Transformation through Integration
An Activity Theoretical Analysis of School Development as Integration of Child Care Institutions and the Elementary School

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To Scott
**Abstract**

This study analyzes an attempt at integration of a pre-school class, a leisure-time center and an elementary school in Sweden. The integration was organized in the form of Vertical Track which implies a successive development of groups comprising children between six and twelve years old, pre-school teachers, recreation pedagogues, and schoolteachers. The integration was prompted by state governed reforms such as the 1992 law allowing six-year olds to start compulsory school.

The study is based on cultural-historical activity theory and was carried out as participant observation and action research.

The study addresses the question of the potentials and alternative goals for change and development of the present school pedagogy and classroom practice that integration implies. Special attention has been paid to what tools might potentially mediate in processes of integration.

A research and educational program, the 5thD, was jointly created between researchers and teachers and located in a Vertical Track. The capacity of this complex tool as a mediator in the multicultural Vertical Track structure was explored.

It is argued that the Vertical Track as an instantiation of the integration reform represents an arena for potential expansive transformation. However, in order for integration to have an impact on the pedagogical practice in schools, teacher interactions need to be mediated by communicative and conceptual tools. It is suggested that the 5thD program is an example of such tools.

Keywords: Integration, pre-school teacher, recreation pedagogue, schoolteacher, contradiction, expansive learning, mediation, and tool.
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Phhhw – I am done 😊

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1 Introduction

Does integration of school and child care institutions possess a potential for transformation of the pedagogy in school and how might the vision and goal of integration be defined? What tools would assist the teachers from the different institutions in their collaborative efforts to create a new joint activity beneficial to both younger and older students? These questions are the focus in this study.

Cuban (2001) describes the history of reforming American schools. He takes as his starting point the kindergarten movement from the late nineteenth century. The kindergarten played a progressive role in school development and was an alternative to the harsh conditions that prevailed in urban schools. However, within a half-century, the kindergarten had become a fixture in public elementary schools and as such it no longer was an agent for change. As Cuban claims, it had become the problem rather than the solution.

In Sweden there is a long history of attempts to enhance collaboration and integration of the compulsory school and child care institutions (see I. Johansson, 2000d). There have been multiple reasons, for example, to facilitate the transition from pre-school to school, but lately the more pronounced aim has been transformation of the school pedagogy and classroom practice. A proposal from the Swedish Ministry of Education states:

The government has emphasized many times during 1996 that the school, the pre-school, and care of school children have to be integrated in order to improve the early significant years in the compulsory school and provide direction to lifelong learning. (Ds U 1997:10, p. 3, italics added, my translation)

A step in the trend to integration, is a law that was enacted in 1992, the so called “flexible school start.” This law permitted the parents to now decide when they want their children to start school - at the age of six or seven. In the

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1 I agree with Daniels’ definition of pedagogy as “forms of social practice which shape and form the cognitive, affective and moral development of individuals” (2001, p. 1).
2 Kindergarten in Sweden is a child care institution called “pre-school class.” The Swedish child care system is described in Chapter 2.
preliminary legislation of this law (SOU 1991:54) it was stated that the
municipalities should be stimulated to develop forms for collaboration
between the school, the pre-school class and, what is called, leisure-time
centers. “Integrated whole school day” (samlad skoldag) is in this context, a
concept meaning that the school, the pre-school class, and the leisure-time
center grow together. The committee suggested that school activities be
organized in mixed age groups in order to adapt to the children’s different
developmental levels. It was also suggested that the activity be theme
directed.

According to the preliminary legislation, the major means of making the
integration work, would be to create common goal documents for the
involved institutions. A second means would be the encouragement of co-
working between pre-school and elementary schoolteachers. The idea was
that the teachers would learn from each other when working together.
Municipalities creating common boards for the school and the pre-school
would enhance the integration.

The law on flexible school-starts resulted in diverse ways of organizing
collaboration and care-giving for the six-year-olds. The most common
structure, despite the intention, is that the six-year-olds are placed in a regular
first grade class. In some municipalities there are age- and grade-independent
groups comprised of children from six to nine years old. Often these groups
are composed of teachers from the different institutions i.e., schoolteachers,
pre-school teachers and recreation pedagogues. These new groups are
sometimes called “Children-school” or “Vertical Tracks.” The term Vertical
Track symbolizes a structure comprised of groups of children of different
ages. Each year a new group of six-year-old children is added to an existing
group, which would imply mixed age-groups from six year olds up to age
nine or even older (see Figure 2.1 in Chapter 2).

Additional steps toward the goal of integration were taken in 1996 and 1998:
the authority of the child care institutions was transferred from the National
Swedish Board of Health and Welfare to the Ministry of Education and the
National Agency for Education, and a common curriculum for the

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3 Sometimes also called “Skövde-modellen.”
4 The word “track” should not be confused with how it is used in the American school
system. “Track” in the American system means division of children into groups based on
capacity and achievements.
In the minutes preceding the new curriculum it is stated: Integration [...] implies that different traditions of teaching and learning can meet. It is not about trying to create compromises in order to keep the different traditions and languages strictly separated [...] but to develop a new outlook and a new practice. (SOU 1997:21, p. 75, italics added, my translation)

In sum it can be said that the aim of the flexible school-start and the new curriculum was a cross-fertilization of the “school pedagogy” and the “child care pedagogy.” Conceptualizations of knowledge, learning, and the “child” as well as working methods are different in these diverse institutions.

Dahlberg and Lenz Taguchi (1994) account for different constructions and conceptualizations of the child that guide the work in the school and the child care institutions, respectively. The pre-school tradition is based on a construction of the child as “nature,” which can be traced back to, for example, educators and philosophers such as Fröbel and Rousseau. The child as “culture- and knowledge-reproducer” is the guiding concept in the school. Dahlberg and Lenz Taguchi (1994) have a vision of the child as a “culture- and knowledge-creator.” This vision represents the desired outcome of cross-fertilization for which the flexible school law and the new curriculum had laid the foundation.

Despite these good intentions, research and investigations have shown that collaboration and integration between child care institutions and schools is a difficult enterprise and that it often fails to succeed (see for example Calander, 1999; Flising, 1995; Fredriksson, 1993; Hansen, 1999; Haug, 1992). Moreover, rather than producing a changed practice, typically the school pedagogy dominates and influences the new integrated practices (Haug, 1992; Fredriksson, 1993; Calander, 1999; Hansen, 1999; Arnquist, 2000). When integration works satisfactorily it is due to a common view and interest from the start among involved teachers (Bergman et al., 1987; Fredriksson, 1993).

Different positions and attitudes can be discerned in the discussion about future development. These positions and attitudes range from separation between child care and school rather than integration (Calander, 1999) to

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5 There were of course other reasons for these reforms but those are not the subject of interest in this study.
strategies of facilitating integration attempts (Skolverket, 2001). One recurrent theme is also that in order for integration to work out and be successful, involved teachers and pedagogues first have to be aware of their, what is alternatively defined as, traditions, codes, cultures, views, discourses, etc, regarding learning, knowledge, and children in order for a new activity to evolve (see, for example, Haug, 1992; Fredriksson, 1993; Dahlberg & Lentz Taguchi, 1994; Munkhammar, 2001). In other words, before the teachers, with their diverse traditions and cultures, will be able to collaborate and work in an integrated manner they have to be aware of their guiding concepts. The question of how and where teachers would become aware of their guiding concepts regarding learning, knowledge, and children is hardly considered in the research referred to above. This question is of major interest in this study.

As pointed out, diverse strategies to enhance and make collaboration and integration successful can be found in the discussion (see, for example, Skolverket, 2001; SOU 1997:21; I. Johansson, 2000c). As is discussed in more detail in the next chapter, I find these strategies lack a discussion about what, in concrete terms, a new integrated activity and pedagogy really is meant to and would imply. This could be an explanation of why integration attempts tend to fail. Moreover, I find that the debate lacks a discussion on what tools, conceptual and material, would facilitate the teachers’ encounters and creation of a new pedagogy and activity.

Based on an activity theoretical approach, as this study is, I take as my point of departure that traditions, cultures, codes, views, discourses, values, attitudes, etc. are constructed and reconstructed in collective, tool-mediated, and object-oriented activities. This implies an approach to change as an integral part of practice, and that a changed view is a result of a transformed activity rather than a precondition. Moreover, it implies that no task can be conducted without suitable tools, material or conceptual.

This starting point demands a methodological approach that puts primacy on practice, which in this context means everyday life in a school setting.

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4 It should be said though that in the report from The National Agency of Education (Skolverket, 2001) it is stated that research based studies of the content in the pedagogical activity need to be increased.

7 The theoretical basis for the study is discussed at length in Chapter 3.
As an undergraduate student I conducted a study in an elementary school (Nilsson, 1998) that, in this study, I will call “North Valley.” The purpose of that study was to understand school development as an aspect of implementation of Information and Communication Technology (ICT). In the spring of 1998 the principal of North Valley decided to reorganize the preschool class, the leisure-time center and the school into a Vertical Track (VT hereafter) organization. I asked permission and, after some discussions, was permitted to study the creation of the new organization.

Returning home after a year-long visit to the Laboratory of Comparative Human Cognition (LCHC) of Michael Cole and his colleagues at the University of California San Diego (UCSD) I also proposed the idea of starting something called a Fifth Dimension (5thD hereafter) in the new VT organization. The idea was accepted and a 5thD was created in collaboration between me and the school.

The 5thD is a collaborative teaching and learning model and activity based on theories developed in the Russian/Soviet cultural-historical school and in the American school of pragmatism. This theoretical basis implies that concepts such as the zone of proximal development, peer-guidance, and tool-mediation are central (Vygotsky, 1978). Based on the idea of tool mediation, computers and telecommunication constitutes one important building block in the 5thD. This is because of their communicative features. Another feature of the 5thD is a consciousness of both play and learning as preconditions for development. The “5th” in the 5thD, followed by the three physical and the one temporal dimensions, signifies meaningful learning.

My idea was in implementing a 5thD milieu in the VT in North Valley that it might facilitate the integration attempt. I thought that the 5thD would comprise something like a “third space” (Gutierrez et al., 1995), a “boundary zone”8 (Konkola, 2002), and as such become a tool for the teachers which would facilitate and help them make sense of each other’s culture and tradition. I was interested in exploring whether the 5thD would mediate the VT teachers’ actions and interactions.

I had two reasons to believe this could be the case. First, North Valley was a school with a history as a pilot school for ICT projects. I had learned, though,

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8 These concepts will be discussed and applied in Chapters 3, 5, and 7.
that the ICT had not produced the outcome in terms of changed classroom activity and pedagogy that was expected and wished. Thus, there seemed to be a need in the school to connect the computer use with a pedagogical framework. Second, I thought that the pronounced theory in the 5thD - that learning and play should not be opposed but intertwined and that learning takes place in play - would bridge and assist in the teachers’ encounters. Play is considered to be the important activity in Swedish pre-schools; learning is, as we know, the important goal in schools. I thought that the 5thD might serve as a model for how play and learning can be integrated. My understanding therefore was that the 5thD would fit into the local culture, yet represent an alternative both to the original school and child care pedagogy. It would be of interest to study whether this complex tool would have any impact on the integration attempt and attempts to develop a new pedagogy.

For two years I stayed in the school, working with and studying the creation, and eventually the apparent decline of the integration attempt. My focus was on the potential for change that the VT project possessed. I was an observer who also took actions. My actions were mainly directed toward the 5thD even though I also intervened in the VT process. Today, in the spring of 2003, the 5thD is still operating in the school. I will in this thesis account for the role the 5thD played in the VT and in what way it contributed to change in the school.

Thus, the purpose of this thesis is to explore the potentials and alternative goals for change and development of the present school pedagogy and classroom practice that integration of the school and child care institutions implies. Special attention will be paid to what tools might potentially mediate in processes of integration.

My intention is that this study will contribute to the Swedish discussion about how to turn the integration reform into a tool for school transformation. In that regard, I hope that our Swedish experiences will contribute to the international community concerned with developing good learning environments and practices for children. In addition, I think that the study should be of interest to those who are concerned with integration of, and encounters between, different cultural systems -- particularly those that aim at change and development. This regards institutions and organizations of different kinds, or other societal bodies.

In chapter 2, I present a frame for the study. The chapter starts with a historical description of the development of the Swedish school and child care
system, respectively. Thereafter I present a more thorough discussion about the research conducted on integrating child care and school. Then the field site, i.e., North Valley as well as the 5thD, is introduced and described. Finally, I discuss the aim of the study.

The study is based on cultural-historical activity theory (see for example Cole & Engeström, 1993; Engeström, 1987; Leontiev, 1978a&b; Vygotsky, 1978, 2001). Activity, or activity systems (Engeström, 1987) is the unit of analysis and main focus. Activity systems are dynamic and under constant flux. Their developmental trajectories can be understood as expansive learning cycles in which systemic contradictions are the driving force. The implication is that change and development take place as a result of contradictions intrinsic to the system yet produced in relationship to neighboring activity systems. Activity system is used to conceptualize the VT organization in North Valley and its internal contradictions. In Chapter 3 cultural-historical activity theory and related concepts and models are accounted for and discussed. My basic methodological approach has been influenced by ethnography with elements of action research. This methodological combination is discussed. The outcome is a theoretical and methodological framework for the study.

I have two connected stories to tell: one is about the VT organization and the other is about the 5thD, both of which are in North Valley. These two systems are interdependent, although I have chosen to describe them separately. The VT narrative describes its start-up, accomplishments and apparent decline. The narrative about the 5thD describes how it began, developed, and was embraced by the school.

I have kept the narratives and the overt analysis of them separate. Consequently Chapter 4 is the narrative about the VT, which I analyze in Chapter 5; Chapter 6 is the narrative about the 5thD, which I analyze in Chapter 7.

In Chapter 8 I develop a discussion about what a new object in the compulsory school might mean in concrete terms. The discussion is based on cultural-historical and socio-cultural approaches to learning and are discussed in terms of the context of discovery, the context of practical application, and the context of criticism (Engeström, 1991b). I call these contexts intra-dimensional learning contexts. Based on findings from this study as well as other studies in this field I add to the intra-dimensional
learning contexts three inter-dimensional learning contexts, which I call the intercultural learning context, the intergenerational learning context, and the interinstitutional learning context. Together these six learning contexts constitute a foundation for further discussions and explorations of what a new practice and pedagogy based on the integration reform might mean.

I conclude in Chapter 9 by discussing practical, theoretical, and methodological implications resulting from the study. The main conclusion from the study is that VTs and other forms of organizing integration processes should be considered an arena where change and development take place. However, change, in this context, does not come automatically but has to be mediated by what in this study is called conceptual and communicative tools.

Finally, an Epilogue is offered as a way to convey that what is told in this thesis is based on just one phase in an on-going developmental process. It demonstrates that schools, though highly institutionalized, are dynamic activity systems. Moreover, it shows that the actions taken in North Valley have had a long-term impact.


## 2 Research Frame

The intention of this chapter is to create a frame for the study. I will start with a description of the development of the compulsory school and the child care system in Sweden. In the account I have lingered over issues that have to do with certain pedagogical practices in the diverse institutions; I think these might have significance for understanding the integration reform and, ultimately, what was going on in North Valley. In this discussion I mainly draw from research on the Swedish school and child care system that is established and well known in Sweden. In addition, the sections contain descriptions of the school and child care practices that most likely are not limited to Swedish circumstances.

After the historical review I give an account of integration attempts, providing a review of dissertations and other studies on the topic. I have focused the discussion on studies undertaken in the 1990s and 2000. These studies are based on the present discussion of, and relate to, the same factors regarding attempts at integration and collaboration of school and child care. Such conditions are, for example, the law on flexible school-start and the new common curriculum, i.e., Lpo94.

Subsequently I describe the field site, i.e., North Valley and the 5thD. Finally I elaborate on the purpose of the present study and give the finishing touch to my arguments.

### 2.1 The Swedish School

Sweden has a long history of teaching and education. In the agricultural society, education took place in homes and families. In the church law (1686), parents were enjoined to teach their children to read. The same was true for masters; they were responsible for their servants’ reading skills. The object of the study was the Christian creed and particularly the Lutheran Catechism. The ultimate goal was a deeper understanding of and an ability to independently reproduce the content in these texts. The interest from the church was closely connected to the Reformation and the Church’s desire to
spread and secure the Christian faith. The methods used to reach this goal were stated in a special ABC–textbook that was to be found in the first part of the Catechism (E. Johansson, 1989). This implied that the children had to learn to read using what we today call the phonics method, i.e., learning the letters and putting them together to form syllables and words. When capable of this they had to learn the texts by heart. The reading progress was supervised by the parish clerk and priest. Each individual’s progress was inscribed in interrogation records (förhörslängder) (E. Johansson, 1989). Reading was a precondition for the Holy Communion, which in turn provided admittance to the “adult world” in the congregation. Reading was also a required prerequisite for marriage and certain other legal actions. In other words, there was strong social pressure behind the requirements of reading (Hartman, 1995). However, the responsibility of the family father was not always executed. One reason was that the children were needed as labor, particularly on the family farms. Despite this, by the end of the 18th century about 90% of the Swedes could actually read (U. Johansson, 1994).

Elementary school (folkskolan) became statutory in Sweden in 1842. This implied that every parish was obliged to take on the expense of schooling and employ a teacher with pedagogical education. This did not, however, mean that all children obtained access to education. According to Hartman (1995) it was not until the end of World War II that the elementary school was established everywhere in the country. But even before this time, schools were established in urban areas for poor children to prevent them from begging on the streets and disturbing the peace (Sandin, 1986). At this time the population was growing, poverty was huge, and criminality was widespread.

In the beginning the elementary school system was organized into monitorial schools, (växelundervisning) which used the so-called Lancaster method. With this method there could be more than 100 children of different ages in one class. This

9 I will sometimes use both Swedish and English terms and sometimes only Swedish. Concepts and words do not always, in a meaningful way, lend themselves to translation. Swedish words will always be in italics and the same is true for concepts that I wish to highlight. Brackets will also be employed in order to support my efforts to make sense of the encounter between Swedish and English terms and concepts.

10 These interrogation records are preserved and are available for public display.

11 According to U. Johansson (1994) this is debated among researchers in the field.

12 After the originator J.Lancaster 1778-1838. See for example Kaestle (1973) and Nordin (1974).
practice was common due to a shortage of teachers and financial resources. The older and more knowledgeable children functioned as so-called monitors; they taught and supervised their schoolmates. With this practice the children were organized in smaller groups and were highly disciplined. Monitorial schools were replaced over time by the teaching of groups of children of the same age, (klassundervisning). This practice was established in 1864 using illustrative teaching (åskådningsundervisning) as the pedagogical method. This was a systematically organized method based on visual objects and questions. The children were to learn terms and concepts by looking at objects and answering the teacher’s questions.

It is from this period that the famous school posters showing plants, animals, etc that many Swedes still remember were derived. This teaching style was suggestive of the earlier way of learning the Catechism that in fact remained long after the establishment of the elementary school (Hartman, 1995).

With industrialization, the need for professional knowledge and technical skills grew. As a result, the educational system expanded. In 1882 the elementary school became a six-year compulsory school for children ages seven to twelve. Despite the establishment of the public elementary school, children destined for higher education most often were trained in private schools or in the home before they attended secondary school. The diverse kinds of secondary schools were called lärdomsskola. Children from the elementary schools rarely continued on to higher forms of education. This created a system of two separate school forms, i.e., the state-run läroverket and the municipality-run elementary school. Because some of the classes ran parallel in terms of age, and no contact or collaboration took place, this has been called the “parallel school system,” (parallelskolesystemet). This also resulted in a separation between theoretical and practical education.

The influence and dominance of the church and Christian doctrine remained unopposed in the elementary school. Hartman (1995) accounts for what he considers a break in the trend; in the educational plan of 1919 Luther’s Catechism was replaced with texts on biblical history and the studies in Christianity decreased by 50%. Instead, space was given to gymnastics, math, local geography, history, and folklore. Practical subjects such as handicraft and gardening were also introduced. The pedagogy proposed in the educational plan of 1919 (arbetskolepedagogik) was influenced by concepts such as “learning by doing” and “the school as a laboratory, not an
auditorium” that we can recognize from John Dewey’s progressive educational ideology¹³ (Hartman, 1995).

In the first half of the 1900s the elementary school was the subject of debate between those who wanted to keep the ties to the church and those who saw the school as a means of social change (U. Johansson, 1994). Defenders of the latter approach also wanted to see the system of the parallel school system abolished. The parallel school system was considered to preserve the prevailing social order, which also meant that the children of the wealthier classes were given a higher education at the expense of the society while the poor were treated to an inferior education. In this context Fridtjuv Berg (1851-1916) who was a pioneer in the development of the Swedish school should be mentioned. He was a liberal and one of those who most intensively fought for a six-year-long public elementary school (bottenskola) as a base for all further education.

At the time of the two world wars the debate about the school took place as a fight about when, i.e., at what grade and age, the students should be separated and differentiated (what in Sweden was called differentieringsfrågan). The conservatives and the representatives from the secondary school, for example the academics, wanted a separation to take place early. They suggested that the students make their choice for further education at the age of ten i.e., in grade four. The “progressive” wanted to keep the classes together for six years and keep them unstreamed which meant that all children had the same curriculum. There were no individual and elected course programs during these six years. After that the students would make their choice if they were continuing on to secondary school and to a course program. The advocates for this strategy were mainly representatives from the elementary school, the social democrats and the liberals. As Isling (1974) points out, the debate demonstrated the contradiction between those who primarily wanted to promote education of the masses and those who wanted to protect the higher education as a selective school for the elite.

After many years of debate and investigations a nine-year comprehensive school, i.e., the compulsory school, (grundskolan) was established in 1962. This

¹³ See, for example, “my pedagogical creed”: http://www.users.globalnet.co.uk/~infed/e-texts/e-dew-pc.htm
was based on the recommendations of the 1946 School Commission appointed by the Social Democratic government. In the new compulsory school the contradiction between the “socializing task” in the elementary school and the “qualifying task” in the secondary grammar school was built in. Isling (1980) claims that the modern school “had obtained contradictory orders of equal socialization and unequal qualification” (p. 336, my translation).

The compulsory school was divided into three levels with three years in each: Grades 1-3, i.e., junior level, (lågstadiet), Grades 4-6, i.e., intermediate level (mellanstadiet), and Grades 7-9, i.e., upper level (högstadiet). Three different teacher categories were established: junior level teacher (lågstadielärare), intermediate level teacher, (mellanstadielärare), and upper or senior level teacher, (ämnesläare). Five principles were to guide the classroom practice in the compulsory school: motivation, activity, concreteness, individualization, and cooperation (Hartman, 1995). Additionally, the reform implied attempts at equalization of practical and theoretical school subjects. During the first eight years classes were kept together and unstreamed, i.e., the students had the same curriculum. Not until the 9th grade could students choose between a practical and a theoretical alignment, which implied preparation for secondary school.

During the first half of the 20th century, a number of measures were taken within the framework of the school that can also be attributed to the development of the Swedish welfare state (folkhemsbygget). Examples include: the rise of school health service, school meals, swimming education, school transportation, recreational activities, school psychologists and, school welfare officers (Richardson, 1983). This development can be understood as the foundation of the expansion of the school’s mission so that it became an institution dealing not only with education but took on additional roles. The first Swedish curriculum from 1962 stressed both the importance of social and personal development and democratic and student centered education.

In 1969 it was time to reform the compulsory school. Ulla Johansson (1994) claims that the reform was aimed at refreshing compulsory education because in an international comparison Sweden had been found to be lagging behind in education. The postwar period after World War II highlighted the need for an extended and modernized basic education. Vocational training was also included; technological advances, the rapid rationalization of production, and
increasing international competition demanded a more advanced labor force. But this also entailed curriculum reform. The curriculum had to be up-to-date; for example, English was made obligatory. The curriculum already stressed features such as character formation, a democratic outlook, and personality development. These ideas required a reformation of the course content and the classroom practices. The old catechetical method with questions and answers and the transmission of transitory knowledge was considered outdated. John Dewey’s ideas were again in vogue (U. Johansson, 1994).

The reform also implied that the classes were kept together for all nine years. This is the compulsory school that we still have today in Sweden. Ulla Johansson (1994) claims that this reform should be understood as part of the aspiration to create equal preconditions for children’s development and learning, which had not been the case with the parallel system that constituted the previous school system. Class-based structures were still present in the school.

Despite radical attempts to reform the educational system, the reforms did not lead to the fundamental pedagogical, social, economic and political changes in society that were intended. According to Richardson (1977), the reason was that the system of management by detailed control that was employed did not allow for maximum use of resources. In response to this situation the government decided on legislation, called the SIA-investigation, aiming at decentralizing the school by giving far-reaching authority to the municipalities. State regulations were replaced by delegated responsibility and an expanded right for local schools to also make decisions on issues regarding pedagogical activity.

The SIA-investigation also addressed the school’s societal role. There were aspirations for opening up the school to the wider society. The school was considered to be too isolated and was expected to open its doors to diverse institutions in society and to collaborate with voluntary organizations and communities. This reform also implied an inclination for collaboration between school and child care institutions. The concept of the integrated whole school day was central and the idea of teacher teams was introduced.

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14 SIA is the Swedish acronym for “The school’s internal work.”
Hartman (1995) claims that by the end of the 1990s the Swedish school had lost its centralized control such that methods and means for reaching the overall goals that are set up by the state government can be decided on a local level. This should be understood in the context that Sweden has had one of the most centralized and homogeneous school systems in the world (Hartman, 1995).

The national curriculum for the compulsory basic school in place at the present time (Lpo94) came into effect in the autumn of 1994. It defines the underlying values, basic objectives and guidelines of the school system. In addition, the curriculum also defines a nation-wide syllabus for each individual subject. On the basis of the curriculum and syllabi, each municipality is obliged to adopt an education plan. The education plans, syllabi and curricula define the scope within which the principal, teaching staff and students of the individual school adapt teaching content, organization and working methods to local conditions. These local variations are finalized in the local curriculum plan (skolarbetsplan).

The division of the three levels, i.e., junior level, intermediate level, and upper level has formally ceased. There is an overall time schedule that indicates the minimum guaranteed time for which students are entitled to teacher-supervised instruction in various subjects. The curriculum stipulates that students and teachers are to plan their daily work together. The practicalities of such student participation are decided by the principal in consultation with teachers and students. It is the duty of the principal to inform and consult with students on matters of major importance to them.

Grades are awarded from the eighth year of compulsory basic school onwards and relate the students’ achievements to the national objective stated in the syllabus for the subject. Throughout compulsory school students and

15 A new compulsory teacher education-program was established in 1988 resulting in two categories: Grades 1-7 teacher and Grades 4-9 teacher. The reform aimed at the creation of a common ground for teaching in the compulsory school (Hartman, 1995). Because senior level teachers’ educational roots were founded in secondary school (lärdomsskolan) while the education for junior level and intermediate level teachers could be derived from the elementary school (folkskolan) there has been a difference in pedagogical styles. The former education was considered to be based on a thematic and problem-based approach, while the latter was considered to have a subject oriented approach.
their parents are to be given regular progress reports, including meetings to discuss development.

Hartman (1995) argues that an historical account of the Swedish educational system shows that it is very resistant to change especially regarding the pedagogical part. However, as Hartman claims, huge changes have taken place during the 20th century, particularly in regard to the organizational superstructure. As shown, there have been religious, economic, and political motives for educational initiatives and reforms. Learning to read was a way to spread Christian morals but education has also been the object of attempts to deal with, as well as influence change in the society. “The democratic school,” according to Isling (1974), aimed at equality and solidarity, collaboration and loyalty, objectivity and tolerance, criticism and independence. This implies that the school’s qualifying task has been complemented with its socializing task. But as Isling claims, in the struggle between these two tasks the qualifying assignment has been dominant. The double requirement has resulted in effects all the way into the classroom practice:

Regarding the *internal work*, the ambiguity in the political will has made the democratic goals fissure. This occurred at the phase where the policies were to be formulated as goals and guidelines for those who, in practice, had to carry into effect the reform decisions, i.e., in the curriculum for the new school. For the pedagogical workers in the school the situation therefore has become unclear and elusive: one has not in a correct way been able to view it or been able to handle it with equanimity. (1980, p. 339, my translation)

Dahlberg and Lentz Taguchi (1994) conceptualize learning in the school as *knowledge and culture reproduction*. According to them, the “code of the curriculum” (Haug, 1992) is dominated by the reconstruction of the present culture and transmission of facts and knowledge in order for the social production and reproduction to proceed. This implies that the focus in school is the subject and the subject content, i.e., transmission of concrete knowledge and skills. As if through a pipeline (Säljö, 2000), the teacher transfers facts and transitory knowledge that the students receive and store in their brains. Later the knowledge can be taken out for use when needed. This “banking” (Freire,

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16 Haug borrows the concept of code from Basil Bernstein and states that “characteristic for a code is that it contains principles or guidelines for interpreting the world around us, and that govern or decide our behaviour” (Haug, 1992, p. 81).
1972) method means that what is to be done in school is visible and indisputable. What is right and wrong is relatively easy to determine. Moreover, the child has little to say about the agenda and content. The teacher has authority and control, while the children are passive and are expected to do what is expected of them. Rogoff explains this metaphorically:

The children have little role except to be receptive, as if they could just open a little bottle cap to let adults pour the knowledge in. In this adult-run model, adults have to be concerned with how to package the knowledge and how to motivate the children to make themselves receptive. (1994, p. 211)

Engeström et al. (2002) describe three features of the school that they also characterise as constraints and built-in obstacles for collaborative self-organizing and, what they call, “expansive learning.”17 These are the socio-spatial structure, the temporal structure and the motivational-and ethical-constraining structure of the school. The socio-spatial structure is based on autonomous classrooms, teachers working as isolated individual practitioners, and the school functioning as an encapsulated unit. The temporal structure is based on discrete lessons and relatively short standardized time sequences of work punctuated by tests, exams, and grading. The communicative pattern in the classroom, which can be understood as a result of this temporal structure, implies that the teacher dominates the discursive play in the classroom. Of all spoken sentences in the classroom the teacher produces more than half (Lundgren, 1979). The role of the teacher is to structure the content, activity and situation, ask questions and comment on the children’s answers. The role of the child is to answer the teacher’s questions - questions that the teacher already knows the answer to (Lundgren, 1979). A phenomenon called “piloting” (lotsning) (Lundgren, 1979, p. 21418) is common, with the teacher guiding the student to the right answer by partly answering the question herself and by partly breaking up the question into pieces so that it becomes obvious what the answer is. Dahlberg and Lentz Taguchi (1994) claim that the question-answer-pattern conveys an attitude toward the relationship between the child and the adult that is communicated as:

17 The concept of expansive learning is defined and discussed in Chapter 3. For now, let’s understand it as creation of new knowledge and activities.
18 Lundgren acknowledges B. Johansson (1975) on this issue.
Who is teaching and who is learning? Who is already filled with knowledge and who is to be filled? Who knows and who has to learn? Who instructs and who executes? The coherent view of knowledge implies that the adult has knowledge that will be transmitted to the child. (1994, p. 19, my translation)

The time factor controls the activity in the school both in terms of the content and of the quality of the question-answer-pattern. Dahlberg and Lentz Taguchi (1994) claim that this implies a pragmatic and future-oriented view in the school and in turn goal rationality with traditional stronger regulations that is connected to evaluation thinking. This takes us to the third kind of constraining structure, i.e., the motivatinal and ethical structure, that Engeström et al. discuss. Grades and measured success become the dominant motive of school work.

To sum up. Despite the fact that the Swedish school system has gone through phases of change, as accounted for above, it seems that transmission of basic skills and knowledge remains the main mission. However, and as the account shows, the development of the school has been ambiguous and filled with tensions and conflict of interest. One such is what Isling (1980) calls the “qualifying” vs. the “socializing” function, which can be understood as manifestations of political ambitions and class struggle in society. Moreover, since early on there has been a desire to transform the transmission pedagogy into a more student-centered and problem-based classroom practice. With the growth of the industrial society the task of educating the new generation was removed from the family and delegated to a new kind of institution - the school. The family was not suited any more to educating their children for the kind of work needed in the society. Few teachers and a lot of students resulted in a practice based on the assumption that students will learn what teacher teaches, i.e., that knowledge can be transmitted easily. The institutional structure in the school both reconstructed and reflected this assumption. Today we are still struggling with this assumption and the pedagogical practice it gives rise to. The conflict between a student-centered practice and the transmission-based practice remains and seems to have become aggravated.

I will now turn to a description of the historical development of what I will call by a common name: the Swedish child care system.
2.2 Swedish Child Care Institutions

This section starts with a short description of the Swedish child care system followed by a historical account that is aimed at facilitating an understanding of the present system and practices.

The Swedish child care system consists of Pre-school services and Welfare for school children (see table 2.1 below). Pre-school services in turn consist of Pre-schools, Family daycare homes and Supplementary pre-school services, also called Open pre-school. Welfare for schoolchildren is a collective general term for activities organized during the school-free period of the day. It takes the form of Leisure-time center, Family daycare home and Open recreational activity. Since 1998 the Pre-school class has been part of the school system, although it is optional. The precursor to the pre-school class, the kindergarten in Sweden called lekskola (play school) and later deltidsförskola (part-time pre-school), has been part of the child care system and has its roots there. I will therefore place it in this section.

<table>
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<tr>
<th>Pre-school services</th>
<th>Welfare for school children</th>
<th>Pre-school class</th>
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<tr>
<td>Pre-school center</td>
<td>Leisure-time center</td>
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<tr>
<td>Family daycare home</td>
<td>Family daycare home</td>
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<td>Supplementary pre-school</td>
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Table 2-1 Swedish Child Care Institutions

This thesis is mainly concerned with the pre-school class and the leisure-time center. However, in order to make the history and culture of the pre-school class and the leisure-time center comprehensible I find it necessary to briefly account for the above-mentioned forms of child care institutions.

By the end of 1999, 64 % of all children in the 1-5 age group were registered in pre-school centers and family daycare homes (Skolverket, 2001). Pre-school centers are located in specially designed premises. The pre-schools provide educational group activity for registered children between the ages of 1-5 years. Pre-schools are generally open all year round and for most of the day, Monday through Friday. The opening times are adapted to parents’

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19 The English terms I use are the ones applied by the National Agency for Education in Sweden, (Skolverket).
working/study hours or to the children’s needs. The parents pay a fee that in most areas is linked to the family’s income and the child’s attendance.

*Family daycare homes* are, as the name reveals, located in private homes and provide care for children between the ages of 1-12. The children are registered and opening hours are varied to fit in with the parents’ schedules. Parents pay a fee in the same way as for pre-school center care. Family daycare complements pre-school centers by providing care, in particular for children who for one reason or another need to be in smaller groups or who live far from the nearest pre-school center. This alternative is more common in rural areas and in small towns than in urban areas.

*The open pre-school* is an alternative to the regular pre-school center for the children of parents who are at home during the day. It also supplements family daycare. Together with their parents or municipal child minders, children are invited to take part in a pedagogical group activity. In some housing areas, open pre-schools collaborate with public bodies like the social welfare services and the maternity care and child health care services. The children are not registered and are not required to attend regularly. Most open pre-schools are free of charge.

Since 1998 the *pre-school class* has been a voluntary part of the state school system. This implies that the municipalities have been responsible for offering children a place in the pre-school class starting with the autumn term of the year of the child’s sixth birthday until the child is due to commence his or her compulsory schooling. In the 2000/2001 school year 93% of all six-year-olds in Sweden attended pre-school class (Skolverket, 2001).

*Welfare for schoolchildren* applies to children up to twelve years of age who attend school, i.e., pre-school class or compulsory basic school. The municipalities are obliged to provide welfare to schoolchildren of working or studying parents, or in cases where the child has an individual need. A place should be offered as close to the child’s home as possible. As in the case of pre-school and family daycare, parents pay a fee, which in most areas is linked to the family’s income and the child’s overall attendance. In the 2000/2001 school year 64% of all children in the six-nine age group\(^\text{20}\) and 7% of all children between ten-twelve years old (Skolverket, 2001) were registered

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\(^\text{20}\) For the main cities the number is 77%. For example, in Stockholm nine of ten children in the age group six to nine attend leisure-time center (Skolverket, 2001).
in *leisure-time centers*. The leisure-time center provides educational group activity for registered children during the school-free period of the day and during holidays. It is generally open all year round. The opening times are adapted to parents’ working/study hours or to the children’s needs. The leisure-time center is often integrated with the school. Integration may involve staff, premises and/or educational activity.

*Open leisure-time activities* are an alternative to leisure-time centers and family daycare for children aged 10-twelve. Such facilities, however, are not widespread. About three quarters of the country’s local authorities lack open activities directed at this age group.

Pre-school center and pre-school class have their origins in two different institutions, the Child-crib (*barnkrubban*)\(^{21}\) and the Kindergarten (*barnträdgården*) respectively. The *child-crib* was the precursor to what we today call pre-school centers. The child-crib emerged out of the poverty and incongruity caused by industrialization in the late 1800’s and early 1900’s. The first child-crib was founded in Stockholm in 1854 and served primarily single mothers (Henschen et al., 1979). The cribs were run by private associations and were financed by private donations, fees, allowances from poor relief, and sometimes the church collection. The cribs were considered charity institutions (Henschen et al., 1979; Tallberg-Broman, 1995) and only destitute parents were entitled to child-crib services.

In general the cribs admitted children ages one to seven in groups of 25-30 children. The opening hours were 7am to 7pm and in case of special need for care the children could stay over night. The manager was often a nurse or a deaconess who had one or two assistants and a female cook to help her. The children were given three meals a day and the activities, such as ring games and singing preferably took place indoors. Very few toys were available; if any, there could be some dolls, wooden horses or building blocks. The older children had access to slates and craftwork.

The cribs were founded for social reasons – the children were to be taken care of while the parents worked. If not, the children ran the risk of being left alone at home, exposed to mismanagement and negligence. Henchen et al., (1979) points out that despite vast sacrifices from the staff there were no

\(^{21}\) The name might originate from the German *Kinderkrippe* (J-E. Johansson, 1994).
resources in terms of time, money, etc. for them to create carefully prepared pedagogical activities. The aim was charity and the cribs’ label of poverty remained until the late 1950s. A reason for the propertied classes to organize and furnish child care was to infuse a Christian and moral spirit in the working class children. This was a way to hide class contradictions and reduce social tensions in the society (Henschen et al., 1979).

Craft center (arbetsstuga) was the precursor to what we call today welfare for school children, and more particularly, the leisure-time center. The prevalent begging among children was one of the reasons why the craft centers started in the late 1800s (Henschen et al., 1979). In 1887 the first craft center in Stockholm was established and the initiator was Anna Hierta-Retzius – the daughter of the liberal newspaperman Lars Johan Hierta. The aim was similar to that of the child-crib: to give care but also to foster the growth and development of the children. The school children (seven to fourteen years old) who attended the craft center were from poor families and were selected for the craft center by their teachers.

The craft centers were open from 5 to 7pm and the activity entailed diverse kinds of work such as brush-making, bookbinding, basketry, shoemaking and repair-work, needlework, lace-making, and weaving. The children’s work partly financed the craft centers, and the reward for the work was a meal in the afternoon. The work was guided by craftsmen and teachers who needed some extra income. In this way the children were exposed to and partly learned a craft they could use later as a means of employment. In that regard the craft center became a complement to the school (Hansen, 1999).

For Anna Hierta it was important that the children found pleasure in the work and that the outcome was nice-looking products. The children were supposed to be skilled in the craft. Their sense of cleanliness, style, and taste was to be cultivated and their imaginations developed, as she claimed “Also the poor children have this sense even if it is dormant” (quoted in Henschen et al., 1979, p. 135, my translation). As Henschen et al. (1979) point out, “the aim of the craft center was the upper class’ view of the workers’ children: they were to be fostered into new skilled and diligent workers. It was class determined” (p. 145, my translation).

By the mid 1800s, the German pedagogue Friedrich Fröbel (1782-1852) had gained international reputation as the prime authority on pedagogy for small
children and the founding father of what came to be called Kindergarten. The choice of the name reflects both symbolically and literally his ideology and theories. The child is a flower that should be nurtured and protected in its garden. But the garden also provides the child with experiences to learn about the laws of nature. Care and learning should occur together.

Fröbel had his roots in romantic philosophy modeled on that of, for example, Jean Jacques Rousseau (1712-1778) even though Fröbel’s thoughts are sometime considered objective realism (J-E. Johansson, 1994). He was influenced by the Swish pedagogue Johann Heinrich Pestalozzi (1746-1827) who is considered to be, by many in Sweden, the founding father of the elementary school (Wallström, 1992; J-E. Johansson, 1994). Despite his close relationship to Pestalozzi he was critical of the way the school was organized and its content structured. Instead of a separation of subject matters – which was the basic structure in the school – Fröbel advocated a holistic view.

Fröbel’s starting point was that humans have a built-in capacity to be creative (verksamhetsdrift). This desire implies that humans, as part of nature, are actively realizing their own internal development as it was provided by nature. This developmental idea was a guiding principal in Fröbel’s thoughts (J-E. Johansson, 1994).

The child expresses her desire to create through play and work. Education therefore should supply the child with opportunities for experiences that involve and engage the child’s entire self, i.e., head, hand, and heart. Fröbel advocated that, parallel to regular teaching, there should also be opportunities to carry out work in the school. The pedagogy he proposed has been called “following pedagogy” (efterföljande pedagogik) as opposed to “prescribed” (föreskrivande), which was the existing pedagogy in schools and still is (J-E. Johansson, 1994).

Wallström (1992) claims that no pedagogue before Fröbel pointed out the significance that play has for learning as strongly as Fröbel had done. Play

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22 June 28, 1840 was the date of the inauguration of the public German kindergarten. This day was chosen by Fröbel because it was the 400-year anniversary celebration memorializing the art of printing. Fröbel chose this day purposely considering the importance of children’s thinking and language (Wallström, 1992). He had several names for diverse activities and projects that preceded Kindergarten, for example Eine Pflege- und Entwicklungsanstalt (Wallström, 1992).
was for Fröbel the absolutely foremost and most significant activity as well as a life form. He stressed the intrinsic value of play and considered it the road to knowledge about the external world (Wallström, 1992; J-E. Johansson, 1994). Play would also increase the child’s self-esteem and self-knowledge. He warned that the play must not be misused to force children’s activities for the purpose of learning. He also stressed the significance of the adult’s presence in the play activities. Their task was to recommend, inspire, and spur the children to play in a certain direction rather than to dominate or control the development of the play. This could take place if the adults participated in the play or stayed close to it (Tallberg Broman, 1995). Schrader-Breyman (1827-1899), one of Fröbel’s students and spokesmen, is often referenced in this regard. She claimed that a kindergarten leader should be “Äusserlich passive und innerlich aktiv,” i.e., “external-passive” and “internal-active” (quoted in J-E. Johansson, 1994, p. 43). Additionally, Fröbel claimed that children offer adults a way to development, i.e., that adults have things to learn from children (J-E. Johansson, 1994).

His pedagogical ideas are reflected in the pedagogical material, the so-called, Spielgaben, (playgifts or in Swedish, Fröbelska lekgävorna) and Beschäftigungsmittel (Activity material or in Swedish aktivitetsmaterial). Fröbel was particularly interested in mathematics and geometry, and the design of the Spielgaben was based on principles from these fields. The Spielgaben were inspired by nature and produced by natural material, such as balls and specially designed blocks. The Beschäftigungsmittel was brought directly from nature and could consist of objects such as sand, clay, wood, wool, seeds, berries, or fruits. The idea was that the children would learn through the process of transformation of both learning materials and object. This was also the guiding idea behind the playgifts (Wallström, 1992). Combined, the Spielgaben and the Beschäftigungsmittel comprised an entirety which is expressed through the dot, the line, and in the three dimensional body:

The entire system is based on the notion of a transition from reality to a depiction of the objects by following a development from bodies via surfaces to lines, and at the points back to lines via surfaces to bodies. In the end this will lead to an understanding of the whole as well as the parts and their interrelationship. (1992, p. 59, my translation).

The material should stimulate both the intellect and emotions and the experience should be transformed and expressed in creative actions. When creative actions, thinking, and emotions are combined, the child is developing
a solid base for her conceptions. In summary, the exterior should give the child an internal experience and the internal has to be made concrete, i.e., “Das Äussere muss dem Kinde innerlich und das Innere ihm äusserlich gemacht warden” (Pösche, 1887) (quoted in Wallström, 1992, p. 50, my translation).

The design of Spielgaben was mindful and well-conceived. For example, Fröbel thought that good materials had to be challenging and interesting to both the child and the adult. Due to its abstract features the Spilegaben have been adaptable to various demands and have survived to this day. For example, until the mid 1970s cubical boxes with building bricks made of wood were standard in Swedish pre-schools (Wallström, 1992).

The kindergarten had a character of the home. Children were to play and be creative as well as do domestic work such as taking care of plants and pets. It was desirable that the kindergarten provide a garden where the children could work and learn. The children could learn how the parts and the entirety were connected as well as categorize and care for living material. In the garden the children were trained to collaborate as well as work independently. Each child had her own square to grow, rake and irrigate, but the paths between the squares were designed to be wide enough to allow two or more children to walk next to each other when inspecting and moving around in the garden. Fröbel stressed group activities and argued that it is important for children to bond with other children. Friendship between children was considered valuable for their development.

Singing, rhythmics, finger games, taking walks, and outdoor play was stressed and common. A famous feature of the kindergarten pedagogy has

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23 J-E. Johansson (1994) claims that this approach can be ascribed to Henriette Schrader-Breymann who came to emphasize – among other things - domestic work and a home like atmosphere in the kindergarten.
become the “focal point of work” (*arbetsmedelpunkt*), developed by Henriette Schrader-Breymann. Activities were built up around an object, i.e., the focal point, that was familiar to the children e.g., festivals, seasons, and animals. “The sheep and the wool” or “Christmas” were typical focal points. The rationale behind the focal point activity was that it aimed at concentration and depth. The children were considered to be exposed to a lot of stimuli and needed to learn the ability to focus and concentrate. Moreover, the work should depart from the children’s own experiences and knowledge. Significantly, the starting point was a concrete and tangible experience. Fröbel argued that there was no point in teaching theoretical terms to young children, but that adults should organize situations where the content in the concepts could be experienced (Wallström, 1992). In order to follow up a concrete experience as, for example, a visit to a farm, representations of the farm were created by using Spielgaben and the Beschäftigungsmittel. Activities such as singing and story telling were also part of the focal point activity.

Tallberg Broman (1995) summarizes the pedagogical principles that influenced the working methods and content in the Fröbel-inspired institutions as follows: answer the children’s desire for action; be a good role model; guide the child’s desire for knowledge; use the group for learning and fosterage, unite living and learning and train the children to observe and notice. This approach was controversial at the time and eventually resulted in the prohibition of Kindergarten for ten years, 1851-1860.

The first kindergarten in Sweden was founded in Stockholm in 1896 and enrolled children three to seven years old. The kindergarten was open three to four hours per day and the fee was more costly than in the child-crib

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24 Later the term focal point of work was replaced with “focus of interest” (*intressecentrum*), and theme work, (*tema arbete*). These name changes reflect a changed view. The Austrian reform pedagogue Elsa Köhler (1879-1940) who often visited Sweden and who introduced focus of interest, developed and renewed the Fröbel-pedagogy based on contemporary developmental psychology. Free creativity was emphasized and templates were abolished. The children’s own interests and questions were given more room in the focus of interest. Additionally more societal-based issues were introduced such as the traffic, the city, the fire-station, and the police (Tallberg Broman, 1995).

25 J-E. Johansson (1994) argues that Henriette Schrader-Breymann independently developed the Fröbel tradition and in a significant way diverged from his pedagogy. Since she played an important role in the spread of the Fröbel tradition to Scandinavia this is of significance.
(Henschen et al., 1979). Consequently it was the wealthy families’ children who attended Kindergarten. However, it should be pointed out that Fröbel wanted the kindergarten to be a right for all children (Wallström, 1992; J-E. Johansson, 1994), and as a consequence he was against private schools.

Later, in the early 1900s, something called Folkskindergartens (folkbarnträdgårdar) were established by Ellen and Maria Moberg, pioneers in the Swedish kindergarten movement. Folkkindergarten only enrolled children from working class families and charged a fee that was affordable to them (Henchen, et al., 1979).

The education of pre-school teachers in Sweden has its origin in the kindergarten tradition. The Fröbel institute (Fröbelinstitutet) was founded in 1909 aiming at training kindergarten teachers. We should bear in mind, though, that Fröbel refused to call the kindergarten staff “teachers.” As has been said the children were not to be taught but guided, and consequently he preferred the term “female leader” (ledarinna).

Svenska Fröbel Förbundet (The Swedish Fröbel federation) was established in 1918 as an interest group and later became a trade union for pre-school teachers. The federation was still viable in the late 1900s but went through several name changes as well as reorganizations. Today pre-school teachers obtain up to three years of pedagogical education, dependent on year of graduation.

J-E. Johansson (1994) claims that the Swedish pre-school pedagogy has a strong knowledge tradition, which is collective, systematic, and technical in nature. It is based on an integrated approach to subject matter which originates in the German Fröbel movement, although, Johansson claims that Fröbel’s legacy was never brought forward in an original and unaltered way:

Those who propagated his pedagogy very soon abandoned the most essential parts in his thinking and replaced them with what they considered to be more foundational. There is reasons for talking about a broad scale Fröbel tradition rather than search for a pure and unadulterated Fröbel doctrine. (1994, p. 18, my translation)

Starting in the 1930s, commissions conducted extensive inquiries regarding the expansion of kindergartens and the child-cribs. This was a part of a social political reform wave where, for example, child allowances and school meals
were established. This took place at a time when industry needed labor and, consequently, a debate about women’s role as mother vs. wage earner ensued. The idea that children needed a pedagogical activity was becoming accepted while it was still considered inappropriate for children to be away from home because of their mothers’ gainful employment. Even though children’s were subsidized for the first time in 1943, in 1949 a majority in parliament voted down a government proposal to expand child care. This was based on the ideology that women should stay home and take charge of their children’s upbringing and care (J.-E. Johansson, 1994). Therefore, it was not until the 1960s that child care facilities, i.e., the kindergarten and the child-crib, expanded in number and child care were given substantial economic support from the state government. The kindergartens were still given priority for this support. Kindergartens became free of charge, unlike the child-cribs that at this time had changed their name and were called day nurseries (daghem). Because the day nurseries’ social function was to replace homecare their fees were excused. By the end of the 1940s the kindergarten was considered a natural part of the educational system in terms of preparation for school.

During this time the Fröbel pedagogy was criticized. In practice it had become rigid and mechanical. According to Tallberg Broman (1995) two factors began to change the perceptions about and design of child care institutions. First, society became more democratic. Second, there were new understandings in the developmental psychological field as well as ideological trends. Individuality, social awareness, independence, and free creativity became the leading concepts. Thoughts and actions should not be guided by traditions and beliefs but by reason and scientifically based knowledge. Arnold Gesell’s developmental psychology became the successor to Fröbel’s philosophy in this new scientific paradigm.

The public allowances to the craft centers also increased in the 1930s, which meant that the municipalities gained insight and control over them. This resulted in longer open hours, compulsory homework, decreased work activity, and fees. In 1944, the name Craft center was replaced with Afternoon homes (eftermiddagshem). Instead of work and crafts, recreation and homework became the main activities. As Henschen et al., (1997) point out “gone is the upper class’ view on the meaning of work. Gone is also the

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26 The reason for the name change was to get rid of its connotation of poverty.
children’s participation in the feeling of solidarity framed by work” (p. 145, my translation). Instead of teachers and craftsmen, kindergarten teachers came to work in the afternoon homes (Hansen, 1999).

By the end of the 1950s the opening hours in the afternoon homes were extended and care was given also before school started in the morning. This development eventually resulted in a name change - afternoon homes became Leisure-time centers (fritidshem). In the leisure-time center recreation became the main feature and the significance of homework ceased. In 1965 the education for “recreation pedagogues” (fritidspedagog) was established. Today it is mainly recreation pedagogues how work in leisure-time centers. Recreation pedagogues have up to three years of pedagogical education, depending on graduation year.

During the 1970s and 1980s a substantial expansion of pre-school- and leisure-time centers took place. The child care expanded from sixty thousand places in 1975 to two hundred thousand ten years later (Kärrby, 2000a). In 1985, the Swedish Parliament decided that all children above the age of 1.5 years would be offered some kind of public child care not later than the fall of 1991. This was a political statement meaning that child care is an important societal factor (J-E. Johansson, 1994). The expansion can be attributed to the market’s need for women’s labor, which in turn addresses the issue of gender equality. Other reasons for the expansion have been proposed, such as research in the field of developmental psychology (Henschen et al., 1979; Tallberg Broman, 1995). This research taught about the significance of a goal-directed pedagogical activity for small children, as expressed, for example, in Barnstugeutredningen (SOU 1972: 26 and 27) – an official report aimed at formulating the goals of the pre-school pedagogy.

Barnstugeutredningen came to have considerable significance for the preschool. In 1975, kindergarten, now called lekskola (play school), became a right for all children, i.e., compulsory for the municipalities to provide. Significant

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27 Henschen et al. accounts for interviews with adults who once were members of a craft center. These narratives often reveal that these people felt pride in having learned a craft and that they thoroughly learned to know a process of work. This knowledge took them closer to the world of the adults and made them participants in a community – the community of work (p. 145)

also was that an official pedagogy – “dialogpedagogik” (dialogic pedagogy) – was formulated which was to be applied in pre-schools, i.e., daghem (day nurseries) and lekskolor (play schools). The dialogic pedagogy implied that the Fröbel pedagogy was called into question in favor of a “less authoritarian pedagogy” (Gertrud Schyl-Bjurman in Henchen et al., 1979). Piaget’s cognitive and Erik H. Erikson’s psychodynamic theories became the new guiding principles. The concepts of “free play” (fri lek) and “free creativity” (fritt skapande), which go back to Fröbel’s era and are still significant and prevalent in today’s pre-school and pre-school classes, obtained new meaning. The ideology was that the content of the activities should be less adult-controlled and as a result adult participation was sometimes less frequent. Instead of the group as the focal point the individual child became the focus. Also, the activity was to be organized in small cohorts of children of varied ages, who were to circulate between “activity centers” (aktivitetsstationer). The teachers were expected to work in teams.

The dialogic pedagogy was questioned and debated from a theoretical, a political and a pragmatic perspective (see for example Bladsjö et al., 1981; Callewaert & Kallós, 1976; Kallós, 1978; Ehn, 1983). Theoretically the basic idea of the child conveyed in Barnstugeutredningen, which can be thought of as “nature,” was questioned. The child as nature implies that the child’s gifts are genetic and innate. The practical consequences of such a view, which implied a basically passive role for the adults, were also opposed:

To initially touch upon the view of children and childrearing, we are of the opinion that both the practical recommendations and their theoretical justifications in the Barnstugeutredningen inquiry are flawed. The Barnstugeutredningen inquiry [...] dismisses planning according to set procedures as ‘mechanical’ and ‘unsuitable for the pre-school purposes’ [...]. The practice of gathering the entire group disappeared with the introduction of dialog pedagogy and was replaced by smaller, spontaneous ad hoc gatherings. The inquiry recommends that children solve conflicts on their own, without adult interference since this may cause an ‘emotional block’ [...] in the child. Free play, where the children are allowed to play without adult interference, is encouraged [...]. Furthermore, the staff is encouraged to set up so called activity [...].

29 Though this is expressed in the preschool discourse it is shown that in practice, play is poorly respected by the preschool teachers. Play is interrupted frequently in favor of cleaning up, going out to the playground, having lunch, or a new activity (Henckel, 1990). This finding corresponds with my experiences from fieldwork and from my own experiences as a preschool teacher.
stations where the children are given the opportunity to experiment, test and play with various materials on their own, without adult instructions or assistance (Bladsjö et al., 1982, p. 85, my translation).

Another effect from this period was that the activity in the leisure-time centers became more identified with care rather than with recreation (Henschen et al., 1979). The recreation idea was replaced with supervision (*tillsyn*) of children in a homelike atmosphere. The leisure-time center resembled the day nurseries in that play and care became the purpose. Calander (1999) points out that state-formulated goals from the 1980s confirmed the role of the leisure-time center as a complement to the home rather than to the school.

Henchen et al. make a concluding remark about the changed ideology of the child care that was obvious by the end of the 1970s:

At the time [the 1930s], new psychological ideas started to gain ground. Gradually, psychologists and therapists took over the role as authorities within childrearing. This had an impact on the child care institutions. After World War II, craftsmen were no longer employed as teachers at the craft centers. Children working was considered out of keeping with the times, and turned into leisure-time activities and services instead. The craft centers were renamed to ‘leisure-time centers’, the teachers became ‘recreational pedagogues’. At the day-care centers the daily responsibilities and structured collective play-time of the children were gradually replaced by didactic toys and developmental psychology. The Barnstugeutredningen inquiry in the early seventies was the crowning achievement in this development towards individualization and psychologization. The early working class movement view of what to teach the children the value of hard work, knowledge is power, order, collective spirit and self-discipline—had been thrown on the scrapheap long ago (1979, p. 286, my translation).

In the 1970s collaboration and integration of school and child care became significant. As mentioned previously, the SIA inquiry introduced the concept of the integrated whole school day which implied collaboration with the child care.\(^\text{30}\) This meant, for example, that the state government initiated something called the Extended leisure-time center (*utvidgade fritidshem*). Extended

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\(^{30}\) However, as Fredriksson (1993) points out, collaboration between school and preschool was already addressed and advocated in the 1946 School Commission. The issue that prompted this objective at that time was to facilitate the transition from preschool to school for the six-year-old children.
leisure-time centers were meant to be located in schools in order to make use of the empty school locations in the mornings and afternoons and also to give care to those school children not enrolled in the regular leisure-time center, but in a more limited way. This use of school space was realized only to a certain extent.

Moreover, Barnstugeutredningen stated that collaboration between the school and the pre-school should be enhanced. The goal should be for the institutions to approach each other in terms of pedagogy, methodology, organization, and perceptions of developmental psychology. For example, Barnstugeutredningen addressed the possibility of a flexible use of premises and teachers. It was also stated that some of the methods used in the pre-school could very well be used in the school in order to adapt to the individual children and their developmental levels. For example, for some children play might be the leading activity in school as well as in pre-school and this should be reflected in the school practice.

One obvious outcome from Barnstugeutredningen was that groups of six-year-old children and pre-school teachers visited schools on a regular basis as preparation for starting school. The hope of an intensified relationship between the child care institutions and the school was maintained throughout diverse public inquires and reports during the 1980s and 1990s (for a review see for example Hansen, 1999; Davidsson, 2000).

During the 1990s significant changes again occurred that influenced the structure of the child care institutions, and pushed the school, pre-school and leisure-time center closer to each other. The 1992 law that implied a flexible school start lead to a more intense collaboration between the pre-school class and the school. The repercussion of this is that the child care and the school now have the same responsible authority, i.e., the Ministry of Education and the Board of Education.31 The pre-school class is now a compulsory part of the school system. The pre-school center has a curriculum (Lpfö98)32 and there is a common curriculum for the compulsory school and the pre-school class (Lpo94, 1998), which is a revised version of Lpo94. Leisure-time centers are to

31 Until the end of the 1990s the responsible authority for the child care has been The National Swedish Board of Health and Welfare (Socialstyrelsen).
32 Lpfö98 highlights the significance of the preschool as the first step on the path to what the Board of Education calls “lifelong learning.”
implement the curriculum as fully as possible. This also implies a clear focus on learning and education for the child care institutions (SOU 1997:21).

In the state commission (SOU 1997:21) that preceded the revised version of the Lpo94 it was stated that the curriculum should provide support for integration of the pre-school class, compulsory school and leisure-time center. The committee suggested that the activity should be organized in mixed age groups in order to adapt to the diverse children’s developmental levels. The work practice was suggested to be theme-directed.\footnote{To organize work in themes such as, for example, the farm, the seasons, or the forest has, as shown, long been a tradition within child care pedagogy in Sweden. Fischer & Madsen (1984), however, have studied this theme-work activity and found that it tends to be based on what they call “adult knowledge” rather than on children’s prerequisites, interest and knowledge level.} Further more, it was stated that the municipalities should be stimulated to develop forms of collaboration wherein the school and the child care would eventually grow together:

Integration […] implies a convergence of various teaching and learning traditions. Confrontations between traditions are often fraught with conflict. It is not a matter of reaching compromises in order to maintain differing traditions, languages and attitudes; but to work toward common objectives by maintaining knowledge and experience while developing a new outlook and a new practice. (SOU 1997:21, p. 74, my translation)

To sum up: As the above account reveals, both social, economic, and educational goals have, to a larger or lesser extent, been guiding the establishment of and content in the different kinds of child care institutions. Despite these divers aims and as pointed out by Dahlberg and Lentz Taguchi (1994), there seems to have been a common idea about the child, which they formulate as the child as “nature.” The implication is that “everything” is already in the child and that she therefore has to be given freedom in order for these innate gifts to grow and develop. This conception and construction has led, at least in the post-war era, to a therapeutic approach and to a focus on emotional development rather than learning (SOU 1997:21). Pleasure and interest from the perspective of the child should guide the activity; processes aimed at discovery, learning, and creativity tend to have been secondary. The construction of the child as nature has its origin in a romantic view of the child as, for example, was expressed by Rousseau and Fröbel.
As has been shown, there is an earnest desire for comprehensiveness in the child care culture, which is connected to the pedagogical idea that collective experiences should be the starting point in the pedagogical work and be developed through play and creativity. This implies that care-giving, hygiene, cooking etc are as important as everything else. Moreover, learning and development have to take place from within each child’s own preconditions, not from objectives stated by others than the child. This perspective leads to a more “here-and-now” approach in contrast to the schools’ more future-directed approach.

Just as the school has, it can be concluded that the child care system and associated institutions have gone through many changes and phases. Even though education always has been the main purpose in the school there have been contradictory ideas as to what and whose interest education should serve. Child care has also had diverse aims. However, there has never been one indisputable task for the child care as there has been for the school. The kindergarten was established for pedagogical reasons and for the child. The child-cribs were organized in order to deal with social problems, and the day nurseries to provide industry with labor – especially female. These different purposes have been discussed in terms of a dichotomy: child milieu vs. repository (Ladberg, 1974). Perhaps we can say that it is this contradiction that has been the driving force in the child care system’s development.

Despite different institutional forms and diverse purposes the pedagogy in the diverse child care institutions seems to always have been relatively child centered, though the early institutions very strongly can be characterized as repositories rather than pedagogical milieus. We can see that over time the role of the adult as an authority, and the direction of the activity in terms of learning, care, recreation, etc. have varied.

2.3 Integration and its Potential for a Qualitatively New Practice

Despite differences in the practical work in the school and the child care institutions, there has been a large degree of agreement between them in the formulations of goals and guidelines for the two institutional systems. From the above description we can see intentions aimed at coordination of the child care’s and the school’s activities. These activities started up as school-start
They [the curricular texts] describe a development taking as its starting point the teachers’ collective responsibility to assess the school readiness of the children, they [the curricula text] view pre-school as preparation for school by striving for continuity regarding contents and working methods and equality. (2000, p. 55, my translation)

One might therefore say that there is a precondition, at least in words and writings, to the creation of a practice; it could be characterized as a mix, or as Haug (1992) puts it, a combination of “the best” from both traditions, i.e., of the school culture and the child care culture respectively.

Integration of child care institutions and the school has been the focus of interest in several doctoral dissertations (Ljungblad, 1979; Wiechel, 1981; Gran, 1982; Haug, 1992; Fredriksson, 1993; Calander, 1999; Hansen; 1999; Munkhammar, 2001) as well as in investigations and evaluations (for example L. Flising, 1990; B. Flising, 1995; Axiö, 2000; I. Johansson, 2000a&b) and other scientific and academic texts (see for example Arnpqvist, 2000; Brorman, 2000; Calander, 1996, 1997; Dahlberg and Lentz Taguchi 1994; Davidsson, 1999a&b, 2000; Hansen, 2000a&b; I. Johansson, 2000c&d, and 2001; Klerfelt, 1999; Kährby, 1982, 2000a&b; Pramling & Mauritzon, 1997).

I want to call attention to two themes that frequently recur in these works. (1) Diverse traditions, codes, discourses, cultures, or as they are sometimes called “professional identities,” mediate actions and interactions, which makes it difficult to bring about functioning integration and collaboration. (2) Instead of the child care traditions influencing the school pedagogy – as it was meant to do – the school code seems to dominate the new practices that arise in integration and collaboration attempts.

As a result, diverse conclusions are drawn. There are those who support the integration movement and believe it is a step in the right direction (see for example Axiö, 2000; I. Johansson, 2001). Others suggest measures and strategies to be taken in order to overcome the difficulties and obstacles that these traditions, codes, etc., constitute (see, for example, Hansen 1999; Skolverket, 2001). Others limit themselves to account for the difficulties, but
claim that teachers\textsuperscript{34} have to be aware of their guiding codes and values before integration and collaboration can be successful and efficient (Haug, 1992; Fredriksson, 1993; Munkhammar, 2001). Yet, others come to the conclusion that the relationship should adhere to collaboration and not lead to integration (Calander, 1999; Klerfelt, 1999). Let us look at some of the more recent dissertations in a little more detail and at what conclusions they draw before we look at strategies to overcome the difficulties that are suggested.

The research undertaken by Calander (1999), Hansen (1999), Fredriksson (1993), and Munkhammar (2001) are all comparable to my own study in that they focus on interactions, or let us say, the encounter, between child care and compulsory schoolteachers in Sweden.

Calander (1999) has been studying the encounter between recreation pedagogues and schoolteachers. He asks what occupational function is produced in work team interaction, what the consequences of the function so constituted are for the recreation pedagogues’ occupational identity, and finally, what the implications are for the recreation pedagogues’ future occupational development. The aim of the study was to analyze how recreation pedagogues’ occupational function was constituted through oral interaction during planning sessions in inter-professional work teams. His perspective is that of the recreation pedagogue. The theoretical perspective is dual in that it intends to link “institutional structure and agents to each other” (1999, p. 212). On the one hand a social constructivist perspective, based mainly on Gidden’s theory of structuration, is taken, on the other, social constructionism was a point of departure. The latter approach is explained as emphasizing the analysis of “socio-cultural interaction between situated actors and the local production of meaning” (Calander, 1999, p. 212) while the former implies an institutional view i.e., “constructions made into an ontologically objective reality” (Ibid).

Calander claims that the integration trend has two causes. One is economical/structural and the other is educational/ideological.\textsuperscript{35} Decentralization and de-regulation paved the way for what he calls “a shotgun wedding” between recreation pedagogues and schoolteachers.

\textsuperscript{34} When, in the forthcoming, I apply the term “teacher” I include schoolteachers, recreation pedagogues, and preschool teachers.

\textsuperscript{35} In the report from Skolverket (2001) it is stated that municipalities around Sweden have high expectations of both financial and pedagogical gains from the reform.
Blending “the best of” the different educational cultures has become the official rhetoric and what is supposed to be the means for progressive educational development. Within this context, Calander’s focus has been to illuminate impediments to inter-professional collaboration. Such impediments have been found in the structure, such as differences in wages and education. Recreation pedagogues are paid less than schoolteachers and receive less training. School is compulsory while attendance at a leisure-time center is optional. Calander concludes that the recreation pedagogue position is a dominated position vis-á-vis the teacher position and therefore the encounter is not one based on an equal standing. In turn, this might lead to problems in interactions and counteract attempts to develop collaborative practices. In fact, this is what he shows in his empirical study. He claims that the school’s dominance causes recreation pedagogues to become teachers’ assistants. Additionally, he shows that recreation pedagogues acting in a school-like educational logic were receiving positive sanctions and that they had difficulties grounding their actions in a leisure-time center educational logic. As a consequence, he argues that recreation pedagogues should get a “divorce” from the integrated work team in order for them to become “Pedagogues of Recreation.”

Monica Hansen (1999) has also, simultaneously with Calander, been studying the encounter between recreation pedagogues and schoolteachers. The aim of her study has been to create a deeper understanding of the interaction between recreation pedagogues and schoolteachers in respect to the significance of professional background. The context is the processes that unfold in a centrally-imposed cooperation between these two related, yet different professional cultures. She asked: How do the actors from the respective professional groups mold the image of themselves and each other? What meaning do the diverse professional cultures have in concrete practical every day encounters between teachers and recreation pedagogues? How have these images and meanings been shaped and influenced by the history of the societal view of each profession?

Unlike Calander, Hansen takes a recreation pedagogue’s as well as a schoolteacher’s perspective. The theoretical basis for the study is symbolic interactionism, as developed at the Chicago School of Sociology. Hansen defines the study as having an ethnographic character. She describes the development of these two professions, which she conceptualizes as cultures, and claims that they have different conceptions of their professional identity,
depending on which tradition they belong to. When schoolteachers describe
the professional competence of recreation pedagogues, the most important
aspect is care. When recreation pedagogues describe schoolteachers’ work, it
is mainly in terms of their work with reading/writing/arithmetic. These
interpretations of each other’s competence are accurate though not complete.
The mutual traits are that both schoolteachers and pedagogues regard
flexibility, sensitivity to the needs of children, capacity to interpreting and
understanding children and an ability to support and guide children’s
learning to be important parts of their own competence.

Moreover, the schoolteacher sees her role as a mediator in the children’s
learning, and the recreation pedagogue sees herself as a model. Hansen
describes the physical and mental environment that schoolteachers build for
work with the children in terms of the metaphor “school as a work place.”
“Leisure-time center as a home” is the corresponding metaphor for the
environment that the recreation pedagogues create. These terms imply
different ways of structuring the daily work.

The schoolteachers’ professional culture is described as a culture with
relatively strong classification and framing – concepts borrowed from Basil
Bernstein. The different types of activities occurring during the school day are
treated as belonging to separate categories, e.g., lessons are separate from
breaks, arithmetic from language, and theoretical subject from practical.
Similarly, different localities are used for different types of activities:
classroom for lessons, schoolyard for recess, lunchroom for meals, etc. This
structure is also seen in the division of labor. The class teacher has the main
responsibility for the class as a whole, the special needs teacher is responsible
for special education, music teacher for music, etc. This structure is apparent
also in the way teachers conduct collaborative work. The joint responsibility
for a team of teachers is “constructed by joining together the interlocking but
separate pieces of a jigsaw puzzle, the overall picture of which signifies the
complete school day for the children” (1999, p. 383).

The culture of recreation pedagogues is described as weak classification and
framing in that the boundaries seems to be less pronounced:

Different types of activities are simultaneous and flow into each other without
any marked transitions. The localities in the leisure-time center are furnished,
equipped and used for a broad variety of activities, boundaries between
“outdoors” and “indoors” are less conspicuous, and boundaries between
“territories” of children and adults are less marked. The division of responsibility between the adults is less strict and co-operative work is conducted in interaction between the pedagogues, where the initiative in the situation flows back and forth between them. The image here is a moving mosaic, with a sometimes somewhat indistinct overall picture, rather than a fixed jigsaw puzzle. (1999, p. 383, my translation)

These differences give rise to misunderstandings and overt and covert conflicts. There seems to be a tendency to subconsciously interpret “the others” and their actions in terms of “right” or “wrong,” “same” or “different” in relation to one’s own culture. The classification and framing is ascribed to factors in the historical background and development of the diverse professional practices.

As does Calander, Hanson worries about the recreation pedagogues’ future identity and function in the school. Unlike Calander, however, Hansen does not argue for a divorce from the school. Instead, she proposes two areas of development of their professional competence:

(1) working with the children in developing their social relations to each other, with what has been labeled “social competence,” and (2) working with experience-based learning in close co-operation with the teacher in connection with classroom based learning” (1999, p. 387, my translation).

Instead of a “melting together” of the three professions, i.e., pre-school teachers, recreation pedagogues, and schoolteachers – as sometimes is proposed in the debate – Hansen advocates that the different competencies possessed by the diverse professionals be strengthened.

Fredriksson’s (1993) thesis is based on cases studies, one of which is an evaluation of an experiment with integration of pre-school, school, and leisure-time center. Organization, content, and methods in three integrated groups are compared and analyzed. The analysis is based on staff and parent understanding and evaluation of methods and content. The data consists of interviews, questionnaires and observations. The study aims to understand what it is in the cultures of schooling and child care that makes cooperation possible but also why it is difficult to implement. The theoretical perspective is organizational (neo-rationalistic) and micro-political.

The experiment ceased before the appointed time and Fredriksson claims that a functioning and rational organization in relation to the aim could not be
established. The different parts of the organization, i.e., the management, the influence of the trade unions, term of employment, and other working conditions were not adapted to the democratic aims of the organization. She concludes by saying that a precondition for successful integration is that it is voluntary and not forced upon the involved teacher groups and pedagogues. A shared pedagogical view is also considered a precondition.

The purpose of Munkhammar’s (2001) thesis is to describe what happens when schoolteachers, pre-school teachers, and recreation pedagogues are brought together to collaborate in the creation of a joint activity. The theoretical perspective is inspired by Foucault’s theory of power where the concept of discourse is of central importance. Consequently, the study came to focus on making visible the discourses that the diverse teachers are embedded in and how the teachers operate within these discourses. Moreover, the focus has been on what impact the discourses have on the teachers’ views and outlook on children, knowledge, and learning. Munkhammar asks: What is it that the teachers take for granted and do not reflect upon and therefore consider natural?

Munkhammar shows how the teachers are controlled and control themselves through the discourses. This, Munkhammar claims, constitutes the range of possibilities within which the teachers work. Moreover, Munkhammar points out the lack of support and guidance that the teacher teams encounter in their efforts to maintain the constituent pedagogic practice. The collaboration gives rise to questions which the pedagogues are unable to handle and from which they defend themselves. These questions concern the teachers’ views on children, knowledge, and learning. These views become self-evident truths, which are taken for granted and therefore seen as natural.

Munkhammar draws the conclusion that in order for change to take place – which is the intention of collaboration – the diverse discourses held by the teachers must be made visible. When the discourses are made visible an opening can be made for the creation of an alternative range of possibilities and thus allow for hope of possible change.

The above review shows that integration of diverse traditions and cultures in the context of children’s learning and care is a complex task. Therefore let us scrutinize the strategy that the authorities have developed in order to make the reform work. The Swedish Board of Education (Skolverket) started in 1998 -
on the behalf of the Swedish government – a three-year study aimed at following the development of integration between the pre-school class, the leisure-time center, and the school. The commission includes such aspects of the integration as activity, organization, and premises. It also deals with the impact of the integration on working methods and the possibilities of stimulating children’s development and learning. In the final report to the government it is stated:

The integration should, above all, be perceived as a pedagogical issue focusing on a development toward more common goals, attitudes, working methods, and outlook in the diverse enterprises. The encounter between the diverse enterprises is expected to set free pedagogical developmental forces and create new conditions for development and learning. It has been emphasized that what are natural occurring components in the pre-school pedagogy, among other things play, care, and creativity, the thematic approach, and the child’s own exploration, should influence the school. (Skolverket, 2001, p. 3, my translation)

Skolverket’s belief is that the integration reform has a developmental potential even though it does not deny the problems accounted for above. It wants to support local integration attempts and claims that it is important to create conditions for the reform to succeed. It is stated that such conditions, above all, regard competence development and what it calls “joint reflection, planning and evaluation of the pedagogical practice” (Skolverket, p. 190). It formulates measures to be taken on both a government/state level and a local/municipality level that might facilitate realization of the reform. On the government/state level it suggests that the following measures be taken:

- Continuous overhaul and synchronization of law and regulations.
- Concentration on implementation of the integration form, the revised Lpo94 and Lpfö98 on both municipality level, local level, and within the principa and teacher-education.
- Continuous concentration on developmental work and developmental dialogues with municipalities and schools in accordance with the government’s commission to The National Agency of Education in which the government requested increased goal-fulfillment in the school.
- Research-based studies of the content in the pedagogical activity and effects of diverse forms of organization and residence.
- Concentration on a dialogue with the educational institutions for principals and new teachers. (Skolverket, p. 10, my translation)
On a local municipality level they suggest that the following measures be taken:

- A conscious concentration on reinforcing knowledge and a shared view in the whole organization.
- Concentration on competence development of all personnel on equal terms.
- Creation of time and support for collegial reflection.
- Retaining and supporting the new teacher teams in the school.
- Review of the management and leadership organization and its competence.
- Evaluation of the integrated enterprises. (Ibid, my translation)

The report breathes a wish and hope that the reform will result in a new kind of practice. Two questions can be asked: What is it actually that is desired? and Where and how is that going to be realized? In other words, what constitutes a new practice, i.e., what does it look like and how is it going to be achieved? With Engeström (1987) we could ask: what is the zone of proximal development in the activity in schools due to the integration reform?

Let us start with the latter question first. Dahlberg and Lentz Taguchi (1994) envision an activity based on a view of the child as a culture- and knowledge-creator, which they perceive as possible and realizable but requiring particular conditions:

If you want to reach a long-term development of the child care’s and the school’s pedagogical work, according to us, a transformation has to take its starting point in a shared view of the child, learning, and knowledge (1994, p. 21, my translation).

They argue that “the traditions, the views, and by that, the codes, first have to be made transparent and conscious before they can be further developed (1994, p. 22, my translation).”

A similar message can be conveyed in Munkhammar’s (2001) study:

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36 Engeström’s concept of collective zone-of-proximal development is based on Vygotsky’s concept of the zone-of-proximal development (1987). “It is the distance between the present everyday actions of the individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in every day actions. (Engeström, 1987, p. 174)
The result of this thesis therefore shows that the discourses must be made visible. We therefore need to document and reflect upon these discourses in order to opening up and bring forth a new or rather an alternative range of possibilities. This can give hope that a change might be possible. (p. 180, my translation)

Haug (1992) goes even further and claims that change requires that those who work within these traditions change the foundation of their understanding of what the work is about:

Changes require also that those who are working within the frameworks have changed the basis of their understanding or the basis of their notions of what the work itself involves. They must internalize another tradition, they must acquire the tacit knowledge about the ideology in which they are to function. They must be able to interpret the signals, give them meaning in a new sense. They must have other notions as to what is important, and how educational work can be done. (1992, p. 192)

These statements seem to share a joint assumption about a “first” and a “then.” Before the teachers, with their diverse traditions, codes, discourses, etc, will be able to collaborate and work in an integrated manner they have to be aware of their guiding concepts. This implies that an insight precedes a changed practice. But how and where is such awareness acquired and how do traditions, codes, discourses, views, values, attitudes, etc change?

In the report from Skolverket (2001), communication and reflection are emphasized. For example, the significance of a strong and supportive local leadership at the school and the municipality, that initiates and arranges for pedagogical discussions, is stressed. Experiences show that schools with such leadership have a greater chance to succeed in their integration attempts. However, this could be contrasted with Calander’s (1999) finding that, within integrated teams, “communicative”37 conduct aiming at understanding and mutual agreement is less prevalent than “strategic” conduct that aims at reaching success that is related to one’s own interest.

I. Johansson asks the challenging and interesting question “How is it possible to create something new out of the present?” (2000c, p. 34). He seems to have confidence, though, that the curriculum and other guiding documents will have an impact due to what he calls “symbolic constructivism,” meaning that

37 Calander employs Habermas’ concepts.
old concepts are imbued with new meanings and new ones are added. This will hopefully have an impact on the school practice. This confidence in guiding documents such as the curriculum and in words and language is in accordance with what is stated in the proposition for the revised curriculum, i.e., Lpo94, (SOU 1997:21):

Shared goals contribute to unite a shared perception, continuity, and stability. With common definitions and concepts a shared language will gradually be molded which will facilitate integration” (SOU 1997:21, p. 81, my translation).

Further, the proposition states that the school has to develop a shared “living pedagogical value-based and practically applied philosophy that also is influenced by the contemporary science” (p. 61, my translation). This philosophy needs to be shared by teachers, parents, management, and politicians and in order for this to take place it is “necessary to initiate a dialogue in a public room” where everybody can meet in a productive discussion” (SOU 1997:21, p. 61, my translation). I. Johansson also recommends “an enlightening educational activity (upplysande bildningsverksamhet)” (2000c, p. 35) in which teacher education has a special role and importance.

Thus, to conclude, it seems that the place for change of value systems etc. is through a dialogue in a public room supported by curriculum and other guiding documents and influenced by contemporary science and enlightening educational activity. My interpretation of these accounts is that they represent a somewhat naive belief that change will take place as a result of good intentions, conscious reflection, and through the power of guidelines and education. This strategy represents to me an idealistic view of the human mind and how traditions, codes, discourses, cultures, professional identities, etc change. I will in this thesis take a different approach. I will try to pursue a dialectical path meaning that change takes place in practice, or to be more specific, in object oriented activities which are mediated by both conceptual and material tools. This implies that change is not brought about from above, nor is it reducible to purely individual self-change of subjects. The key is as Marx argues in his Thesis of Feuerbach “revolutionary practice,” (Marx & Engels, 1968, pp. 659-660) which is not to be understood in narrowly political terms but as joint “practical-critical activity” potentially embedded in any mundane everyday practice (Engeström & Miettinen, 1999, p. 3).

Let us now turn to the second issue, i.e., what a new pedagogy really would mean. Generally in the work on integration and collaboration there is an
absence of discussion and definition of what the “best” (Haug, 1992) of the two worlds might imply, or rather, this issue is not developed in the discussion. What is it that is expected from the teachers? What would it mean for a schoolteacher to adhere less to the school code i.e., what is she supposed to replace her “school-pedagogy-tool-kit” or discourse with? According to Davidsson, who has analyzed and interpreted the concepts of cooperation, (samarbete), collaboration (samverkan), and integration in the schools’ and the pre-schools’ guidelines and curriculums, that is not exactly clear:

I interpret the way the curriculum is written as an exhortation to individual teachers, pre-school as well as schoolteachers, to work together, and, drawing upon their individual professional skills, create a new and different practice for the learning process. The new construction should be based on a consensus of children’s learning and development process. In this respect the curriculum can be understood as requesting certain parts to be similar and common, but others to be kept separate, i.e. the activities are supposed to differ in some way. The earlier traditions should form part of the new (2000, p. 55, my translation).

In the report from Skolverket (2001) it is stated that principals and teacher teams have exhibited confusion about how to go about integration, due to lack of insight into the overall intention and purpose of the integration reform and the new organization. They admit that it is time to start to think about the pedagogical questions:

The National Agency of Education […] maintains that issues of content and pedagogy should be emphasized rather than organizational ones. The pre-school class and integration reform have not been fully tested due to a lack of knowledge and implementation resources. (2001, p. 64, my translation)

My conclusion is that there is a need to develop the discussion regarding both goals and means for the integration reform. What would be the features of a pedagogical practice in the school that is truly influenced by the child care tradition? How and where can such a practice be realized?

Before I elaborate further on these questions I will now turn to the site where I conducted my fieldwork – the North Valley School - and after that describe the 5thD.


### 2.4 The Setting: North Valley School

North Valley is a public school in a small town in Sweden. It is located in a middle/working class area and serves a neighborhood with a large immigrant population. The school was founded in 1981 and is comprised of six classes, one each from first grade to sixth grade. Many of the school teachers who were employed at the time of the founding still work in the school.

An open leisure-time activity was established in the school in 1990. It was the first step in a process of physically moving child care institutions into the school. This was not an easy thing to do and it caused tensions between the schoolteachers and the open leisure-time staff. A substitute in VT used to work at the open leisure-time center, and recounts her experience:

**E2:1**
Well, yes, that’s what we had to do [“force” our way into school], and although we made a crack in the wall we never came over. That happened later when they took the pre-school children to school once a week or something like that. This way they [the pre-school teachers] took the next hit, as it were. But we were like trailblazers. Like it or not, we had to be there [in the school] and preferably cooperate as well. (Interview, 02/01/99)

In 1993 the school and the child care merged at the political/municipality level (common board) as well as at the administrative and local level (school and child care district). This implied that a school district often came to be comprised of one school and a number of child care institutions. The management of these new school districts often came to be assumed by one teacher from the school and one from the child care. In North Valley, however, a pre-school teacher named Patricia\(^{38}\) became the principal. A recreation pedagogue was appointed as vice-principal. In the same reorganization the pre-school class moved in to the school and the open leisure-time activity was transformed into a regular leisure-time center. As mentioned, this process did not take place without a struggle. In contrast to the account of the substitute teacher cited above we can listen to a schoolteacher and her perspective on this situation:

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\(^{38}\) In Sweden today it is very common that teachers are called by “their” first names both by children and adults. I have therefore chosen to call the teachers and other adults in the school by first name. To help the reader I have given schoolteachers names starting with S, preschool teachers with P, recreation pedagogues with R, and high school teachers with H.
**E2:2**

As a teacher you feel that you must have full control over everybody’s skills. Therefore you think if you divide the kids into different groups, some at the pre-school class or the leisure-time center and some somewhere else, then you have no control. The kids are floating around everywhere. (Interview spring 1996)

North Valley became “computerized” in 1995. This involved implementation of an intranet and a relatively large number of computers were given to the school. This was one of the reasons why I became interested in studying this particular school. They seemed inclined to try out new pedagogical tools and methods. This was also why I introduced the idea of starting a 5thD program in this school (the 5thD will be described later in this chapter).

In the spring of 1998, Patricia decided that integration of the pre-school class, the lower grades, and the leisure-time center would take place at the start of the school year in the fall of 1998. The name of the new organizational form that replaced the class/grade and the child-care groups was, as said in the introductory chapter, “VT” (vertical tracks). The word VT symbolizes a structure that would comprise groups of children of different ages. This implied that each year a new group of six-year-old children would be added to an existing group. Instead of grades there would be VTs comprised of children from ages six to twelve in the case where all the grades in the school would be included. In the first phase two VTs were organized with one teacher each from the primary grades, the pre-school class, and the leisure-time center and approximately fifteen six-year-olds and fifteen seven-year-olds. This is shown in table 2.2.

<table>
<thead>
<tr>
<th><strong>Vertical-Track 1</strong></th>
<th><strong>Vertical-Track 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandra – schoolteacher</td>
<td>Susan – schoolteacher</td>
</tr>
<tr>
<td>Petra – pre-school teacher</td>
<td>Paula – pre-school teacher</td>
</tr>
<tr>
<td>Rita/Rebecca – recreation pedagogue</td>
<td>Rose – recreation pedagogue</td>
</tr>
<tr>
<td>Six-year-olds – approximately 15</td>
<td>Six-year-olds – approximately 15</td>
</tr>
<tr>
<td>Seven-year-olds – approximately 15</td>
<td>Seven-year-olds – approximately 15</td>
</tr>
</tbody>
</table>

Table 2-2 Members of the two VTs.
This structure implies, in theory, that after five years there would be two VTs with $10^5$\textsuperscript{39} children and approximately 10 teachers\textsuperscript{40} in each. This is graphically displayed in figure 2.1.

![Figure 2-1 Progression in the VT Organization.](image)

The VT organization was sustained for two years. Some changes took place in the leadership of the school during this time. Sam, one of the schoolteachers, became the vice-principal in the spring of 1998 when his predecessor left. Patricia resigned at her own request in the spring of 1999 as a result of tensions and conflicts. Sam became the principal for a while before a second reorganization, an expansion of the school district, took place. In the spring of

\textsuperscript{39} In reality there were approximately 160 students in the school which would mean 80 in each VT group.

\textsuperscript{40} There were approximately 18 full time teacher positions in the school divided among 20 persons.
2000 he reassigned as a vice-principal under a principal located at a nearby school. In the new structure not every school had its own principal.

Figure 2.2 shows how the locations were organized before the VT organization started and figure 2.3 shows how it looked afterwards. As can be seen in the drawings the school building has two floors. The first and second grades are located downstairs and the third to sixth grades upstairs. The preschool class and the leisure-time center are also downstairs.

<table>
<thead>
<tr>
<th>Craft-room</th>
<th>Play-room</th>
<th>Play-room</th>
<th>Music-hall</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT 2 Class-room (blue)</td>
<td>VT 1 Play-room (red)</td>
<td>VT 1 Play-room (red)</td>
<td>VT 2 Class-room (blue)</td>
</tr>
</tbody>
</table>

Figure 2-2 School Premises before the VT Organization

<table>
<thead>
<tr>
<th>Craft-room</th>
<th>Play-room</th>
<th>Play-room</th>
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<td>VT 2 Class-room (blue)</td>
<td>VT 1 Play-room (red)</td>
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<td>VT 2 Class-room (blue)</td>
</tr>
</tbody>
</table>

Figure 2-3 School Premises during the VT Organization
The 5thD is designed to be a learning environment and is often organized as an after school activity. According to the originators, it should be understood as a complement to school learning. It was developed in the 1980s by Michael Cole and Peg Griffin at the University of California, San Diego (Cole, 1996a, 1999). The program has its origin in a research project that aimed at understanding reading disabilities as related to schooling. From the start the intention was to conduct classroom observations, which the designated teachers in the beginning of the project agreed upon. When it turned out that the researchers were not able to promise that the research would result in an immediate improvement of the children’s literacy, the teachers decided to withdraw from the project. Cole’s interpretation was that the pressure on the teachers to show results made them reluctant to take the risk of devoting their time to curriculum tasks for something they found unreliable. This withdrawal caused the research team to develop “Field College” - a kind of field laboratory organized as a voluntarily after-school activity (Cole, 1996a; LCHC, 1982). Field College served as the model for the 5thD when it was later designed.

The theoretical foundation of the 5thD is brought from the Russian/Soviet school of cultural-historical theory and American pragmatism. A significant concept in the 5thD design is Vygotsky’s famous “the zone of proximal
development” (zo-ped). An essential idea in Vygotsky’s thinking is that the formation of mind is essentially a sociocultural process. Another is that humans are constantly in a process of development and change. This means that we appropriate knowledge through interactions with others and by using the intellectual and practical tools we master. The concept of zo-ped is a way to express this dynamic way of looking at humans and their learning and development. The zone is the distance between what an individual can accomplish alone, without support, on the one hand, and on the other what one can accomplish with support and collaboration. Accordingly, the 5thD is arranged to facilitate learning so that a development in the zone will be possible.

According to Cole and Nicolopoulou there is a tendency in research that has associated itself with the ideas of Vygotsky to “conceive of the ‘social’ or interpsychological context of development exclusively in terms of face-to-face interaction in dyadic pairs (or, rarely, in small groups)” (1993, 283). They find this perspective too narrow. They claim “Vygotskian research needs to move beyond this narrow focus, to address more systematically the larger institutional and cultural contexts within which face-to-face interactions occur and that structure their nature and impact” (1993, 283). This definition of social and inter-psychological context directs interest to the structure and dynamics of the environment. The 5thD as a complex set of structures and artifacts answers to these requirements.

Another significant idea in the 5thD, according to Cole and Nicolopoulou, is the significance of rules. The basic idea is that rules enable and restrict as well as regulate and integrate the social group. “Rules emerge and have force within the context of a cohesive social group; and they serve, as Durkheim (1897/1951) would put it, both to regulate and to integrate the social group – that is, to maintaining its cohesion” (p. 293).

This aspect might be of special interest now, when introducing 5thD to schools since schools tend to have a special relation to rules – an issue I explore in Chapter 5. Accordingly, a central rule, or principle, in the 5thD is choice within a structured context, which I shall soon discuss. This rule

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41 “It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (1978, 86).
governed activity offers the children a variety of opportunities to set goals that motivate and guide their activity.

Yet, in the 5thD framework, this structure should not rest on the authority of individuals but on the authority of an impersonal normative system. This system should be based on “... shared and voluntarily accepted rules that are embedded in, and constituted of, an ongoing practice” (Cole and Nicolopoulou, 1993, p. 292). According to Cole and Nicolopoulou this structure enables the children to take an active role in their own education in that it permits them to engage in goal formation. What the program attempts to create is a culture of collaborative learning. The discipline provided by a system of shared and voluntarily accepted rules is crucial to create such a culture.

The 5thD model has three main institutional components: research, college education, and collaboration with local communities or institutions. The main research object has been child learning and development. The 5thD has served as a context for researching, for example, literacy development. However, the 5thD has also been the subject of interest in understanding institutionalization and sustainability of what Cole calls, “proven” successful educational innovations. The experiences from Field College and elsewhere (Cole, 1996a) triggered the question as to why it is so hard to sustain proven successful educational innovations when funding resources are withdrawn. Thus, special attention has been given to understand the circumstances under which some 5thD sites are sustained and others cease.

The second institutional component is education of college students. An important component in the 5thD is undergraduate education. The design implies that students participate in 5thD site work as part of a curriculum requirement. It gives the students a chance to practice and question taught theories. At the same time their participation contribute to a stimulating learning environment for the children. The students participate on a regular basis, several days a week and often for a semester.

The third institutional component is collaboration with local communities or institutions. A 5thD site is hosted by, for example, a youth club, a school, a local ethnic community or a library. It is meant to answer local needs. According to Cole, local adaptation is assumed to be necessary for development of the 5thD. Thus, the 5thD model incorporates an appreciation
of the local creativity of each system, which also becomes a resource for local sustainability. Privileging diversity occurs on two levels. At the site level, a 5thD is designed to encourage participation by people of diverse ages, genders, educational backgrounds, languages and cultures, and socio-economic status. At the level of the community of researchers and implementers, the 5thD model also encourages diversity by requiring local content that addresses local needs while at the same time providing a framework that the community members share.

As I see it, the program has three main characteristics. First, *computers and a variety of artifacts mediate* children’s and student’s actions and interactions. The reasons for making computers a significant artifact were multiple when designing the 5thD. For example, at the time computers were not accessible to everyone, especially not to children in low-income areas. The 5thD allowed these children to become acquainted with the new technology at the same time as this technology seemed attractive to them. Moreover, telecommunication and computers seemed to posse qualities valuable for enhancing communication between children and children and adults.

The second feature of the 5thD has to do with the *significance of play in learning and development*. Cole and Nicolopoulou argue that play is a prototype of the desired culture that the 5thD is meant to create. Play, Cole and Nicolopoulou claim, “... is enjoyable, it is intrinsically voluntary, and it is at the same time an essentially rule-governed activity: Its two essential components are the presence of an imaginary situation and the rules implicit in this imaginary situation (Cole & Nicolopoulou, 1993 p. 293). The child learns from adhering to, grasping, and managing the rules in the (imagined) practice that they constitute. For example, pretending to be a mother requires attending to and making explicit the normally implicit rules embedded in the role of “mother.”

Third, the 5thD is a *complex structure*. The physical arrangement is organized around a structuring device, the maze, which is often represented as a three dimensional board. The maze contains (symbolically) a number of rooms (often about twenty or close to). Each room contains one to three software games and sometimes a board game. The games can be played on three different levels, Beginner, Good and Expert. The content and goal of each

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42 The purpose of this study is not, however, to discuss computer use in educational settings or Computer Supported Cooperative Learning. See Koschmann, 1996 and Sinko et al., 1999 for an overview of that field.
level in a particular game are explicated in task cards, which consequently guide the play. The task cards are designed to stimulate problem-based learning, and strategic, logical, and reflective thinking.

The structure is arranged so that the higher the level of achieved, the more freedom there is to choose. This means that when the expert level in a game is accomplished in one room it is possible to choose three other rooms to go to – or a free pass can be obtained that permits play in any room. Accomplishing only the beginner level gains access to only one other room. This means that incitements to gain expertise and progress are intrinsic to the system and that the structure of the maze takes over the adult’s role to motivate and direct the children. The system promotes setting goals and encourages children to design and build their own path through the maze.

Each child has a folder containing the constitution and a journey log, which shows the paths the child has taken and games accomplished. The folder may also contain a “free pass,” which permits the child to go in to any room he or she chooses. This card is given initially when the child becomes a member but can also be acquired when she reaches expert level in a particular game.

Each child also has his or her own figurine (a doll, a car, a teddy bear, etc) which is placed in the room in which the child is playing at the moment. This also serves to set goals for the child. By accomplishing more levels the figurine can be replaced with a more desirable one. Hints and strategies to games can be found in a “hints-box” or folder to which the child or the team that is playing can turn for help. This is a tangible feature of a collaborative culture.

A constitution was created by the Wizard that states and gives information about the rules. The rules can be adjusted, but only through discussions with the Wizard. The Wizard’s gender is ambiguous and it can only communicate through the computer mediated network or by paper mail. It is the ultimate authority and has diverse functions. It contributes to making the 5thD-world magical and mystic and it urges the participants to play and engage in fantasy. The Wizard encourages the children when they are having difficulties, chides them when they behave antiscocially or perform a task in a fashion below their abilities. It helps out with broken computers, is a challenging communication peer, and mediates in conflicts, etc. In the role as mediator in conflicts, the Wizard contributes to the reordering of power
relations between children and adults. The adults do not need to confront the children but leave it to the Wizard to judge disputes. In this way the Wizard enables the adults to take on the role of aborator and peer rather than someone who bukes and executes power because of age and position. The Wizard also serves as a tool for communication. Often an assignment requires that the child report to the Wizard what he or she has accomplished. This is expected to promote intellectual development in that it both enhances literacy and reflective thinking.

As has been mentioned, an important component is the participation of the undergraduate students, commonly called assistants. Their job is to be active together with the children in a “peer manner” (Vygotsky, 1978). The rule is that the children should be helped as little as possible, but as much as necessary to keep to and continue the task. Often the children know more about the games, due to experience, but the undergraduates are more knowledgeable regarding logical and abstract thinking. This situation, where both the children and the undergraduates have expertise, though in different domains – makes the teacher and learner roles fluid\textsuperscript{43}, which is advantageous in the learning process. Moreover, the children admire and seek the undergraduate’s approval while the undergraduates very much want to be liked and admired by the children. These interactions and feelings of affiliation also motivate action.

Finally, there is a site-coordinator at each site who is responsible for running and managing the site. Maintenance of the computers often causes a lot of work for the site-coordinator. Usually someone from the host institution takes on the role of site-coordinator.

The fact that the 5thD is both a research environment - field laboratory - and a learning environment for children is reflected in the method or approach to the 5thD that Cole calls “Utopian methodology” (1995, 1996b). Cole suggests the following steps when applying the utopian methodology to the 5thD:

1. Create activity systems that instantiate the theoretical principles taken from the theory (in this case, principles of cultural-historical psychology). This process requires resources external to those the system initially possesses in its initial phases.

\textsuperscript{43} See Fröbel’s idea of “guiding,” section 2.2.
2. Demonstrate that within those activity settings, it is possible to create the qualities of interaction required by the theory to produce learning and development. This phase generally also requires additional, outside resources.

3. Organize the activity with respect to its setting/context in such a manner that the practice is taken up and sustained in the absence of external resources, but using all the resources appropriated in the course of creating and sustaining the model system from “birth” (1995, p. 2).

Cole argues that the method is utopian in that it creates activity systems built on the utmost knowledge of learning and development that there is. This enables us to test the theories in “reality” at the same time that the activity contributes to the change and development of practice.

2.6 Purpose of the Study

As was discussed previously, I perceive a need to develop the discussion regarding both goals and means for the integration reform. In my opinion, the idea of what a new school practice as a result of integration, in concrete terms, might mean is underdeveloped. The same is true regarding the means to make the reform have an impact on the practice in schools. I previously also claimed that the strategy for reaching the goals, that are expected as an outcome of the reform, is based on an idealistic view on how change takes place.

My starting point in this study is that change takes place in practice, or, with Lave and Wenger (1991), in a community of practice, as part of everyday life. This every-day-life can be understood as collective, tool-mediated, and object-oriented activities, as I discuss further in Chapter 3. These mediating tools might be both concepts and material artifacts. Based on such a cultural-historical activity theoretical perspective this means that I assume that reflection on (Schön, 1983) and change of traditions, codes, and views, to use Dahlberg and Lentz Taguchi’s terms, is an inherent part of this practice, though it certainly takes place in a more or less conscious, explicit, purposeful, and collective manner. In other words, I believe that it is in the “doing” of the new practice that “the basis of their understanding or the basis of their notions of what the work itself involves” can be changed, to quote Haug (1992, p. 192).
Engeström (1987) points out that change and development are driven by contradictions in activity systems. This means that a new practice in the school cannot be developed based mainly on a vision that is imposed from above or from outside. A new practice can only be the outcome of a developmental and expansive process inside each particular school and with the teachers as the change agents, though with support from “outside.” Conflict, tensions, and breakdowns can be the point of departure from which to discover contradictions in the system that prevent and at the same time make development possible.

Apart from an analysis of contradictions, which makes possible reflection and creation of a new practice, a process aiming at change cannot take place unmediated, i.e., without tools. In other words, reflection, awareness and creation of a new practice assumes tools, especially in what Haug (1992) calls, the realization arena\(^44\), Calander calls the strategic context\(^45\) and I will call activity system (see Chapter 3). Engeström and Escalante (1995) point out that in order to solve a problem adequate tools are needed. They claim that no task can be conducted without suitable tools:

This ‘instrumental impoverishment’ (Engeström 1987, 101) may be seen in various examples: you are supposed to learn to read and write by just reading and writing, to use a computer by just using it (manuals are commonly regarded as notoriously useless). The lack of tools means a lack of distance and lack of critical reflection. You learn school texts by plunging into them, not by comparing and questioning them with the help of other sources. This is the age-old myth of a non-mediated relationship between the cognizing subject and the external world, or the ‘postulate of directness’ (Leont’iev 1978a, 47) reborn. (p. 363)

This practice based approach to change invites us to take a closer look at a concrete process of an attempt to integrate the school with the child care. The aim of such an investigation would be to understand the potentials such an integration might have for transforming the school practice and pedagogy. Based on the above discussion special attention to what mediates in such a process would be of significance.

\(^{44}\) Haug (1992) distinguishes between arena of formulation and arena of realization.

\(^{45}\) Strategic context is defined as located vertically between external and internal aspects and horizontally between the three dimensional couples: signification - communication, dominance - power, legitimacy – sanction, meaning, that what happens in one area of the strategic context in different ways influences the other areas.
A finding in Munkhammar’s study (2001) is the lack of support and guidance that the teacher teams encounter. In the present study I had the opportunity to explore the role the 5thD as a complex and potentially useful tool played in the integration attempt.

Thus, the purpose of this thesis is to explore the potentials and alternative goals for change and development of the present school pedagogy and classroom practice that integration of the school and child care institutions implies. Special attention will be paid to what tools might potentially mediate in processes of integration.

To sum up, I take as an assumption that the integration reform can be considered a means for change. In this view the integration takes the form and carries the interest of a process rather than as the end product of a policy or reform. In the process teachers, in their role as “change agents,” need assistance to reconsider, rediscover, and redesign their tools as well as the object of their activity. Consequently, I will argue (1) that integration and collaboration between the school, the pre-school class, and the leisure-time center possess potential for expansive transformation of the school’s pedagogical practice, (2) that in order for the potentials to become realized, the process of integration and collaboration has to be mediated and tools have to be provided and created.
3 Theoretical and Methodological Frame for the Study

In this chapter I will describe the theoretical as well as the methodological approach employed in this study and the specific methods used when both collecting and analyzing data. I will also discuss problems with access to and trust in the field and in that context touch upon the issues of validity and generalization.

3.1 Cultural-Historical Activity Theory

The theoretical framework guiding this study is cultural-historical activity theory (CHAT), see, for example, Cole & Engeström (1993), Engeström (1987), Engeström, et al. (1999). Activity theory is a comprehensive term for research and theorizing, and was initiated by the founders of the cultural-historical school of Russian/Soviet psychology in the 1920s and 1930s: L. S. Vygotsky (1978, 2001), A. N. Leont’ev (1978a&b) and A. R. Luria, (1976).

Activity is the unit of analysis in activity theory. When Leont’ev formulated the concept of activity he based it on Marx’s concept of labor, or production of use value (Engeström & Miettinen, 1999). In his Thesis of Feuerbach, Marx argued against both a mechanical materialism and idealism. Mechanical materialism eliminates human agency, and idealism puts it in the head or soul of the individual. The concept of activity offers a way to overcome this dualism between the individual

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Activity theory should not be confused with the broader notion of socio-cultural and Post-Vygotskian theory. Cole et al. (1997) compares activity theory to four closely related approaches. One is represented by the research of Jim Wertsch (see for example 1994, 1995), who takes mediated action as the unit of analysis. A second takes practice, community of practice, and participation as the unit of analysis. This approach is represented by Lave (see for example 1991) and Lave & Wenger (1991). The third is represented by Barbara Rogoff (see for example 1994, 1995) and, according to Cole et al., complements the perspectives of the former approaches. Rogoff requires that the analysis should be carried out on three planes: the personal, the interpersonal, and the community. These approaches are commonly labeled socio-cultural. See also Säljö (2000) for an account on the socio-cultural approach. I have no intention here to discuss the differences between these different approaches. Instead I refer readers, for example, to Daniels (2001).
subject and objective societal circumstances. Engeström & Miettinen (1999) argue that activity as the unit of analysis complements a system view and a subject view:

The analyst constructs the activity system as if looking at it from above. At the same time, the analyst must select a subject, a member (or better yet, multiple different members) of the local activity, through whose eyes and interpretations the activity is constructed. This dialectic between the systemic and subjective-partisan views brings the researcher into a dialogical relationship with the local activity under investigation. (p. 10)

Based on Marx’s concept of labor, Leont’ev (1978a&b) formulated a scheme that distinguishes three different levels, though interdependent, on which social actions take place and can be understood. The three levels in the scheme are: activity, action, and operation. Activity is object-oriented, collective and tends to be durable. The object carries the motive for the activity and thereby generates the ongoing activity. The object of activity is not fixed and clearly defined, but constantly evolving. Despite this the object determines the direction of the activity:

The main thing that distinguishes one activity from another […] is the difference of their objects. It is exactly the object of an activity that gives it a determined direction. According to the terminology I have proposed, the object of an activity is its true motive. It is understood that the motive may be either material or ideal, either present in perception or existing only in imagination or in thought. (Leont’ev, 1978a, p. 62)

In this study the object of schooling is of interest. Engeström, in general terms, defines it as follows:

On the standard image, the object of teaching consists of the text book on the one hand, and the students on the other. The teacher’s job is to make these two objects merge, that is, to make the students internalize the textbook so as to be able to produce decent grades and test scores as measures of successful internalization. (1994a, p. 46)

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47 Activity systems are not always institutionalized but also have an emergent and momentary aspect. As Cole and Engeström point out “Local, concrete activities […] are simultaneously unique and general, momentary and durable (1993, p. 8). Schools are taken as an example of activity that appears stable due to reproduction of similar outcomes and actions. However, as Cole and Engeström point out, close analysis of apparently unchanging activity systems reveals that activity systems are constantly changing and reorganizing, going through a transformational process fueled by contradictions and disturbances.
*Actions* are discrete, individual, tool-mediated, driven by goals, and have clear beginnings and endings. They exist over short time-scales. The relationship between activity and action is that the object determines the horizon of possible goals and actions which have finite and relatively short half-lives. Equally important is that no activity exists without human actions. Actions become *operations* when they have become routinized. Operations are conditional, i.e., determined by situational circumstances.

Engeström (1987) developed Leontev’s concept of activity into a model of a cultural historical activity system that has a defined structure48 (see Figure 3.1).

![Figure 3-1 Activity System (Engeström, 1987, p. 178)](image)

The foundation of Engeström’s model is based in Vygotsky’s (1978) notion of tool-mediation which is represented by the upper part of the triangle in Engeström’s model. The notion of tool-mediation is vital in the cultural-historical school because it is considered to be the distinguishing feature between humans and other species.

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48It should be pointed out that the term “activity” is very common in educational settings, at least in the Swedish and American context. Thus, the term is frequently used in this study also in such a generic way. I assume that it is clear from the context in which way the term is meant to be understood. The term “practice” as a generic term is also commonly used in educational contexts and is replaceable with the generic term “activity.” However, also “practice” is a theoretical term. Scribner & Cole discuss a practice as routinized actions “It is a usual mode or method of doing something – playing the piano, sewing trousers, writing letters” (1978, p. 457). Thus, it is important to notice that the theoretical terms “activity” and “practice” are not replaceable.
Tool-mediation transforms humans’ conditions of living as well as their mental functioning. This was articulated by Luria when he wrote that man differs from animals in that he can make and use tools. These tools:

not only radically change his conditions of existence, they even react on him in that they effect a change in him and his psychic condition. (1928, p. 493).

To clarify, mediation implies that the relation between subject, in Engeström’s model an individual or group whose point of view is adopted in the analysis, and environment (object) are linked through some kind of instrument which in turn creates higher mental functioning (Vygotsky, 1978). From this comes the theory that human mind and action should be understood and analyzed as a product of mediated, object-oriented activity.

At first glance it might seem reasonable to equate tool or instrument with the notion of artifact. But as Cole (1996) points out the concept of artifact can be understood in a more general sense than that of a tool. An artifact has dual features in that it can be both a tool and an object. An artifact is not a tool due to its design; it becomes a tool when used in an activity for a purpose. Engeström & Escalante (1995) explain:

…objects appear in two fundamentally different roles: as objects (Gegenstand) and as mediating artifacts or tools. There is nothing in the material makeup of an object as such that would determine which one it is: object or tool. The constellation of the activity determines the place and the meaning of the object (Engeström, 1990, 171-195). (1995, pp. 361-362)

Moreover, artifacts are simultaneously material and ideal. Referring to John Dewey, Hegel, and Marx, Cole elaborates on this:

… an artifact is an aspect of the material world that has been modified over the history of its incorporation into goal-directed human action. By virtue of the changes wrought in the process of their creation and use, artifacts are simultaneously ideal (conceptual) and material. They are ideal in that their material form has been shaped by their participation in the interactions of which they were previously a part and which they mediate in the present. (Cole, 1996a, p. 117)

One implication of this line of reasoning is that both tangible objects like tables, computers, and hammers, as well as language, are to be considered as artifacts. As Cole claims “what differentiates the word “table” from an actual table is the relative
prominence of their material and ideal aspects and the kinds of coordinations they afford” (Ibid). As a consequence, according to Cole, mediation through artifacts applies equally to objects and people.

Wartofsky (1979) suggests a way to elaborate on the notion of artifacts that paves the way to perceive an artifact within its use in human activity. Wartofsky describes artifacts as “objectifications of human needs and intentions already invested with cognitive and affective content” (1979, p. 204). He distinguishes between primary, secondary and tertiary artifacts. Primary artifacts are those directly used in production. Axes, clubs, needles and bowls are mentioned as examples. Secondary artifacts are those “used in the preservation and transmission of the acquired skills or modes of action or praxis by which this production is carried out” (p. 202). Such artifacts (representations) are, according to Wartofsky, not “in the mind” as mental entities but “products of direct outward action, the transformation of natural materials, or the disposition or arrangement of bodily actions (e.g. in dance) or the social forms of organization of such activities as hunting, or of such relations as kinship, hierarchy, etc” (Ibid). Tertiary artifacts are imaginations and possible worlds as art and fiction. This last kind of artifact can come to color the way we see the “actual” world, providing a tool for changing current praxis. “…they [tertiary artifacts] constitute a domain in which there is a free construction in the imagination of rules and operations different from those adopted for ordinary ‘this-worldly’ praxis” (p. 209).

Wartofsky’s notion of artifact demonstrates that tool use does not take place in a vacuum, but is embedded in a larger context of activity. In Engeström’s model this notion of context is expressed through the lower level of the expanded triangle. The community refers to those who share the same general object, defined as “raw material” or “problem area” which through tool-mediated actions result in outcomes. Rules refer to explicit and implicit norms, conventions, and regulations that constrain actions within the activity system. The division of labor refers to the division of object-oriented actions: tasks, authority, hierarchies, and benefits among members of the community.

These components in an activity system and their relationships implies that an activity system has both an object-oriented productive aspect and a communicative aspect since an activity system:

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49 Cole (1996a) adds words and language to this category in Wartofsky’s scheme.
...integrates the subject, the object, and the instruments (material as well as signs and symbols) into a unified whole. An activity system incorporates both the object-oriented productive aspect and the person-oriented communicative aspect of human conduct. Production and communication are inseparable (Rossi-Landi, 1983). Actually, a human activity system always contains the subsystems of production, distribution, exchange, and consumption. (Engeström, 1993a, p. 67)

Elsewhere, Engeström et al. (1997) define and discuss – based on the work of Raeithel (1983) and Fichtner (1984) – the concepts of coordination, cooperation, and communication as forms of intersubjectivity. The general structure of coordination implies that there is a common given script but each actor has its own object though the objects are overlapping:

The various actors are following their scripted roles, each concentrating on the successful performance of the assigned actions, or on ‘the presentation of the self’ (Goffman, 1959). The script is coded in written rules and places or tacitly assumed traditions. It coordinates the participants’ actions as if from behind their backs, without being questioned or discussed. (1997, p. 372)

The general structure of cooperation implies that the actors share a problem, and, in their efforts to solve it, they go beyond the given script:

By cooperation we mean modes of interaction in which the actors, instead of each focusing on performing their assigned roles or presenting themselves, focus on a shared problem, trying to find mutually acceptable ways to conceptualize and solve it. The participants go beyond the confines of the given script, yet they do this without explicitly questioning or reconceptualizing the script. (1997, p. 372)

The general structure of communication implies that the object, the script and the interactions are reconceptualized:

By reflective communication we mean interactions in which the actors focus on reconceptualizing their own organization and interaction in relation to their shared objects. Both the object and the script are reconceptualized, as is the interaction between the participants. Transitions to communication are rare in the ongoing flow of daily flow actions. (1997, p. 373)

Engeström (1987) connects the levels of intersubjectivity to Leontiev’s levels of operations, actions, and activity and refers to Fichtner’s argument that the developmental forms of intersubjectivity are not regarded as ontogenetic stages but as phases of any cycle of genuine learning activity, a concept I will later discuss.
3.1.1 Expansive Learning

An activity system is not a stable structure but filled with tensions, conflicts, viewpoints or “voices,” as well as layers of historically accumulated artifacts, rules, and ways to divide labor. While this situation might cause paralysis and incapacity, it constitutes a potential resource for development and collective achievement (Engeström, 1987). To understand how conflicts and tensions can facilitate development it is essential to consider the concept of contradiction. Contradictions are systemic opposed to, for example, accidental disturbances and interpersonal conflicts. However, accidental disturbances and interpersonal conflicts are often signs of, and convey, contradictions. Engeström (1987) discusses four kinds of contradictions: primary, secondary, tertiary, and quaternary.

A Primary contradictions “lives as the inner conflict between exchange value and use value within each corner of the triangle of activity” (1987, p. 87). Secondary contradictions appear between the corners of the triangle. According to Engeström “the stiff hierarchical division of labor lagging behind and preventing the possibilities opened by advanced instruments is a typical example” (Ibid). Tertiary contradictions appear between an activity system and a more advanced system “when representatives of culture (e.g., teachers) introduce the object and motive of a culturally more advanced form of the central activity into the dominant form of the central activity (Ibid). Finally, quaternary contradictions are contradictions between “neighbor activities” and the central activity, which is the unit of analysis (see Figure 3.2).

The “neighbor” activities include activities that “produce” objects, instruments, subjects, and rules for the central activity. For example, if we regard North Valley school as the central activity system we might consider what essential neighbor activities it is surrounded by. First, it is surrounded by families that send their children to the school. In that regard they can be thought of as object producing activities provided that we think of the children as objects in schooling. Production of schooling material in terms of books, pencils, and lately even computers, are essential neighbor activities in terms of instrument-producing activity. Teacher education might be a subject-producing activity if we think of teachers as subjects in the school. Finally, the activities of the local and central school authority might be essential rule-producing activities. However, as Engeström points out, neighbor activities also include “central activities which are in some other way, for a longer or shorter period, connected or related to the given central activity, potentially hybridizing each other through their exchanges” (1987, p. 88). This hybridization is
of special interest when I consider the collaboration/integration of the three institutions, i.e., the pre-school class, the leisure-time center, and the school.

Figure 3-2 Idealized Network of Activity Systems (Engeström, 1987, p. 89)

When analyzing and trying to understand inner and systemic contradictions, it is necessary to interpret them against a historical analysis of the evolution of the activity system. The notion of developmental cycle helps in the making of this historical analysis at the same time as it supports aspirations for transformations and change. The developmental cycle is based on Batson’s learning theory, which is a complex hierarchy of the processes of learning, based upon “a hierarchic classification of the types of error which are to be corrected in the various learning processes” (Bateson, 1972, p. 287).

Bateson’s levels are as follows:

Zero learning is characterized by specificity of response, which – right or wrong – is not subjected to correction.
Learning I is change in specificity of response by correction of errors of choice within a set of alternatives.

Learning II is change in the process of Learning I, e.g., a corrective change in the set of alternatives from which choice is made, or it is a change in how the sequence of experience is punctuated.

Learning III is change in the process of Learning II, e.g., a corrective change in the system of sets of alternatives from which choice is made. […]

Learning IV would be change in Learning III, but probably does not occur in any adult living organism on this earth. Evolutionary process has, however, created organisms whose ontogeny brings them to level III. The combination of phylogenesis with ontogenesis, in fact, achieves Level IV.” (Bateson, 1972, p. 293).

Learning I is conditional, i.e., the learner learns in a tacit and nonconscious way to do what is expected and is alternatively reinforced or punished for her reactions. There is a fixed correct way, which is to be obtained by the learner. Learning I implies that both the object/outcome and the instruments, which can be called tools or primary artifacts, are given. By and large, Learning I means repetitive corrections in the way the subject uses the instrument upon the object.

Learning II implies learning how to learn. The learner develops a tacit understanding of how to accomplish the tasks in the specific context of Learning I. Put differently, Learning II is about learning the rules of the game, for example, how to behave as a student, how to succeed or pass the exams, or how to cheat and beat the system. This kind of knowledge which is embedded in what we try to learn, has elsewhere been discussed as the hidden curriculum (see, for example, Levy, 1976) and contributes to the development of habits and character formation, which are useful for orienting in the world. However, Learning II also implies experimentation, bending of rules, and problem solving.

If Learning II is about learning the right answers, development of habits, and character formation, Learning III is essentially about conscious self-alteration. It is a rare event, produced by the contradictions of Learning II. Demands and messages directed to the subject are experienced as conflicting and the subject finds itself in a
double bind\textsuperscript{50} situation. It does not seem to matter what she does, it will in any case be wrong. In this situation the subject either reacts pathologically or starts to ask questions and critically perceive the given task and context. She distances herself and starts to construct a larger context, i.e., expands the object of her activity. She goes beyond the information given and constructs new sets of criteria, which liberates her from the constraints of the given and present context. Instruments used and produced in this effort are representations and images, i.e., secondary and tertiary artifacts. Thus, in Learning III the subject becomes conscious and gains ability to perceive the whole system in its past, present, and future versions. Individual manifestations of Learning III are commonly called “personal crises,” “breaking away,” “turning points” or “moments of revelation” (Engeström, 1987). Learning III actions are commonly suppressed and stigmatized since they threaten present rules.

To sum up, learning is a multilayered phenomenon. Learning I and II take place all the time, while Learning III is a rare event. In Learning I and II the task is given, while in Learning III it has to be constructed. Worded differently, in Learning I and II the object is seen as a problem possessing its own objective dynamics outside the subject, whereas in Learning III the object system is seen as containing the subject within it, which implies that the quality of the subject itself changes radically (Engeström, 1987).

But what is the relationship between Bateson’s hierarchy of learning levels and Engeström’s developmental cycle that would help us to make a historical analysis of the evolution of the activity system? Engeström perceives a connection between individual Learning III and a phenomenon that he conceptualizes as, expansive learning.

In order for individual “explosive” Learning III manifestations to make a contribution to societal development in terms of new activities, rules, tools, and roles, and thus indirectly to her own individual development, social alliances have to be created that in an intensive or conscious way master the double binds.

\textsuperscript{50} Bateson (1972, p. 208) draws an example of a double bind situation from Zen Buddhism, where the goal is to achieve enlightenment. The Zen master holds a stick over the pupil’s head and says fiercely “If you say this stick is real, I will strike you with it. If you say this stick is not real, I will strike you with it. If you don’t say anything, I will strike you with it.” The pupil has to go beyond the defined context and offered options for actions in order to reach enlightenment, for example, reach up and take the stick away from the master. If not, disorientation and confusion is achieved rather than enlightenment.
However, in this perspective the double binds are no longer located in the individual but are reformulated as “...a social, societal essential dilemma which cannot be resolved through separate individual actions alone – but in which joint co-operative actions can push a historically new form of activity into emergence” (Engeström, 1987, p. 165). When this happens and the object of these actions is development, a learning activity is created:

Learning III as the outcome and form of typically human development is basically collective in nature. The collective Learning III is perhaps not so dramatic as its individual manifestations. But the real production and application of world outlooks, restructuring of complex activity systems, is not conceivable in individual and drastically sudden terms alone. In periods of exceptional upheavals, such as revolutions, the collective and the individual, the profound and the sudden, the action and the activity, seem to merge, even to the point where the individual seems to take the leading role. But these are temporary phenomena. The bread and butter of human development is collective Learning III, gradual in form but profound in substantial effects. (Engeström, 1987, p. 158)

Engeström’s expansive learning cycle can be depicted in a crystallized model of five phases. The first phase is the need state. It is characterized by contradictions expressed as tensions, discontent, and often conflicts which might be resolved through regression or expansion. The second phase is the double bind. In this phase contradictions are becoming sharpened and, the discontent of, the members of the activity system is directed to more clearly defined goals. The way out of a double bind requires analysis and conceptual understanding of the contradiction. In the third phase, object/motive construction, the members sketch and create a new solution to the contradiction. This might involve new mediational means, rules, and division of labor. In the fourth phase, application and generalization, the new model of activity is put into practice. Finally, in the fifth phase, consolidation and reflection, the new activity is fortified and critically reflected upon. Elsewhere (Engeström, 1999a) the cycle is described as an expansive spiral of learning actions consisting of, as an ideal-typical sequence, seven phases: questioning, analyzing, modeling, examining the model, implementing the model, reflecting, and consolidating.
In essence, expansive learning, i.e., development, modeled as above, implies reconstruction of the object and the motive. Learning in this way therefore means creation of new activities and activity systems (Engeström, 1987). Questions like why and what we are producing introduce the potential for expansion (Engeström et al., 1995). Engeström claims that at the level of a collective activity system, expansive cycles can be seen as equivalent to travel through the zone of proximal development discussed by Vygotsky. Thus, in this context the zone is:

the distance between the present everyday actions of the individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in everyday actions. (Engeström, 1987, p. 174)

In resent theorizing within the activity theory tradition, as well as in closely related theoretical schools, an interest has emerged in the expansive potential enclosed in the interplay and interaction between activity systems. Engeström (1996, in press) calls this theorizing the “third generation of activity theory” implying that Vygotsky’s concept of tool mediation was the first and Leontiev’s expansion to collective activity was the second. Vygotsky’s foundational work, in the first generation of activity theory, was very much focused on vertical development
toward “higher psychological functions.” In the second generation of activity theory the focus has been on single activity systems and their internal dynamics and development resulting in insensitivity toward cultural diversity. Engeström points out that the third generation of activity theory needs to develop conceptual tools to understand dialogue, multiple perspectives, and networks of interacting activity systems.

The third generation of activity theory is particularly relevant to my study since mine deals with intercultural and interinstitutional relations, which often connote boundary-crossing. In the next section I will discuss concepts that have been developed within the CHAT framework as well as closely related approaches that address the issue of boundary-crossing.

### 3.1.2 Boundary-Crossing

The multiplicity of tasks both within and across activity systems has been conceptualized by Engeström et al., as polycontextuality:

Polycontextuality at the level of activity systems means that experts are engaged not only in multiple simultaneous tasks and task-specific participation frameworks within one and the same activity. They are also increasingly involved in multiple communities of practice. (1995, p. 320)

Engeström et al. point out that boundary-crossing, in terms of polycontextuality, requires mediating artifacts, which can be meetings and talks, dialogues and argumentation, physical artifacts such as work-material, pointing, and bodily movement. Boundary objects – a concept introduced by Star (1989) and Star and Griesemer (1989) – is called attention to by Engeström et al. as a way to conceptually elaborate on mediating artifacts typical to boundary-crossing processes. Boundary objects presuppose motives from different worlds at the same time as they make cooperation possible. Star and Griesemer ask how it is possible for heterogeneity and cooperation to coexist and suggest that boundary objects facilitate translation between social worlds:

Boundary objects are objects that are plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. […] These objects may be abstract or concrete. They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation. The creation and management of boundary objects is a key process
in developing and maintaining coherence across intersecting social worlds. (Star & Griesemer, 1989, p. 393)

I will use the concept of boundary object in Chapter 7 where I discuss and analyze the 5thD and its role in the school.

Konkola et al. (in press) discuss boundary objects as tools and objects, “Boundary objects, such as learning tasks, can be simultaneously tools for boundary-crossing and objects for looking together for a new, shared object for the activity systems” (p. 9). These objects and tools are significant in what Konkola (2002) calls “boundary zone activity.” A boundary zone is:

... a sphere which resembles a ‘no-man’s land, free from prearranged routines or rigid patterns. It is also a place where each activity system […] reflects its own structure, attitudes, beliefs, norms, and roles. This reflection means that elements from both sides are always present in the boundary zone. (Konkola et al., in press, p. 7)

In Chapter 5 I will introduce the concept of “boundary system” that emerged as a result of this study. The concept of boundary zone was, as will be shown, useful in the formation of the concept of boundary system.

To sum up, activity theory is the theoretical foundation for my study. This implies that the unit of analysis, the method of data collection, and the interpretation of the data, have been permeated by activity theory. For example, Engeström’s model of an activity system has revealed the diverse activity systems that operate in the school along with their internal structures, objects of activity, contradictions, and the relationships among them.

Before I describe my methodological approach, I will briefly focus on some theories and concepts that more particularly deal with intercultural relationships.

### 3.2 Acculturation

Working within a different tradition from activity theory, Berry (1980, 1983) discusses acculturation or cultural meetings. Berry does not explicitly define acculturation but localizes certain features of the phenomenon. For example, there is an encounter of at least two bodies in which change takes place in at least one, it contains phases of conflict and adaptation, and there is both an individual and a
group level, and the history and purpose of the cultural conflict should be considered. Berry claims that acculturation generally leads to mainly four different outcomes: assimilation, integration, rejection and deculturation. In *assimilation* the individual chooses to relinquish his or her cultural identity and moves into the larger society is the option taken. *Integration* implies the maintenance of cultural integrity, as well as the movement to become an integral part of a larger societal framework. The option is therefore to retain cultural identity and move to join the dominant society. *Rejection* refers to self-imposed withdrawal from the larger society. Finally, *deculturation* means that one lives with neither of the cultures and is characterized by feelings of alienation and loss of identity.

Berry’s categorization is based on logical reasoning validated by standardized interviews rather than empirical observations of practice. It seems that in this logic there is no room for creation of something “new.” The only sign of development that Berry acknowledges is linguistic, specifically linguistic novelty; he takes Creole as an example of a result of cultural merge.

The categories Berry suggests are reflected in the work of Gibson (1988, 1991), Gibson & Bhachu (1991) and Ogbu (1991). The authors discuss acculturation, which Gibson defines as “the process of culture change and adaptation which results when groups with different cultures come into contact” (1991, 367). The concept is discussed from the perspective of immigrants vs. involuntary minorities. Gibson refers *minority* to “a group occupying a subordinate position in a multiethnic society, suffering from the disabilities of prejudice and discrimination, and maintaining a separate group identity” (1991, p. 358). Ogbu (1991) defines *immigrants* as those who came to their present societies voluntarily because they believed that the move would lead to better economic conditions, better overall opportunities or greater political freedom. *Involuntary minorities* are people who were brought into their present society through slavery, conquest or colonization. The focus is on how children from these groups fail or succeed in schools in the society in which they – as a group - are occupying a subordinate position. Gibson & Bhachu describe how an Indian cultural group – Punjabi Sikhs – pursue a strategy of accommodation and acculturation without assimilation. It should be pointed out that Punjabi Sikhs are considered immigrants in the Ogbu-Gibson scheme:

Being in America means you have to compromise a little, “ they say. “Learning from the Americans, but don’t become like them.” “Dress to please the people, but eat to please yourself.” Interviews with Sikh parents and students were filled with such comments and sayings (1991, p. 71).
Involuntary minorities view school learning in a *subtractive* light, meaning that adaptation to teachers and the school system will lead to an erosion of their identities and cultures. Adaptation to school authority and the acquisition of proficiency in the dominant language and culture symbolize behaving like those who historically have oppressed them, i.e., “acting white.” Immigrants, on the other hand, consider school learning as something that will enhance their ability to participate in both the larger society and their ethnic communities. They view school learning as *additive*. Assimilation is a less common phenomenon but is described by Gibson (1991) as happening particularly to the second generation of immigrants and by a few involuntarily minority students. Members of the last group, however, encounter severe pressure from their peers since they are perceived as traitors and quitters.

In applying Berry’s categorization, it seems that integration is comparable to accommodation and acculturation without assimilation. According to both concepts, the cultural model developed before the encounter is maintained and sustained yet there is acceptance to adaptation to the dominant society. It seems to me that rejection is what characterizes involuntary minorities’ relationship to school learning. Deculturation can be compared to what Gibson defines as “‘maladjustment’ to both the culture of one’s upbringing and that of the larger society” (1991, p. 364).

However, unlike Berry, Gibson (1991) puts forward an approach to acculturation, which she discusses as multiculturalism or additive acculturation. *Multiculturalism* and a policy of *additive acculturation* imply that there should be a recognition of the minority cultures as contributing to society and that adaptation has to be mutual. Gibson argues that this policy would help students distinguish the acquisition of academic skills and proficiency with dominant cultural norms from their own social identification with a particular ethnic group. Second, it would help minority students apply themselves to their studies without having to choose between academic success and the maintenance of their ethnic identities:

> Rather than communicating to minority students that they need to change their cultures or labeling as troublemakers those who resist assimilation, schools need to encourage minority students to maintain a strong anchor within their families and communities. (Gibson, 1991, p. 375)

Thus, acculturation should be a mutual process of cultural change and adaptation and it should not only be children from the minority groups who are being asked to
adapt: all students have much to gain through contact with peers from diverse backgrounds.

I will now turn to the issue of methods and discuss what would be a relevant methodological approach to my research agenda as well as the kind of theoretical framework I have chosen to base my study in.

### 3.3 Method

Frake states “method links data – what we construe to be observations of some particular reality – with theory, our proposals for understanding reality in general” (1999, p. 33). I call the method in this study “emergent action ethnography” because it is an ethnography-inspired case study with elements of action research that emerged out of involvement in a local practice. However, I will show that these methodological approaches do not have to remain separate but can be merged. As such they constitute a new way of thinking about and doing field research. I will start this section by discussing ethnography, case study and action research and use these concepts to explain what I have done and how I have been thinking about what I have done.

Ethnography, or “writing culture,” is in a generic sense about observing and describing other ways of life (Emerson, 2001). Van Maanen states that “An ethnography is written representation of a culture (or selected aspects of a culture)” (1988, p. 1) and further explains that fieldwork is the method of ethnography, while culture is the subject. The result should be a conscious and systematic interpretation of a culture or parts of it.

Describing and interpreting culture is not as straight-forward an endeavor as it first might seem. The first question that arises is how to understand and define culture. According to Geertz (1973), who in turn believes with Max Weber that “man is an animal suspended in webs of significance he himself has spun” (1973, p. 5) culture
constitutes these webs. Consequently, Geertz claims, the analysis of these webs, or culture, should not be an experimental science in search of law, but interpretation in search of meaning. This means that what is to be described is not an objective world with objects, events, and actions with inherent and unambiguous meaning. On the contrary, since the world is subjectively experienced, understood, and interpreted, though socially and culturally mediated, it is these interpretations, or meaning structures that should be described. In other words, it is these structures of meaning that we can call culture, through which the members of a site or community make sense of, produce, reproduce and go about their daily life, that is the locus of interest.

In order to reach a sufficient cultural portrait or interpretation of meaning structures, what Geertz (1973) calls “a thick description” has to be conducted. The “thickness” in thick description does not lie in “reporting, collecting, and assembling “facts” but in interpretively understanding and representing the subtleties and complexities of meaning” (Emerson 2001, p. 33). Consequently, ethnography is actor-oriented in the sense that its aim is to convey how members of the studied site or community make sense of actions, events, and, I would also add, employ artifacts. In sum, what we want to pursue is “meaning-rich, context-sensitive, and holistic descriptions of social activities” (Emerson, 2001, p. 35).

Subjectivity is due both to the subjects, whose world is of interest to the researcher, and the researcher herself. Consequently, what the ethnographer chooses to focus on, describe, and interpret is also subjectively infused with implicit and explicit theories and assumptions about the world. This means that, as Emerson notices, “…any and all description is inevitably partial and selective; description includes some traits, features, or aspects and exclude others” (2001, p. 28).

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51 Culture has been defined in a variety of ways. It is often discussed in terms of the “internal” and “external” approaches, i.e., as something that should be located “outside” or “inside” the head. It would go beyond the scope of this study to account for these diverse interpretations. However, in agreement with Cole (1996a) and Wartofsky (1973) I understand artifacts - simultaneously ideal and material - to be the fundamental constituents of culture (see Section 3.1). This dialectic way of understanding artifacts helps to overcome this dichotomy. Moreover, making mediational artifacts the fundamental constituent in culture reveals the cognitive and developmental aspects of culture. The approach that Cole calls “culture as helping things grow” is in agreement with, and has close affinity with, the “Geertzian” way of defining culture (Cole, 1996a). For a discussion on the concept and applicability of culture in organizational studies see Alvesson (1993).
The issue of subjectivity vs. objectivity, and hence representation (Hatch, 1996), is often discussed in the duality of realism vs. relativism (Atkinson, 2001; Emerson, 2001; Hammersley, 2001; Wenneberg, 2001). Emerson claims that two stances are evident in this debate. There is the post modern position that rejects any strong version of realism resulting in a shift in focus from the “social life, to the analyst’s self” (Best, 1995, p. 128) and to the textual interpretive act. Then there are those claiming that such a standpoint “deprives ethnography of its distinctive warrant – discovering and describing social worlds – and seek ways of maintaining some grounding notion of reality…” (Emerson, 2001, p. 50). My approach is in line with the latter view. Thus, I share the concerns of Best, i.e., that prioritizing textual realities promotes an “Out of the streets, into the armchairs” (1995, p. 128) mentality. I believe that the main foundation for analysis must be data, systematically and rigorously collected in the field. This discussion also implicitly addresses the issue of validity and generalization in this discipline. When is an ethnographic account valid (true) and how can it be generalized? How this question will be answered depends, of course, not only on what ontological and epistemological stance the researcher takes but also on the quality of her craftsmanship (Kvale, 1997), which very much has to do with both collecting, analyzing, and inscribing data. I will return to this discussion in the last part of this chapter.

To me the deeper meaning of ethnography is to try, as far as it is possible, to understand the members of the culture studied, their actions and activity, “in their own right.” However, as Emerson points out, since it is not possible for an ethnographer to grasp members’ perspectives “in themselves,” there is a risk that ethnographers will reconfigure and perhaps distort member’s meanings. The significance of this problem is that there should be an awareness that there is always a motive and a meaning behind actions and activities and a reason and a history behind a certain behavior. This implies that the ethnographer’s job is to convey that motive or meaning, as I see it, by means of cultural-historical lenses and tools. Our job is not to judge but to seek insight and understanding. In order to do that, the ethnographer needs to be critical of and be aware of her own meaning structures that guide her perception and understanding of what is being studied. In my case that meant that I had to revise my, in many regards simplistic, view of school practice, teachers, and teachers’ attitudes to their work. My pre-understanding of the site was based on earlier experiences both from being a student and a parent. Moreover, I was trained to be a pre-school teacher and have been working in different kinds of child care institutions for more than fifteen years. These diverse experiences, in combination with my theoretical/ideological way of
perceiving the world, have of course colored my view of the school and schooling as well as of what data to collect/construe, etc. The choices are of course made both consciously and unconsciously. Consciously, I have a theoretical view and a history as a pre-school teacher that have colored my perspective. Unconsciously, both emotions and intuition (Alvesson & Köping, 1993; Emerson, 2001; Emerson et al., 1997) toward what might be significant helped me focus.

Written representations of culture are often designated narratives. Polkinghorne (1995) discusses narrative inquiry within the field of qualitative research. By “narrative” Polkinghorne is specifically referring to texts that are thematically organized by plots. He distinguishes between a paradigmatic type, which he calls “analysis of narratives”, and a narrative type, which he calls “narrative analysis.” The former is based on Bruner’s (1985) concept of paradigmatic reasoning, the latter, on his concept of narrative reasoning. Analysis of narratives produces knowledge of concepts, while narrative analysis produces knowledge of particular situations. The function of a narrative analysis is therefore to produce answers to how and why a particular outcome came about. The outcome should be a useful, interesting, explanatory, and powerful story, which is faithful to the actual historical happenings.52

My narratives are about cases; in Stake’s (1994) words they are case studies. Stake claims that the case study is defined by interest in the individual case. A case is specific and more. It is a bounded system. Demarcation, though not easy to place, and patterns of behavior are key factors in order to understand the case.

Stake (1994) differentiates between three types of case studies: the intrinsic, the instrumental and the collective. The intrinsic case study is undertaken when one wants to reach a better understanding of a particular case. It is not about understanding an abstract construction or general phenomenon. The purpose is not theory building. The instrumental case study is undertaken in order to provide insight into an issue or refinement of theory. Here the case is of secondary interest, it plays a supporting role, facilitating or understanding something else. Collective case study is an extended instrumental case study; it entails examining a number of cases.

52 For interesting school and child care ethnographies see, for example, Mehan, 1979; Nespor, 1997; Ladberg, 1974; Wagner, 1994; Willis 1977; Ödman, 1975; Ehn 1983.
Stake claims that a case study might mean fuel for processes of understanding and consciousness. He calls these processes “naturalistic generalization” (1994, 240). They are based on individual experiences and tacit knowledge and lead to expectations rather than prediction.

The present case study, or rather studies, draws on both the instrumental and the intrinsic case study, though not in an orthodox way. The VT and integration case study is instrumental in that it aims at contributing the body of knowledge dealing with the issue of integration between child care institutions and the school.

My study of the 5thD is intrinsic in that it aims at understanding what role this particular artifact played in the integration process in the school. However, the outcome of this study will be theorized and generalized. I develop concepts that make it possible to generalize and theorize. In that regard it is not entirely intrinsic. Together these cases ultimately are meant to contribute to knowledge about change and developmental processes in schools.

I have chosen to keep the representation of the cases, i.e., the stories, that I tell in Chapters 4 (the development and decline of the VT) and 6 (the story about the 5thD) somewhat “clean” from overt analytical elaboration. However, I agree with Emerson when he points out that “to insist on a sharp polarity between description and analysis is deeply misleading: description is necessarily analytic” (2001, p. 28). In Chapters 5 and 7 respectively, I make my overt analysis of the cases and here I explicitly use the concepts and models that I have accounted for in section 3.1 and 3.2. Thus, I intend to construct narrative analysis in Chapters 4 and 6 while the analysis of narrative more aptly describes what I do in Chapters 5 and 7. Or, with Davydov, I would say that I develop empirical knowledge through the narratives and theoretical knowledge in the analysis:54

53 The notion of naturalism in social research refers to naturally occurring human behavior opposed to behavior in artificial settings as, for example, in experiments. Moreover, naturalism requires that social events and processes must be explained in terms of their relationship to the context in which they occur (Hammersley, 1994).

54 “Empirical knowledge, based on observation, reflects only external traits of objects and relies on perceptual notions. Theoretical knowledge, based on the transformation of objects, reflects their internal relations and interconnections. In the reproduction of an object, theoretical thinking exceeds the limits of perceptual representations.” (Davydov, 1977, p. 310-312)
For Davydov, theoretical knowledge is developed only by applying a dialectical method, by him called “the germ cell model.”\footnote{The germ cell model has been characterized as “ascending from the abstract to the concrete.” In dialectics the term “concrete” does not, as the general notion suggests, refer to something sensually palpable. Rather it is understood as the holistic quality of systemic interconnectedness. Something which is “abstract” is understood as reflecting and reconstructing the systemic and interconnected nature of objects, not as mental representations based on classification.} The model of activity system and the developmental cycle is by Engeström (1987) considered to be a germ cell model.

Despite this reference to Davydov I have chosen to divide the discussion into narrative analyses and analysis of the narratives because I think narratives have a value in itself (Bruner, 1985; Polkinghorne, 1995). Narratives urge the reader to make his or her own interpretations, although they are based on selected material. In this regard there is some “thirdness” about narratives, to use Wartofsky’s (1979) words, which I think is a valuable complement to a more explicit theoretical analysis.

Apart from taking an ethnographical approach in this study, I have also had an interest in action and change. This can be understood both from a pragmatic and a theoretical perspective. As an apprentice in research, and as someone with an identity as a practitioner, I had problems at the beginning of the study in defining and understanding my role and task before me. I did what I was used to, i.e., took actions and initiatives. From a theoretical perspective, however, this attitude is in accordance with the idea that mediation is a precondition for development. Vygotsky (1978) calls this method dual stimulation, implying that in order to, through research, define the zone of proximal development, tools have to be provided to the research subject. Applied to my situation, this approach was realized in that I intervened and was a participant observer in different phases and ways, something I discuss more in detail in Section 3.3.1.

Researchers’ interest in change and active involvement in the studied site, i.e., intervention, is often designated as action research. Many authors of action research, among them van Beinum & Pålshaugen (1996) and Eden & Huxham (1996) hesitate to define the concept. Van Beinum and Pålshaugen claim that it would be a limitation for learning and development if they were forced to draw boundaries and thereby decide what to include and exclude. Eden & Huxham do not believe it would be useful; to the contrary, they see a risk of a wasteful definitional debate. Instead they state that:
Action research involves the researcher in working with members of an organization over a matter which is of genuine concern to them and in which there is an intent by the organization members to take action based on the intervention. (1996, p. 526, italics added)

In the first issue of a new journal for action research - *Concepts and Transformation* - the editors Hans van Beinum and Öyvind Pålshaugen (1996) look back on the development of action research and point to contemporary features. They claim that action research has moved from a socio-psychological and socio-technical orientation into a socio-ecological direction. Organizations are no longer perceived as structures but as ongoing processes of evolving functional relations. Theory is considered an ongoing process of conceptualization instead of an ordering framework, and the research and change strategy is a discourse-based approach rather than an implementation of a designed model. Language, instead of being perceived as one of the conditions for change, becomes the crucial element in the change process. The unit of analysis and change is no longer the individual organization but interorganizational processes and networks. There is a shift from expert-driven to concept-driven processes of organizational change which presume broad participation in the way that local knowledge is merged with general knowledge as well as highly specialized knowledge. Finally, there is an increasing interpenetration of the local and the global.

Van Beinum and Pålshaugen's description seems to fit with findings of Chisholm and Elden (1993). They claim that new dimensions of action research are emerging due to changed conditions in society that have to do with the interdependence between societal and organizational actors, a faster pace of change, demands from systems members for "solutions" to problems, and the limitations of traditional positivistic research.

Action research is commonly divided into different categories. Reason (1994) distinguishes three traditionally different kinds of approaches. There is action research that takes a management perspective - Action Science or Action Inquiry - aiming at organizational change and development of social science theory. Within this group, Reason locates for example, Argyris and Schön as one example. The

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56 International Journal of Action Research and Organizational Renewal.
57 The same theme can be discerned in ethnography, i.e., a shift from focus on single sites or units to networks or "paths" (see for example Marcus, 1998).
58 The same phenomenon can be discerned in ethnography (see Burawoy et al., 2000).
59 See for example their Organizational Learning II (1996).
objective in this kind of action research is the transformation of behavior towards
greater effectiveness.\textsuperscript{60}

The second approach aims at emancipation and empowering of groups and
individuals through social change and transformation. Reason calls this approach
Participatory Action Research (PAR). In the educational field I consider Freire
(1972) a prominent example.\textsuperscript{61} According to Reason, these two traditions barely
recognize or influence each other.

In the third approach, which Reason calls Co-operative inquiry, researchers and
practitioners work closely together in order to explore and change work practice
and professional skills. I would, within the field of education, consider Wells’ (1994,
1999) concept of “community of inquiry” as a representative in this approach.\textsuperscript{62}

Thinking of my involvement in North Valley I could, in a limited way, identify
with all three approaches yet with none of them completely. I was invited to
participate by the management, i.e., Patricia, the principal at the time, though not
explicitly to do work for her. Hence, she was my “gatekeeper” (Elvy et al., 1991)
who facilitated my entrance into the school. I would say that Patricia was a radical
principal who had high expectations and had plans to develop the school in line
with a progressive pedagogy. I felt that she, reasonably enough, tried to capitalize
on my presence in the school.

As depicted in Chapter 4, power was a constantly present phenomenon in the
school. It was played out between the diverse institutional groups, i.e., the pre-
school, the leisure-time center, and the school, as well as in between groups and
individuals within the school. Power was not a stable and durable asset, as I
experienced it, but alternated between people and situations. In the beginning of
my attendance in the school I associated power with certain groups and
individuals, and powerlessness with others. Over time I came to reconsider this
view. Mainly I began to see and believe that in many regards all were captured in
their “webs of meaning,” struggling to make sense of each other and the work and
problems they were facing. In that sense I felt my work and presence could
perhaps, though in a limited way, contribute to the emancipation and
empowerment of the teachers. I think I came to represent a need in that I was

\textsuperscript{60} For example Argyris and Schön claim that in order for organizational learning to occur a
change from Model 1 to Model 2 behavior is presumed.
\textsuperscript{61} See also Roth, et al., (2002).
\textsuperscript{62} See also Cochran-Smith & Lytle (1999) for a review on the teacher research movement.
someone from “outside” to whom individuals could talk about their work. This is further described for in Chapter 4.

I did not conduct research together with the teachers in order to explore and change work practice and professional skills, although doing that presumably would have been both possible and beneficial to both me and the teachers, an issue I elaborate on in Chapter 7.

Thus, my work in the school cannot be defined as action research if one is employing Eden and Huxham’s definition. I was not asked to support and help out with a matter which was of genuine concern to them and where there was the intention to take action based on an intervention, to paraphrase Eden and Huxham.

The characteristic of the research and interventional work I did in the school was, instead, emergent and in part co-constructed. The study was not designed and planned from the start. I did not go out and look for a school where I could do fieldwork. Nor was I a consultant that did action research. The study emerged from my involvement (Nocon, et al., 2001) in the school. As shown in Chapter 2, my contact and collaboration with the school started in 1996 due to a study in my undergraduate education. It continued as a result of an interest in starting a 5thD program. From my point of view, this project, at least in its initial state, was more of an outreach or third mission (Nilsson & Sutter, 2002) project than research. Not until later on, when the VT was introduced, did I frame it as a doctoral study.

Yet, the study could be described as intervention. I did play a role in the change and developmental process that took place in the school. Over time I came to think and talk about my participation in the school as “leading with the little finger,” implying that I did take on, in certain aspects, a guiding role and pushed for change. Particularly the work with initiating, planning for, and operating the 5thD required “little finger work.”

One could say that the metaphor suggests extending a weak part of the hand, which others must grasp willingly in order to be led gently along the path. From the start I assumed responsibility for coordinating and pushing the 5thD work forward. My work ranged from searching for monetary and human recourses to making sure things “happened.” It also meant making sure that diverse involved partners were informed as well as “translating” (Nocon, 2000) between parties, for example, between undergraduates and the schoolteachers. I felt that if the 5thD was going to happen and later be sustained I had to be there with my “little finger” to facilitate dialogue, negotiation, coordination, and deliberation at least until the
work in and around the 5thD had been stabilized and institutionalized. Even though I took a leading role, my strategy was to do just enough to keep the project going. I wanted the 5thD work to be based on the school’s practice and be “theirs.” If not, I reasoned, we should not do it. On the other hand, I realized the importance of my facilitation. This work eventually resulted in a collaboration that seemed to be reciprocal. Moreover, our collaboration has been sustained (see Epilogue).

Thus, to conclude, as a consequence of saying that my methodological approach is an ethnographically inspired emergent case study with elements of action research I could call it “emergent action ethnography.” My point is that the study emerged out of involvement in a local practice that I tried to understand as culturally and historically constructed. My lens was cultural-historical, yet I intervened, took actions, and was interested in change.

The aim of ethnography has not traditionally been transformation (Grudin & Grinter, 1995; Hammersley, 1994; Martin & Frost, 1996), though ethnographers claim that the outcome often implies change (Rosen, 1991) or critique of the culture studied (Van Maanen in Putnam et al., 1993). According to Rosen (1991) structures of meaning are internalized and as such are, completely or in part, unconscious to the members of a community. This explains why members are not invited to participate in ethnographic research. Since the researchers’ interests, i.e., the meaning structures playing out in the studied setting, are not conscious to the members it cannot be the object of joint interest. Moreover, different uses of, and approaches to, ethnography have been subject to debate. Atkinson & Hammersley (1994), for example, claim that the concept of ethnography has been the object of controversy, in that some relate to a philosophical paradigm to which one has to commit, while others perceive it as a method that can be used if and when it is suitable. Prasad (1996) prefers to conceptualize ethnography as a methodology in contrast to a method. This means, according to her, that ethnography has a relationship to ontology and epistemology. She claims that there has traditionally been, within ethnography, a resistance to grand theories explaining human action. In her view, the knowledge that can be developed is local.

The aim of action research has not traditionally been to unveil layers of meaning but to understand change processes by taking part. Thus, to claim a combination of ethnography and action research therefore might seem odd. However work in a direction where ethnographical field methods are used within an action- or interventionist research approach is emerging (see, for example, Hepsö, 1997).
Within the framework of activity theory, Engeström (1987) and colleagues have developed the concept of Developmental Work Research (DWR) (see, for example, Engeström, 1993b, 1996; Engeström et al., 1996) in which elements from both action research and ethnography are present. I will describe this approach in a little more detail, since I employ parts of it in my analyses in both Chapters 5 and 7.

DWR aims at applying, testing and refining the concept of expansive learning described in Section 3.1.1. This approach presumes intervention or actions taken by the researchers in collaboration with an organization aiming at transformation:

Expansive developmental research aims at making cycles of expansive transition collectively mastered journeys through the zone of proximal development. In other words, it aims at furnishing people with tertiary and secondary instruments necessary for the mastery of qualitative transformations of their activity systems. (1987, p. 337 italics added)

Secondary instruments of expansion are springboards, instrumental models, and microcosms. Some of these models will be used in this study and thus will be discussed later. Tertiary instrument of expansion is the overall methodology for making and using the secondary instruments as it is depicted in Figure 3.4. The model is based on Vygotsky’s (1978) “genetic approach,” which focuses on process rather than fixed objects, explanations rather than descriptions, and on the significance of historical accounts. This explicit use of a theoretical framework is one critical distinction between DWR and other approaches to action research (Engeström, 1993b).

The first step in Engeström’s methodological cycle of expansive developmental research consists of gaining a preliminary phenomenological insight into the nature of the discourse and problems as experienced by those involved in the activity and of delineating the activity system under investigation. The researchers task is to get a grasp of the need state and the primary contradictions beneath the surface of the problems. This is accomplished by observations, discussions, and “reading” of the internal and public discussion. It should be stressed that the researcher is not dealing with activities in general but with a real and concrete activity realized by identifiable persons in identifiable locations.

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63 See also Scribner (1985) for a discussion, elaboration, and critical remarks on Vygotsky’s genetic approach.
Rigorous analysis of the activity system is the second step. This takes place through object-historical, theory-historical, and actual-empirical analysis. The object-historical analysis implies identifying and analyzing the successive developmental phases of the activity system and the object. In particular, the secondary contradictions that give rise to the transitions from one developmental phase to another need to be uncovered.

The main aim of the theory-historical analysis is to identify and trace the formation of the secondary contradictions initiated by or connected to the secondary instruments (concepts and models embodied in working procedures, handbooks, etc.) of the successive developmental periods. The actual-empirical analysis aims at definition of the object. The ultimate aim of the analysis is to make the participants, the potential subjects of the activity, themselves face the secondary contradictions. This might take place as an intense conceptual conflict.

The third step is formation of new instruments. This step consists of three main elements: finding a springboard, formulating the general instrumental model, and constructing a microcosm for taking over the responsibility of elaborating further the instrumental models and turning them into new forms of practice. The strategic components (corners in Engeström’s triangle model) are elaborated in order to work out a new general instrument of expansion. The conscious formation of a microcosm as a sub-step of expansive research corresponds to the formation of a vehicle for transition from cooperation to reflective communication.

To implement the new instruments is the fourth step. This implies that the activity system faces intense conflict between the old and the given new ways of doing and thinking - the tertiary contradiction. The task of the researcher is to trace and analyze the solutions to the conflicts produced by the participants in their daily actions. The created new ways of doing and thinking resides in such practical solutions.

In reporting and evaluating the process, i.e., the fifth step, one should reproduce the actual course of the expansive transition, following its basic temporal structure.

The double-headed arrows in Figure 3.3 and 3.4 implies that the process is not linear but that it allows for and include returning to previous stages.
The “Change Laboratory” is an example of a DWR approach that provides secondary and tertiary expansive instruments supporting the development of work practices (Engeström, 1996; 2000; Engeström et al., 1996; Ahonen et al., 2000). Models of diverse kinds and representations of the workplace practice such as videotaped work situations, interview transcriptions, or statistical data, arranged as a laboratory, facilitate reflection and modeling of present activity as well as that of the past and future.

The members of the workplace are encouraged to “play” and “imagine” in the laboratory in order to discover disturbances, contradictions and built-in buffers that prevent development of their working conditions. Key findings and outcomes of DWR are novel activity-specific, intermediate-level theoretical concepts and methods, i.e., intellectual tools for reflective mastery of practice. Engeström claims that such intermediate theoretical concepts provide a two-way bridge between general theory and specific practice. The guiding theory of activity as an explanatory model can and will be reexamined and reconstructed from studies of concrete activities.
Ethnographical field methods such as observation and unstructured interviews and techniques such as video and tape recordings are used. The field method utilized is an “ethnography of troubles” (Engeström, 2000). In many of the DWR studies (see, for example, Engeström, 1991a) an extended period of time is spent in collaboration with practitioners in and outside the workplace. Sometimes the practitioners take on roles as co-researchers (Engeström, 1996).

My study has similarities to DWR in that it shares an interest in intervention. However, my contribution was much more modest in that regard. I did not offer a Change Lab. As I further discuss in Section 3.3.3, I was a single researcher, while DWR often takes place as teamwork. However, my study also has similarities with DWR in that it draws on ethnography. The differences in this regard are, as I have discussed, that my focus is both on telling a story, i.e., narrative analysis and on concept formation, or analysis of narratives (Polkinghorne, 1995), while in DWR I see a focus on producing knowledge through concepts and models. In the analysis in Chapter 5, however, I draw heavily on the DWR approach even though I did not carry out a methodological cycle of expansion as described above. The analysis is based in the fieldwork I did, which I will account for in the next sections.

To sum up: based on the purpose of this study it is clear that I have an interest in developing knowledge about change processes. I believe that in order to do so it is crucial (1) to understand members’ actions as culturally mediated and their activities as culturally and historically produced. This leads to respect for the members and their actions even though the latter are not always liked by the researcher. (2) I believe that the best way to understand a phenomenon and thus be able to produce knowledge is to be a participant and take action, which inevitably implies change, or as van Beinum and Pålshaugen put it:

The research, the learning, is in the joint action, which, if successful, will at the same time and in the same act make a contribution to solving or clarifying practical problems as well as generating knowledge. Action research thus reflects the mutuality of research and development. (1996, p. 6)

The two features described above constitute, as I understand it, ethnography and action research, respectively. What I called emergent action ethnography thus draws on both ethnography and action research and combines these two methodological approaches in a new way. Ethnography is not, in this approach, reduced to a data-gathering method nor to a description or representation of a culture. The main contribution of ethnography is the comprehension of human action and activity as culturally and historically mediated and produced. This
invites us to view actions and activities as changeable. Action research in this context represents the potential that intervention, or in my case involvement (Nocon, et al., 2001), has for development of both practice and knowledge in collaboration with members. The intervention/involvement is based in the ethnographical, or cultural historical, understanding of the site and its members. This understanding, and thus respect, is an asset in the knowledge and change-producing intervention/involvement. I think this is what van Beinum and Pålshaugen (1996) might mean with the socio-ecological direction in action research, mentioned above. Ethnography and action research is coming together, for example, in the form of emergent action ethnography.

In the next section, I will explore how this approach was materialized in terms of how I collected the data.

### 3.3.1 Data

From the start I have struggled with problems of trust and access - I had problems with “getting along” (Lofland & Lofland, 1995). My “gatekeeper” (Elvy, et al., 1991) in the school was initially Patricia, a pre-school teacher and also the school’s principal. In 1996, when I was an undergraduate student, she helped me to carry out a study by letting me interview some teachers in North Valley. From that time onward I understood that she was struggling with legitimacy and trust among the teachers. She claimed that the teachers never entirely accepted her as their leader, and in 1999 she left the school after many years of tensions with them. I think my relationship with Patricia sometimes influenced the teachers’ perception of me in a way that made me feel uncomfortable and “trapped” between her and the teachers. These circumstances came to constrain my involvement and possibilities to observe, interview, and collect data. Like Patricia, I was also a pre-school teacher and to these other teachers my intentions were unclear64 which of course influenced my work in terms of what data I was able to collect and my role in the school.

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64 Ethnographical studies are often in the beginning of the fieldwork, loosely structured and without a narrow or clear hypothesis and goal. In time, the focus becomes more evident also due to what is “discovered” in the field. This of course influences the members’ understanding of what is going on and why the ethnographer is there. This also happened to me. I sometimes felt that I had not been able to satisfy their need to know more precisely what I was studying.
Adler and Adler (1987) describe several roles that researchers can take in the field. They range from complete observer to complete participant and are drawn from the Chicago School, existential sociology, and ethnomethodology. From the Chicago School, Adler and Adler describe four roles: complete observer, observer-as-participant, participant-as-observer, and complete participant.

My roles in the VT and in the 5thD were different from each other. I would describe my role in the VT project as one of observer-as-participant. The observer-as-participant is a “rather detached, overt role, typically involving brief and highly formalized interaction between researchers and members, with no attempts to enduring relationships on either side” (1987, p. 13). My participation in the VT was not entirely accepted by all the teachers. In order to cope with the situation I found myself trying to be as invisible as possible, in order to avoid increasing their workload or introducing other “problems.” On the other hand, I tried to help out when and where needed. Over time I came to develop a good relationship with several of the teachers. I was “up-dated” with the latest information upon arrival, especially by some of the child care teachers and one of the schoolteachers. This update would report conflicts, decisions, or changes in plans, etc. Sometimes, and especially towards the end of my stay, I found myself in a position where I was “consulted” by diverse parties. These parties could be the principal, the child care teachers, or the schoolteacher that I was closest to. This was not always easy to handle though I did my best to stick to discussions on “facts” and not be dragged into discussions on personal issues. This situation of course highlighted the need for consciousness about the contradictions that were the foundations for diverse conflicts that I encountered.

However, there were some teachers that I felt never accepted me. This caused problems when collecting my data. For example, I had to be very careful with the tape-recorder, which was an issue every time I used it. Most of the teachers did not mind, but since one or two did, I had to ask for permission every time and I was not always allowed to use it. The intrusiveness of the tape recorder also influenced which meetings I could attend. For example, I was only permitted to take part in planning sessions in VT 1. Sometimes I was not permitted to participate under the argument of respecting the privacy of the children. Of course I respected this rationale, but I did not always find it convincing.

However, it should be mentioned that I did take part, and in that regard intervened, in a significant way in the VT. I carried out an evaluation after the VT
had been operating for half a year. As a consequence of that work, I was heavily involved in subsequent discussions based on the evaluation.

Despite the problems I have described I felt that the data I was able to collect provided sufficient enough information about the processes I set out to capture and make sense of.

In the 5thD my role was more active, pursuing, and overt since I initiated and was partly responsible for running the 5thD. Here I was more of a participant-as-observer. A participant-as-observer “involves greater contact and intimacy between researchers and their subjects” (Ibid).

Since 1997 I have been in North Valley, one could say, “irregularly on a regular basis.” I have been away for months at a time, but when I was in residence I visited the school approximately twice a week. My base for participation has been the 5thD sessions which took place twice a day. I have often been in the VT a couple of hours before or after the 5thD sessions. I have attended and observed lessons and sessions, small group activities, breaks, and activities in the leisure-time center. Taken together it could therefore be said that I have been in contact and worked with the school for more than seven years, from the spring of 1996 to the present, i.e., the fall of 2002. Thus, I still collaborate with the school (see the Epilogue).

I will below account for the kind of data that I collected during my time in the school. In 1996 I conducted interviews with Patricia, the principal, and three other teachers. This was due to an undergraduate study (Nilsson, 1998). During 1997 most of my interactions with the school involved the starting up and running of the 5thD after-school site. During this time I mostly observed and took field notes. I did conduct a few individual interviews and one group interview with teachers about the 5thD.

During the VT project, I interviewed the VT teachers twice. The first time was before the VT started, during the summer of 1998, but after the organization was decided upon. The second time was November-December 1998, i.e., when the VT organization had been running for a little more than one semester. These interviews were the result of the evaluation that I carried out, which was initiated by the principal. During the two years of the VT, I interviewed the two principals several times. I also interviewed a former child care staff person who came to the school as a substitute teacher for a week. This person had also been a student in this school. All of these interviews can be defined as semi-structured or open-ended, or as Lofland & Lofland (1995) call it, “guided conversations.” I did have particular
questions I wanted to get answered, but mainly I wanted to capture the interviewees' own take on the issue at stake. All these interviews were tape-recorded and transcribed. I have also used data from interviews that were conducted by undergraduate students. The interviewees in this case were the VT teachers, the site-coordinator/principal, and the high school students, and the topic was the 5thD.

For the duration of the VT organization I took part in two evaluation discussions, one in each VT group. These discussions were based on the report I produced, which in turn was based on the evaluation interviews (the entire report is shown in Appendix I). I also participated in several planning sessions, mainly in meetings related to VT 1 but also in one with the recreation pedagogues planning for the leisure-time activity. All of these sessions are tape-recorded. In the ending phase of the VT project I took part in three meetings which were in regrd to the future of the VT. These meetings were partially tape-recorded. In addition, two more meetings that I did not attend were tape-recorded and used for data collection. One was in the ending phase and recorded by the principal and one was a session with some of the VT teachers and a university student/5thD project manager. The mentioned student recorded this last meeting.

A database of approximately 200 fieldnotes has been produced since 1996. Most of them are my own but there are also some notes written by undergraduate students and high school students. E-mail correspondence has also been a source of information.

In addition to the sources described above, I have had access to documents produced in the school, for example, information fliers aimed at the parents as well as the principal’s written plan and preparation material for the VT organization.

3.3.2 Data Analysis

An ethnographical analysis should be an emergent process developed through stages where insights and understandings build upon prior insights and understandings (Emerson et al., 1995). My processing of data could be said to have started with the first fieldnote I produced. Each note ends with a more or less
spontaneous, and sometimes, in retrospect, embarrassing reaction on the observed events. In time, I started to develop an initial understanding or image of “what was going on.” This understanding has gradually been revised and become more complex as a result of a deeper acquaintance with the site but also due to the interplay between the literature I have reviewed and the empirical studies (the hermeneutic spiral has in some phases seemed almost tangible).

From the start I planned to write one comprehensive story. With the passing of time, I came to reconsider that decision due to the fact that my initial hypothesis about the role of the 5thD did not seem to hold. Instead of primarily having a mediating role in the VT, the 5thD seemed to constitute what I started to think of as a bridging artifact and as such an interinstitutional, intercultural and intergenerational learning environment in its own right. I felt that the 5thD deserved its own story. Consequently, and as previously discussed, two stories are told: one about the integration in terms of the VT organization and another about the 5thD.

Due to the aim of the study, i.e., understanding the potential for change and development by analyzing expansive cycles I decided to tell the stories (in Chapters 4 and 6) as “chronological narratives” (Atkinson, 1990, p. 126). In order to create an outline for the two stories I, in the first round, read through all the fieldnotes and e-mails and made an open coding (Emerson, et al., 1995). This coding enabled me to create outlines, which can also be considered memos (Ibid), for the narratives based on significant events and themes. In a process parallel to that used in the outline of the narratives, I started to think of the more systematic analysis of each story (Chapters 5 and 7).

In the next phase, I went through all the interview material and picked out excerpts that I thought exemplified and highlighted significant events and themes. In so doing, I discovered new information that made me discover new crucial events, connections, and relationships that I had not previously been aware of. It was as though the interviewees were given the chance to clarify what I had recorded (and not recorded) in my fieldnotes and in that way have a second chance to speak. This

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65 When reading through the fieldnotes, one can discern a transformation in my remarks from my earlier superficial and simple towards a more insightful and problematizing approach. Moreover, my initial comments are very much tainted by my pre-school teacher background. According to Emerson, et al. (1995), it is a common feature among beginning ethnographers to judge members by their own standards.
time I “heard” them more clearly. Upon finalizing the versions of the narratives in Chapters 4 and 6 I returned to and completed the analysis in Chapters 5 and 7.

When writing the final text, or the “thematic narrative” (Emerson et al., 1995) I applied the “excerpt strategy” (Ibid). This strategy involves an extensive use of interview and fieldnote excerpts in the final text. Rather than a weaving together of excerpts with interpretations and comments, the excerpt strategy creates a discursive contrast between description and analysis. The text is organized so that analytical statements and commentaries are offered before and after the excerpts. Thus, the excerpt strategy also invites the reader to review the foundation, construction, and authenticity of the interpretations offered. In addition, the excerpt strategy allows for presentation of unexplicated details and qualities of events observed in the field. The ethnographer is not expected to comment upon every aspect of the content in the fieldnote excerpts that are used in the final text. On the contrary, as Emerson et al., claim:

In fact, these unexamined qualities or details contribute to readers’ tacit understanding of the scenes or events being described and analyzed. In this strategy, the excerpts evoke as well as convince and, thus, stand out as striking, central, key writing in the ethnographic story. (1995, p. 181)

Consequently I had to pay extra attention to the quality and design of the interview and field note excerpts. The question of how to properly represent interview and other kinds of discursive material takes some consideration. On the one hand, it is important to reproduce what was said as accurately as possible. On the other hand, spoken language conveys grammatical errors, iterations, interruptions, etc, which often make an exact representation (if this is ever possible) hard to read and make sense of (Kvale, 1997). Exceptions do of course occur, say, when the discourse is the unit of analysis or when the exact occurrences, for example, pauses, iteration, or overlap play a crucial role for the phenomena studied. The purpose of using interview data in this study has been to give the reader as direct and close a contact as possible to actions and interactions in the site. In this regard I had to choose, on the one hand, between verbatim representations that also included such things as pauses, accentuations, and hesitations and, on the other hand, a “cleaner” excerpt that was easier to understand. In most cases I chose the latter. Thus, I “washed” the material of occurrences like those described above when this did not change and interfere with (my understanding of) the meaning of what was said. But sometimes, I chose the alternative. For example, in some cases I felt that hesitations and emphasis helped to lend a sense of closeness to the actors and the site, and therefore some excerpts are more inclusive than others. The fact that the interviews
are translated from Swedish to English also, unfortunately, interferes with their tangible authenticity.

Fieldnotes are “accounts describing experiences and observations the researcher has made while participating in an intense and involved manner” (Emerson et al., 1995, p. 11). Thus, they comprise the essential grounding and resource for the ethnographic account to come. When out in the field the researcher pays attention to details and impressions and makes mental notes, “headnotes.” But she also takes brief written records by jotting down key words and phrases (Emerson, et al., 1995). These “jottings” (Ibid) serve as a device for later recall when writing the fieldnote. I used both these methods. Usually after a day in the school I wrote my fieldnote in the evening based on both headnotes and jottings. In meetings, for example planning sessions, it was easy for me to take notes since note-taking was a natural part of that activity. Notebooks were a working material for the teachers as well. However, when I took part in, for example lessons and sessions with the children, I usually kept a little notebook in my pocket in which I jotted down words or sketches to aid my memory. I avoided doing this publicly; rather I went to the bathroom or a hidden away place where I could make my notes without being seen. I felt that taking notes made me more of a researcher and less of a participant in the eyes of the teachers. Of course they would wonder about what I was writing about them – who would not? I felt this would jeopardize my access to important information and would stress my already shaky relationship with at least some of the teachers.

Fieldnotes contain a lot of accounts of “who said what.” Of course it is impossible to remember exactly, word for word, what people have said. A jotting contains a more or less exact (to the extent it is possible) transcript of a conversation or what someone said. In the fieldnote excerpts that I use in the narratives I parafrase what teachers and members have said. These references are based on jottings that are, by and large, reproductions of what was said.

Since fieldnotes, at least in their initial state, are not intended to be read by anyone but the researcher herself, except for perhaps, members of her research community, less attention is given to the form than to the content. What is important is to write down as much as possible of what can be remembered. This means that the fieldnotes need to be edited before being used in the final text. As with interview material, they are filled with grammatical mistakes, hurriedly formulated sentences, and filled with diverse and seemingly incoherent information. Because I
have chosen to use quite a lot of excerpts from fieldnotes, I have also “cleaned” the field notes in order to help the reader to better make sense of them.

### 3.3.3 Validity and Generalizing

This whole methods discussion of course boils down to the question of validity and the possibility of generalizing from the study. Kvale (1997) claims that validity and generalizability are intertwined, and he accounts for three criteria regarding validity testing in qualitative studies: craftsmanship, communicative validity and pragmatic validity. The researcher’s *craftsmanship* is about control, questioning, and the capacity to develop theory from the investigation. The *communicative* validity is the truth that is reached in the discourse with the research community or with the public. The *pragmatic* validity concerns applicability and the actions that are the result of the new knowledge.

With this in mind, I will now discuss some of the problems I already have mentioned that occurred in the process of conducting this study.

As has been previously pointed out, my background is as a pre-school teacher. More than fifteen years in the profession shaped and molded my identity. Entering into the academic world implied learning a new language, that of the academic and research discourse. Previously, my object of activity had been practice development; now my task was knowledge development. Especially at the beginning, I confused these two tasks and took on duties that were not traditionally those of a researcher. I helped out, intervened, and “supervised.” As I have discussed, though, intervention serves the purpose of knowledge development within an action research approach. Determining the boundaries of, or rather, the relationship between, of what constitutes research and what constitutes an interest in practice development has not always been clear to me. I have to admit that this shift in identity has not been an easy process.

As a result of this unclear “division of labor” the study was not designed in a traditional way - rather it came about through an emergent process. The 5thD was introduced partly based on its value to the school, partly based on my interest in exploring its value for transformation of the school pedagogy. At the time of the implementation of the 5thD, the VT project turned up as an option to frame my exploration of the role of the 5thD.
Did my practice-based experiences and loyalties have any impact on the trustworthiness of this study and its results? As I have previously discussed, qualitative research is, by definition, subjective. It is through my eyes the reader is told this story. In creating it I have tried to – as best as I understand them – “play by the rules.” I have tried to have an open mind in the process of collecting and interpreting data. During the process I – in many regards – changed my understanding of the field. I take that as a sign that my intention to stay open-minded was satisfactory.

Over the first years, which included the most intense fieldwork, I mainly worked without an adviser to guide and inform the study. There were people around who I discussed my research with but not in the sense of a designated adviser. This can be understood as a result of my own search for a research community where I could feel affinity. As a doctoral student you are – for most of the time – placed in a research community not based on your own theoretical and methodological beliefs and interests. You become a participant in a particular research group because of the school you happened to be enrolled at. This was not a satisfying situation for me, so I embarked on a journey to find researchers and a research community engaged in a theoretical and methodological approach that I found convincing and appropriate. Over the last few years I have had an affiliation with the Laboratory of Comparative Human Cognition at the University of California, San Diego. Professor Yrjö Engeström has been my adviser for the past two years.

This lack of guidance in the beginning resulted in some problems with the data collection. Even though an ethnographical study traditionally begins with a broad focus it took a long time before I was able to narrow down my subject area and focus my data gathering. In the beginning I tried to capture “everything” – of course an impossible task. Moreover, as I see it, this situation prevented me from taking a more active and supportive part, mainly in the VT context. With support from an adviser or team of researchers my intervention could have been more overt and supportive of the VT teachers’ efforts to create their new activity. That in turn, perhaps, would have enhanced the knowledge of the role of mediation in integration attempts. With an experienced adviser I might not have had the problems with access and “getting along” that I have accounted for in the previous sections. In other words, I lacked support in developing a craftsmanship, an issue discussed by Kvale (1997).

On the other hand, I believe that the study has qualities caused by its emergent and slow growing process that in turn were due to these initial circumstances. Such
insights as, for example, my use of “little finger work” and the ideas about the 5thD as a microcosm, discussed in Chapter 7, can perhaps be attributed to my deviation from a traditional research design. The search for practical, local, and circumscribed solutions to problems facing the collaborative effort between myself and North Valley to do something interesting and “good” has contributed to the study. This was because parts of these struggles have turned out to be valuable data.

However, over time I was able to frame and focus the study. The issue of integration became essential. Intensive literature studies proceeded in parallel with the fieldwork. My intention has been to give a convincing argument as to why the integration reform has the potential to result in school development. Due to the long term collaboration with the school, and thus the possibility to perform intensive fieldwork over a long period of time, I am convinced I have the data to make that argument. When the fieldwork on the integration ended, I felt that my understanding of the process was genuine. I was there from the beginning to the end and I was able to follow the whole process in detail.

Based on this long term emergent action ethnographical study, I have developed concepts that I believe have the potential to contribute to the theoretical discussion in both the community that deals with integration of school and child care and in the CHAT community as well. My hope is that my findings will be applied to and considered in future attempts of integration. Thus, the validity and generalizability of the concepts generated in this study have to be, as Engeström (1999, p. 36) claims, tested and proven by the viability, diffusion, and multiplication in similar activity systems.

The 5thD research community is world-wide and has existed for almost two decades. To bring the 5thD back to school in order to facilitate school development is a challenge to the 5thD community. On the other hand, it is within this community that such an attempt can be explored, discussed, validated, and generalized.

A great deal of being able to communicating the study has of course to do with language. When starting this study, my voice was that of a pre-school teacher rather than that of an academics. Over time, I have become familiar with the

http://www.5d.org/
http://www.uclinks.org/
http://129.171.53.1/blantonw/5dClhse/clearingh1.html
academic culture and language eventhough it will take a long time for me to be “fluent.” Moreover, I have chosen to write in English, though it is not my mother tongue. This does, of course, constrain my ability to communicate. Sometimes I have felt that I communicated what I “could” rather than what I “wanted.” In the end, however, due to support from several research colleagues and my English-speaking friends and family, I think I have been able to convey my main message and points, although not as precisely as I would have liked to, and probably would have been able to if I had been writing in Swedish. If this is a correct assumption, and I possess acceptable communicative skills apart from any errors in usage that can be assigned to my English language skills will in the end be judged by the reader based on her background, interest of knowledge, and experiences. Such communicative skills might, for example, regard the structure of the outline, the clarity of my thought and expression, logical reasoning, honesty, etc.
4 The Development and Decline of the VT Organization

As I have argued previously, the purpose of this study and my theoretical approach required serious immersion into a community of practice. Thus, I will extensively describe and account for the everyday life and discourse in a school struggling with change and development of its practice which was framed by an integration attempt.

For two years, as was described in Chapter 3, I closely followed and partially participated in the integration attempt. I will, if not warn the reader, make clear from the start that this chapter is extensive and filled with numerous excerpts from fieldnotes and interviews. The purpose is to present a rich narrative. The excerpts are numbered (E:1, etc). This number system is employed in Chapter 5 to show what excerpt correlates with my analysis.

Some readers probably will recognize themselves, to a lesser or greater extent. The school I describe and its activity is not unique but can be recognized anywhere in Sweden. In that case I hope that the North Valley story will contribute to other, and perhaps, different perspectives on the readers’ own experiences. Moreover, my intention is that the narrative also will contribute to a general understanding of the complexity in integration attempts. The narrative also makes visible that the integration was embedded in the ongoing activity in the entire school and by that it was both dependent on and influenced by that activity.

In this chapter I do not make an explicit and extensive analysis - that I do in the next chapter. However, I do make minor comments on events and phenomena. I also relate some of my data to similar findings, particularly from the report from the National Agency of Education (Skolverket, 2001). In that regard I more or less leave the reader alone to make her own interpretations.67

67It should be pointed out, however, as discussed in Chapter 3, that there exist no data that is not, in one way or another, already interpreted. My choice of what and how to present, for example, is of course subjective and in that regard already an interpretation.
I start with an account of the preparation phase. I end with a summary of a letter from all the VT teachers addressed to the principal and the vice-principal accounting for their reasons why they wanted the VT to be continued and sustained.

### 4.1 The Planning and Initial Phase

In the spring of 1998 Patricia, the principal at the time, told me about her plans to launch the VT organization. In her network of school leaders, collaboration between the pre-school class and the lower grades was often discussed. The discussion was prompted by the law about the flexible school start. The law had also been discussed by the schoolteachers who worried about having six-year-olds in their classrooms.

With support from the group of principals, Patricia worked out a plan for restructuring the school that was based on a VT structure (see Figure 2.1). In explaining her vision and idea behind the VT, the terms “individualization”\(^{68}\), “diversity,” and “comprehensive view” were central:

**E4:1**

Patricia: I see it as individualization. When you’re working with groups like that you have to take your time with each individual. This is what they’ve been talking about in school for so long, about individualization.

Monica: What’s meant by “individualization”?

Patricia: That biological age is unimportant. The problem is that you don’t see each child. [...] In order to get that comprehensive view you wish you could move the staff around. The mix means there are more adults, which is what we need. You get a different type of diversity since you get people with different skills. (Interview, spring 1999)

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\(^{68}\) “Individualization” is a term with a positive connotation, in this school as well as in the school debate in general. However, it does not have a uniform meaning. Sometimes, as Hansen (1999) points out, it might mean that each child should be treated based on her own developmental level and condition and be given the chance to work at her own pace. It can also apply to teaching methods in that the teacher knows the individual children and can provide individualized support and stimulus. This might be about choosing, for example, a verbal vs. a hands-on approach. In my opinion individualization should not be opposed to collective and collaborative learning.
In a pamphlet aimed for the teachers Patricia described the new organization. She wrote for example:

E4:2
We’re moving from education to learning—lifelong learning. The idea now is that we are learning THROUGHOUT life, not FOR life. Furthermore, the Education Act states that our six-year-olds are to be integrated and so does LPO 94 [the 1994 curriculum for the compulsory school] and the curriculum for classes of six-year-olds. An organization with a more comprehensive view of the school day and greater scope for play is a prerequisite to success.

As an undergraduate I had interviewed Patricia about her attitude and feeling about the school in general (Nilsson, 1998). She had far-reaching plans for the development of the school practice in North Valley. At that time she said:

E4:3
I would like to see all these things like schedules, lessons, classrooms, breaks, guards, and I don’t know everything that schools represent, rethought. Instead you could look at this as a mission: this is what we are going to do during these six years, these are the kids we have, this is our material and now we are going to manage this and not remain in the past. (Interview, spring 1996)

When informing the teachers about her plans and the VT structure, she initially encountered some reluctance. She claimed these problems were almost immediately defeated. When interviewing the teachers who were assigned to the VT, I understood that there had been some resistance to the idea of the integration project.

However, in the beginning of August 1998 the teachers assigned to the VT had a workshop with a consultant, to prepare for the new work organization that would start three weeks later. Patricia was concerned that they would only discuss schedule-related issues and therefore she urged them to bring some questions to consider and discuss in the workshop, for example, goals that can be evaluated, basic values and thoughts, and play and joy in the work. These questions were displayed on an easel in Patricia’s room for a period of several weeks. I asked Patricia what she meant by “basic values” and she said it had to do with how we view children, how we learn, when we learn, what knowledge is, etc. One could say that Patricia had asked them to discuss what Dahlberg and Lentz Taguchi call
their view of the child, learning, and knowledge, what Haug (1992) calls codes, and Munkhammar, (2001) discourse. Patricia did not take part in the workshop.69

In interviews, I later learned that the teachers were not particularly happy with the workshop. They had expected to be given time to plan and prepare for the new work. Instead, the aim of the workshop had been to enable the participants to get to know each other – over a glass of wine:

E4:4
Sandra: Yeah, we were away, right?
Rita: We lost sight of it, the objective sort of, what we want to get out of this, then you just kick off, you know, carrying on if as nothing has happened.
Sandra: We were away for a few days, you know. At the seminar we weren’t allowed to talk about what we wanted, we were supposed to talk about other stuff. [laughs]
Rita: We were supposed to find out who we were.
Sandra: Not say a word about work, but it was interesting. We’d brought loads of [gadgets]. So we thought... in the evening, but then we were supposed to sit there and drink wine. And we’d brought no wine!
Rita: [laughs] Then we were supposed to talk things through, but we had no wine, so we just sat there, sat there with a beer. [laughs]
Rita: Maybe it’d been better if we’d brought some wine with us.
[Collapsing with laughter while making inaudible remarks]
(Evaluation discussion, 02/02/99)

A couple of days before the start of school in August 1998 all the teachers gathered to prepare for and plan the upcoming school year. After the first part of the meeting, which all teachers took part in, they met in smaller groups. I took part in

69In Skolverket’s report (2001) it is stated that half of the principals who were part of the study on which the report was based claim that they do not have time to pursue pedagogical issues. Because of the decentralized organization, the pedagogical developmental work is often delegated to the work team. It is further stated that the teams have no time to deepen their knowledge of the integration reform and its intentions. Moreover, half of the principals claim that they lack support from the school boards and the administration. The politicians and managers who formally have the responsibility for development of the integration reform have distributed this responsibility to the local principals and work teams. The rhetoric used is that integration should be based on local needs, conditions, and requests. However, principals and members of the teacher teams have expressed confusion when the project is actually launched. They claim they lack understanding and guidance about the overall intentions with the integration reform. Some local schools have taken advantage of the situation by creating an activity they prefer to see.
the VT’s session. This was the first time the VT teachers had met to plan and organize their new work. All six VT teachers participated. What I took part in can be described as a fumbling attempt to form and develop an entirely new work practice. The excerpt below from my fieldnote shows how the teachers built upon previous experiences and knowledge of their different institutional and professional practices. They used their cultural toolkit (Swidler, 1986) in order to make sense of and deal with their new task. They were left without guidance and the whole situation was undirected - there was no plan or formal leadership guiding their negotiations and discussions. A large number of different issues were commented upon and the discussion was moving back and forth. They started to discuss and plan for their first immediate task, the roll call, which was coming up a couple of days later. The pre-school and the schoolteachers started to suggest different ways of conducting the roll call. After some negotiation they agreed upon a agenda. They continued to discuss practical issues, the schedule, etc. The following excerpt is meant to transmit the style and the atmosphere at the meeting:

E4:5
In the end it is decided that the staff will first introduce themselves, then hold the roll call and finally let the children draw while the staff talk to the parents. Sandra admonishes the others that, when talking to the parents, they should bring up practical issues, such as that if they are buying a new satchel it needs to be large enough to fit the A4 format, that the children will get a folder for the parents to have a look at, that the parents should check the satchel every day, that the children must wear slippers etc. Sonja from 2nd grade enters, holding a schedule. She and Rose discuss something about the schedule that needs sorting out. Then Rose says, “Let’s go over to the 2nd grade and sort it out, it won’t take more than an hour.” Apparently it had to do with Sonja asking for help from the recreation pedagogues. Rose leaves with Sonja and returns after a goodish while. While she’s gone the others talk about what it will be like next year when the new six-year-olds are to be inducted, plus another two teachers. Someone says, “We’ll worry about that then.” When Rose returns she says, “What happened to planning the roll call?” They discuss Sam and Patricia’s presence at the roll call. Sandra says, “She’s the driving force behind it all, I really think they ought to make a show.” Then there is a discussion about the school nurse, health responsibilities etc. Sam enters, talks about the schedule, this time it’s PE. They ask him whether he will be present at the roll call, and he says yes he thinks so, but he’ll have to check first. He leaves and they talk about the importance of getting the time to do school, pre-school and leisure-time planning. Susan emphasizes that she sometimes would like to be alone with the seven-year-olds. Someone says it’s not right to use VT time for planning. Sandra suggests that she and Susan can do the planning between 7 and 8 a.m., but Susan objects vehemently. They start talking about the fact that there will not be three of them
that often, which had been Patricia’s argument for launching the VT organization. They discuss what Patricia has written about VT and the amount of time she claims there will be three adults. Petra shows a schedule developed by Patricia. They all agree that it will not happen very often. Rose says, “Don’t worry about Patricia’s schedule, we’ll do it our way anyway.” Susan says something about the A to Z notes on the wall. They look a bit flimsy, and she says she would like to fasten them on hardboard. (Fieldnote, 08/17/98)

Despite the complexity of the situation the teachers seemed to be able to deal with the issues they were facing. A great deal centered on the schedule, an issue Patricia had shown concern about, which became reinforced by outsiders coming in wanting to discuss issues that had to do with the schedule.

The excerpt also reveals a certain resistance to the VT idea – this was Patricia’s idea, not theirs. The attitude was that Patricia had designed and decided on it and therefore she should be responsible for it. Rose showed a somewhat different attitude when she claimed that they were free to design and shape their work, as they liked. A first indication was visible in a wish to divide the responsibility for the six-and seven-year-old children among the different teacher categories. Susan claimed that, now and then, she wanted to be on her own with the seven-year-old children. This became clearer during the rest of the meeting:

E4:6
They discuss the children’s pigeonholes. Susan says “The six-year-olds, have they got their pigeon-holes in there [in their intended classroom, previously used by a pre-school class]?” The answer is “no” and she says, “Then we can let the seven-year-olds use them?” Paula replies “Sure, can’t see why not.” Susan laughs and says, “There’s got to be some difference.” Then there is a discussion about birthdays. Susan and Paula realize that they no longer have to duplicate birthday parties. Someone points out “Now, it’s no longer our kids and theirs—I mean we’re talking about the same children.” They decide to divide the children into sub-groups: the pre-school children are the “red” group, the first-graders the “blue” group, and the new six-year-olds will be the “yellow” group. They all think it is better to use colors because it is not as childish as animals, for instance. Sandra says, “We should’ve thought of this for folders and stuff.” Someone says it does not matter, it will be OK anyway. (Fieldnote, 08/17/98)

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70 One of Patricia’s arguments for the VT was an increase of adults in the classroom.
71 It was the same children who were in the school and then went to the leisure-time center.
Very early on, the schoolteachers made it clear that they wanted the responsibility for the seven-year-old children. A structure emerged in that a “blue” and a “red” group were created. The blue group came to comprise the seven-year-olds and the red group the six-year-olds. This division of labor was often rationalized in terms of “one should do what one is good at.”

Despite the categorization of “red” and “blue” children it seemed as if the new VT structure made it easier to think of the children in a more holistic sense in terms of having “joint custody” of them. They seemed to realize that they were dealing with the “same” children.

This division of labor was also reinforced from “outside.” For example, when the maintenance man came in during a session he approached Susan with a question related to “her” classroom:

**E4:7**
One of the maintenance men enters and asks Susan “You’re not using these [some tables], right?” Susan replies, “We haven’t decided yet, but I won’t be using that one.” The maintenance man leaves. (Fieldnote, 08/17/98)

The rest of the planning sessions in the planning conference followed the pattern of dividing the work in accordance with old roles and on the maxim “doing what one is best at”:

**E4:8**
Rose says, “Shall we plan for Friday?” Paula wonders whether they are going to sing. “How are we going to line up?” Susan asks. Rose asks whether they are to shake hands. They come to the conclusion that it will be too much of a drag if the children are to shake hands with all three of them, and agree on having one day each. “I can do it on Thursday since you’re doing the finger game,” says Susan. Then they talk about the pigeonholes in the classroom and Susan says, “I can show them the pigeonholes when I have the seven-year-olds.” Later on, Paula says, “Why not let them play freely?” Rose says it is important, but nothing more is said. “I was thinking the seven-year-olds would like to show their books,” Susan says. “There’s no need to keep them mixed. The seven-year-olds can stay here on their own for a while. I can show them how to put the books back.” Paula wonders what to do about rules and “getting to know each other’. Susan replies, “Well, rules and stuff, we’ll have to sort that out as we go along next week.” Susan refers to her notes from last year’s planning sessions and says, “We had math as early as the first week” to which Paula remarks “that early” and then says, “We could thread pearls on strings and stuff.” “So, on Friday, you’ll shake hands with them and let them in?” Susan asks. “And then—during
the assembly, are we supposed to sit on the floor then?” “Yeah, to start at least,” Paula replies. Susan says “They’ve got to have fixed places.” Rose has returned and says “Can’t that wait until we see what they’re like?” “You quickly spot which ones can sit together,” Susan says. They start discussing where to put computers, and start looking for wall sockets and connectors. (Fieldnote, 08/18/98)

Even though a structure was taking shape that separated the school from the child care, the teachers seemed to be able to make use of each other’s experiences and competence. It was decided that after the morning sessions in the color groups there would be small age-mixed groups or common activities for the whole group.

It became apparent that the teachers had no clear perception of the objectives and the purpose of the VT. This was obvious when they faced the problem of explaining the content and the structure of the VT to the parents. After some discussions they came up with a strategy to deal with it:

E4:9
After the break the discussion about what the parents will think of VT as opposed to the traditional way resurfaced. Rita says “The parents of the seven-year-olds will be worried that it’ll all turn into fun and games and just be muddled and vague. The parents of the six-year-olds that it’ll all be schoolwork and no play.” Sandra says “Put it this way: they’ll get another five classes.” Susan wonders if the parents are worried. Petra replies “No, they just want to know.” To this Paula remarks “Well, so do we.” Rita asks [by way of a statement], “In the morning there will be more literacy, math, in the afternoon PE, drama, etc?” Sandra says “We can emphasize themes which involve math, literacy and so on and so forth.” Susan says, “I can understand if parents are worried.” (Fieldnote, 08/17/98)

The discussion pointed out the significance of the relationship with the parents in the new organization - an issue that hardly had been considered when designing the new VT organization.

Through negotiation (Davidsson, 1999b) a structure and activity incrementally emerged that was based on a separation of the school and the child care, yet influenced by both. Let us look in more detail into that practice.

72 The number of teacher hours available in the VT was higher in the beginning than if they had had their regular organization.
4.2 The New Activity

The structure that emerged came to shape the everyday practice in the VT. In order to describe this practice I have organized this section as a journey through a regular day. The timetable (Table 4.1) and the drawings of the school in Figures 2.2, 2.3, and 2.4, serve as references to describe the activities.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.20 am</td>
<td>Common assembly for the red and blue groups</td>
</tr>
<tr>
<td>8.50 am</td>
<td>Teaching/learning and play in the blue and the red groups, respectively</td>
</tr>
<tr>
<td>9.40 am</td>
<td>Break</td>
</tr>
<tr>
<td>10.00 am</td>
<td>Teaching/learning and play in the blue and the red groups, respectively</td>
</tr>
<tr>
<td>10.40 am</td>
<td>Lunch</td>
</tr>
<tr>
<td>11.20 am</td>
<td>Small mixed age groups or shared activities such as the 5thD</td>
</tr>
<tr>
<td>1.00 pm</td>
<td>School day ends, children go to leisure-time center or home. Planning sessions for the teachers</td>
</tr>
<tr>
<td>2.00 pm</td>
<td>Schoolteachers’ work day ends</td>
</tr>
<tr>
<td>4.00 pm</td>
<td>Pre-school teachers’ work day ends</td>
</tr>
<tr>
<td>5.00 pm</td>
<td>Recreation pedagogues’ work day ends</td>
</tr>
</tbody>
</table>

Table 4-1 Schedule for the VT

As in most Swedish schools the day started at 8.20. When called in from the playground the children lined up in the hallway in two lines, the red and the blue – according to age. Before entering the classroom each child in the blue group shook hands with the schoolteacher, and the children in the red group, with the preschool teacher. After that, they all walked, nicely and quietly for most of the time, into the classroom and sat down at their marked places or on the floor. One of the teachers started the session, usually by talking about the day and date followed by singing a song, a tradition common in the Swedish pre-school. The session went on for approximately thirty minutes and then the red group left together with the preschool teacher. The schoolteacher who was still in the classroom did math or literacy with the blue group. Sometimes the recreation pedagogue helped out in the classroom.

One day I participated in a literacy session in the blue group. The children worked with the books according to a guideline and when they had accomplished the required pages in the book they were assigned to worksheets and other similar tasks. No one was supposed to work ahead and no one to be left behind, a strategy
that did not sit well with Simon, a seven-year-old boy, who had other ideas of acting and learning. Simon was considered to have “behavior problems.” He was considered to be intelligent but to have concentration problems. He had a full-time aid teacher, Anna, who he seemed to like a lot:

**E4:10**

I am sitting next to Simon and Anna who have been away from the classroom for a little while. Simon is writing in his book. Every now and then, Anna erases the letters that Simon is writing in order for him to make them nicer. At one point Simon asks Anna to draw the dots for where to start and stop the lines for the letter A. Suddenly Simon is filling in the left-out letter O in the word “rose” on the next opening in the book so that the word becomes complete. Anna erases it and says “no, this page first.” This is repeated several times. In between, Simon works according to the rules but once in a while he tries to get back to the other page. The incident ends with Anna chasing Simon round the table while Simon is trying to write. She says something about Sandra [the school teacher] not having admitted writing on the next page. (Fieldnote, 12/04/98)

This incident revealed a characteristic feature of this school as in schools in general; textbooks and fill-in-the-blank-forms tasks controlled the activities. Textbooks were objects rather than tools in the teaching practice (Miettinen, 1999; Olsen, 1980).

The work method that the fieldnote describes, combined with the structure of the blue and red groups, implied that the six-year-olds seldom participated in these literacy and math sessions because they would fall behind if they did not take part on a regular basis. The reason for this was that textbooks aimed at the seven-year-olds were not available for the six-year-olds. It was obvious, but infrequently discussed, that there were both six and seven-year-old children who would benefit from being exposed to activities from the group they were not a member of. On several occasions I saw children work with tasks clearly below their capacities. On one occasion Petter, a seven-year-old boy, was doing arithmetic with numbers up to fifty. He did it as a free choice at the end of a session. When this happened Susan looked at him and then at me, and said, “sometimes they know more than you can

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73 According to the report from the National Agency of Education (Skolverket, 2001) literacy stimulation of the six-year-olds occurs in the classes where the integration is more developed. It would, according to conclusions drawn in the report, be possible to give some children opportunities for individualized literacy stimulation.

74 In the report from Skolverket (2001) it is stated that many preschool class children are able to read simple words and coherent texts but that they are not paid attention to and stimulated accordingly in the school.
imagine.” I observed a similar phenomenon in a 5thD session. A high school student and I were working with Lisa (seven years) and Cecilia (six years). Cecilia turned out to be the more fluent reader and writer and thus assumed the role of the leader:

E4:11
There are two girls who choose to play a boardgame, so we go down to the classroom. The advanced level requires them to play five rounds and then give a description of one of the characters in the game. Lisa, who is seven, starts writing at my request. She finds it difficult, but Cecilia (who is six years old) turns out to be much more proficient. I suggest that she do spelling while Lisa takes care of the writing. They do this for a while until Lisa gets tired of it, and Cecilia takes over. We talk about what she will write. After a while, Lisa goes to fetch an optional copybook and starts writing, aided by the high school student. (Fieldnote, 10/27/99)

As a way to bridge the gap between the activities for the pre-schoolers and the first graders and to make the education more individualized, the child care teachers often pointed out that they wanted to create new material and pedagogical tools so that there would be a more varied supply of material for the children to choose from. As Rita said “not all children learn from Ola’s textbook.” They had ideas about home-made books and a shop where the children could play and learn about numbers and math by using money, measuring instruments, etc. In particular Rita talked about this and referred to the Montessori pre-school in which her niece was enrolled.

To create new learning material would require planning and preparation time, which they claimed they did not have, a well-known phenomenon in education (see, for example, Donahoe,1993). Despite the lack of time there were attempts at pedagogical innovations. For example, VT 1 did create a shop for the children for the purpose of mixing play and math. My impression was that the idea had not materialized in a way that met their expectations.

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75 The activity in the 5thD is described at length in Chapter 6.
76 In the report from Skolverket (2001) the issue of lack of planning time is discussed. It is claimed that lack of planning time is one of the main obstacles for realizing the integration reform. However, in many of the planning sessions I took part in, a lot of time was spent discussing specific children and their home conditions. Sometime my reaction to this was that the time could have been used more efficiently.
The recreation pedagogues sometimes substituted for the schoolteachers. Once I participated in a session that Rita gave while Sandra was on sick leave. The following occurred:

**E4:12**

Petra takes the six-year-olds to the playroom while Rita stays with the others. She tells them that she has been on the phone with Sandra who has told her what they are supposed to do today. They will be going through their new literacy homework. Rita has written the assignment on the whiteboard:

Ola, Elsa and Leo see a fox. Ola rows and rows. Leo sits in the sun.
“I can see suns,” says Leo.
“Elsa rows too!” Ola said.

Rita asks the children if they recognize any of the words. When she comes to Laura, who is still thinking, she gets no answer and goes on to ask Max instead. At that point Laura raises her hand—maybe she has finished thinking. She sits like that for a long time, until another kid gives an answer—probably the word she was thinking of. She lowers her hand. Then, when Rita is reading the sentence “I can see suns...” Laura stirs and says Leo can’t because there is only one sun! Rita replies that maybe he can! Laura’s face takes on a serious and thoughtful expression. The children take out their readers. They get to read sections in it and Laura says she has been reading ahead at home. Inspired by the line “rows and rows,” Max and Allan start talking about a fishing trip they made together. Rita replies, “It is alright, you can read as much as you like.” They look at the pictures in the book and there is one where Leo is looking at three suns. Rita says that he is seeing three suns. Laura looks serious, as if she is thinking about what is right and wrong in the world. They take out their copybooks and drawing-books and start working. Then the bell rings for recess.
(Fieldnote, 10/26/99)

After the break it was time for math:

**E4:13**

After recess it is time for math, and Rita gives the children their instructions. They are to work in the exercise book, but only up to page 43. Someone asks whether Sandra has said so. A bit embarrassed, Rita says yes. She refers to what Sandra has said about various exercises, and what they may or may not do. At some point Rita becomes “Miss.” (Fieldnote, 10/26/99)

As the excerpt reveals, Rita followed the rules of schooling and carried out the class as if she had been a schoolteacher. It could be said that she did this despite her often outspoken critique of the school. She did not grab the chance to enter into a
dialogue with Laura about her “philosophical” questions. Rather, she made sure that they followed the, by Sandra, prescribed “script.” However, it is a well-known fact (Haug, 1992; Henckel, 1990) that when child care staff tentatively assume the role of a teacher they have a tendency to change their behavior and become “teachers.” However, they lack the teachers’ motives. Therefore their role is more of an imitation of external features, a kind of stereotype, rather than a real teacher role. Moreover, Hansen (1999) claims that in the context of formal learning in the school, recreation pedagogues have difficulty in transferring and adapting their working methods from the leisure-time center.

At 9.40 there was a break until 10. From 10 the work continued in the color groups and at 10.40 there was a lunch break. At 11.20 all children were divided into smaller age-mixed groups. The activity was often organized as “activity stations” supposedly modeled on the pre-school tradition (see Chapter 2), which meant that the teachers were leading an activity, e.g., story telling or reading, music, or craft work in the different rooms. The children, in their groups, took part in each activity according to a schedule:

**E4:14**

I went with the children into Susan’s room. She was reading *Måns och Mari om hösten* [a children’s book]. The children sat down on the floor, and a boy offered me a chair, but I decided to sit on the floor as well. Susan sat in front of them, reading aloud. She asked about various things in the book, and the children raised their hands. She spent a lot of time making sure they did not speak out of turn. On a couple of occasions this question-answer pattern turned into a more “genuine” dialogue. For example, when it turned out that one of the boys actually knew a bit about mushrooms this developed into a genuine dialogue between him and Susan. It did not last long, though. (Fieldnote, 09/24/98)

For a moment, in this situation, the knowledgeable boy took on a role unusual for a child to occupy. He was no longer the object of transmission of facts. Instead he was a capable counterpart in a dialogue about a topic of interest. However, the feeling I had was that this was “outside the agenda.” The dialogue was something that deviated from the usual pattern of interaction in the classroom, i.e., unidirectional rather than dialogical communication. These kinds of dialogic interactions seldom took place, I saw, in the organized sessions. However, they were more common in situations of free play and in between the sessions and classes.

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For a discussion about children’s questions as a starting point for philosophical inquiry, see Matthew (1984) and as an alternative method in school preparation for six-year-olds, see Persson (1993).
The teachers also appeared to have difficulty adjusting their plans to the children’s interest and wishes. Rita commented on this in an interview where she talked about the activity in the morning sessions in the color groups as well as in the small group activities in the afternoon:

**E4:15**

The aim of the VT organization was to give the children a (school) day based on their needs and abilities. It’s very busy in the morning, it’s varied, but on the other hand not particularly individualized. We’re all doing the same thing, everyone’s in on everything during the day. This individualization, we haven’t come that far yet […] We are presenting the children with ready-made suggestions all the time, they don’t get very much choice in the matter. Even though it’s varied for them in one way, they don’t have any real freedom of choice. (Interview, 12/07/98)

However, despite this attitude she was ambiguous on this matter. On the one hand she claimed she would like the children to have more influence. On the other hand she said that the children should not always decide because they also need guidance. Some children, she explained, need structure and have difficulties when asked to choose among activities. She claimed that the team had not yet found their “model” and that she had problems verbalizing her goal:

**E4:16**

I have a goal but I can’t really visualize it, can’t put it in words. (Interview 12/07/98)

Some days the small group activities were replaced with activities for the entire group, for example, when they did swimming, drama, or athletics. The 5thD was also such an activity (see Chapter 6).

At 1pm the school day ended and the children who did not belong to the leisure-time center went home. Now was the time when the teachers held their planning sessions. Each VT met twice a week from 1pm to 2pm. The VT (except for the

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78 The report (Skolverket, 2001) contains data showing the activities in the preschool classes/compulsory school are to a great extent initiated and determined by adults. For example, 42% of the activities of the 6-year olds and 63% of the 7-year-olds are chosen by adults. 28% of all activities are chosen by the six-year-old herself and 14% by the 7-year-old. Activities chosen in collaboration between the 6-year-old child and an adult take place in 30% of the cases and in 23% for the 7-year-olds. In the leisure-time center it is different. 90% of the 6-year-olds and 87% of the 7-year-olds would chose their activities by themselves.
school teachers) that did not have the planning session took care of all fifty children. At 1pm the school teachers had no more obligations with the children and were therefore off for their own planning or meetings upstairs with the other school teachers and the principal. The child care teachers, i.e., the rest of the VT team members, stayed with the children, the pre-school teachers until 4pm, the recreation pedagogues until 5pm. They took turns, taking care of the children, when they were having their own planning sessions in the afternoon. They also had planning meetings in the evenings, which was not the case for the school teachers.

The planning sessions I took part in were primarily about coordinating events and activities. I hardly saw any explicit discussions about, what we might call, pedagogy or methodology (see Munkhammar, 2001 in this regard). The main task seemed to be to fill the schedule with activities to which the teachers contributed based on their pedagogical experiences and traditions.

As conveyed in the above description the school day was tightly structured and organized. The teachers performed the activities according to a very detailed plan: little was accidental or random. Concern with order and control therefore appeared to be as characteristic of this school as with many other schools (see Barraclough & Stewart, 1992; Hanson, 1999; Manke, 1997; Mehan, 1997; for a discussion on power, control, and order in the classroom). I felt that a feeling of chaos threatening order was constantly present. More order became the means of keeping the chaos away. Rules and children’s lack of obedience to them were often discussed. The following set of rules was displayed on a wall poster in one of the play rooms, which was mostly occupied by children not yet literate:

<table>
<thead>
<tr>
<th>A nice friend:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not tease</td>
</tr>
<tr>
<td>Does not use bad words</td>
</tr>
<tr>
<td>Does not fight and kick</td>
</tr>
<tr>
<td>One should help each other</td>
</tr>
<tr>
<td>Be nice</td>
</tr>
<tr>
<td>Not lie</td>
</tr>
</tbody>
</table>

Figure 4-1 Rules in the School
Another sign of the desire for order was that I frequently saw children lined up. This seemed to be independent of age and grade. Moving from one classroom to another, to the dining hall or coming in and out from the playground required lining up.

The rule obsession did not apply equally to everybody, however. Rose, one of the recreation pedagogues, seemed to find some of the rules in the school bizarre. The fieldnote excerpt below is from a “going-to-the-bathroom-rule” discussion from one of the introductory planning sessions, when the VT started:

E4:17
Susan asks [by way of a statement] “They’re allowed to go the bathroom? Like sneak out?” Rose says “Great.” She tells about a child who wet herself because she had been told to wait until recess before going to the bathroom. Paula says, “Our children have asked if they’re allowed to go. We’ll see what happens now…” (Fieldnote, 08/17/98)

Despite the obsession with rules and order I often saw situations where teachers, as I understood it, chose not to “see” when children “misbehaved.” This was particularly true when it came to situations with children who were considered troublemakers.

4.3 Conflicts

In the beginning of September 1998, I participated in a meeting with the child care teachers in the VT, Patricia and Sam - the vice-principal. The aim of the meeting was to discuss the role of the leisure-time center in the VT. Problems had occurred there that had to do with the recreation pedagogues’ participation in the VT. Due to their participation they felt their time and energy had been directed away from the leisure-time activity. For a period of time there also had been a lack of people in the leisure-time center and it had been hard to find substitutes. As a way to solve some of the problems, the child care teachers wanted to expand the leisure-time center’s space. Lack of space caused conflicts among the children, and therefore they wanted to move one group of children to the hallway on the second floor.

During the meeting I understood that the problems in the leisure-time center had resulted in conflicts with the lunchroom staff as well as with the cleaning staff. The

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79 See Nespor (1996) for a discussion on control of students’ bodies.
leisure-time center had moved their afternoon meal into the lunchroom. This increased the lunchroom staff’s workload without giving them any additional payment. In addition, the cleaning staff had demanded that the leisure-time center not use particular areas in the school in the afternoon. They did not want the locations to be messed up again after they had cleaned them at the end of the school day - they wanted the school to look nice in the morning. It was decided in the meeting, however, that Sam and Patricia would ask Samuel, the teacher in the six grade, if it would be ok with him to move one group to the hallway outside his classroom.\textsuperscript{80}

In the meeting Sam also informed the child care teachers about issues that had been discussed in the last teachers’ meeting, which took place once a week on a regular basis. The child care teachers did not participate in these meetings. The discussion led Rita to question this exclusion. She introduced the idea of common meetings for all teachers and staff in the school. She claimed that the schoolteachers “up there” (meaning on the second floor) kept making decisions that the child care teachers were never informed about. Patricia responded affirmatively to Rita’s request to have house meetings and I understood that the issue had been discussed before but that the schoolteachers had resisted the idea. House meetings could only be held in the evenings or late afternoons because the child care teachers were busy taking care of the children in the mornings and the afternoons. Sam suggested that they could have it once a semester but Patricia claimed this was too infrequent. Sam was reluctant and said that there were so many activities taking place in the evenings such as meetings with parents, courses, etc.\textsuperscript{81} They discussed a suitable time and Patricia suggested 5.30pm to 7pm. She suggested to Sam that they would raise the issue in the next teachers’ meeting. Petra stressed the importance of shared

\textsuperscript{80} Calander (1999) shows how premises in integrated schools and leisure-time centers are divided into, what he calls, the leisure-time region (fridtidsens region) vs. the teaching region (undervisningsens region). Crossing and overstepping these boundaries cause tension and conflict.

\textsuperscript{81} Schoolteachers and child care teachers have different labor contracts. In the report from the National Agency of Education (Skolverket, 2001) the problem is acknowledged and it is stressed that local authorities should create actual opportunities for the teachers to meet and plan together.
meetings now when child care teachers, due to the VT, spend a lot of time in the school.\textsuperscript{82}

Two weeks later I learned that there had been a conflict between Patricia and the schoolteachers. Patricia had ordered some teachers to help out in the leisure-time center when there was an acute crisis because of lack of people. In response, the teachers contacted their trade union. The union supported their claim that Patricia did not have the authority to order them to perform this kind of work. The fact that the recreation pedagogues replaced the schoolteachers if needed, without discussion, obviously did not mean that the reverse was the case.

Also, the leisure-time center’s expansion, which had been discussed earlier, had caused tensions. The following fieldnote shows how the conflicts were escalating:

\textbf{E4:18}

When I came down to the VT 2 team I bumped into Rose. I thought she looked sad and tired. When I asked her how she was, she said she had had a run-in with the maintenance man. He had let slip a remark about the leisure-time center having moved a group to the upper floor: “child care is apparently taking over the entire school” were his words. Rose got angry and asked him whether it was his own opinion or something the teachers said. He claimed it to be his own view, but Rose thinks this is how the schoolteachers talk among themselves. Apparently, she had been discussing this with one of the teachers too. In any case, she had become so angry that she had started to cry. She said she felt disillusioned. Her view was that they had a joint responsibility for the children and the rooms are empty in the afternoon and evening anyway. I asked why the teachers were against it and she replied that it was probably because they did not want the children to mess up their classrooms. She said it really ought to be possible to hold a sensible discussion about how to best accommodate everyone, but that they completely stonewalled everything. I asked her what had happened to the suggestion about holding house meetings. She told me the teachers had said no to it, their reason being that it was pointless for the child care staff to have to listen to them talking shop. She said that she also thought

\textsuperscript{82} The case studies reported in Skolverket (2001) show that the support from the principal is of great importance when preschool teachers, recreation pedagogues, and minority staff groups are to be integrated into an already existing activity in a school. In the report it is stated “There are among our case studies examples that these groups [recreation pedagogues and preschool teachers] are not regarded as school staff, that they are left out of the work on the local curriculum plan and that they do not participate in the school’s conferences, etc. Without this participation it is almost impossible to achieve an integrated activity on equal terms” (p. 43).
Patricia was as disillusioned and weary as herself. I said that I had heard about the conflict with the teachers regarding their helping out at the leisure-time center. I asked if they had had a union meeting and she replied that they had. Apparently the union had decided that she had no authority to give them orders. She also told me that they said it would have been O.K. if she had asked and not ordered them to help out. (Fieldnote, 09/24/98)

In late February 1999, I was informed that Patricia was on a part-time sick leave. That continued until she resigned in the late spring of 1999. She told me that, as a pre-school teacher, she felt she never had had any legitimacy as a principal and that teachers had an ambivalent relation to leadership in general:

E4:19
It was so paradoxical— it still is, at least here. On the one hand, no one’s allowed to be in charge—they want to take charge themselves. On the other they can cry out: “is there no one here who can make a decision?” This makes it very difficult, you know. I just don’t understand them. Which way do they want it? (Interview, 05/25/99)

As to the causes of the conflicts, she addressed the problems of opposing views on learning and knowledge and her role rather than herself as a person:

E4:20
This is not a matter of disliking Patricia as a person, it’s a question of the role I’m playing here. I can see that […] It’s incredibly difficult to change. It’s about their epistemological view. Why do they view knowledge the way they do in school? Historically, you’re supposed to learn things, sit still and take it in. In school, the teacher has always been omniscient—and at pains to tell others about it. They haven’t taken into consideration that one learns – not that someone is teaching. (Interview, 02/25/99)

I asked her if they discussed their views on knowledge and learning but she said:

E4:21
You know, it’s not really open for discussion. Our respective positions are so terribly far apart. Perhaps some bitterness. It’s going to take such a long time. I won’t live to see it. The meeting of cultures, it doesn’t take a day—many years, generations. I’m beginning to realize that now. The school environment is alien to me. I don’t understand their way of thinking, their approach to children. In their approach they fail to take a comprehensive view of the child. That they can’t pick out sequences—“there, now you’ll learn this”—you learn all the time, even during recess. They probably get it, but they’re so stuck in their roles. (Interview, 02/25/99)
Due to the background of how the VT started, i.e., lack of preparation and agreement, Sam wanted an evaluation to be carried out before they moved on to the next step, which would have implied possible addition of a new group of six-year-olds in the fall. When I heard that, I volunteered to carry out the evaluation.\(^{83}\)

### 4.4 The Evaluation and the Next Step

I conducted interviews with all the teachers in the VT. The aim was to get an understanding of how they felt about the work and their ideas about the next step in the expansion of the VT. Different alternatives were discussed such as ending at P-1, i.e., integrating the pre-school class and the first graders, or proceeding to involve the second graders (see the VT model in Figure 2.1).

Some main issues turned out to be central to the report (the report as a whole is to be found in Appendix I). These were: teamwork, the decision and preparation phase, integration and individualized work, the leisure-time center’s work situation, planning time, and the design of the VT in the upcoming fall.

What the VT teachers seemed to value most was the teamwork structure: to share the responsibility and to have colleagues to have discussions with seemed to be an important aspect of the VT (Brorman, 2000). The VT teachers had two criticisms: the lack of preparation time before the start-up and also the absence of pedagogical leadership and guidance before and during the process of starting and working with the VT. There was no time given for developmental work in terms of creation of new pedagogical material. The structure of the blue and the red group was discussed in the report. It was claimed that this structure prevented an individualized work practice due to the fact that the children were defined by age and not by capacity and achievements. Moving between the groups was not possible. If a “blue child” now and then took part in the red group she would fall behind. If a “red child” participated irregularly in the blue group the tasks would not make sense because she would lack knowledge necessary to deal with the task at hand.

The work in the leisure-time center had suffered from the VT organization. Human resources had been taken from the leisure-time center and used during the school

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\(^{83}\)In accordance with the school law, the local schools are obliged to evaluate and follow up their performance and work (Skolverket, 2001).
day. Consequently, the activity in the afternoon was less prepared and organized. There seemed to be a larger need for planning time than could be satisfied. The issue of when to plan was also addressed.

A number of different alternatives for the fall were suggested. The first thing to consider was whether to keep the pre-school class and the first grade, i.e., P-1 or precede to P-2, i.e., pre-school class up to second grade. If they decided to proceed to P-2 there were some alternatives given for how to organize it. A concluding remark I made in the report was that overall it seemed like the VT teachers wanted to keep the VT in one structure or another, P-1 or P-2. I also encouraged the teachers to discuss the aim of the VT, which can be seen in this concluding part of the evaluation:

E4:22

Conclusion
Most of the staff is of the opinion that one of the upsides is the increased number of adults, which means that they feel understaffed less often. Another is that they are working in teams. The downside seems to be that they are “shooting their bolts” in the morning and that, as a result, the leisure-time center is being put on the back burner. A further downside is that they feel they have access to fewer resources when working with math and literacy. The difficulties mainly seem to center around planning time, when to fit it in and that it is too short.

In my view there are a number of issues that need to be discussed, such as how to ensure activities take on a greater focus on the individual—if that is one of the objectives—and a long-term perspective on the reorganization this coming fall. Will this reorganization benefit the children and their development potential? Furthermore, I do believe it is necessary to find a way of involving the parents in a discussion about the organization in order for them to better understand and influence it in accordance with the new Education Act. In short, the objectives and the ultimate aim of the VT organization need to be discussed. (Evaluation, December 1998)

The report was distributed and discussed with the VT teachers, each VT separately. The teachers in VT 1 were the first to discuss it in a meeting in which Sam and I also participated. The meeting started with a discussion about the alternatives: what to do in the upcoming fall and how to continue in the following years. In response to that discussion Sam presented a plan for the process of arriving at a decision. First

84 The schoolteachers in the VT had told me that before the VT they had often had two teachers in the classroom when working with math and literacy. Now they were alone.
the VT teams would meet and discuss – the present meeting was this first step. After that the report and the plan for the future would be discussed in two schoolteacher meetings “up stairs.” I asked Sam if the child care staff would participate in the meetings but he said that that was not the case. Sam explained that it was important that the schoolteachers took part in the decision because they would eventually be involved if the decision was to continue with the VT. He explained that there later would be a meeting with all teachers where the decision would be made. Rita did not seem to be content with this agenda, something that became clear later in the meeting:

E4:23
Sam: I was thinking that—what we really should do—once you’ve read through this and given it some thought, you make a list. I intend to ask the intermediate-level teachers to make a list today too. That you yourselves think this through—“This is the way I want it, even though it’s a bit utopian.”
Rita: Uh-uh.
Sam: That way we can at least see... which direction... in what way... what goals I want to set up with this too. Because when we sit down and talk... you go like “What you say sounds good,” and maybe it turns out you haven’t thought it through yourself.
Rita: No, but at the same time, isn’t that a bit difficult for the others? Sure, it’s easier if you’ve been in on it maybe... to make a decision than if you’ve read about it.
Sam: I want them to read.
Rita: Then maybe they think that, “yeah, this sounds great” or like “no way.”
Sam: I agree with you, it’s really hard.
Rita: It’s a bit weird.
Sandra: We’ve been working on this for a long time and have a more positive attitude than those who haven’t bothered about it at all—thinking like, “What’s that they’re doing”?—and not engaging in it. I’ve had to defend [laughs], I’ve had to defend the organization many times, and this thing with the 5thD for instance and the idea behind it, I’ve had to do that many times against my colleagues because they aren’t familiar with it. They’re like, “OK, so that’s how you’re thinking, yeah, I was like thinking that this is great, they learn different ways of acquiring knowledge, to be flexible, they get...” Basically, they just think it’s completely muddled and vague, if you know what I mean. And, maybe they think it’s the same... but it’s, you know, it is well thought-out—that we’re supposed to develop, follow a connecting thought. We’re trying, at least.
Monica [to Rita]: Are you concerned that they’re the ones making the decision?
Rita: No, I’m not concerned, but it can be difficult for them to do it when they don’t actually know how it works, perhaps. (Evaluation discussion, 02/02/99)
This excerpt illustrates the conflict that already was present in the school, i.e., that the child care teachers felt that they were “second-class citizens” in the school. Important decisions were made upstairs, even those that directly affected the child care teachers. What was interesting to note was that Sandra expressed her feeling that she had assumed the role of mediator between the schoolteachers upstairs and the teachers in the VT. Her participation in both “worlds” made this possible or – if one wants – put her in this position. After the discussion on how to proceed with the VT structure, the conversation focused on issues that were more related to the content in the report:

E4:24
Rita: [leafing through her copy of the evaluation report]: I think this sounds quite interesting [referring to a discussion about dividing the children into groups, and the consequences of this]. This is not something we really talk that much about, this thing about how children learn, when they learn—and now we’re letting all children do the same thing, basically. We don’t do that, you know, I mean, they’re working with the same books.
Sandra: But they’re all different. [laughs]
Rita: Yeah, sure, but there’s really no freedom of choice, is there?
Sandra: No, not exactly at the basic level, but later, everyone’s got to learn the letters.
Sam: This last thing here, Rita, what you [alludes to Monica] say about discussing objectives and aims—that’s really the first thing we ought to do.
Rita: That’s something we really didn’t have time to discuss before we kicked off, what we want with all this, what the objective is. We just got started, there really wasn’t any time for planning or anything.
Sandra: Yeah, we were away, right?
Rita: We lost sight of it, the objective sort of, what we want to get out of this, then you just kick off, you know, carrying on as if nothing has happened. (Evaluation discussion, 02/02/99)

At this point I felt the atmosphere in the room becoming a little tense. Rita was pushing for an open-minded discussion about learning. In the interview earlier Rita had talked about a need to refine their “model,” as she put it. She wanted the work to take as its starting point the children’s interest and desire rather than having all activities already planned out for them. It seemed as if Sandra took a defensive position. She did not seem to be disposed to open up for an unconditional discussion on these matters. The discussion ceased and was replaced with

85 In the report I had suggested math and literacy sessions instead of the division by age groups as a possible solution to the problem of fixed groups.
memories from the days with the consultant (see E4:4), which seemed to relieve the tensions. Later I tried to return to this kind of discussion by talking about the limitations of the color group structure. I took Cecilia as an example (see E4:11). This sparked a discussion about Marcus who seemed to be in the same position; he was far more advanced than “his age” would imply:

**E4:25**

Monica: I was with Lisa (seven years) and Cecilia (six years), and we were writing to the Wizard. I could tell Cecilia was far more advanced, she already knew how to write—so I asked her to help Lisa out with the spelling, that way they cooperated. And then they swapped, and then it struck me again that Lisa’s in the group of the seven-year-olds, but Cecilia’s not, and when she starts school this coming fall—well, she’ll know lots already, and if you then can find ways of meeting their individual needs...
Sandra: Then it’s easier if we incorporate the second-graders. Look at Marcus for instance, I’m checking him all the time you know.
Rita: Yeah, I’ve thought about that too.
Sandra: Surely he could squeeze it all in in a year.
Sandra: But right now he wants to play.
Sam: Shouldn’t that be... “Now he wants to play?”
Sandra: Yes.
Sam: But I mean generally if anyone’s experiencing this kind of development, does it make a difference if they’re in P-1 and have a year then?
Sandra: No.
Sam: No.
Sandra: No, but if you’ve got P-2 it’s easier to play around with the groups.
Sam: That’s an advantage.
Rita: That’s exactly what can be difficult for like Petra and me with Marcus. I don’t really know what to give him. He needs a few exercises to get his teeth into, otherwise he’ll get bored because it’s no challenge for him.
Sandra: He reads straight away the stuff we’re struggling with.
(Evaluation discussion, 02/02/99)

The discussion revealed that they struggled with problems that the VT structure was meant to resolve, i.e., flexibility in relation to the children’s needs (see Brorman, 2000 on this issue). In this instance they discussed the case of a seven-year-old boy with the intellectual capacity of an eight-year-old, but who seemed to need the play and movement/motion of a six-year-old. The flexibility in a P-2 structure therefore seemed tempting.66 This dilemma was further discussed and in this discussion the

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66 In the report from Skolverket (2001) it is pointed out that the most common age composition in the integrated schools is 6-8, i.e., preschool class to second grade.
point was made that there might be a risk with such a structure; sometimes children need to be pushed in order to accomplish and this might be neglected in a more individualized approach:

E4:26
Monica: My idea, what I wrote about the red and the blue group... early on it’s easy for a red to be with the blues, then the blues take off. Take Charlotta for example, she’s not taught at her level. She’s way ahead of the others in the red group, generally speaking. But she’s still in the red group.
Rita: Sure.
Monica: How about relaxing, you know not so strictly one way or the other— how would you work then, that’s of course the question, that I don’t know.
Sandra: Well the thing is that six-year-olds need to play more than seven-year-olds, which means it can’t be permanent, it has to be flexible in some way, but at the same time allowing...
Rita: Yeah, a bit of both.
Sam: This is the question, to focus more on sessions—math, literacy, putting them in groups where they like fit in, still keeping that element of play too.
Sandra: But we can’t just let go of those whom we know need... some kids have to sort of work, you know, to learn. They need to be like stimulated all the time. You can’t let them out of your sight, in any way, because then they’ll never reach the finish line so to speak. They’ve got such a propensity... like Fredrik—he would just sit there on his chair—he needs to move around and do different [laughs]... for him to stand a chance of acquiring that knowledge he must like work twice as hard.
Sam: Uuhuh.
Monica: That’s why I think that... how do you make sure each individual kid really gets what she needs?
Sandra: Yes, that’s the thing, it’s important not to have too many kids [laughs]. You’ve got to have time to organize...
Rita: There are so many with differing needs, it’s not at all easy.
Sandra: You’ve got to bear this in mind all the time, you know, you’ve got to bear this in mind all the time. (Evaluation discussion, 02/02/99)

The discussion illuminated dilemmas that the teachers were facing. They seemed to accept the diverse needs that children had even though they tended to look at it more in terms of age-related rather than related to individual needs. The construction of the child as for example “the six-year-old” vs. “the seven-year-old” dominated their way of discussing the children’s needs (Davidsson, 1999b).

After this discussion, which I considered open-minded and investigative, I became a little bolder and took the “Petter example.” I said something about Petter working
with more difficult math tasks when doing voluntary work than when doing the mandatory:

E4:27
Monica: There’s another example where, what’s his name... well anyway, he always did these math games. He was working on, on 25, very high numbers. When Susan saw what he was doing, she said, “Gosh, you’re really good at this.” She was surprised that he knew so much. After recess they were doing sums, 6 minus 1—that sort of thing.
Rita: Yeah, sure.
Monica: The same old story once again.
Sandra: Their needs differ. They need structure, 6 minus 1, but maybe the kid can do sums like 25 + 32 too—it’s a different matter—you need to work both ways, that’s the thing. We can’t just skip the basics just because they know how to count, perhaps we need to cover that as well, the various parts, we have to do both—choose to work on the basics and make it stick.
Rita: It’s stuff like this I don’t know, you see, because this is something I haven’t learned.
Sandra: Because otherwise you might miss something there, you have to go through it—if not, you can’t really work on the rest. It could be like you choose to do something. But the basics you have to, you know, check up on.
Rita: Something can go wrong otherwise?
Sandra: Yeah, yes I think so, you know. The thing is, knowing the basics makes the whole thing so much easier. They’ll manage that all right, they look at it from different angles... and then maybe they continue with their high numbers. Like Amanda here, you know she’s doing sums like 32 + 75. The number 7, various patterns and stuff.
Sam: We could work out a system where they have to do these large numbers, but they got to have a proper understanding of the concept of numbers to realize the value of a particular number. As long as they don’t think it’s so simple that they get bored and lose concentration because of that. (Evaluation discussion, 02/02/99)

In this dialogue Sandra expressed, with partial support from Sam, a definite apprehension about the way to teach and learn math. According to her, it is not enough to be able to count, you have to understand and manage the logic behind the numbers. This conceptual starting point and base was not accessible to the recreation pedagogue, it was knowledge outside her professional expertise. Sam tried to expand the pedagogical discussion by contrasting the aspects of making the learning situation meaningful vs. conducting it in a systematic way. These kinds of discussions were rare but seemed to approach the core of the pedagogical activity.
The report was also discussed with VT 2 in a meeting. Susan started up by commenting on the writings about the blue and the red group:

E4:28
Susan: I don’t know who said this: “arguably the color groups prevent a more flexible way of working...” Then you need more people, you know, who can take care of this. And now we go out for a while, and then we play, and then back into the classroom again. You can’t just treat them like yo-yos, this coming-and-going, in the meantime maybe we’ve been working on something they haven’t taken part in. (Evaluation discussion, 02/09/99)

Susan here showed signs of defending the “color-structure” at the same time as she gave voice to the same assumption as Sandra did in an earlier excerpt (E4:26), i.e., that the children had to be held together as a homogeneous group and taught accordingly. This is the way teaching takes place, which makes “coming-and-going” impossible. Everybody has to be there and receive the same information. If not, there is a risk that they will fall behind. But there was also another reason in her defense of the color-structure, and that had to do with the curriculum:

E4:29
Susan: I mean this... the seven-year-olds are guaranteed, they are supposed to get their math and literacy classes, so in a way that’s a restriction. Then, apart from that, there’s all that other stuff. We can’t renege on it..., we have a, you know... the requirement that they are supposed to learn to count and read and write. We can’t just skip those hours, literacy and math, that they’re entitled to in the first grade. Then each week maybe they won’t always get such and such a number of hours of literacy and math.
Sam: Well, there was a suggestion in there about working with themes, theme math, that you decide to work on math, but at different levels. Anyway, if we take the whole group... everyone in VT1 work with this math theme at different levels. (Evaluation discussion, 02/09/99)

Sam again seemed to be open to a new and different structure that would seem to be more in line with the aim of the VT and the new curriculum: a more individualized and holistic approach to learning which in turn also implied a challenge of the traditional structure in the school. A substitute pre-school teacher, recently graduated, pushed the discussion forward, though she seemed to have problems with finding a coherent structure in her way of arguing. The discussion revealed again that the aim of the VT was not understood by the teachers and that the issue of individualized pedagogy vs. teaching of (pretended) homogeneous groups was very confusing:
E4:30
Substitute pre-school teacher: If we’re working on one of these themes then, if we divide the children according to what we think is their development and what have you, then I think we have a greater chance of making the children understand, eeh, how... how to learn, that they maybe will want to learn more than if you like have... go through numbers and stuff, maybe then they won’t understand what it’ll be good for, won’t take it in, push it away more like. Then when they get to the last week, it turns out they’ve lagged very far behind. Because then I also think that then... this seven-year-old kid, he’ll be in this group there at his level and stuff. And then what? If it’s going to be... then when he’s starting second grade, what’s that teacher going to do with all these kids at different levels?
Sam: That’s not so good, hmm...
Substitute pre-school teacher: She might be on her own then, but we’ve working in teams with a P-1 and we think we’ve been so clever and maybe they’ve all made progress, but she’s getting them at different levels.
Sam: Then there’s the issue of biological age...
Substitute pre-school teacher: Yes.
Monica: But, that’s the way it is anyway. I’m thinking about two things. Isn’t that the point of the VT organization, that the second grade should be integrated so that they’re always taught at their own level? On the other hand, my thinking goes like this... eeh, when they start second grade, it’s always the case, right? You know, some kids know more and others less. Don’t you have that problem anyway?
Sam: Yes.
Susan: Yeah, sure.
Sam: Well, I suppose you do. Then we’re back to the question what the object of this whole exercise is, right? What do we want to achieve? Do we want a homogenous group leaving the VT structure and entering the second grade, or do we want the biological age regardless of what level they’re at, as long as they’ve been given what it takes during VT, that’s the difference here.
Susan: But in some way it feels like we’ve got to get them all together somewhere. If it’s not in the second grade, if we go on like this in second grade, then it’ll be in third grade. If we don’t continue like this all the way then.
(Evaluation discussion, 02/09/99)

Susan’s comment captured a crucial point about the VT structure. The VT structure implied a possibility that each child could have her own individual route through the system, presupposing that the grade system was removed. From six to twelve years old the child could be taught, supervised and guided on a more individualized basis. If the VT structure only comprised pre-school and grades 1 and 2, then the scope for an individualized approach would be much more limited, i.e., to grade P-2. Consequently, the grade 1 and 2 teachers had to worry about
preparing the children for grade 3 (Nilsson, 1998). Conceptions of how the schoolwork has to be organized and carried out are historically embedded in both the curriculum and in the structure of grades and levels. These conceptions are taken for granted and seemed to obstruct or interfere with basic ideas of the VT structure. However, Susan showed concerns about the children. She seemed to believe, if the traditional teaching were to be replaced with a more flexible and loose structure, that there was a risk that some children would fall behind and not be prepared for the next level, whenever it appeared.

The conversation then turned to new pedagogical material suitable for the VT:

**E4:31**

Susan: This is what we’ve been talking so much about, about creating separate math rooms and literacy rooms where they can go and work on what suits them best.

Sam: When I read this it just struck me, I envisioned a type of Montessori method—where you build up different levels. But, you know, that’s a pretty structured way of working. The material is pretty well thought out, or very well thought out.

Susan: You know, we can do quite a lot of that ourselves too.

Sam: Yeah, but we could build on something that’s already been developed to a certain extent, use the same ideas, then develop our own. (Evaluation discussion, 02/09/99)

The discussion showed that there was a willingness to try new ways, both in terms of tool use and pedagogical approaches. But it seemed hard to make these ideas materialized.

A week after this meeting I talked with Petra about what would happen in the fall. She said that she had been reading the report several times and that she was leaning toward P-1 and that they should have math and literacy sessions instead of the blue and the red groups. Instead of adding a third group of children they would focus on developing the pedagogy. In a conversation with Rita she told me that there had been discussions in their VT team about mixing the red and the blue group. They did not agree and according to Rita, Sandra didn’t want to do that.

The evaluation was then distributed to all the teachers and discussed in a first schoolteacher meeting. The next day, Sam told me about the meeting:

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87 In Skolverket (2001) it is claimed that two issues are particularly hard to agree upon. One regards children with special needs and the other regards children’s learning.
I came to the school at 11 a.m. and bumped into the special needs teacher in the hall and we exchanged a few words about the cold weather. Sam joined us and we spoke briefly. I asked him how it all had panned out yesterday and he told me that they had had a very good discussion at the staff meeting. He said it was the first time they had discussed pedagogy! The meeting had lasted an hour longer than usual. He was sorry that Samuel and Seppo had not been there (off sick). They had decided that the meeting on March 3 would be scheduled for 4 p.m. so that the child care staff would be able to attend. Sissi had said something like “I’ve seen myself as a fifth and sixth grade teacher and always thought I’d got nothing to do with VT. Now I realize that it’s having an influence on my own work.” They had discussed my point that the children were at different levels and that their needs were not met at these different levels. Susan had said something about wanting to “give them” so much (I interpreted it as literacy and math training) because she did not know what would happen later on. Sam told me that they had discussed having a literacy theme across all levels and grades.

(Fieldnote, 02/11/99)

Sissi’s comment is interesting. It is as if she realized, during the meeting, that she is not only a fourth, fifth and sixth grade teacher but also “a teacher in the school,” and therefore she had to be concerned with what was going on at all levels and grades. With this new insight, collaboration with the child care seemed to be a need, instead of as before, a requirement and demand from “above.”

Sam also told me that the schoolteachers had asked in what way the VT had been beneficial for the children and their learning. This was an issue they would liked to have seen elaborated in the report. However, the next meeting, together with the child care teachers, was taking place “downstairs” in the leisure-time center.

The meeting started with some questions from some of the schoolteachers in the higher grades. For example they asked about the promotion of the present “VT children” to grade 2. This revealed again that the idea and aim of the VT were not clear. The work in the VTs had not been integrated in the sense that the teachers could suggest to the parents which children they considered ready to move on to grade 2. Only the seven-year-old children would be promoted. This also revealed that the VT structure required closer collaboration with the parents.

In the discussion the issue about the limitation and precondition of the VT was addressed. It seemed clear to everybody that at one point in time the VT progress had to cease if not all the grades in the school were to be involved. In this discussion research on achievement in mixed age groups vs. divided age groups was
addressed. Despite this, it was delegated to the VT teachers to make the crucial decision. This time Samuel who was absent the last meeting and seemed to be influential, was present:

E4:33
Samuel asks what they [the VT teachers] really want. Earlier during the meeting he had been looking at his watch and seemed bothered about having to participate in this “nonsense.” Stephanie says, “Speak your minds, whatever you’re feeling.” Paula replies that she wants take a greater part in math and literacy and that she is OK with either P-1 or P-2. Sandra says P-1 another year because now they have started to find their feet. She says that now they need to develop the didactic part, for instance ways of developing math and literacy in order to get the six-year-olds more involved. She also says it is OK with P-1 and P-2 if the rest of the staff are prepared to work with 3:4 and 5:6. Sandra says that they are cooperating more than it seems, with themes etc. “Literacy has in principle staid the same. If we retain P-1 we need to develop a new approach to working with the six-year-olds, integrating the six and seven-year-olds,” she says. “We need to make study visits to other schools working with VT. We need a guiding thought for the six-year-olds in the blue work,” she says. (Evaluation discussion, 03/03/99)

It was eventually decided that the VT would go on for at least two more years. After that there would be an evaluation before a new decision about the continuation was to be made:

E4:34
Patricia says the decision must be seen in a larger perspective: “It’s a question about whether to continue or not.” Sam elaborates and says it is looking like P-1 and testing it for another year, developing the didactic side. He goes on to say team working is good, working with themes leads to teambuilding. Samuel says that sounds like an accurate interpretation. Sonja asks who is going to be in charge of the second graders, and Sam replies that he will start looking at teacher allocation.” Rita says the recreation pedagogues can help out in the second grade, but gets no response from the others. In her view this will be a way of bridging the gap when the second-graders get a new teacher. She will be a link to the new class. Sandra says they want to continue team working—it has taken a

88 Earlier in the meeting Sam had suggested that the third and the fourth as well as the fifth and the sixth grades should work more closely together. He suggested that there be a common theme in language study and that the teachers would work in teams to effectuate this.
long time getting to know each other, and they do not want to stop now. The meeting breaks up and people gather in smaller groups and start talking. Sandra says to me that one of the prerequisites of the VT organization is for the other teachers to continue working with age-integrated groups—otherwise it will all be pointless. (Fieldnote, 03/03/99)

A consequence of the decision, i.e., to stick to P-1, was that the seven-year old children would obtain a new teacher in the fall. The VT teams would receive new six-year-olds and the present “red” children would become the “blue group.” The meeting also touched upon the problematic situation in the leisure-time center:

E4:35
Stephanie asks about the leisure-time center and says activities there seem to have deteriorated badly. She wonders why. Rita replies that it has to do with the scheduling of the teachers; they are short of staff in the afternoon because resources are concentrated in the morning classes. The air is filled with an unvoiced discontent emanating from the schoolteachers—they claim that the leisure-time center has become messier and more chaotic. Rita retorts that the recreation pedagogues are engaged in two organizations, and that they will have to concentrate their efforts—either at the leisure-time center or in the school. I sense a feeling of resignation. (Fieldnote, 03/03/99)

A week after the meeting Sam told me that Susan and Sandra changed their minds about the P-1 decision. They wanted to hold on to their children another year. They had talked to Stephanie, the third grade teacher who would take on the second graders from the fall. The three of them had come to a conclusion that something in between P-1 and P-2 would be best. Sam had opposed this idea arguing that they had to know what the basic structure would be. I asked Sam if the child care teachers took part in this discussion and he claimed they did. I was later informed by Petra about this change in direction and she claimed it was because Susan wanted to work with Stephanie, whom she had worked with before and knew well. Petra seemed resigned to this outcome and as she felt as if she had been run over.

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89 In Skolverket (2001, p. 48) it is claimed that “The teams need time and a conscious management in order for the diverse professional cultures to approach and come close to each other. This is necessary in order for pedagogical developmental forces to be released in order for something new to develop.”
4.5 The Final Phase

When the fall came and the new school year started the new structure in the VT became visible. Formally there was P-1 but in reality the new structure was a mix of P-1, P-2, and the traditional grade system. Stephanie took over the children from the two blue groups but Susan and Sandra took turns helping out in Stephanie’s classroom:

E4:36
Today Sandra [on sick leave] was supposed to have worked with Stephanie and the second graders between 8.20 a.m. and 9 a.m. I ask Rita whether Sandra and Susan actually will be able to do very much in only 40 minutes, but it seems they do. Rita tells me they take part in the parents-teacher talks too. However, she says that Sandra and Susan seem stressed out when working with the first graders. They do not have as many classes this year and they are worried there will not be enough time. Rita goes on to say that Susan and Sandra continuously check with each other about how far they have come in the book. They want to keep the same pace, and they do. Furthermore, Rita tells me that when she and Petra suggest things, Sandra agrees—for instance, in the case of the International Teddy Bear Day—but this gives rise to an internal conflict because she feels stressed. I ask Rita how they tackle this and she replies that they compromise. (Fieldnote, 10/26/99)

Sandra and Susan each had a new group of seven-year-olds. Somehow it seemed that these new circumstances separated the schoolteachers from the child care teachers even though, as it turned out, they had responded to the idea of subject sessions:

E4:37
Paula said that today they were supposed to have a common math session with half the group (six and seven-year-olds), but that Susan had cancelled because she is behind in literacy. She told me that they had done such a session during the semester. They have been working with concepts like shapes, colors etc, but she thought it had become too hectic for the six-year-olds. They have been progressing too quickly. After the common session, the six-year-olds have also worked with letters, but they have been unable to keep up. Paula said something about “the teachers having their own curriculum to follow, but that doesn’t apply to us.” She also mentioned the importance of free play and that the six-year-olds are not yet ready for school. She also pointed out that the seven-year-olds need to play more. I said I remembered her mentioning something about wanting to be in the classroom, but she said “You learn, you know. Now I know.” She also said that now there is more school-centered preparation
throughout the whole year, whereas before this was limited to the spring. She seemed to think that that was enough. (Fieldnote, 10/19/99)

The practice of math and literacy sessions had been tried, but it seemed that the “reproduction” model (Dahlberg & Lentz Taguchi, 1994) was the guiding concept. The red group was invited into the blue group to work with school like-tasks. The same pattern occurred as in the previous year, when some of the six-year-olds tried out the blue group. The blue group had to keep to a faster pace, which resulted in the six-year-old children’s eventual dropping out. Another outcome was that the pre-school teachers found it better to keep the groups apart.

In March 2000 I was told that the VT probably would end in the fall, which otherwise would have been the start of the third year. Petra told me that this was because there now was a new principal and that they lacked resources to continue. All the VT teachers were disappointed, especially the schoolteachers. In mid-April the new principal confirmed for the VT teachers that the VT would end. An effect of the budget cuts was to reduce teacher participation in the VT program, and hence a reduction in the student-to-teacher ratio.

Several meetings were held in the late spring about the situation. A protest letter (Appendix II) was sent to Sam and the new principal. The teachers reminded them that they had been promised a period of three years to try out the VT. Sam’s answer was that such decisions carry no value when there are budget cuts. Sandra told me that “when we were to start the VT we didn’t want to and protested against it. Now we don’t want to stop with the VT, and we protest because of that.” The following excerpt and account is from one of the first meetings during this period. The main concern was to prepare for a meeting with the parents where they had to be informed about the new situation:

E4:38

They return to the formalities of the meeting with the parents; they decide to hold it in the dining-hall, the same place where they introduced the VT organization. Now they have to tell them that it is being abandoned. Someone laughs and says, “We can always tell them that you were so critical back then that we’ve now decided to discontinue it.” They talk about what a shame it is that they have to abandon the VT. Someone says that despite the lack of resources for co-planning they can still cooperate, for instance when it comes to

90 According to Skolverket (2001) shrinking resources and larger groups of children contribute to a return to age-homogeneous groups.

91 I. Johansson (2000c) recounts experiences of the same kind.
PE. Susan thinks that it does not have to end there. Rose says that it is such a shame, Susan and Sandra agree. Susan is upset; worried that she will not get enough special-needs resources for literacy. (Fieldnote, 05/10/00)

In the discussion preparing for the meeting with the parents, Sam claimed that they should be honest with the parents and tell them that there were also disadvantages to the VT, for example, that the activity in the leisure-time center had suffered. He then said that the recreation pedagogues would still participate in the schoolwork. Rose reacted to this. She stated that, of course they could, but that the same thing would then happen all over again: they would use up all their energy in the school. She repeated that they did not want to go back to how it used to be, i.e., a lot of spare time in the mornings, but that they had to take care of and worry about the leisure-time center.

Then something interesting happened. Sam said that they might not need to be so firm about the boundaries between the leisure-time center, the school, and the preschool class. His comment was provoked by the obvious difficulties in coordinating and scheduling the large number of people and activities that had resulted from the VT structure. His suggestion was that instead they could just work together in an “integrated whole school day” (see Chapters 1 and 2). Then they would not need to count resources for the different units and instead could just focus on working together. Susan and Sandra responded with “mm...” as if they were not entirely opposed to the idea. Sandra then asked Sam if he had any suggestions about how this could be worked out. But Sam said no and responded by asking her if any of the teachers did. None answered. Afterwards in an interview I asked Sam why he said this:

E4:39
Monica: I was also thinking about when you said this, Sandra asked whether you had any suggestions as to how this could be done. And then you said, “No, do you?”
Sam: Mmm.
Monica: You said “No, do you know that one?”
Sam: Mmm, yes.
Monica: What were you think... how am I to interpret that?
Sam: Interpret what?

92 Recreation pedagogues, in general, used to have what was called “child-free time” in the mornings while the children were in school. During the 1990’s this was subject to change due to economic measures.
Monica: You know, like, I was thinking that [pauses] you wanted them to take responsibility.
Sam: Yeah.
Monica: And planned, how to best continue to cooperate even though it won’t look exactly like it has for the last two years. But she wanted you to clarify things, how they would work. Then nothing more was said.
Sam: Uh-uh. You see, my thinking was that I’ll say this to get them thinking, then sooner or later something will come out of it. Or we’ll see on Wednesday if this has led to anything.
Monica: So you wanted them to…
Sam: I wanted to make them think.
Monica: Would thinking…
Sam: I think something happens when you’re made to think.
Monica: Rather than if you’d presented a complete proposal?
Sam: That’s the simplest way, that’s what they want. (Interview, 05/16/00)

Sam avoided formulating a strategy for realizing his suggestion – instead he hoped that would come from the teachers. This was something that seemed to be too difficult a task for the teachers even though Rose, in the continuation of the meeting, expressed her regrets that they had not had this kind of discussion earlier. She said that they should figure out an entirely new work practice that takes the childrens’ perspective as the starting point. This would mean, she claimed, that the schoolteachers also had to be prepared to be in the school in the afternoons. To this Sandra responded that that was already the case, that they spent thirty-seven hours\(^{93}\) in the school. The discussion ended by Petra saying that “no, we have to take the starting point in the schedule.” In this she got support from Susan. I discussed the incident later with Rose:

\[E4:40\]

Monica: When you were discussing the VT, you were planning a meeting with the parents. Towards the end then, almost when it was finished Sam started saying that… it doesn’t matter if it’s called “leisure-time center,” “school” or “playschool” or whatever. Do you remember? And then you spoke up, Rose, you said something about it being a shame we didn’t have this discussion before.
Rose: Yeah, yeah that’s right.
Monica: Do you remember?
Rose: Yeah, yeah sure.

\(^{93}\) In the teachers’ labour contract it is stated that teachers have to be in the school certain number of hours per week. That the teacher groups have different labour contracts is a constant source of tensions between these teacher categories (see for example Calander, 1999).
Monica: Then everyone started saying “Never mind the schedule, what does that matter as long as we can work the way we want,” that sort of thing.
Rose: Uh-uh, what I meant…
Monica: What did you mean?
Rose: Yeah well, what I meant then was that I really think that we could have done something sensible with this cooperation between the school and our staff. Firstly what… I think I said that also… or if it was before. It’s a matter of give and take; they can’t just expect us to give all the time. Then it would’ve been a matter of us taking care of PE for instance, but then we need help with the administration. If we’re to do the planning in the afternoon, that’ll be even tighter since it’s been cut back, we need help from the teachers when we’re doing the planning, for example. Maybe planning couldn’t be scheduled for the afternoon. It’s about… I think we could’ve done something, but that we would have been forced to cooperate across the divides in a totally different way and then it’s a question about attitude. (Interview, 05/30/00)

During the meeting it was made clear that the recreation pedagogues were determined to protect, what they considered their responsibility, the leisure-time center. Their work, the activity in the leisure-time center, had suffered during the VT and they were now firm about protecting it. They made clear that they were happy to help out in the school but no longer at the expense of the quality of the activity in the leisure-time center. In the following week there were intense discussions in the school about the new situation. I took part in these.

**E4:41**

Rose: So, that was suggested, you know, that we would take care of PE - from 12.20pm to 1.30pm - for a while. But we refused because then we’re at the leisure-time center.
Sandra: But what we did say, we said, like, you know, if we’re having the whole class there won’t be any kids at the leisure-time center.
Monica: That’s what I’m wondering about.
Sandra: If there are no kids at the leisure-time center, then we must be able to cooperate instead.
Rebecca: That’s what we’re doing, that’s what we’re doing.
Sandra: In principle, it would’ve been possible in the afternoons too, right?
Rebecca: But then we’ve got…
Sandra: If it had been arranged so that all the kids had been, then we could’ve worked in the afternoon. After all, they’re—we’re all here anyway.
Rebecca: But we’ve got pre-school children who finishes at 11.20am.
Sandra: Yeah, but you are like four people.
Rebecca: Yeah well, but Petra and Paula are having their planning sessions then, and then we have to be at the leisure-time center.
Sandra: Yes.
Rebecca: They’re supposed to have their planning sessions on those afternoons.
Sandra: They do the planning before that time, but as for the leisure-time center...
Rose: But that doesn’t seem right either, because then we’re flat out the whole... exactly that entire day then too. If there’s something to do with the school, in my view, it should be in the morning, you know, not when the leisure-time center’s open.
Sandra: Start at 10 a.m. then.
Monica: Then you want, you want to decide how the time should... in the afternoon.
Rose: Yeah, yeah sure, yes when they’re at the leisure-time center, I don’t feel like—and it doesn’t feel right either—first having them in the morning and then you’re working and maybe you’ve got a small window where you have to struggle with administrative tasks. You know, there’s a lot of administrative work involved too. And then if we’re having PE, and then you get back, and then it’s hectic and then you’ve got a whole day when it’s just so hectic. And the afternoon hours, they’re intended for our leisure-time center. That’s when the leisure-time center’s open. And that’s what’s important for us. (Interview, 05/30/00)

Sandra tried to find ways and times for collaboration but was met with evasive maneuvers on the part of the recreation pedagogues. What it seemed to boil down to was that the pedagogues did not want to commit to anything that might restrict their freedom to reconstruct and make the activity in the leisure-time center function again. This was particularly important to them since they had, in a meeting with the parents, encountered criticism. The parents were upset about the low quality of the leisure-time center activity. Moreover, the recreation pedagogues seemed to feel that the collaboration, if it were to continue, would not be on equal terms, something they would not accept. They said they felt that they

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94 Hansen claims that the double role of the recreation pedagogues in the school has not satisfactory been discussed and reflected upon: “In one sense it is a mental adjustment from one activity to another [the school and the leisure-time center] with partly separate objectives and prerequisites. In another sense it is an approach and a way of working that has been developed for the profession in a leisure-time center context which does not automatically translate into a school context” (2000, p. 144).

95 It should be pointed out that the parents who utilize the leisure-time center pay for this service while the VT involves all children.
were expected to help out in the school but that the reverse was not the case, i.e., the teachers were not prepared to help out in the leisure-time center:

**E4:42**

Monica: Let’s say that if you’re stepping in taking the PE class in the afternoon, that wouldn’t count as leisure-time center activity, then?
Rose & Rebecca: No, no.
Monica: So then you’re just helping the school out?
Rebecca: Yeah, we get nothing in return, you know.
Monica: Nothing in return?
Rose: It’s not cooperation in that way, at least I don’t think so, you know we step in and help out with the class. We’re not cooperating in the sense that we get anything in return.
Monica: What would it look like if this was done the way you think it should?
Rose: Yeah well, we could like maybe yeah, we could hold the PE classes like together, maybe we could hold it together, or do some kind of exchange. We suggested that we’d take care of PE and they’d handle our administration, but no, no way.
Rebecca: It feels like we’re supposed to give them […] You know, we like notice that they have no understanding of our role. And we have like, you know, maybe we we’ve… we want like them to understand, but at the same time we don’t know if they think that we have any understanding of their organization. That’s where, you know, it becomes...
Monica: But what would it look like if you showed a mutual respect for each other, I mean wouldn’t it… as far as I can see you still want to cooperate in some way, right?
Rebecca & Rose: Yes.
Monica: What can be done to make you feel as if it’s not just you helping them out?
Rose: If we for instance could have gotten some help with administrative tasks, or if they’d helped us out sometimes when things were piling up with the groups and one of us was off for one reason or another.
Monica: But can they actually work in the afternoon, haven’t they got a limited number of hours?

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96 In her study of the encounter between recreation pedagogues and schoolteachers, Hansen (1999) shows that the recreation pedagogues carefully indicated when their independent position was threatened. This happened when their work was not respected, when they suspected that less attractive duties were loaded upon them, or when they ran the risk of becoming a helper. She also shows that there was a lack of balance in the collaboration, which implied that the recreation pedagogues took part in the schoolwork but that the reverse was not the case, i.e., the teachers did not take part in the work of the leisure-time center.
Rose: I suppose they do, but I mean if they’d helped… come in and been with us for an hour when the team had their planning session, I’m sure we could’ve worked something out. And that’s like some kind of comprehensive school day. And they could’ve done their planning afterward, or skiped a meeting or something, that way I’m sure we could’ve run a good leisure-time center.

Monica: Are they in a meeting like, right now?
Rose: Yes.
Monica: Every week?
Rose: Yes.
Rebecca: But they themselves think it’s pretty pointless.

(Interview, 05/30/00)

It seemed that both parties wanted some kind of collaboration, but what that really meant was unclear:

**E4:43**

Monica: Is it a question of stepping in and helping out in each other’s organizations or is it a question of the organizations, sort of blurring the boundaries between school, leisure-time center, pre-school class?
Rebecca: That’s how I feel it should be. But if we’re cooperating there should be some kind of co-planning. Like doing things together, mixing staff and categories, and mixing the children too. That’s how I feel cooperation should be. That’s how I perceive cooperation.
Rose: But surely it’s a question of wanting to blur the boundaries a bit. That’s what I would have seen as the aim.
Rose: Yeah, what would it look like? That we worked more on equal terms, but at the same time benefiting from each other’s skills. I mean, I don’t know how to teach literacy, for instance. I also think that it’s important not to forget what you’re good at or what you’ve been educated for, you know, because otherwise… that you’re doing what you’re best at. Then for example, I was a bit interested in—before we took over PE—I was looking for a window of opportunity to be in on English classes at the intermediate stage. I would really have enjoyed that.
Rebecca: We actually went round with notes saying like “We are free at such and such a time,” but not one of them got in touch.
Rose: Yeah, so did we.
Monica: Why the English classes?
Rose: I think I’m good at English, it’s a subject I know.⁹⁷ Maybe I’m even better than most of them up there. It would’ve been great fun, but we didn’t manage to

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⁹⁷ Rose was married to an Englishman and therefore had lived in England for many years.
fit it in. There was one teacher who was interested, but we were unable to juggle it. It’s a shame, she had a sixth grade class and I would’ve loved to do that.98 (Interview, 05/30/00)

During the ending phase Sandra pushed for continued collaboration. I asked her how she wanted it to be:

E4:44
Monica: When you say coop… that you want to cooperate or that you want to cooperate more—what are you thinking, what kind of things are you thinking of then?
Sandra: I’m thinking like we could do themes together, for instance in the afternoons or PE or something, you know.
Monica: Theme working, like in small groups?
Sandra: Well yeah, working with something. Working on anything really, the forest or whatever we’re working on. But the thing is that this type of activity takes planning, and there’s no real time for planning and that’s such a shame.
Monica: But not mixed age groups then or… we’re talking about leisure-time center staff stepping in…
Sandra: That could be either or, it depends. There are many possibilities or… or also yeah… we’ve talked about like having PE then too, you know. That means there are no kids at the leisure-time center, then they’re taking part in activities, they’re tied to people all the time. (Interview, 05/30/00)

In March 2000 the teachers wrote a letter to Sam and the new principal in which they accounted for why they wanted to continue with the VT (see Appendix II). The letter is written in three different sections, one from each teacher pair. The schoolteachers focused on the teamwork, that there were several adults responsible for the children, which facilitated the work. The pre-school teachers stressed that a comprehensive view of the children was possible in the VT. This meant that the children were taken care of by the same adults during the whole day. However, they also pointed out some problems the VT brought about for the six-year-olds. For example, it implied that there were too many relationships and that the play often was interrupted. The recreation pedagogues also emphasized the comprehensive view. They mentioned that their participation implied that their pedagogical view was communicated to the school and that their particular competence, as for example sports, art, and drama was valuable to the school. They

98 In the report from Skolverket (2001) it is claimed that one feature of a school with developmental potential is that the adults take part in the activity based on interest and individual qualities and not only on professional roles.
ended their section by referring to the intentions for collaboration and integration that are stated in the curriculum, i.e., Lpo94.

4.6 Summary

A VT structure was initiated in North Valley by Patricia, the principal, as a response to the new law about the voluntary school start for six-year-olds and the new curriculum. This structure would eventually lead to groups of children from six to twelve years old. This would make possible a more individualized education and an activity pervaded with a more holistic view of children and their needs.

The teachers initially assigned to work in the VT showed signs of resistance. However, when the plan was put into action they seemed to accept the new organization and were prepared to carry out the new task and make it work. They were sent to a workshop in which they were not given time to work on and plan their new task; instead, they were asked to get to know each other through diverse consultancy techniques. As a consequence, when the semester started the teachers had barely any plans for how to go about the new work task.

After the semester started, but before the children arrived, the VT teachers planned and organized their work over a period of two days. They were left without any guidance, neither leadership nor supervision. Through coordination, deliberation, adaptation, and negotiation they formed a new activity based on their professional experience and expertise from work in the three different institutional settings.

Early on the schoolteachers made clear that they wanted control over the first graders’ education. This was, to my knowledge, never discussed in the teams but seemed natural and taken for granted. This resulted in an organization that came to reflect the traditional school structure. The six-year-olds constituted the “red group” and the seven-year-olds the “blue group.” These groups came to be the basis for the children’s activities. Some movement took place between these groups but it was marginal. However, a structure deviant from what is tradition in the school emerged. After the morning sessions in the “color groups” the children were placed into mixed age groups. In these groups one teacher worked with a small number of children, sometimes in theme based activities, which seemed to open up possibilities for new forms of communication between the teachers and the children.
The school’s, and to a certain extent also the pre-school’s, discourse of order, control, and adult-planned and -run activities permeated the activity system. There was little room for improvisation and initiatives from the children. This was criticized by the recreation pedagogues and on several occasions they expressed discontent with this order.

Pedagogical innovations in terms of materials and activities that would make an individualized approach possible were often discussed. Some initiatives were taken. For example, a shop was organized in a corner of the computer room aimed for both play and learning. However, innovations of that kind seemed hard to realize, partly due to lack of time.

Over time, it seemed that the schoolteachers gained from the new organization while the recreation pedagogues and the activity in the leisure-time center suffered. The relative number of adults responsible for the seven-year-olds was higher than usual in the first grade. The activity in the leisure-time center seemed to deteriorate with complains from both the parents and the schoolteachers. Despite this situation all the VT teachers seemed content with the VT and in an evaluation they expressed the view that they wanted to continue with the VT.

The evaluation seemed to evoke pedagogical discussions in a way that had not taken place in the school before. Such tendencies could be seen both in the discussions at the VT teams’ as well as the schoolteachers’ meetings. A result was an attempt at closer collaboration between the child care teachers and the “upstairs” located schoolteachers. It also became clear that a real VT structure would require discussions and closer collaboration with the parents. An outcome from the evaluation discussion was that it was decided that the VT organization would go on for at least two more years. After that a new evaluation would be conducted and a new decision made.

At the same time as staff members seemed to enjoy collaboration and communication, several incidents involving conflicts occurred in the school. Initially two conflicts could be discerned. One regarded the issue of how to use the premises, the other how to divide labor. The leisure-time center had faced criticism from the parents and tried to solve its problems in part by expanding physically. Moreover, while the recreation pedagogues willingly substituted for the schoolteachers, the schoolteachers refused to help out in the leisure-time center. Patricia had demanded that the schoolteachers help out when there was a shortage
of personnel and no substitutes could be obtained. This caused a battle between Patricia and the schoolteachers.

The tensions between Patricia and the schoolteachers were obvious and explicit. They were attributed to personal flaws, for example, there were claims that Patricia’s lack of communication skills caused the problems. Patricia, on the other hand, claimed that the teachers were stuck in an obsolete way of thinking. The conflicts eventually resulted in Patricia leaving the school.

After Patricia quit, the VT went on for another year. However, after one year the school had to make budget cuts and as a consequence the number of teacher hours in the VT was decreased. When this happened it was obvious that the tight schedule that had been a result of the intertwined activity of the P-2 constellation would fall apart. In this situation Sam, the vice-principal suggested an unbiased approach to future work, which could almost be described as a vision of a boundary-free integration. No one really understood what that would imply and the issue was never discussed further.

All the VT teachers showed great disappointment and indignation toward the demise of the VT. The schoolteachers pushed for a continued collaboration but the recreation pedagogues were no longer willing to prioritize the VT activity at the expense of the leisure-time center. Their conditions for future collaboration was that it had to be on equal terms. They needed to restore and gain control over the activity in the leisure-time center. For the pre-school class teachers the end of the collaboration meant that they could retreat and build a safe and somewhat isolated activity for the six-year-olds and newcomers to the school. In this phase voices were heard that asked for a redefinition of integration. These voices were not responded to productively.

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99 In Skolverket (2001, p. 55) this issue is discussed. It says “at one school the preschool teachers expressed that they thought that it was too muddled and unsettled for the children when having to change groups and maits several times per week and therefore they incrementally decreased the collaboration between grade 1 and the preschool class.”
5 VT Analysis: The Potential for Change and Development

In this chapter I will analyze the narrative presented in the previous chapter. However, and as was discussed in Chapter 3, I will not comment upon every aspect of the content in the fieldnote excerpts and interviews.

I will start by utilizing the concept of contradiction (Engeström, 1987). Thereafter I apply a communication perspective and analyze the forms of intersubjectivity (Engeström et al., 1997) that I found in the VT process. Finally I discuss the integration process in terms of boundary-crossing and acculturation. Doing this presupposes a demarcated unit of analysis. In accordance with the theoretical frame for the study, (Engeström, 1987) this unit will be activity system. According to Engeström, an activity system consists of a community whose collective and individual actions are mediated by rules, tools, and division of labor. The glue that keeps this community together is a common interest in the object. “Object” should be understood as an entity that has met a human need and therefore motivates and directs the activity (Engeström, 1999). Different individuals or groups of individuals take the role of a subject when acting upon the object. To have access to and potentially achieve a subject’s position therefore presupposes membership in the community. Moreover, an activity system is something that develops over time and therefore has a history.

What can be distinguished relatively easily in the data are the three established institutions and their practices, i.e., the compulsory school, the pre-school class, and the leisure-time center. Let us think of them as activity systems based on the fact that there is in each a historically discernable object (though changing over time as was discussed in Chapter 2), and that rules, division of labor, and tools have been somewhat stable over time. But how would we define the VT? It had no history, though an internal structure incrementally emerged. The object was unclear and under negotiation and construction. So were the rules, tools, and the division of labor.

However, the emerging structure that was developing was in many ways shaped by the culture and traditions in the three involved institutions, which
I now conceptualize as activity systems. As has been discussed previously and observed elsewhere (Arnqvist, 2000; Calander, 1999; Fredriksson, 1993; Hansen, 1999) the school practice also tended to dominate the features of the new organization. Nevertheless, a process of creation of a new activity system took place, which I will think of as an emerging boundary system. The VT was an emerging system in that it was a new activity incrementally constructed by the participants over time. The notion of boundary system can be compared to the concept of systems of boundary discussed by Seikkula (1991, 1994) and Seikkula & Sutela (1990) in the context of psychiatric treatment and social work. For example, when a patient is admitted to a hospital a new boundary system is constituted that links care teams, families, referring agencies etc. in family therapy. In a system of boundary “professionals and the families ‘co-evolve’, travel through a phase of co-development in their interactions” (Seikula, 1991, p. 111). This new system of boundary is an “independent organization, which operates according to systems law” (Seikula & Sutela, 1990, p. 34). The involved systems – the family and the hospital – influence each other’s understanding and ways of acting.

Systems of boundary are – as I understand them – temporary. They are functional during the treatment of a patient but are not meant to be permanent. Additionally, the system of boundary exists parallel to the family and the hospital systems. Collaboration that leads to overlapping of systems is conceptualized by Konkola (2002) as boundary zone, which resembles “a ‘no-man’s land’, free from prearranged routines or rigid patterns and giving an impression of flexibility and creativity” (Konkola, p. 3). The boundary zone is also a temporary place that exists parallel to the involved systems. The boundary zone context is assumed to have potential for collaborative learning between activity systems.

Thus, the difference between my notion of boundary system from both system of boundary (Seikkula, 1991, 1994; Seikkula & Sutela, 1990) and boundary zone (Konkola, 2002) is that the original and involved activity systems are not meant to remain but to merge into one. Consequently the new boundary system, comprised of several systems, was meant to be a permanent and durable system.

I call the VT in North Valley a boundary system because it was a new permanent system that was emerging. It was intended as merger between systems that used to operate on the boundaries of each other. For example, it
was the same children who inhabited the leisure-time center and the school. The pre-school teachers in the pre-school had part of their working hours in the leisure-time center. Premises were collectively used by all three institutions in that all three were located in the school. In other words, the activity systems were overlapping both in terms of children, personnel, and premises. Moreover, collaboration between the three institutions was required and did also take place.\textsuperscript{100}

In the emerging boundary system of VT, struggle about how to understand and construct a new object and activity was obvious. The struggle, and perhaps confusion, was expressed as blame of the management (E4:6) but also as concrete efforts to divide labor, find suitable tools and design rules. These efforts were particularly obvious in the introductory phase of the VT project (see for example E4:9 and E4:11).

I will in the next section analyze, through the lens of tensions and contradictions, the development of this emerging boundary system. This system did not sustain, but, as we shall see, carried the potential for expansive transformation. As Foot puts it, “Contradictions are a sign of richness in the activity system, not weakness, and of mobility and the capacity of an activity to develop rather than function in a fixed and static mode.” (1999, p. 293).

### 5.1 Contradictions

It would be hard to claim that the formation of the VT was a collective endeavor initiated by the teachers based on their needs. On the contrary, the VT was a project initiated and thought out by Patricia, the principal of North Valley at the time. It was based on her vision to create, perhaps we could say, an individualized and holistic pedagogy. She said, “I see it [the VT] as individualization. When you’re working with groups like that [VT] you have to take your time with each individual. This is what they’ve been talking about in school for so long, about individualization” (E4:1). And further "In order to get that comprehensive view you wish you could move the staff around. The mix means there are more adults, which is what we need. You get a different type of diversity since you get people with different skills” (E4:2).

\textsuperscript{100} This situation of overlap is not unique to North Valley; rather it is the norm.
This vision is recognizable in the official documents and rhetoric that have been described in Chapter 2. Dahlberg and Lenz Taguchi’s (1994) vision of the child as a culture- and knowledge-creator represents this official vision of a new object in the school practice. Gunilla Dahlberg was a member of the committee (BOSK)\textsuperscript{101} that prepared the revision of the state curriculum (Lpo94), which was conducted due to the integration reform. In their report (SOU 1997:21) the concept of the child as culture- and knowledge-creator is used to explain the attitude toward children and learning in the school that the curriculum aims at. The construction is based on the three traditions of thought that comprise the child care and the school: the classical German concept of knowledge and education, i.e., “Bildung,” progressivism, and the dialogic idea. The vision of the child as a culture- and knowledge-creator is an approach to children, learning, and knowledge but also to content and methods. A common value system is supposed to permeate the activity.

In this vision the child is respected as competent and curious – a child who is filled with pleasure to learn, to explore and to develop as a human being in active relation to other people. The child is seen as having resources and taking an active part in the knowledge producing process. The child is active in the construction of herself, her personality, and knowledge and skills through the interaction with the environment (Dahlberg and Lenz Taguchi, 1994). In the BOSK report this is formulated as follows:

...a view of the child as active and competent, and already from the outset filled with wonder and an appetite for learning. In this approach to the learning process children and adolescents get the opportunity to create a connection between earlier experiences, knowledge, thoughts and feelings and thus to develop their knowledge and creativity. (SOU 1997:21, p. 73, my translation)

The role of the teacher or pedagogue, from this perspective, is to be a fellow traveler, guide, and tutor. It is important to be a good listener and good at asking questions. A dualistic thinking has to be avoided. The process of learning and development should include play and gravity, fantasy and logic, thought and passion, theory and practice, structure and intuition, body and soul, etc. In addition, the pedagogue has to manage complexity and variety and unite means and ends, product and process, quality and quantity, freedom and control, reproduction and production.

\textsuperscript{101} BOSK is the Swedish acronym for the Child care and School Committee (Barnomsorg och skolakommittén).
Let us take as a starting point that this view was what Patricia was heading at (compare, for example, her pamphlet to the teachers shown in E4:2) and that that view was compatible with what is said about the child as culture- and knowledge-creator.

The concept of the child as a culture- and knowledge-creator is contrasted by Dahlberg and Lenz Taguchi with a construction of the child as a culture- and knowledge-reproducer (see Chapter 2), which Dahlberg and Lenz Taguchi still consider to be the guiding concept in the school. But they also contrast it with the pre-school’s tradition, which they conceptualize as the child as nature, as also discussed in Chapter 2.

The history and tradition in the leisure-time center show that diverse aims and directions have influenced the practice (Rohlin, 2000). Activities such as work, or call it handicraft, and homework and aims such as recreation, care giving, and social development have dominated. Yet, as Rohlin notes, there is a huge instability factor in regard to its future identity.

I will in this analysis use the term social fosterage when I discuss the leisure-time practice. Even though the leisure-time center has a lot in common with the pre-school tradition (Person, 1998) I can also see a difference. My understanding, and experience, is that the difference can be attributed to an emphasis on supporting children in their social development. Rather than thinking of the child constructed as reproducer, as in the school, or as nature as in the pre-school, I prefer to think of the child as a social and societal actor when framed by the leisure-time center. This is also, as I understand it, in line with what Hansen (1999) suggests. She claims that “social competence” should be a signifier of what children learn in the leisure-time center.

Thus, in the VT activity at least four different, though overlapping, conceptions, visions, and traditions were struggling in the creation of the new object. These four were: Patricia’s vision of an individualized and comprehensive pedagogy that could be conceptualized as the official vision of the child as culture- and knowledge-creator; the school’s conception of the child as a culture- and knowledge-reproducer; the pre-school’s conception of the child as nature; and the leisure-time tradition of social fosterage. I will utilize these concepts in my attempt to explore the efforts to create a new activity based on these traditions, conceptions, and visions with the help of the concept of contradiction.
The concept of contradiction is used in cultural-historical activity theory to depict and analyze incongruities in activity systems generated and developed under long periods of time. These systemic incongruities are often expressed as conflicts, breakdowns, or inadequacies but can only be properly understood through historical and empirical investigations.

A historical analysis of contradictions in the three original activity systems that were involved in the creation of the emergent boundary system of VT, i.e., the compulsory school, the pre-school class, and the leisure-time center suggests an understanding of the VT as a response to intrinsic contradictions in these systems.\(^{102}\)

These historically evolved contradictions comprise a point of departure when I investigate what contradictions become visible in the efforts to create a new activity, i.e., the VT organization. VT should therefore be understood as a hybrid of three historically evolved activities, i.e., the school, the pre-school class, and the leisure-time center and the contradictions in these systems. The merger was based on an aspiration for a new activity. This aspiration can be understood as both an ideal vision but also a result of long-term contradictions within the systems. Thus, what I do is scrutinize contradictions that emerged in the construction of the VT system, both as historically produced and in relation to an envisioned new object. In that regard we could say that I have conducted an analysis of contradictions based on both an historical analysis and on visions of a future activity.

I will start with the contradictions that became the most obvious in the process of creating a new activity and in the formation of a new object. These were contradictions that had to do with the division of labor. Consequently these contradictions will be explored more thoroughly than the tool and the rule contradictions that I discuss subsequently.

### 5.1.1 Contradictions in the Division of Labor

As Engeström (1993) points out, the concept of division of labor refers to both the horizontal division of tasks between the members of the community and

\(^{102}\) The analysis referred to here is based on data collected in a previous study (Nilsson, 1998) and supported by the general description, presented in Chapter 2, of the historical development of these kinds of institutions.
to the vertical division of power and status. I consider two aspects particularly significant in order to understand the trajectory of the VT organization. The first regards the structure of the age-based “color groups,” i.e., the “blue” and the “red” groups. The second aspect is the exchange of labor between the recreation pedagogues and the schoolteachers, or let’s say the absence of reciprocity in this area.

Early on there were signs that the children would be divided according to age (see E4:5 and E4:6). The schoolteachers made clear what they considered their main responsibility, i.e., the seven-year-old schoolchildren. A structure emerged that, to a large extent, was based on the traditional grade system. The pre-school teachers were mainly responsible for the six-year-olds and the schoolteachers were responsible for the seven-year-olds. The recreation pedagogues helped out where and when needed. With this division of labor the old school structure remained almost intact within the VT. This implied that the children were not given the opportunity to be stimulated and challenged based on their individual needs and capacity which I understood was the main goal in Patricia’s vision (E4:1 and E4:2). Instead it was the children’s age that determined what kind of activity they would be offered and take part in.

This nonflexible structure was reinforced by the teaching style that dominated in the blue group, i.e., in the first grade, which was very much textbook-based. The children either had to follow the pace determined by the textbook or not participate in the blue group’s activity at all. The decision as to whether a child would belong to the “wrong” color group was, in the end, the parent’s. According to statistics only 4% of the six-year-olds start school (Skolverket, 2001), which indicates that parents do not see that alternative as an option for their children. This meant that the six-year-olds stayed in the red group and the seven-year-olds in the blue, independent of their capacity and developmental level. Even though obstructed by the structure boundary-crossing and movement between these groups occasionally took place. But it was rare.

The color structure in turn implied that the division of labor between the teacher groups remained mainly unchanged. The schoolteachers remained in control of and responsible for the teaching and education of the seven-year-olds, which in turn implied that they were responsible for planning of lessons, supplementary work, etc. Consequently, the schoolteachers were absent from
the VT activity in the afternoons, away for preparation, while the child care teachers were present until late afternoon. This also meant that the schoolteachers turned to their colleagues for discussions on teaching-related problems rather than to the child care teachers. Thus, it seemed as if the color structure created a situation where the VT schoolteachers’ relationship with the other schoolteachers tended to be stronger than with the child care teachers in the VT.

This division of labor was also reinforced by external stimulus and the spatial arrangement in the school. As shown in the narrative in Chapter 4, even if the VT teachers tried to recreate and alter their roles, they remained the “schoolteacher,” the “recreation pedagogue,” etc, to actors outside the VT. Such an example occurred when Susan was approached by the maintenance man about how to arrange “her classroom” (E4:7).

The color structure was also reinforced by the attitude that “one should do what one is good at” (E4:8), which seemed to be connected to the profession the teachers belonged to, their background, and identity, or let’s say motivated by the object of their (previous) activity.

The second aspect of the issue of division of labor regards the exchange of labor. As has been shown, it seemed natural for the recreation pedagogues to substitute and help out when and where needed in the school (see, for example, E4:5, E:12, and E:34). This was something they seemed to accept and almost welcome, at least initially. Several times they expressed a positive attitude toward expanding their professional duties and knowledge areas; Rose, for example volunteered to teach English (E4:43). Also, the pre-school teachers showed interest in teaching. Paula, for example, several times expressed an interest in taking part in literacy and math instruction.

When Patricia, however, at one point asked the schoolteachers to substitute in the leisure-time center, they refused. Their argument for not doing so was
interesting. They claimed that they were not qualified to do the recreation pedagogues’ work.103

This situation was repeated in the ending phase of the VT project when the recreation pedagogues asked the schoolteachers in the VT to help out in the leisure-time center with some of their administrative duties and when they were asked to help out in the afternoons now and then (E4:42). The recreation pedagogues and the activity in the leisure-time center had suffered because of their participation in the VT; in order for the leisure-time center to “get back on its feet” and regain control of the situation they needed support from the schoolteachers – something they never obtained. As we have seen, there was reluctance and resistance on the part of the schoolteachers to let go of this compartmentalized division of labor that was played out both in the color structure and in denial of mutual support. Why?

Kleppestö (1993) takes social identity theory as an explanation model when trying to understand a merger process between two Swedish firms. One basic idea in this theory is that humans need to classify themselves and others into social categories, which gives them their social identity. Using that idea, Kleppestö is able to explain why problems appear at mergers and acquisitions. The merger itself increases people’s need for belonging and identity because their old social categories are threatened. A reasonable interpretation, according to such a view, would be to understand the schoolteachers’ protection of their traditional roles as protection and defense of their identity.

Florin, (1987) discusses social closure in the context of teacher professionalism. Social closure refers to the aspiration to exclude others from the profession. Since 1990 North Valley had to make room for several child care institutions. These institutions were an open leisure-time activity, that

103 With this rhetoric they used the power structure between the teacher groups in the school to strengthen their own position. By arguing for protection of the recreation pedagogues’ professional integrity they protected their own. With this strategy the recreation pedagogues were put in a position where they, on the one hand ought to be thankful to the teachers for protecting their integrity, and on the other they were prevented from acting out their own needs and interests, i.e., the recreation pedagogues needed help from the schoolteachers in the afternoon. This is a prime example of a double-bind situation. On the other hand, one can of course also ask why teachers would extend their duties without any financial compensation in return.
later became the leisure-time center, and the pre-school class. This had taken place with suspiciousness, hesitation, and one might even say resistance on the part of the teachers. Social closure might be a result of the of child care institutions’ “invasion” of the school, since it might have been experienced as threatening to the schoolteachers’ identity - if one applies Kleppestö’s theory. This does not seem reasonable if one considers the well-documented fact that it is the school that has the preferential right of interpretation and tends to be the stronger and more powerful part (Fredriksson, 1993; Munkhammar, 2001; Calander, 1999; Hansen, 1999).

On the other hand, we could give social closure the responsibility for causing resistance to the immigration of the child care institutions. If so, we would want to know the reason for social closure or why teachers would want to exclude others from their profession. Let us consider two examples within the expanded school context of North Valley that could be interpreted as expressions of social closure. The first one is about who has the skill but not the right to teach, the second about who has both the (conventional) skill and the right to teach.

Rose’s offer to help out with English teaching was passively refused (E4:43). She had expertise in English and she was willing to contribute her knowledge and labor. It seemed that this offer was neither appreciated nor received affirmatively in the school even though no one directly refused it. One likely explanation is the tradition of qualification rules (behörighetsregler) that guides the division of labor in school settings. Recreation pedagogues, until recently,¹⁰⁴ have not been considered to have the required qualification to teach.

The second example has to do with who has the right skills for teaching. In a discussion about the color groups vs. mixed groups, Sandra stressed the need to teach all children the basic logic in math. She emphasized this need in a way that hampered the discussion (E4:27), which might otherwise have led to a vigorous debate on methods. Instead it probably contributed to a preservation of existing roles and methods.

¹⁰⁴ The BOSK committee suggested that both preschool teachers and recreation pedagogues "can be used for teaching in the public school" (SOU 1979:21, p. 78, my translation) which was also came to be confirmed in the new curriculum (Lpo94).
Instead of defining these actions as “elimination” we can understand them as expressions of traditional division of labor and tool use in schools. As has been discussed in Chapter 3, the motive in an activity system is located in the object, though it is seldom clear to all the participants in the activity system. The motive/object shapes the actions in the activity system. Let’s say the object (and motive of the activity) in the school is culture and knowledge reproduction. The actions, which can be categorized as professional skills and thus comprise the toolkit, have been acquired through long years of experience and they fit nicely with the object of the activity. These skills are not only purposeful actions of teaching, they have become unconscious and routinized operations -- as Leontiev claims, “an action may be transformed into a means of achieving a goal, into an operation capable of realizing various actions” (1978a, p. 67). Until questioned, the skill remained taken for granted by Sandra and when questioned it was defended without apparently reflection (Erickson, 1996).

To answer the question as to why there was a reluctance and resistance on the part of the schoolteachers to let go of this division of labor we have to consider the object of their activity. As Leont’ev (1978a, pp. 62-3) states, “To understand why separate actions are meaningful one needs to understand the motive behind the whole activity. Activity is guided by a motive.” Thus, the structure of a mixed blue and red group would for the schoolteachers imply if not denial so at least a questioning of their skills. But more than that, it would be a threat to their ability to perform their duties and responsibilities, i.e., a threat to the rules of schooling and teaching. This was clearly expressed in the situation where Susan showed her disapproval of the idea of subject sessions as an alternative to the color structure, and where she accounted for the children’s right to a certain number of hours of teacher-supervised instruction (E4:29). To mix the red and blue group did not make sense to the schoolteachers since they had no real perception of the idea behind the VT, i.e., they could not yet perceive a new object. For them it would be, to use a metaphor, like jumping into deep water without knowing if they were capable of swimming. Why would anyone do that?

The BOSK committee states that the concept of teaching (undervisning) needs to be expanded based on a holistic view of the students’ development. This implies that teaching no longer should be understood as transmission of facts but as creating conditions for learning by arrangements of contexts and environments where the individual is given the opportunity to acquire knowledge and where knowledge is understood as a process rather than a product (SOU1979:21, p. 73).
Therefore the reluctance to let go of the division of labor was not only about identity, in the sense suggested by Kleppestö (1993). It was also about not being able to make sure that the children learn to read, write, count, etc. Therefore, what the schoolteachers did when resisting a mix of the color groups was to defend and protect their right and responsibility to teach in a way that they knew, through experience, works most of the time. With this method, the outcome is children who have learned what the teachers are expected to teach them: predetermined skills and propositional knowledge.106

This line of reasoning is in accordance with Hansson (1999) who found that teachers experience that they are under demands and that this causes them to put demands on the children in terms of things that have to be done and learned and tasks that have to be accomplished. Hansen claims that this is a watershed between schoolteachers and recreation pedagogues, i.e., schoolteachers have “demands” while recreation pedagogues have “time,” which causes tensions and conflicts between these teacher groups. Therefore it makes sense to attribute the reason the schoolteachers refused to help out in the leisure-time center to this “time vs demand” factor -- which we also could think of as two sets of guiding rules for the two teacher categories respectively. Why would teachers with all the demands upon them (and constant lack of time) help recreation pedagogues, who have all the time (and no demands)?

Yet, the lack of mutual support reflected an attitude to learning in which the leisure-time activity had little significance. If the schoolteachers had considered the learning that took place in the leisure-time center comparable, and significant, to the learning that took place in the school, then they might have been more supportive. The school tradition and conceptualization of the child as reproducer assumes and requires that teachers are given time to focus on their object of transmitting factual knowledge to the children. This is best done in a space organized for the purpose, i.e., the classroom. If the object in the school had been in line with children as creators, meaning that children learn and develop in dynamic interactions with people and environments based on their curiosity, desire to learn, and experiences, there would

106 In this context it can be useful to mention Mintzberg (1983) who talks about standardized work by learned professional methods, instead of organization-specific rules. He mentions schools as an example. He claims that there is less external control in work carried out by professionals, but that due to the specialization the organization nevertheless is dull and hard to change.
probably have been room for reciprocal exchange of labor. Learning from this perspective certainly also takes place in the leisure-time center, for example when out in the forest, in the art room, or when setting the table for the afternoon meal.

Consequently, as a complement to understanding the resistance to changing the division of labor from the standpoint of social closure or social identity construction, it might be (more) productive to understand both the resistance to mixed groups and the lack of reciprocity in the exchange of services as a natural consequence of being a member of a community that has a distinct object by which the members’ actions are directed and motivated. To be even bolder we could say that identity not only is a question of classification into social categories but is also about being able to act in accordance with the object of one’s activity. In other words, the object of the activity in which one takes part contributes to identity formation.

Moreover, it might be productive, as Kindred (1999) suggests, to take resistance as a starting point for learning and dialogue. Kindred discusses learning at work and claims that resistance should be understood not as a departure from or threat to a learning process but as the entry act itself, a point of orientation from which further learning can proceed and change take place:

As a form of acute attention, resistance, despite the negative style of its expression, is a purposive entry into a dialogic and potentially exploratory process. Although it is an act of self-preservation in the least, it can also be a move toward empowerment. Most important, though, it is a developmental act within a process of cognitive and cultural change. (p. 218)

This approach is consistent with Piderit (2000) who claims that the term “resistance to change” should be retired. Piderit shows that the reaction against change in organizations often is ambivalent and multidimensional rather than just negative, which the stereotypical image wants us to believe. She suggests that acknowledging ambivalence can “provide a basis for motivating new action, rather than the continuation of old routines” (2000, p. 790).

A good example of the ambivalence that Piderit discusses was Susan, one of the schoolteachers. Looking through the data it is clear that her actions were informed by the schooling tradition yet she came forward as a “change
agent.” For example, she often expressed her role as that of an interceder between the school and the child care, in that she often had to stand up for and explain the work that was carried out in the VT (E4:23). In the end, she was the one in the VT who most persistently fought for its continuation (E4:44). In addition, she advocated the 5thD despite her colleagues’ initially negative attitude.

This teaches us that we should investigate the reasons for the schoolteachers’ resistance. Rather than thinking of their attitude as lack of will, caused by selfishness, (see, for example, I. Johansson, 2000c, p. 20) it should be taken seriously and as a point of departure for exploration, dialogue, and learning:

What has been discussed so far is the contradiction within the division of labor. I have shown that there was a dominance of the school tradition in terms of the color structure and in terms of lack of reciprocal support in the distribution of labor. We could call this a compartmentalized structure. However, the division of labor deviated from the traditional school structure due to the introduction of the small groups and the “activity stations” that took place after lunch. As discussed in Chapter 2, small groups, thematically organized activities, and activity stations were all influences from the child care traditions. In other words, parallel to the compartmentalized structure there were significant elements from the child care culture.

It is also important to point out that there were attempts to mix the blue and the red group. The teachers started to experiment with theme groups, i.e., common sessions in math and literacy (E4:37; Appendix 1). This kind of structure carried the potential for a more individualized practice that would have permitted children to work on tasks based on interest and capacity rather than on age. However, this did not work out in a satisfactory way. It seemed as though dominance of the school practice shaped the activity in those sessions and that was not acceptable to the pre-school teachers. To the schoolteachers these sessions seemed to imply obstacles to their teaching. For example, Susan claimed she had to decrease the pace. Despite the problems, we can think of these sessions as a hint about a “new” kind of structure that we may call an integrated structure.

In the next section, which discusses instrument contradictions, I examine the impact of these groups and then think of them as learning tools.
The contradiction in the division of labor discussed above is depicted in Figure 5.1 based on Engeström’s (1987) model of an activity system. The subject and the community have no analytic significance in this figure other than to illustrate in general terms the composition of the activity system of the VT.

In other words, in the division of labor there was a tension between, on the one hand, a compartmentalized structure in terms of the color group structure and the uneven distribution of labor i.e., unilateral support, and on the other hand, an integrated structure in terms of mixed groups (sessions) and demand for an even distribution of labor - or call it reciprocal support. However, the dominating compartmentalized structure was also influenced by the child care tradition.

The fact that the object is under construction is visualized by a question mark. The object is represented by two circles in which the inner one is divided into three segments. The inner circle is an attempt to envision that the construction of the object is taking place as interplay between the three integrated activity systems. The outer circle is an attempt to visualize that the proposed vision is meant to influence the object.

The object of the child as culture- and knowledge-reproducer is underlined and so is the envisioned object of the child as culture- and knowledge-creator. That is meant to illustrate that it was the structure inherited from the school tradition, i.e., the compartmentalized structure that was the dominating counterpart in the contradiction to the new envisioned object. The compartmentalized structure did not seem to advance the practice toward a more individualized and holistic approach.

The objects of nature and social fosterage are tinted. It is meant to symbolize that the two child care traditions influenced the contradiction between the division of labor and the new envisioned object. It was the recreation pedagogues who most firmly demanded an equal distribution of labor in terms of mutual support. It was also they together with the pre-school teachers who advocated mixed groups and sessions instead of the color structure. In other words they challenged the old object of reproduction in favor of a new one. Moreover, elements from these traditions became part of the structure, such as small group activities and activity stations.
5.1.2 Instrument-Contradiction

As discussed in Chapter 3, mediating instruments are both physical and tangible artifacts, such as books and pencils, and conceptual and symbolic internal and external artifacts, such as signs, words and concepts.

In the last section we could see that the school tradition dominated the division of labor in the VT. A concrete manifestation of that was the color structure, which meant that the children were divided into groups according to age. The instrumental poverty (Engeström, 1987) in the blue groups, to which the seven-year-old children belonged, was striking. These sessions consisted mainly of the teachers’ instructions, textbooks, and forms to fill out. The goal seemed to be to have accomplished the tasks that the textbook supplied, not too early and not too late but exactly at certain predetermined junctures. As a result the children had to keep a certain pace, which seemed to constrain both them and the teachers. As shown, for example in excerpt E4:10, the dependence and focus on the textbook seemed to prevent the children from finding their own individual paths and rhythms in their learning.
processes and trajectories. Simon, considered to have learning problems, was held back and not permitted to continue to work when he was motivated. Everybody had to keep the same pace -- otherwise it would cause problems for the teachers. The teachers were also prisoners in this race. They showed signs of stress because they worried that they would not be able to cover everything in the textbooks on time (E4:36).

Another result of the “textbook-run methodology” was that high-achieving children were not challenged. Petter, for example, was far beyond the rest of the group and seemed to do his best to entertain himself while waiting for the others to move along. There did not seem to be tasks and tools challenging enough for him.

Thus, the textbook served as an end rather than a means (Miettinen, 1999; Olson, 1980; Engeström, 1987), and learning tools became restricted to pencils and pens, erasers and notebooks as Engeström (1987) points out. The instrumental poverty seemed to reinforce the dominance of the school pedagogy as reproduction.

Also in sense textbooks serve the role as a preserver of the object of knowledge and culture reproduction. Olson states that textbooks carry authority in that “they are taken as the authorized version of a society’s valid knowledge” (1980, p. 192). Moreover, he claims that the students’ responsibility is primarily to master this knowledge: “Children do not have the right to disagree with the authorized texts; they have to master and be prepared to defend them” (1980, p. 192). This situation reflects the same status difference that there is between the teacher and the student in the oral language in the classroom, i.e., between the writer (the author of the textbook) and the reader (the student).

Thus, the textbook-run practice did not encourage the child’s progress in becoming a reflective and critical creator of knowledge and culture. As Engeström explains it, since the dominant task is to reproduce and modify the given text, the role of the text in the societal practice is of peripheral importance. “The text becomes a closed world, a dead object cut off from its living context” (1987, p. 101). Thus, instead of serving as a tool in an activity aiming at creation, it facilitates reproduction of knowledge developed and used earlier and elsewhere. When the textbook is the object, we can ask what
is left in the classroom as mediational means to support culture and knowledge creation.

The influence, in the context of instruments, of the pre-school and the leisure-time center became manifested through the activities in the small groups and common activities that took place after lunch (see table 4.1). This structure was not based on age. The small group activities ranged from, for example, book reading (E4:14), to craft work, sports, or music and drama. The groups comprised approximately eight children who alternated between the teachers. These activities were arranged and led by the individual teachers, though they were planned and discussed together. Once a day the small group activity was arranged as theme-work as, for example, “nature,” “helpfulness,” or “the traffic” (see Chapter 2). The common activities ranged from, for example, outdoor activities, swimming, or the 5thD.

There was no doubt that the teachers were ingenious - they took every opportunity given to expose the children to diverse experiences. For example, they visited exhibitions, theater performances, and conducted study visits to the police and the fire fighters. In that regard I think it is correct to say that the integration implied, for the children, a more varied activity in terms of mediational means than they would have been offered without the integration. Moreover, the pre-school teachers, especially, as shown, contributed with their tradition-based activities such as the assembly with fruit (fruktstund), finger games (fingerlekar) and childrens’ songs (sångramsor) in the shared sessions such as the common assembly for the groups in the morning (see table 4.1).

The problem with all these different activities, we might think of them as learning tools, seemed to be that these were recurrently introduced to the children as “given.” The teachers considered these tools appropriate and without any doubt, their introduction was based on good intentions. Whether these learning tools made sense to the children seemed not to be the subject of reflection, except by Rita, the recreation pedagogue (4:15). She complained several times that every session or class was preplanned and organized by the teachers and that the children’s interests and suggestions were hardly taken into account. This issue will be further discussed in the next section in terms of rules.
As has been shown, however, the small group activities did seem to carry a potential for a more dialogic pattern of interaction (see Wells [1999, 2000, 2002] for a discussion on dialogue as a tool for learning in the classroom) compared to the classroom discourse (E4:10 and E4:12). Susan’s “mushroom dialogue” with one of her students (see E4:14) was an example of that.

Attempts at the development of more and different mediational instruments could be seen. The issue about alternative pedagogical materials, such as production of books modeled by Montessori and Waldorf pedagogy, was discussed several times. Also, VT 1 did create a shop for the children to play and learn, though it seemed to have marginal impact on the activity.\(^\text{108}\)

The 5thD was also a “new” kind of pedagogical means that was employed. The 5thD, as described in Chapter 2, was designed to provide the children with possibilities to develop goals, and strategies to reach these goals, and through that to gain power over their own learning trajectories (see Chapter 6).

Thus, we may conclude that the dominance of the traditional school-based instruments was exposed to alternatives. These alternatives were represented by instruments from the child care tradition but also new tools were considered and even tried out. Despite this, it seemed that in order to develop an object in line with the vision of the child and learning as creation, a qualitatively new as well as more varied set of tools were required. By “varied” I mean tools that would provide the children with meaningful tasks as experienced by them aiming at both academic and personal development.\(^\text{109}\)

In figure 5.2 the model from figure 5.1 is employed and expanded to depict also the instrument contradiction discussed above. Traditional tools such as

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\(^{108}\) In Chapter 8 I will account for a shop-play activity that was consciously designed as an activity aiming at both learning and play in an integrated group. The shop-play activity was based on both the school and the preschool culture but not as a compromise or assembly. Instead it became an entirely new activity system deviating from both the school and the preschool way of doing shop-play, yet built on elements from both these traditions.

\(^{109}\) Veresov & Hakkarinen (2001), for example, discuss creation of new activities in the transition from play to learning. See also Broström (1990; 1999) and Hakkarinen (1999) for a discussion on learning in play and play as an activity not directed from above but based on children’s initiatives and engagement.
textbooks, pencils, crafts and art, music, sports and outdoor activities, are contrasted with tools promoting knowledge and culture creation such as a shop, the 5thD, and homemade books. This does not mean that textbooks, pencils, crafts and art, music, sports and outdoor activities, etc are improper. On the contrary, they did all contribute to a more varied practice than the traditional school practice. However, the claim is that with an object of culture and knowledge creation there seemed to be a need for a reconsideration of how these tools might be used.

The three institutions are underlined to depict that they all contributed to the tool production in the VT. The vision is underlined signifying that there was a need for development of tools and reconsideration of “old” tools facilitating a practice with an object defined as culture and knowledge creation. I have chosen not to tint any of the institutions. I did not see a force that seemed to challenge the traditional tool use in a way that could have had a major impact on the activity.
5.1.3 Rule-Contradiction

The third contradiction that I will discuss concerns the rules in the school. “Rules” refers to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system. I will concentrate on what seemed to me to be one of the most prominent features of the school – the constant aspiration for order and control. This of course both reflected and influenced the teachers approach to the children, learning, and knowledge. Power relations and structures in the classroom are discussed, for example, by Barraclough & Stewart (1992) and Manke (1997). Barraclough & Stewart define power as “the potential or capacity to influence the behavior of some other person or persons. Compliance gaining, or behaviour alteration, is the realization of that potential” (1992, p. 4). Manke says “power is a structure of relationships” (1997, p.1).

My focus here is not power as a phenomenon but the realization, or manifestations, of power from the perspective of the teacher: controlling what the children do, in what order they do it, how they behave and move about in the premises, what order they have in their desks, their way of talking, etc.

The desire for order and control was expressed on posters on the walls (Figure 4.1) and in rules for how to behave and move around on the school premises. It permeated the lessons, as I discussed, for example, in the previous section where I described the necessity to conduct the tasks in the textbook in a particular order and at a particular pace (E4:10). This order and control structure seemed to silence the children’s “voices” (see, for example, E4:12) though of course resistance could be seen. Also, the pre-school teachers seemed to be guided by a need for a very structured and orderly way of working with the children (Henckel, 1990). This order seemed to be essential to keep the fundamental pattern of interaction in place, i.e., transmission of skills and knowledge from the teachers to the students.

The reason for this obsession with order should of course, in the same way as the insistence on the color structure, be understood as motivated by the object of the activity. As I have said several times, the object in school is mainly reproduction, which is manifested as transmission of basic skills and memorization of items of information (Wells, 2000). For a single teacher in her classroom with, let’s say, twenty-five to thirty students, it seems reasonable to believe that order and control serve this task (Erickson, 1996; Manke, 1997).
As Hansen (1999) has pointed out, teachers’ experience is that they are under demands and therefore place demands on the children. Order and control help the teachers to manage these demands.

However, this order, and consequently implicitly the pattern of transmission, came to be questioned by, most saliently, the recreation pedagogues. They expressed annoyance several times that all the activities with the children were preplanned and prearranged (see, for example, E4:15) which was a consequence of this desire for order and control. This, they claimed, made it impossible for the children to have a say about what to do. Instead they claimed that the starting point of the work with the children should not always be what the teachers planned but the children’s interests and accrued past as well.

This claim from the recreation pedagogues makes sense if we take into consideration Hansen’s finding about what it is that rules recreation pedagogues’ and schoolteachers’ work respectively. Recreation pedagogues have time to take into account children’s individual needs and interests - something schoolteachers do not have. This dilemma was well articulated by Stephanie in a discussion about the child care moving into the school premises:

It is our horror, that they finish third grade and are not capable of reading, writing and counting and so on [...] That “control” was a good word you said. As a teacher you feel that you must have full control over everybody’s skills. Therefore you think if you divide the kids into different groups, some at the kindergarten or the leisure-time center and others somewhere else, then you have no control. The kids are floating around everywhere. As a teacher you want to have control, “Are you sure you have got this now, little Tom?”...I have to accept the fact that I have to release a little of the control but I will absolutely not release on the quality.” (Interview spring 1996).

The meaning of the commonly used expression “to take the starting point in the child’s experiences” has been explored by Hansen (2000a). She presents five types of interpretations, alternatively called conceptions, of this expression based on interview data with schoolteachers and recreation pedagogues. These are as follows: (1) To identify the child’s developmental level and meet the child on that level in the learning/teaching process. Embedded in this view is an assumption about the “Piagetian” stages and the metaphor of a ladder is almost palpable. The action required here is to find
out what step each child is on and provide appropriate stimulus. (2) Teaching/education should be based on the child’s previous knowledge. Here experiences are equalized with knowledge such as what the children know, for example, about a certain animal, country, or profession. This knowledge can then become the base of a new plan, or be used to revise an existing plan for further learning/teaching in the subject. (3) Children have different social realities and therefore they have different preconditions to profiting from the activities in the school and the leisure-time center. This interpretation is about being aware of children’s differences in terms of class/social group, ethnic/language background, gender, and earlier child care experiences. (4) Teaching/learning should take as its starting point the children’s interests, in order to enhance motivation. A typical example in this category would be when a child tells about something she has seen on the TV, which the teacher capitalizes on and takes as a starting point in the teaching/learning process. (5) Teaching/learning has to be experienced-based, meaning that children should be encouraged and offered the opportunity to use all their senses in the learning/teaching process, not only the intellect. The basic “Deweyan” idea is that in order to learn, children have to “do” and to experience (see also the Fröbel tradition discussed in Chapter 2).

Hansen points out that the different types of interpretations show different aspects of the concept of children’s experiences in relation to teaching and learning. In the first three types, experience is perceived as an entity, i.e., developmental level, previous knowledge, and accrued past social experiences. In all three types of interpretations the purpose is to identify the individual child’s or the particular group’s experiences with individualization of teaching methods as the ultimate goal.

The remaining types of interpretations are about the role of the immediate, lived experiences in teaching/learning. In type 4 the interest of the child motivates further learning. In type 5, experience is interpreted both as practical actions and as lived experience and is considered an ingredient in the learning/teaching process. Hansen points out that the only two categories that differentiate between schoolteachers and recreation pedagogues are Numbers 4 and 5. Number 4 contains answers only from schoolteachers and Number 5 only from recreation pedagogues. In type 1-3 both schoolteachers and recreation pedagogues are represented. Hansen argues that this is in accordance with her findings in earlier work (Hansen, 1999) which shows that
schoolteachers stress motivation for learning while recreation pedagogues claim that children learn through practical activity in contrast to mere theory.

Hansen claims that a reasonable interpretation of “to take the starting point in children’s experiences” would be that in pedagogical contexts one would make children’s experiences, as well as the processing of these experiences, as the subject of didactical considerations.

A way of making such a didactical consideration would be to assume that the children’s “voices” have to be heard, taken seriously, and made a source in the learning process and the pedagogical work. Thus, we could connect Hansen’s five understandings of “to take the starting point in children’s experiences” to the rule system and think of what a “new” rule system, based on an object of the child as culture- and knowledge-creator would possible imply. I imagine that Hansen’s items, Numbers 1 to 4, i.e., developmental level, previous knowledge, social reality, and interest, require a guiding norm that would necessitate the children’s voices and encourage dialogues with them rather than monitoring them through order. Starting with the children’s needs and experiences therefore might imply a situation that would restrain the teachers’ control of exercising knowledge and culture reproduction in terms of the traditional transmission approach. However, it might, or might not, require a different division of labor; for example, more adults would be necessary in the classroom (or wherever learning in the educational institution might take place). In any case, a structure of mixed groups would perhaps support such a rule system in that the child care teachers would become involved. Again, this interconnectedness between the components will soon be addressed.

Interpretation number 5, i.e., experience-based learning and teaching, has to do with a holistic approach to learning whose goal is to integrate hand, heart, and head, to allude to Fröbel. I imagine that working methods built on such an approach would not need a norm structure based on control and order either, the way it was manifested in the school. But again, the reason why the present norm system was retained has to be found in the object of the activity.

Thus, we could imagine that rules based on to take the starting point in children’s experiences would lead to encouragement of children’s voices and active use of all their senses, which in turn would be more in line with an
object identified as culture- and knowledge-creation as described in section 5.1.

However, the narrative in Chapter 4 makes visible dilemmatic situations involving rules as well as individual and temporary attempts to originate actions based on new kinds of rules. These situations highlight the rule contradiction between control and order vs., what might be called, appreciation of children’s voices.

Sandra’s dialogue with the boy about mushrooms (E4:14) showed a good example of such an approach, i.e., to respect and utilize the children’s “voices” in learning situations. Gutiérrez et al., conceptualize this kind of dialogue as a third space. The third space means occasions when the teacher’s script and the students’ counterscript converge in terms of coming together in creation of new meanings. Gutiérrez et al., imagine the potential for classroom participants to bridge diverse identities and activities, and thus, rearticulate power relations through “a dialogic pedagogy” in which various cultures, discourses, and knowledges are made available to all classroom participants (1995, p. 467).

We can assume that monitoring all the children in an activity that is oriented towards dialogue with them (Wells, 1999, 2000, 2002; Gutiérrez et al. 1995) might be experienced by the teachers as a risky business (see for example E6:9 in Chapter 6 where Sam claims that teachers in problem-based learning worry about whether children learn anything). The teachers want to be assured that the children absorb what they are taught.

On the other hand, a more dialogue-directed pattern of interaction seems to agree with the creation approach rather than with the reproduction approach, since it presupposes confidence in children’s capability to be active creators of their knowledge.

In sum, there seems to be a contradiction between strict order and control and the development of the object of allowing children to be creative in the areas of culture and knowledge.

The rule-contradiction discussed above is depicted in figure 5.3. Now the model of the activity system of the VT is completed with all its components and the dynamics in and between them.
The rule-contradiction is comprised by a tension between a need for control and order vs. an emerging demand for what we can call appreciation of children’s voices. The main proponents of order and control came from the school and the pre-school teachers. That is the reason why the school and the pre-school are underlined.

The dominating rule system of order and control was questioned, though not really challenged, mainly by the leisure-time tradition of social fosterage.

![Figure 5-3 Rule-Contradiction](image)

**5.2 New Object and the Interconnectedness between the Contradictions**

In the above analysis I have scrutinized the different elements of the emergent boundary VT system and their relationship to an envisioned object. The purpose has been to understand the potential the integration of the school, the pre-school class, and the leisure-time center has for development of a new kind of pedagogy in the school.
As the analysis reveals, what seemed to happen was that the new emerging boundary system tended to be, if not a compromise, yet a conglomerate of elements from the three institutions existing side by side. For example, the division of labor was dominated by the school tradition of age-based groups, yet there were influences from the child care tradition in terms of age-mixed small group activities. The instrumental poverty was improved by addition of activities, or call it learning tools, recognized from the child care tradition. In other words, the activity was “richer” in the emerging boundary VT system than in the school system. However, I rarely had the feeling that “something new” was created, i.e., the object of the activity remained unchanged. There were tendencies, however, to expansion. For example, there was the attempt to mix the blue and the red groups. Thus, my interpretation is that the object of the activity was never reconsidered, changed and expanded. What might have had an impact on a redefinition and expansion of the object?

Components in an activity system have no clear-cut boundaries but tend to blur. For example, the division of labor was intertwined with the rule system in that the structure based on age was best served by the rule system of order and control. Thus, the success and usefulness of a new tool, a new way to divide labor, or a new rule was dependent on its relation to the other components and ultimately on the object of the activity. If we compare this with a single and enduring activity system we could assume that a new division of labor, a new instrument, or a new rule might be an outcome of a temporary, yet historically emerged, problematic situation. For example, a new division of labor might be required when a new ICT system is implemented. An adjustment in one or two of the components can take place without putting into question the whole system and the object of the activity. The situation in the emerging system of VT was different. In the VT the teachers were facing the task of creating an entirely new activity based on a new envisioned object. This situation seemed to require openness to simultaneous adjustments in all the components.

Thus, creation of a new tool, a new structure for dividing labor, or a new rule system in the emergent boundary system of VT did not seem to support the creation of a new object. However, a partial solution to one of the contradictions might have influenced the other contradictions. For example, systematic mixing of the blue and the red group and sessions focusing on a particular theme or subject might have influenced and strengthened the tool contradiction. As stated, such groups and sessions might have highlighted the
need for a variety of new kinds of tools. Moreover, creation of new tools perhaps would have facilitated more of a dialogical atmosphere, less dependent on strict order and control.

The analysis points to the fact that the roles and the rules were harder to negotiate and change, but that the instrument development was welcomed and seemed less tension-laden. Tools cannot do the trick of the trade alone, i.e., change the basic structure and practice in the classroom, which Cuban (2000) shows in his study of computer use in schools. Despite this I would say that emphasizing creation of new and varied tools, which also was suggested, might have been a way to push the system in the direction of change of the object in line with the vision.

However, the changes that did take place in the process of creating the VT system did not seem to carry the potential for a substantial transformation of the object in the envisioned direction. Yet, later on tendencies to expand the object could be discerned. Two such attempts were prompted by (1) the evaluation report and the discussions that followed and (2) by a suggestion of an unbiased continuation of the VT in a context of reduced economic resources. The attempt that was prompted by the evaluation came to involve the whole school and concerned the very compartmentalized structure of the school discussed in the previous section. These tendencies took place as individual and collective actions but they did not seem to result in a substantial transformation of the system on a collective level. Why? In the next section I will discuss that. I will begin with the attempt that was connected to the evaluation and then turn to the attempt that was prompted by the decrease in economic resources to the VT.

5.3 Expansive Actions and Tendencies toward Learning Activity

At the time of the evaluation, half a year after the idea of the VT was initially introduced, the discussion about the goals and the vision of the VT seemed to have been taken over by the VT teachers. The evaluation showed that the VT teachers wanted to continue with this organization (E4:22 and Appendix I). The VT organization seemed to have created a need. As Engeström claims “Each new expanded need is produced in an activity which in turn is established on the basis of a previous need that, having met its object, has
been transformed into a motive” (1987 p. 167). This can be interpreted as the motive of the school practice, transmission of information from a single teacher to a group of students, now being challenged by a new growing need to work more collaboratively and boundlessly. This finding is in accordance with other studies indicating that teachers in integrated schools seem to want to work in teams though it is time-consuming (Pramling & Mauritzon, 1997; Rogoff et al., 2001).

Sam had made an extensive plan for the evaluation process, which seemed to play a significant role in the discussion. Teachers in various formations discussed the evaluation report intensively. This also seemed to reinforce reflection upon the object of the activity in the entire school, as something unique to the diverse teacher groups vs. something common to all the teachers in North Valley. These acts of reflection should be understood in relation to the very compartmentalized structure of North Valley that the narrative in Chapter 4 reveal.

For example, during the evaluation phase, Sissi, a fifth grade teacher, expressed questions regarding her role as a schoolteacher in North Valley vs. a “fifth grade teacher.” In the meeting where the school teachers had discussed the evaluation report she had initiated a discussion about the consequences it would have for her own work in case the VT structure (Figure 2.1) would involve and be applied to all grades in the school (E4:32). She seemed to envision a conflict and relationship, between the VT structure becoming the new basic organization for the entire school and her own object – the fifth grade. It would require an approach where the teachers shared the responsibility for all children in the school instead of as now – being responsible only for the students in the class. The compartmentalized structure, in other words, became exposed to pressure. The evaluation report mediated this insight. This expansive action predicted a contradiction between the present practice and a possible new practice. This expansive action is depicted in Figure 5.4
Another example of breaking away from the compartmentalized structure in North Valley was that the teachers decided to have one of their meetings later in the afternoon in order for the child care teachers to attend. In case the VT structure should come to involve and be applied to all teachers in North Valley it was important for all to meet. This idea of late afternoon meetings was something Patricia had tried to introduce but had encountered resistance to, and therefore had given up. One could therefore say that Patricia’s goal or vision in this phase started to take shape as a collective goal and emerging new object. The discussions were based on the assumption that the VT would be the basic organizational structure even though the future expansion of the structure and practice was hard to visualize and little discussed. This would require an entire new reconstruction of the division of labor in the school and that would violate the compartmentalized structure.

These kinds of reflective and expansive actions and interactions increased during the period when it became clear that the resources for continuing with the VT would end; in other words a contradiction with the resource-producing system caused tensions that seemed to have expansive potential. The manifestation of the untenable in the situation was the tight schedule that would not be possible to follow with decreased teacher hours. A significant example was when Rose claimed that they should long ago have discussed the aim of the VT and that they had to find an entirely new work practice,
starting with the children’s needs. This was a response to, and therefore mediated by, Sam’s suggestion about continuing with the VT, in terms of a whole school day, despite decreased resources. Rose made clear (see E4:40) that she was dissatisfied with how the VT had been realized and that she wanted a much more integrated and mutual collaboration carried out on equal terms. Thus, Rose’s action made visible a contradiction between the way they carried out the work today and a possible “entirely new” way. The expansive action discussed here is depicted in Figure 5.5.

From the evaluation and during the ending phase of the project, in other words, there were potentials for expansion. The teachers started to accept the idea of an expanded VT structure that would involve the entire school. In addition, the object of the VT was consciously reflected upon. This happened mainly in the form of individual actions but they were publicly expressed. Thus, I would say that the boundary system of VT constituted an “arena” for
expansion. In the Pocket Oxford Dictionary (Fowler, 1924) arena\textsuperscript{110} is defined as “Centre of amphi-theatre; scene of conflict sphere of action.” Integration might be organized in the form of VT, child-school or a similar structure. I think of these organizational forms as arenas of conflicts and spheres of actions and thus they constitute potentials for expansion, or collective zones of proximal development (Engeström, 1987). The encounter between the three different institutions made necessary creation of solutions to diverse situations/problems. In that regard the activity became transparent and thus open to reflection and conflicts. The activity in the boundary system of VT as well as in North Valley as a whole began to motivate new actions.

The role of mediational instruments in this process is noticeable. As pointed out, the evaluation report and the subsequent discussion appeared to play a major role in the developmental process that took place. The same was true of the discussion where Rose came to question the conditions and the goal of the integration. It was mediated by Sam’s suggestion that instead of being constrained by a tight schedule they should work in accordance with the idea of the integrated whole-schoolday (see Chapter 2).

Norman (1993) calls instruments that complement abilities and strengthen mental powers “cognitive artifacts” or “tools of thought.” Norman distinguishes between experiential and reflective artifacts. Experiential artifacts provide ways to experience and act upon the world, a telescope is an example. Reflective artifacts provide ways to modify and act upon representations. Displays of games and timetables are given as examples.

We could think of both the evaluation report and Sam’s suggestion as examples of cognitive artifacts. Both helped the teachers to experience the VT work as well as reflect and act upon its further implications. I will in this context call these cognitive artifacts, i.e., the evaluation report and Sam’s suggestion, communicative tools. With communicative tools I have in mind tools that facilitate members’ reflection upon and communication about their present as well as future activity. For example, instruments that support discovery of contradictions, incongruities, and double-bind situations in their activity systems are such tools. Engeström’s (1987) triangular model,

\begin{footnotesize}
\bibitem{Lave}
Lave et al. (1984) call a behavior setting with durable and public properties an arena. A supermarket is an example. It is a physically, economically, politically, and socially organized space-in-time. It is not negotiable directly by the individual. A “setting,” in Lave et al’s. terminology, is an arena that is repeatedly experienced, personally ordered and edited.
\end{footnotesize}
conceptualized as a secondary instrument of expansion, can serve as an example (see Chapter 3). However, as we will see there were not adequate tools present in the continuation of the integration process. As discussed, there were a number of expansive actions - or in Bateson’s terms actions toward learning III but the transition to substantial expansive learning, or learning activity, never fully took place. I believe the reason it didn’t take place had to do with this lack of communicative tools but also with lack of what I will call conceptual tools. With conceptual tools I have in mind concepts, theories, and methods that would, in the teachers everyday-work-practice, mediate imagination and conceptualization of what the new object of the child as culture- and knowledge-creator would imply in practice, i.e., in the school’s everyday life. I will return to the issue of communicative and conceptual tools in both Chapter 7 and 8. Let us now look at the teachers’ attempts to expand their object of work through the model of expansive cycle of learning actions (Engeström, 1987; 2000), discussed in Chapter 3. I saw two expansive cycles and the beginning of a third during my time in North Valley.

### 5.3.1 Cycle I

The first step in an expansive learning cycle is a need state and questioning of the present activity. As accounted for in Chapter 3, a primary contradiction is an inner conflict between exchange value and use value within a component. The integration reform and its local adaptations could be interpreted as caused by historically evolved contradictions in the three involved activity systems, i.e., the compulsory school, the pre-school class, and the leisure-time center. In Chapter 2, I discussed how different interests and functions have been struggling in the school, such as, religious, moral, educational, political, and economical. Isling (1980), for example, talks about the qualification vs. the socializing function and how that has resulted in effects all the way into the classroom practice.¹¹¹

¹¹¹ Though we are now mainly interested in the primary contradiction in schooling it should be pointed out that the different purposes co-existing in the child care system have been discussed in terms of a dichotomy: child milieu vs. repository (Ladberg, 1974). This contradiction has, together with pedagogical and psychological trends, influenced the activity, for example in terms of the relationship between learning and care, free play and organized activities and the role of the pedagogue.
As described in Chapter 2, North Valley was founded in 1981. Until 1990 the school was without any child care groups. In 1990 the first child care group, i.e., the open leisure-time center, moved in to the school. As was also discussed in Chapter 2, the trend of moving leisure-time centers as well as voluntary leisure clubs, etc. into the school had already started in the 1970s. The SIA investigation was a milestone in this movement. The substitute whose voice is present in the interview excerpt in E2:1 describes the tensions that emerged in a way that could be understood as an expression of the tension between what Isling (1980) calls the qualifying and the socializing functions. We could assume that the qualifying function dominated here as in any other school and that the immigration of the open leisure-time center interfered with this function.

Moreover, in interviews with the school teachers (Nilsson, 1998) I learned that they were struggling with changes in the object. The teachers told me that they find children not behaving as they did twenty-five to thirty years ago. Keep in mind that most of the teachers in North Valley had been there since its start. These teachers were experienced longtimers in the profession. They claimed that children today are less inclined to obey, that they are more disharmonious and have difficulties in concentrating, yet are more outspoken and “free.” With Engeström’s definition of the object in schooling (see Chapter 3) we could say that the children have changed in such a way that it is not possible any more to “merge the book with the child” in an easy way. This might indicate that qualification alone is not satisfactory to the students. Thus we could conclude that the first step in the expansive cycle I, depicted in Figure 5.5, contained a primary contradiction that on an abstract level may be characterized as qualification vs. socializing. On the local level this contradiction was instantiated in the division of labor and the object as compartmentalized vs integrated structure and reproduction vs meaningful learning, respectively.

The second step in an expansive cycle is aggravation of primary contradiction which causes double-bind situations. As said, in 1990 the first child care institution moved into North Valley, followed by the pre-school class in 1993. At the same time there was a merger on the administrative and board level of the child care and the school. This implied that the new North Valley district comprised a number of pre-schools as well. A pre-school teacher became the principal. In addition, in 1995 a computer network was implemented, which implied the expectation that the teachers rethink their teaching style and tool-
use in the classroom. On top of that the 5thD started in 1998. The substitute
describes in a vivid way how the open leisure-time center’s emergence caused
tensions. For example, the open leisure-time center not only had to “be there”
they had to “cooperate (with the school) as well.” In other words, all these
changes had an impact on the division of labor. In a similar vein the teacher
who was the driving force, or “fire soul” (Nocon, et al. 2001), in the
computerization of the school describes changes that that implied:

Perhaps one soon can leave the teachers desk, I hope we soon will. We are on our
way. But there are a great number of teachers who still use the “oracle
pedagogics” – standing at the teacher’s desk and talking. With the computer and
more computers I think we can release more of this research that the kids think is
fun, that they can search for different sources, that they can sit and write and put

If we contrast her vision with a different teacher’s perception of the “modern
methodology” it is likely that changes in the instrument component caused
tensions:

The modern methodology is about putting the students in a team and then they
are supposed to search for the knowledge themselves. Sometimes it feels like:
they do not do that because they start to play. They are not capable of carrying
out that responsibility. Everyone does not think it is enjoyable to search for
knowledge because it is hard work. (In Nilsson, 1998)

The principal summarized this period:

I think there has to be some kind of chaos in order to have the possibility of
creating something new. I feel that way about this reconstruction that we have
had: computers in, a new boss and some new collegues and a leisure-time center
which has “messed around” and “destroyed.” Everything has been in chaos, you
could say, during some years. But now we are on our way up again. (In Nilsson,
1998)

Thus, we could conclude that the primary contradictions in the first step became
aggravated due to all the changes that took place in the 1990s. The primary
contradiction in the division of labor became aggravated due to intence influences
from the child care. A contradiction in the instrument emerged due to
implementation of computer based tools. These aggravated contradictions resulted
in secondary contradictions, with the object, in the way that the object of schooling
or reproduction, or in Isling’s terms qualification, became questioned.
The third step in the expansive learning cycle is about modeling a new solution to the double binds generated by the secondary contradictions. It is about object and motive construction as well as construction of new means, rules, and division of labor. I perceive Patricia’s design of the VT in the spring of 1998 as a way to model a new solution to the double binds that existed in North Valley at this time.

The fourth step in the expansive learning cycle concerns examining the new model. This took place during the summer and the beginning of fall, 1998. The two teams met, scrutinized Patricia’s model (E4:5 and 6) and designed their new work practice.

The fifth step is about implementing the new model. In this phase tertiary contradictions arise. A tertiary contradiction is an emerging contradiction inside a system, between the present practice in a system and a possible new and more advanced, future practice. Engeström states:

...the participants of the activity system face intense conflicts between the old and the given new ways of doing and thinking – the tertiary contradiction. These conflicts take different forms. They may be struggles between the old rules and the new instruments... (1987, 334)

During the fall and winter of 1998 the VT system was put into practice. This can be understood as the fifth step in the first cycle. At the end of this phase the evaluation took place, which can be understood as a manifestation of the sixth and last step. This step is about reflecting on the process and consolidating the outcomes into a new stable form of practice. In this phase quaternary contradictions arise between the central activity and its neighboring systems.

In the evaluation discussion, expansive actions were visible, as depicted in Figure 5.4. These expansive actions indicated a tertiary contradiction, i.e., tension between the present activity and a new, different and perhaps more advanced one. The evaluation was, at the same time, a means for reflection. The outcome of the evaluation showed that there was an agreement about continuing with the VT organization. No obvious quaternary contradiction could be discerned in this phase. The expansive learning cycle I is depicted in figure 5.6
The analysis in this chapter points out primary contradictions in the emergent boundary system of VT. These could be found in the division of labor as compartmentalized structure vs. integrated structure, in the instrument component as traditional tools vs. tools promoting knowledge and culture creation, and in the rule system in terms of control and order vs. appreciation of the children’s voices. These contradictions are depicted as the first step in the expansive cycle II.

As has been discussed, the evaluation process seemed to imply that the teachers started to embrace the idea of transforming the whole school based on the VT structure. Since the VT structure implied a new object of schooling we could say that the idealized object of the child as culture- and knowledge-creator had started to materialize. This materialization sharpened the primary
contradictions into secondary contradictions. The primary contradictions in the component of division of labor, instrument, and rule developed into contradictions with the new object. This is shown in the second step in cycle II.

In the evaluation process there was a discussion about the next step in the VT. This was manifested as modeling of new groups such as pre-school class-grade 1 or pre-school class-grade 2. This is shown as the third step in cycle II.

The fourth step in cycle II - examining the new model - is located in the discussion of the new structure in the VT. The decision from the meeting was that they would go for preschool class and grade 1. This decision was later questioned in favor of a structure something in-between pre-school class-grade 1 and pre-school class-grade 2 that came to be the realized model when implemented in the fifth step.

During this phase the team members were faced with the fact that change in economic resources would not permit them to continue with the VT the way it had been structured and carried out. This resulted in reflection and thus the sixth step. In this phase expansive actions were discerned (see Figure 5.5) that made visible a tertiary contradiction.

The expansive learning cycle discussed above is depicted in Figure 5.7.
From the discussion it may be concluded that the different phases in the two cycles do not follow a straight-forward path but overlap in time. Cycle II starts up in the midst of cycle I, which means that the processes of modeling, examining, implementing, and reflecting often were intertwined. What is also clear from the modeling of the cycles is that the tertiary contradictions that could be discerned became visible in the processes of reflecting on the new work practice rather than in the implementation phase which would be the case in some expansive cycles reported before (see, for example, Engeström 1999, 2000: Ahonen et al., 2000). This supports the conclusion that the boundary system of VT comprised an arena for development. The activity in the VT seemed to provide space but also paved the way for reflection on a new kind of object and entirely new activity. The VT implied “doing new” which seemed to be followed by “thinking new” in terms of imagining a new activity.
5.3.3 Cycle III

The expansive situation shown in the ending phase of cycle II made obvious the significant double-bind located in the division of labor. The schoolteachers had benefited from the new organization. When the recreation pedagogues were pushed to continue the collaboration, the contradictions became sharpened. This made the untenable situation evident. In order for the collaboration to continue there had to be a shift, especially in the division of labor. The recreation pedagogues were not prepared any longer to carry alone the burden of the collaboration. In other words, the primary contradiction in the division of labor between the compartmentalized and the integrated structure became aggravated. Therefore the ending phase of the integration and VT organization seemed to carry real potential for expansive learning. In that regard we could say that a third expansive cycle arose. Rose’s questioning and “exploding” (E4:40) could have been a springboard\textsuperscript{112} into a process of creating an entirely new activity. However, this expansive potential did not result in a completed third developmental cycle. Instead the VT organization was called off. Despite the teachers’ willingness to continue with the integration and their acceptance of the idea that VT would be the basic structure in the school, the teachers did not seem to be able to turn the contradictions into processes that in a more fundamental way transformed their practice. As Engeström points out, “A need state contains no automatism. It may be “resolved” through regression or it may be resolved through expansion” (1987, p.169).

The initiated but uncompleted third expansive cycle is depicted in Figure 5.8.

\textsuperscript{112} “The springboard is a facilitative image, technique or socio-conversational constellation (or a combination of these) misplaced or transplanted from some previous context into a new, expansively transitional activity context during an acute conflict of a double bind character. The springboard has typically only a temporary or situational function in the solution of the double bind” (Engeström, 1987, p. 287).
The three expansive learning cycles help us to obtain a clearer understanding of the processes that took place in North Valley. Moreover they illuminate the lack of instruments to facilitate the process and ultimately the object. I have claimed that the teachers in North Valley lacked communicative and conceptual tools for turning the integration attempt into a successful reconstruction of the object and the entire activity in North Valley. In Chapters 7 and 8 I will discuss further what such tools might look like. Before I do that I will consider the processes depicted above from the perspective of communication, boundary-crossing, and cultural hybridization.

### 5.4 Communication

The role of communication\(^ {113}\) in activity has been considered by Davydov who argues that:

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\(^{113}\) Here I mean communication in a generic sense.
…collective and individual activity is realized in the form of material and spiritual social relationships. Communication is a processual expression of these relationships. Communication can exist only in the process of different kinds of activity realization by people.

That is why the notions of activity and communication must not be opposed. At the same time, one cannot study communication and evaluate its role in people’s lives without examining their activity. Communication only gives form to activity. (1999b, p. 47)

Nocon (2000) argues that the joint nature of activity is achieved in communication, and therefore she claims that, “While communication, as Davydov points out, cannot exist except in activity; activity cannot exist except in communication.” (p. 89). In this section I will focus on communication as a vital aspect of activity.

As discussed in Chapter 3, Engeström, et al. (1997), based on Fichtner (1984) and Raeithel (1983), make a distinction between coordination, cooperation and communication as forms of intersubjectivity. The general structure of coordination implies that there is a common given script but each actor has his or her own object though the objects are overlapping. The general structure of cooperation implies that the actors share a problem, and, in their efforts to solve it, they go beyond the given script. The general structure of communication implies that the object, the script and the interactions are reconceptualized.

Engeström claims that the developmental forms of intersubjectivity can be regarded as phases of any cycle of genuine learning activity, which corresponds with the idea of expansive cycles. Each expansive transition is a transition from the individual to the collective, or from coordination to communication.

Flising (1995) shows that work teams comprised of schoolteachers, pre-school teachers, and recreation pedagogues often go through different phases before they find their identity. There are often three such phases. They can be parallel, overlapping, and show a developmental trajectory:

At the first level, or development phase, established professional roles are emphasized highlighting the fact that everyone involved, based on her competence, is performing tasks which form part of her own profession. In this
phase cooperation is seen as a parallel task. Time is divided in some way, and then everybody turns to her respective tasks.

Over time people get to know each other and this leads to greater cooperation and continuity or joint, theme-based projects for instance.

This may in turn lead to the staff trying out new ways of working and cooperation when developing activities. Once at this level or development phase, it seems that the staff starts relaxing earlier, well-established professional roles and preserves, and starts paying greater attention to personal skills and interests. If all goes well, these skills and interests are supplementing each other, resulting in a more dynamic and multifaceted environment for the children than before when everyone was occupied with her own particular tasks (1995, p. 38–39 italics added, my translation).

Applying Engeström, et al.’s concepts of coordination, cooperation, and communication, it makes sense to apply coordination to the first level, cooperation to the second, and communication to the third. On the first level there is an assumed common script in that collaboration is taking place, yet, as parallel work, i.e., each having their own object. On the second level they share a problem and collectively help out. The “sharedness” is stressed and we can assume that they are starting to go beyond the given script. On the third level new ways are tried out and co-construction of the content in the activity takes place. This level assumes that the object, the script and the interactions are reconceptualized.

This process could be recognized in the VT in North Valley. From the start it was evident that the schoolteachers were determined to make sure that they were in charge of the seven-year-old children’s education. This was made clear very early on in the process of developing the VT. With Flising we could say that the teachers, in the beginning of the VT project, stressed their professional roles and stuck to what that role prescribed. They coordinated their work in that they followed their scripted roles, i.e., “each concentrating on the successful performance of the assigned actions” (Engeström et al. 1997, p. 372).

As has been described, the teachers developed a practice that implied elements from the school, the pre-school class, and the leisure-time traditions. With Flising we could say that they found ways to collaborate. Their intersubjectivity could be described in terms of cooperation in that there was a focus on shared problems. They worked together, developed shared projects
such as, for example, theme-based activities, i.e., problems for which they tried to find “mutually acceptable ways to conceptualize and solve” (Engeström et al. 1997, p. 372). One can therefore say that a mix of coordination and cooperation characterized their intersubjectivity from early on.

From start the teachers several times expressed a need for guidance and support. This makes sense due to the fact that the goal of the VT never was discussed and clarified. Also, the principals asked for guidance in terms of external supervision. One might theorize that what they asked for were tools to be able to reconceptualize their organization in relation to their new, yet unclear object.

This kind of discourse, i.e., a mix of coordination and cooperation, remained in the VT until the spring of 2000 when it was evident that the extra resources the VT had utilized would cease. At this time a shift in the manner of conversation became obvious. The tone was not as polite as before but, on the other hand, “the actors started to focus on reconceptualizing their own organization and interaction in relation to their shared objects” (Engeström et al. 1997, p. 373) i.e., communication could be discerned. This is the phase that I claimed, in the previous section, contained the main potential for expansive transformation. It was here, for example, that Rose exclaimed, or in Bateson’s (1972) terms made a meta-communicative statement, that they should have had a conversation long ago about the aim of the VT and the integration, with the purpose of developing an entirely new work practice.

Flising described the third phase as one where new ways of working are tried out and where development of the content takes place collectively. This implies a letting go of professional roles and territorial thinking and behavior. Instead, individual competencies become valued. Tendencies toward communication did also take place during the time of the evaluation discussions. In these discussions, questions were raised about the purpose and the goals of the VT. Even though I saw tendencies toward communication, the kind of actions Flising describes did not continue in a sustained way. As pointed out earlier, new working methods and attempts to collaboratively develop the content in the activities did not stabilize.

The discussions that I would characterize as communication were rather straight-forward and direct. Based on both examples, Rose confronting the
work team in the ending phase and the processes during the evaluation, it is clear that communication was not a smooth and tension-free process. On the contrary, tendencies toward communication seemed to be connected to emotions of stress and resentfulness, something Engeström et al. confronted in their study on polycontextuality:

The artifact-mediated construction of objects does not happen in a solitary manner or in harmonious unison. It is a collaborative and dialogical process in which different perspectives (Holland & Reeves, 1996) and voices (R. Engeström, 1995) meet, collide, and merge. (1999e, p. 382)

Tendencies toward communication, as defined by Engeström, et al., imply conditions for learning activity, in that the object is subjected to reflection and reconsideration. However, in everyday language I think we tend to see communication as a pleasant and friendly form of intersubjectivity, equalized with dialogue. What I saw in North Valley was, as stated, the opposite - tendencies toward learning activity (or call it communication) were connected to stress and conflicts. However, instead of releasing an expansive process, the conflicts resulted in a retrograde motion. Thus the potential for expansion was not realized. As I have claimed before, there was a lack of communicative tools to mediate the situation.

Leadership is often discussed in the context of organizational learning and development (see, for example Senge, 1993). It is considered that it is the leader who possesses both the responsibility and the power to impact change processes and enhance dialogue and mediate communication. As shown in Chapter 4, this was also discussed in Skolverket’s report (2001). The report claims that in order for integration projects to succeed the principal’s support is crucial.

In North Valley I saw two ways to initiate and manage the integration as well as the on-going work and communicative process that were taking place. One was a top-down mode initiated by Patricia that resulted in resistance. Her goal was to create a new kind of school practice. She took actions aimed at changing the school practice that was in agreement with the official documents and statements. However, her methods seemed instrumental in nature, assuming a causal relationship between her expressed visions and outcomes in conformity with these visions. She did not seem to consider that she was dealing with a group of professionals who had a strong identity yet seemed to need guidance, but on their own terms. Patricia was able to
formulate what I would define as a prime example of a double-bind situation, though she was not able to manage it:

On the one hand, no one’s allowed to be in charge—they want to do that themselves. On the other they can cry out: ‘is there no one here who can make a decision?’ This makes it very difficult, you know. I just don’t understand them. Which way do they want it? (Interview, 05/25/99, E4:19)

My understanding of this situation was that the teachers requested leadership and guidance but in such a way that they would be shown respect for their work and insight into their “world.”

The other attempt was, I would hesitate to say a bottom-up mode, but a process guided by ideas of participation. This process was led by Sam and seemed to be more productive at least in its initial phase. However, when in a strategic, important moment in the ending phase of the VT, he was asked for a plan to redesign the VT in order for it to be adjusted to the present situation he “withdrew” and handed over the responsibility to the teachers, a responsibility that seemed too difficult for the teachers to handle at this time:

Monica: I was also thinking about when you said this, Sandra asked whether you had any suggestions as to how this could be done. And then you said, “No, do you?”
Sam: Mmm.
Monica: You said “No, do you know that one?”
Sam: Mmm, yes.
Monica: What were you thinking… how am I to interpret that?
Sam: Interpret what?
Monica: You know, like, I was thinking that [pauses] you wanted them to take responsibility.
Sam: Yeah.
Monica: And planned, how to best continue to cooperate even though it won’t look exactly like it’s done the last two years. But she wanted you to clarify things, how they would work. Then nothing more was said.
Sam: Uh-uh. You see, my thinking was that I’ll say this to get them thinking, then sooner or later something will come out of it. Or we’ll see on Wednesday if this has led to anything.
Monica: So you wanted them to...

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114 I would hesitate to ascribe the different approaches taken to personal characteristics. We should bear in mind that Patricia was a preschool teacher and Sam a schoolteacher, which - in all probability - influenced the interactions between and within the teachers and their groups.
Sam: I wanted to make them think.
Monica: Would thinking…
Sam: I think something happens when you’re made to think.
Monica: Rather than if you’d presented a complete proposal?
Sam: That’s the simplest way, that’s what they want. (Interview, 05/16/00, E4:39)

In the rear-view mirror we can see that this situation was an entrance into a communicative process, or learning activity, that unfortunately was lost and neglected.

In a way we could say that both these strategies led to a betrayal of the teachers and their needs. This was not done consciously or purposefully yet the result was that the teachers were let down. My interpretation is that neither one of the principals acquired or was offered adequate tools for their task.\textsuperscript{115}

\section*{5.5 Transformation through Boundar-Crossing and Cultural Hybridization}

My hypothesis when starting the study of the VT was that integration of the three different institutions might imply steps toward a new pedagogical practice, a practice that would draw on the three traditions but be transformed into a new practice that was neither of the three, or rather like a hybrid\textsuperscript{116}. My idea was something like: blue and yellow make green.

Applying the acculturation and accommodation framework discussed in Chapter 3, relevant comparisons can be made concerning the encounter between the school and the child care institutions and the encounter between minority groups and the dominant society. As the narrative in Chapter 4 reveals, the child care institutions can represent the role of minority groups in their relationship to the dominant school culture. The child care institutions resembled the situation of “involuntary minorities” (Ogbu, 1991) in that they did not move into the school at their own request. The child care institution’s

\textsuperscript{115} See also Axiö (2000) for a discussion on the principal’s role in integrated groups.

\textsuperscript{116} Hybrid can be defined as follows: “The offspring of two plants of different species or varieties of plants. Hybrids are created when the pollen from one kind of plant is used to pollinate a different variety, resulting in an entirely new variety.” (\url{http://davesgarden.com/gardenology/go/476/}, 10/10/02)
affirmative attitude to the integration and to the VT has similarities to the attitude of “immigrant minorities” (Ogbu, 1991). The child care teachers looked at the encounter in an additive way - both for their own professional sake but also for the children’s. I find it useful to apply Berry’s, Gibson’s, and Ogbu’s classification, not as static categories but as a way of thinking of the different phases that the integration process went through. In doing so, Berry’s four categories, i.e., assimilation, integration, rejection, and de-culturation can be understood in terms of situated actions.

It is clear that the school was the dominant culture. The child care teachers’ way of handling this circumstance was mainly integrative, meaning that they accepted the school dominance even though they never gave up their own value systems and attitudes to their work. This was, for example, reflected in the maxim and model “one should do what one is good at” as well as the pattern of coordination discussed above. There was a given script, dominated by the school culture, that the child care teachers adhered to though they had their own agenda.

The behavior of the child care teachers tended to be situationally assimilative especially when the context was clearly school-framed, as for example when Rita took the role of substitute (E4:12 and 13). Without hesitation she performed the role of a teacher. She received information from Sandra about what to teach the children and she carried out the task accordingly. This phenomenon, i.e., that child care teachers assume an identity of a schoolteacher when put in a school context, is shown elsewhere (Calander, 1999; Hansen, 1999; Haug, 1992; Henckel, 1990).

However, in other contexts and phases the child care teachers, especially the recreation pedagogues, showed a determination to not give up their ideas and identity. Rejection was clearly taking place in the ending phase of the process. The recreation pedagogues were rejecting the dominance of the school, which led to conflicts and open argumentation, a situation Gibson recognizes:

In situations where the dominant group presses for assimilation, or conformity to the dominant culture, but the subordinate group views assimilation as inimical to its interests, we may anticipate intergroup conflict […]. (1991, p. 374)

It is interesting, however that in this phase of rejection the steps toward communication, and thus expansion, could be discerned. The recreation pedagogues claimed their right to existence and collaboration on equal terms.
It can be said that they demanded **multiculturalism** and a policy of additive **acculturation**.

Monica: What can be done to make you feel as if it’s not just you helping them out?
Rose: If we for instance could have gotten some help with administrative tasks, or if they’d helped us out sometimes when things were piling up with the groups and one of us was off for one reason or another. (Interview, 05/30/00, E4:42)

They not only asked for multiculturalism, however; they also, through the voice of Rose, pushed for what I here will call **hybridization**. They suggested a take on the situation where the VT would be entirely reconsidered based on knowledge and experiences developed in their respective traditions and cultures. Rose said:

It’s about... I think we could’ve done something, but that we would have been forced to cooperate across the divides in a **totally different way** and then it’s a question about attitude. (Interview, italics added, 05/30/00, E4:40)

My interpretation is that the recreation pedagogues advocated creation of a new object and activity based on multiculturalism and diversity.

If cultural integration has the potential to be productive it is not because of assimilation but because of the involved teacher groups’ persistence in asserting their cultural traditions. As Gibson discusses; immigrant students succeed in school “*not* because they have assimilated but because they have strong home cultures and a strong and positive sense of their ethnic identities.” (Gibson, 1991 p. 374-375)

Davidsson (2000) points out that integration is the intended goal of the collaboration between the pre-school class, the school, and the leisure-time center. What that means is open for interpretation. It might mean shared administration, premises, or personnel. However, it might also mean a new kind of practice where play, creativity, care, and learning are central elements. Davidsson’s interpretation of the way of formulating the new curriculum (Lpo94) is that the individual teachers, based on their own specific professional knowledge and experiences, will construct a new kind of pedagogy for children’s learning:
The new construction should be based on a consensus view of the learning and developmental processes of children. In this respect, the above passage can be understood as requesting certain parts to be similar and common, while others are kept separate, i.e. the activities are supposed to differ in some way. The earlier traditions should form part of the new. (2000, p. 55, my translation)

5.6 Summary and Conclusion

I will end this chapter by relating the outcome of the analysis to the purpose of this study, i.e., the potential for development that the integration reform possesses. Where do we find the potential for school development that I claimed the integration reform possesses?

Despite the initial reluctance to the VT, the teachers initially assigned to work in the VT took on the task of creating a new activity. In that process they drew on their professional identities, experiences and knowledge - they used their toolkit (Swidler, 1986). They created an activity that was “richer” and more varied than the traditional school practice. When asked to integrate, the teachers coordinated their former activities and cooperated in the construction of a new one. The dominating feature of the activity was that the three institutional traditions existed side-by-side (Brorman, 2000) resulting in, not a hybridized activity, but a diverse and multifaceted one. Thus, the object of the school activity was never expanded or reconstructed in a full sense. The object of the activity was largely taken for granted by the teachers, although based on different perspectives.

The most obvious and essential contradiction was the one between the compartmentalized division of labor and the new envisioned object. The schoolteachers, especially, advocated and defended this structure. I believe that the schoolteachers’ defense of the structure should be understood as motivated by the object in their previous activity system, i.e., schooling.

Due to the structure of the integration, i.e., the VT, the whole school eventually became involved. In this process, and after some time, the vision of a new object started to take shape as an emerging new object. As a consequence, contradictions between the new envisioned object and the components in the emerging boundary system of VT became aggravated. This was true especially when it came to the division of labor. The compartmentalized structure became obsolete. New forms of collaboration
between the schoolteachers and the child care teachers emerged, were required, and were approved. For example, common planning- and decision sessions were implemented.

The style that characterized these actions and interactions of expansion can be conceptualized as communication. However, it was not smooth but took place in an atmosphere that was tense and fraught with conflict. Instead of understanding this situation as destructive it should be understood as a situation that carried a real potential for development. In this situation “why” questions were asked which indicates expansive learning (Engeström, 1987).

The emerging new object motivated new actions that could be understood as responses to contradictions. As has been stated, the contradictions were based in both the “objective reality,” i.e., evolving tensions in the institutions comprising the VT, but also in the vision expressed by the principal. Visions and goals are not enough to achieve change and development (Engeström, 2000). However, the role the vision played in this case was to create a platform for “taking new actions” as well as to make visible the inappropriateness of the existing systemic structure for the new envisioned object. Perceived in this way one could say that the emerging boundary system of VT created an arena for expansive transformation.

The tools that mediated these expansive actions were the evaluation report and a proposal about continuation of the VT in an open-minded manner. We could therefore add evaluation reports and proposals as mediating artifacts that Engeström et al.’s. (1995) found facilitating boundary-crossing and mediation in emergent boundary systems. Such artifacts are meetings and talks, dialogues and argumentation, physical artifacts such as work-materials, pointing, and body movement (see Chapter 3).

However, the expansive actions were never transformed into consiously completed collective expansive cycles. When expansion did not take place there seemed to be a lack of mediating tools. It is also clear from the analysis of the expansive learning cycles that there were periods and situations where the work would have benefited from a more explicit discussion about what the vision and goal of the VT might imply. My conclusion is that the teachers lacked adequate tools to manage their complex task. In her study, Munkhammar (2001), accounts for the same phenomenon, i.e., teachers want to develop their work but they lack tools:
She [schoolteacher] is grappling with the idea of changing the approach to learning and knowledge—to something else than just "pen and paper." The teacher thus expresses her struggle with these contradictory thoughts in her approach to child, knowledge and learning. She is reluctantly allowing these notions to guide her, although she would like to change them. The teacher is controlled by a dominant discourse, but is also aware of this. However, the teacher lacks "the tools" which can help her change this situation (Munkhammar, 2001, p. 144, my translation).

I call the kinds of tools that would make the ideal vision of the child as culture- and knowledge-creator comprehensible conceptual tools. Conceptual tools might be accessible concepts, theories, and methods that would mediate imagination and conceptualization of what the new object of the child as culture- and knowledge-creator would imply in practice, i.e., in the school’s everyday life.

The analysis of contradictions in the VT and the learning cycles also highlights a need for communicative tools. The contradictions disclose conditions that need to be resolved in order for development to take place. The major contradiction seemed to be located in the division of labor. The compartmentalized structure had a negative impact on the development of an object defined as culture- and knowledge-creation. However, this contradiction can only be understood if the schoolteachers’ and child care teachers’ previous object of activity is taken into consideration. Munkhammar (2001) illuminates this when she accounts for her finding that in a milieu where recreation pedagogues do not care about whether the children learn to read and write, teachers will not let go of the control of, in this example, literacy teaching. Another example is when play becomes a threat to learning to read, write, and count. She asks:

But why does the work team never become a forum that, based in interest and competence, divides labor and responsibility? Why does the work team never become a forum in order to collaboratively listen, argue, reflect, and evaluate with the aim of developing the activity? […] The teachers are left alone to manage this on their own, with the rhetoric that they are professionals (2001, p. 165, my translation)

I have interpreted this condition as a need for communicative tools. The teams of teachers need tools that facilitate members’ reflection upon and communication about their present as well as future activity. For example,
instruments that support discovery of contradictions, incongruities, and double-bind situations in their activity systems are such tools.

Thus, to answer the question posed in the beginning of this section I would say that the potential for change of the school’s pedagogical practice is implied in the integrated activity, i.e., in the “doing the new.” However, in the “doing the new” or creation and construction of the new activity, the teachers need adequate tools.

In the following three chapters I will explore further what communicative and conceptual tools might mean. In Chapters 6 and 7 I will discuss the 5thD and the role it played in the VT and North Valley and in what way it can be, or not be, considered a communicative as well as a conceptual tool. In Chapter 8 I will discuss approaches to learning in the compulsory school and the child care that we could think of as conceptual tools.
In this chapter I will tell the story of the 5thD in North Valley. The narrative is based on fieldwork conducted over a period of three and a half years: from fall 1997 to spring 2000. I will describe how the 5thD project started, how the 5thD was employed by children, students, and teachers, and how it became institutionalized. Moreover, I will show how the collaborative endeavor between institutions to start and operate the 5thD was in no way a smooth and easy process but a process filled with tensions, conflicts, and pitfalls. As I will discuss in more detail in the next chapter, this process offered an entry into a way of thinking about the 5thD as a communicative as well as a conceptual tool, concepts I discussed in the previous chapter.

I introduced the 5thD to North Valley before the VT was even thought of. I had an, naïve, idea that it somehow would have an impact on the school’s pedagogical practice. As previously described, I knew the principal and some of the teachers from a previous study. Later, when the suggestion came up to turn the after-school site that was initially started into an in-school site I thought of it as a possible tool for the teachers which would facilitate and help them to make sense of each other’s culture and tradition. My idea was that it would comprise something like a “third space” (Gutiérrez et al., 1995) or a “boundary zone” (Konkola, 2002) and as such mediate the teachers’ interactions. I was interested in exploring whether the 5thD as a complex tool would facilitate the integration attempt.

With institutionalization I mean that activities become independent of particular persons and a “taken for granted task” (see Berger & Luckmann 1966) for a discussion on institutionalization).

The third space applies to occasions when the teacher’s script and the students’ counterscript converge. Gutiérrez et al. imagine the potential for classroom participants to bridge diverse identities and activities, and thus rearticulate power relations through “a dialogic pedagogy” in which various cultures, discourses, and knowledges are made available to all classroom participants (1995).

“Because of this hybrid, polycontextual, multivoiced and multiscpted context, the boundary zone is considered as a place where it is possible to extend the object of each activity system and to create a shared object between them” (Konkola, in press, p.7).
The idea that the 5thD would be a useful tool in the school was based on two assumptions: first, that the school was already computerized. As a result the 5thD would fit into the local culture while having the potential to enhance preexisting computer use. The second, that the 5thD stressed both learning and play as important features in child growth and development. Thus, it would appeal to all three institutions involved, at the same time that it would model play and learning as integrated activities. With the 5thD organized in this way I had a opportunity to study the impact of a complex tool in an integration attempt.

### 6.1 Fall Semester 1998 - Initiation and Preparation of the In-School Site

Patricia, the principal, was my gatekeeper. I knew her from a study I had done in North Valley during my undergraduate education. Our common experience at having worked as pre-school teachers for many years made it easy to bond: we spoke the same language. Returning home after a visit to the lab\(^{120}\) of Michael Cole and his colleagues at the University of California San Diego (UCSD) I proposed to Patricia the idea of starting a 5thD in the school, which seemed to appeal to her. An undergraduate student of Cole’s was in Sweden on an exchange and she was prepared to take on site-coordinator work. We discussed the project with Patricia and how it would fit with the school’s ICT-use and computer and software system. Their ICT equipment was exclusive compared to that of other schools in the town; which was due to an ICT project financed by a national foundation\(^{121}\) and initiated and run by a devoted schoolteacher who was an enthusiastic proponent of ICT. The introduction of computers into the school had not taken place without discussion. In particular, software was an issue of debate among the teachers. Software that was considered play, and therefore not perceived as educational, was controversial.

We were asked to meet with the teachers to talk about the 5thD, which we did. In the meeting the teachers wanted to know about learning effects on children participating in 5thD programs. This was a tricky issue since most research in the area comprised ethnographical case studies but not statistical data based on tests.\(^{122}\)

\(^{120}\) Laboratory of Comparative Human Cognition.

\(^{121}\) This was a project financed by Stiftelsen för Kunskaps- och Kompetensutveckling (The Knowledge and Competence Association).

\(^{122}\) See Blanton et al., (1997) and Mayer et al., (1997) for a discussion of effects of participation in the 5thD.
We tried to discuss these methodological issues as well as account for the guiding ideas behind the program. When we left the meeting, however, we were not sure we had been able to convey our message in a persuasive way.

After internal discussions, the school decided to become a host for a 5thD site and the teachers discussed what children would be offered a place in the 5thD. Eventually some criteria for selection were decided: (a) children with no computers at home and (b) children with weak Swedish. This criterion resulted in the selection of a group of mainly immigrant children. It was also decided that the site would run one afternoon per week.

The program started in January 1999 as an after-school activity for two hours once a week. The undergraduate student from Cole’s lab was the site coordinator and students from the university were assistants. At the end of the semester I conducted a group interview with the teachers of the children who participated in the program. One of the teachers, Sam, the computer-coordinator in the school at that time, was especially interested in trying out the 5thD during school time - an idea I introduced. This was also true of Sandra, one of the teachers who turned out to be one of the VT teachers. She was familiar with the 5thD since she had taken the class at the university, which included field studies at a 5thD site. She had also taken part in an open lecture by Michael Cole when he visited the university.

Sam thought that the 5thD idea was ingenious in that it offered the possibility for children to make choices based on individual goals and interests, at the same time as it offered teachers the opportunity to direct and influence the children’s work. Additionally he appreciated that the design with the maze offered an overview of available software in the system. He wanted the 5thD to be part of the activity of all six classes in the school. This was not possible as there was not a sufficient number of undergraduates.

In the subsequent discussions about the in-school 5thD I made a request for my (and the university’s) participation, which implied that the 5thD would be placed in the VT. I had been informed about the VT plans and that it would start in the upcoming fall. I introduced the idea in a meeting with all the VT teachers who seemed interested even though I clearly had difficulties in explaining my purpose with the project. Telling them that I was interested in the 5thD as a “change agent” was hard since that indirectly critiqued their work. It was no easier to explain my idea about the 5thD as a bridge between cultures, since culture was not a concept the teachers used to perceive themselves and their co-workers. Despite these
problems of communicating the aim of my study, which persisted during my time in the school, my proposal was accepted and it was decided that the 5thD would be part of the VT. However the fall semester was needed to arrange for the start, which took place in January 1999.

In this phase the collaboration was initiated with an association called New Forms\textsuperscript{123}, whose aim was to develop new forms for teaching and learning in schools based on ICT. New Forms provided resources for ICT related projects. New Forms was thus able to finance the site coordinator part time and contribute software and additional material. New Forms also financed a study tour for Patricia and Sam to California in the US, in order to learn about the 5thD and its implementation in school environments there. The study tour was enabled by the collaboration the research team had developed with their American colleagues. Patricia and Sam were shown several sites in California and met with teachers. The trip took place in October and upon his return Sam actively worked on preparing for the new 5thD in-school site. During his efforts, Sam tried to include the VT teachers. For example he brought the VT members to the 5thD site at the university\textsuperscript{124} in order to explore the activity and the equipment. The following fieldnote excerpt reveals concerns some of the teachers showed:

\begin{quote}
E6:1
We talked about Legologo, something that Sam wanted to try out in the school. We talked maze and task cards and Susan said at some point “are we getting help with this”? Sam implied that the team had the responsibility. Annie said that the children should take part in designing the maze. Sandra claimed that the children would not understand what this is all about. Afterwards, we talked a lot about the activity in terms of how a maze could be designed etc. The discussion seemed to have had an impact on Sara because she changed her mind and said that the children could join in after all. When we discussed the times when we should have the 5thD, Susan said several times that they were busy with theme work and other activities. I started to wonder if she really was interested in the 5thD. Sandra was more enthusiastic. We decided to have the 5thD once a week and the VT group, between 11:20 am and noon. (Fieldnote 11/16/98)
\end{quote}

During the Christmas break Sam completed his preparations. He told us he wished the VT teachers had been more involved. Before the semester ended the visiting

\textsuperscript{123} New Forms, later called Learning Lab, started as collaboration between the municipality, the university, and an industrial park localized in close connection to the university.

\textsuperscript{124} In addition to the 5thD site at North Valley there has been sites at the university library since 1996.
student and I were again invited to a teachers’ staff meeting to talk about the 5thD. We did not see the need to do so, since we had attended the meeting in the spring. Sam wanted our participation. He claimed that the teachers would take us more seriously than him, implying that there was a problem getting the project accepted. This time we had to promote the new 5thD - the VT version. The meeting turned out to be very uncomfortable:

E6:2
I felt an instinctive and huge discomfort. Sam stood in front of us all and talked. We were standing in the doorway and he said “Welcome” but he did not ask us to sit down. There we were in the doorway with our coats on while Sam talked about the 5thD. The first question we got was from a teacher that I remembered from the start of the last semester. She had worked at the school before but had taken time off for further education. She said something like “I have talked to the children in the 5thD and they tell me that the only thing they do is play soccer games, etc. Is it really so?” Sam transferred the question to Annie who said that it is important that the children like it and therefore she is not so hard on the rules herself. It was as if she had to defend herself. Sam asked what my role was. I started by talking about Cole in the US 12 years ago - disadvantaged children and research. I said something about child care and the school in the VT and that the 5thD mixes play and learning. I felt tremendously restricted and tried to say as little as possible. When I looked at the people around me they looked either empty or suspicious and sulking. Not one had a pleased or appreciative look. I took a look at Susan. She looked tremendously suspicious as if she were examining every word I said. It was as if she asked: “why are you here?” I started to wonder myself.

Sandra said something about scheduling the 5thD in the afternoon in order not to disturb the regular math and literacy classes! We said thank you and left. Patricia left with us and we all shook our heads – the whole thing was tragicomic. Patricia told us she was looking for a new job. She can not stay there as they do not listen to her any more. (Fieldnote 11/19/98)

In the same way as the first meeting that we attended, this meeting conveyed two contradictory messages. One was suspicion and resistance to what we suggested and represented. The other was interest and curiosity. I felt that on the one hand the teachers wanted to figure out if the 5thD would contribute and help them in their teaching, but on the other they deeply distrusted our ideas. Both viewpoints were expressed in questions they asked about what children learn in the 5thD. Again they wanted to know if there were any statistics showing improvement due to participation in the 5thD. The meeting also showed fractures in what seemed to be a collective attitude, while at the same time exposing difficulties in trying to pursue
a nonconforming point of view. Sandra’s comment shows that she tried to stay loyal to her teacher colleagues simultaneously as she defended and promoted the 5thD.

When we started up the VT-5thD we faced the problem of not being able to obtain undergraduates. As a solution to this problem we contacted the high school in town and invited them to collaborate. After discussions, students from the Children- and recreational-program came to participate. At first, the teachers in the program hesitated because they did not want to make any quick decisions without discussions with their students, and in this case there was no time for such discussions. Thus, they expected resistance from the students. However, after several meetings and discussions with us they decided that they would join. At least, as they said, they would give it a try during the spring semester. In the end of the fall semester, the high school students were invited for a preparation session. In this session the sixth-graders in North Valley were their “teachers”:

E6:3
We are going through with the high school students. They had gathered in the dining hall and we invited them into the media room. One of their teachers joined them. The 6th grade students were in the room and the high school students were placed between them. All started with a particular software program that Sam had chosen. After that they were permitted to choose any program, which turned out to be soccer or hockey games. They seemed to have a nice time together, laughing and talking. No nonsense though there were twenty-five students in the room. I talked with the teacher about the students. She told me that they have many (high school) students who are tired of the school and have problems but that there are also some that take sincere interest in the children.

After the session Sam and I talked with the high school students about the 5thD. They seemed to like it a lot. I said something about research and I noticed that Sam emphasized that the 5thD combines play and learning.

Then it was time for the next session. Sam instructed me to wait with the students and their teacher, Hans, in the lunch-room. There was some problem with the computers and there was a delay. We were “tossed out” by the lunch-

125 As explained in Chapter 2, the 5thD model assumes participation by undergraduates. The undergraduates participate as part of a course requirement. At the time not enough courses involving the 5thD were given at the university to meet the needs from the local sites.

126 This vocational program aims at educating students for work in child-care settings and in leisure-time activities.
room staff so we had to wait in the hallway. Many students who were supposed to show up did not come. The justification was that they had an empty spot in their schedule, so they decided to go home. This started a discussion between Hans and his students. Hans felt that they could have done something else during the spare time but they said there was nothing for them to do. A “who-is-guilty? who-has-the-responsibility? and do-we-have-to-work?” discussion emerged. Everything finally went ok and many students were enthusiastic, asked questions and had viewpoints. (Fieldnote 12/08/98)

Sam told me later that he had had a back up plan in case the high school decided not to join. The plan was to make the six graders assistants to the younger children. However, in January the 5thD started as part of the VT curriculum with the high school students as assistants. When this happened the after-school site ended because we did not have recourses to run both.

6.2 Spring Semester 1999 – The First Semester with the VT-5thD Site

Most of the children seemed to enjoy the 5thD. We often heard that they told their parents or the teachers that they looked forward to the weekly session. A visible sign of this was that the teachers occasionally used the 5thD both as a punishment and a reward. For example, bad behavior in the classroom ran the risk of endangering a child’s participation in the weekly 5thD session.

The sessions came to take on a particular formula. The session started with the children gathering around the maze and the site coordinator, i.e., Sam, and later Sara, welcoming them with letters from the local Wizard127 – or informing them about news. An undergraduate student’s fieldnote gives us an example of this formula:

E6:4
Sara started the day by telling the students that the Wizard had complained about the grown ups… The children seemed intense and listened vigilant. She said that the Wizard was upset because there were not enough good and funny games. The Wizard was also ticked off over the adults and had requested a meeting to decide on new games. This was appreciated and I think it gave the children a shot in the arm to write to the Wizard. Good story, Sara! (Fieldnote by Ulla 10/27/99)

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127 The local Wizard has its own story based on circumstances familiar to the children.
After this initial procedure the children looked for “their” high school student and together they picked up their folders in order to find out what had been done last session. If there were not enough high school students, which most often was the case, the VT teachers had to stand in as assistants. Most of them seemed to do that with great pleasure while some of them showed less interest.

The ratio of children to assistants was often 2:1. If the high school student was not present the children tended to show disappointment. The children and the students tended to bond and strong ties were built between them. During the initial phase of the session, while everybody was picking up task cards, finding computers or game boards, etc., it usually was noisy and busy in the tiny room. The class often calmed down after a while when everybody was set and knew what to do. A period of intense work was taking place and students and children often seemed to have a good time interacting. When the session was over, the assistants filled out the children’s logs and wrote a short note about the interactions they had had with the children. The maze and the other 5thD artifacts were taken away and the room was locked.

Some of the children were very computer literate; they were experts on particular games and they were comfortable using the machine. Others were beginners. Those children who were more familiar with the computers were very helpful and seemed to enjoy sharing their expertise. Something that can be called “asking-anybody-in-the-room” became a habit. Children and students were encouraged to simply verbally post questions in the air, something I myself frequently did. Almost always several children volunteered to help. The children tended to be surprisingly helpful to each other as well as to the high school students and other participating adults. The following excerpt shows a situation where Lucas acts as “the more advanced peer” and guides Dick “in his zone of proximal development.” Dick has the lead, but Lucas is there to help him overcome difficulties so that he eventually can manage on his own:

E6:5
I asked them to go and pick up their folders. Yet, they knew they were playing the game of Croc. I said that it is Dick who needs to practice and Lucas agreed. Lucas said that Dick can have three lives and that he himself could have one life. I smiled and said yes, that seems fair since Dick dies faster than you. He nodded. Lucas helped Dick who now and then asked Lucas to take over. But somehow

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128 See Gack (1998) on children’s expertise in the 5thD.
Dick managed to take back the keyboard when he was capable of it. Dick was very happy when he succeeded. (Fieldnote 10/27/99)

Although many children were skilled computer users, the adults played an important role in guiding and supporting them. The fieldnote below is written by an undergraduate student who had a lot of 5thD experience. The note is a narrative in itself, illustrating interactions between students and children, which were common in the 5thD. Ulla was working with Eric and Cecilia this day:

**E6:6**

Eric had achieved a lot last time and now he wanted a free pass to go to the new home-page-task in room 2. He had heard from Greg that he and Simon had made homepages. I said OK but Cecilia who had been sick last time wanted very much to play Hygglo, which she had hoped to do. Today we had plenty of computers so I let Cecilia play Hygglo on one computer and Eric make a homepage on another. I myself sat between them. Cecilia used earphones so I was shielded. Sometimes she asked for help and Eric did help her. I have noticed that Eric is very good with the computer and the games and moreover, he is very keen to help others. Cecilia trusts him completely on what he says about the games. I tried checking on her in between to keep up with what she was doing and ask her questions, for example, if she could find the teddy bear in the game. But, it was hard to take part because I did not hear and besides, I was busy with Eric’s homepage.

Greg had told Eric about the homepage and he was very interested in making his own. He told me that he and Greg were brothers which I hadn’t. Eric did not really understand what a homepage was. He stressed that he wanted a similar one to Greg’s. I showed him Greg’s page and also Simon’s but told him that he should make his own. To get started I showed him the address to Iconbazaar where there are many pictures and backgrounds to download. In the beginning he asked about every picture; does Greg have this one? But with time he started to choose some of his own ideas. He learned quickly how to save pictures and how to go back and forth between the pages and the Iconbazaar. I had to explain that page one means “page 1” and that there sometimes are several pages linked from the same page. He understood this also and clicked skillfully between the different picture databases. He was still not sure what a website was. In order for him to get something obvious on his page before the 5thD session was over I suggested that we should start to build his page and that we could search for more pictures to add later.

I pointed and showed and he clicked on “archives” and “new empty page.” When the work-page came up I told him that he could “paint” his background that he had saved earlier. I had to show him again where to click (but of course I
let him take care of the mouse because I think you remember more if you yourself do the clicking). When the window came up under “format” where you can choose which color you like for the text, link-text and background I encouraged him to try to change colors until he was satisfied. He eventually picked a black background and red text.

He was pleased when he saw that the color of the background changed from white to black and he wanted to keep going. I said that you can write, for example, Eric’s homepage and then add pictures. He typed and I showed him where to change the font, size, placing, and color of the text. He wanted to add the pictures. I showed him the short cut to do this and he chose pictures to add. He moved around a little, sat back and admired his work. To show him what a link was I suggested that he start on a fresh empty page and add a different background. He remembered a lot of what he had been doing before and succeeded in getting a background with pictures instead of the plain and predetermined colors. He wrote back and we turned the word into a link so that we could come back to the front page.

From the front page we created a link to the new page, then saved and tested it with the browser. He was thrilled that it worked and I think he started to understand how it works. As we worked with the page children came in and stood behind him and looked. Some of them showed appreciation and that they were impressed, which made Eric straighten himself up. Cecilia, on the other hand, was very busy with Hygglo and showed no interest in the web page. (Fieldnote by Ulla 10/20/99)

Over time, the high school students’ participation during the spring became shaky and irregular. Sometimes several of them showed up, at other times, just a few. This caused tension in North Valley, and it made Susan annoyed and disappointed. She could not, as Sam had promised her and she had claimed, be in the background and study the children in a more distant and overarching way. Instead, she had to help out with the children, which interestingly enough, seemed to take place in a very different mode than normally was the case:

**E6:7**

I saw Susan with earphones on and working with one student, though we don’t usually see her do that – a new kind of interaction. (Fieldnote 17/02/99)

However, there were also students who really enjoyed coming to the 5thD and preferred it to schoolwork. They showed up for site sessions though they did not attend class. This unpredictable situation caused Sam and me to have a meeting with the students and their teachers at the high school to discuss their participation.
Two camps seemed to have emerged: one was in support of the 5thD, the other was not. Different explanations were given. Some of the students lived far away, out in the countryside. They didn’t want to go all the way in to town to participate only in the 5thD; they had no other classes the day of the 5thD. A second explanation was that the 5thD had been made mandatory by the teachers and this had not been discussed with the students. According to the students, the teachers had, without informing them, decided to volunteer their participation in the 5thD. A third was that children should not work with computers. A fourth was that the 5thD was boring. In addition, they also had some complaints about the rules in the lunchroom. They were upset that they were not given the option to eat what they wanted, as, for example only sandwiches, a choice they were accustomed to when having their lunch in their school. When asked about this rule, Sam answered that the children in North Valley had to try at least a small piece of the food served before refusing it and turning only to sandwiches. This was a problem for some of the high school students due to the fact that, as they claimed, they didn’t eat all kinds of food. Sam’s and my response to this was to try to discuss the high school students’ role as adults and guiding peers for the children – a message hard to get across.

The students who liked the 5thD were very engaged in the work. On one occasion we discussed the design of the maze. Among the VT teachers there had been a discussion about whether we should visualize in the maze what games were available in each room. This might help the children to gain an understanding of the structure of the maze. They would be able to realize that the more games they completed the more freedom they were given to choose games. At the time pictures of places from the town were displayed in the rooms. Sandra claimed that some of the children had already figured this out. The question of the design of the maze was brought up with the high school students:

E6:8
Before we closed I asked the assistants their opinion about the design of the maze. One said that it can be as it is because it is more exciting for the children. One other said, if they see the games they will only be stressed and try to go to a particular room. I said that this was a good point and we decided that we should

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129 In Sweden all students are offered free lunch. For reasons that had to do with the schedule the high school students were having their lunch at North Valley the day of the 5thD.
130 In the maze, there were pictures of local scenes such as the town square, the church, stores, etc.
talk about it more. It feels good to have discussions with them about the design – it is also a way to discuss pedagogy. (Fieldnote 02/03/99)

After each session the high school students had to fill out a form. They were asked to reflect on interactions they had had with the children whether something had been problematic or particularly interesting, etc. The site coordinator kept the notes in a folder. Through the notes it was possible to follow the students’ thoughts and feelings about their participation in the 5thD. A good example of a high school student’s development is when she, in the beginning of the semester, requested that North Valley buy a bus so that they would not need to walk there all the way from their school (it was a 10 to 15 minute walk). It should be pointed out that this particular student was considered to have a general negative attitude. However, at the end of one session she was telling Sara that she had been working with a child that was so disinterested and negative. The high school student claimed she had tried to do everything to satisfy and make her happy. As she told the site-coordinator about her efforts, she turned to her teacher who was standing behind her and said, “It must be hard for you when we behave like that.”

In this applied learning situation it was as though she became aware of her role as an adult and leader (compare with the lunchroom-rule discussion earlier). She was given the opportunity to take on new roles, which enabled her to reflect upon herself, both as a “child” vs. an adult and as a learner vs. a teacher or more advanced peer.

The work with the 5thD provided a context to discuss issues related to learning and classroom practices. Sam and I often entered into such discussions. He told me stories about how he occasionally had worked with students in a problem-based manner. One example was when he had worked with a group of children on transmitting files between computers. The children started to experiment and came up with solutions he never had thought of. Together they reflected on what they had done by tracking the solution back step by step. These narratives caused me to ask him why teachers seem so reluctant to adopt problem-based teaching. He had a reasonable explanation: teachers know what they “have” but not what they might obtain if they change their working methods:

E6:9
We started to talk about pedagogy and I asked him about the relationship between problem-based learning and skill training. I referred to his own examples where he had told me that his son helped out with preparations for the 5thD. He had solved a lot of problems with the computer network. We came up
with the metaphor of a soccer team - you have to play the whole game but also do the technique training. He said they like to work problem-based but that it is a dilemma with the difficult kids that they have (I recognized that argument). I countered that they do not manage skill training either since it is so boring. He agreed but claimed that as a teacher you feel that at least they learn something. In problem-based teaching there is no way to check. (Fieldnote 02/04/99).

In these discussions he often let me know that he would like to have someone from the outside, like a mentor or peer, to confide in, but there was no recourse for such things. Another theme in our discussions was his defense of the school in general. As shown later on (E6:13) teachers have developed a sensitivity to what they feel is a critique of the school and of them as teachers. His basic attitude was that since schools have been around for hundreds of years they must have served some purposes and the teachers must have done something right. On the other hand, he showed openness to change and new ideas.

Sandra’s name was often mentioned as an advocate of the 5thD. Rita, for example, told me that she often heard Sandra defend the 5thD when it was attacked by other teachers, who that claimed there were more important things to do in the school than “playing games.” In an interview Sandra was asked what the 5thD might mean for the children and she said, “they feel familiar with computers and they can develop different skills and knowledge that we might not have time for when we are in the classroom reading and writing; it can be more individualized.” She was also asked how the 5thD differs from the regular schoolwork:

E6:10
Interviewer: In what way does the 5thD work apart from how you on a regular basis work with the children?
Sandra: With computers you mean?
Interviewer: Yes.
Sandra: When the class is working with computers I have tasks that correspond to what we are doing and talking about. For example, in Swedish, if we are working with letters then they work with that [on the computer]. But they have to work differently. I tell them what program to work with, and then they work with that as much as they can. We have two computers in the classroom. I have to set a time limit so that everyone gets to use the computer. But when we are at the 5thD we have more time and they get to work until satisfied, so to say. We can’t do that in the classroom, so I have to tell them that you can work for fifteen minutes now and then it takes another week before they can do it next time. Then they get to work for another fifteen minutes in the same program. And I choose programs based on what we have been talking about. If we have been talking about nature then they get to research related kinds of programs and
look at bugs that they find interesting to read about. But in the classroom I introduce a bug and talk about it and take it as a starting point and work with it. But when they are working with the computer they can look at any bug they like. I guess one has to do so because I want them to pay attention to certain things. Then they might go on and then they see, yes, it has six legs, the ladybug, and there is the spider, it has eight. They can do that when they look themselves, *research* so to say (Interview by undergraduate students in spring 1999, italics added by MN).

Sandra’s interpretation of the question was that 5thD is about computers. This suggests that her understanding of the 5thD was that its main trait (excluding, for example, the problem-based or the play-like character) was computer use. She therefore compared her own computer use in the classroom with how the computers were used in the 5thD. From her answer a traditional teaching approach can be detected; she had decided what was to be learned. But it was also possible to envision a consciousness about a different approach in that she used the word “research” regarding the children’s own actions in front of the computers. There is a hint about “something else”; a possibility for the children to go beyond the frames set up by the teacher. They were permitted to search for objects she had not decided on, though they had to stay within a certain frame. Later in the interview when asked if she could see any pedagogical advantages with the 5thD she answered that “Yes, it is possible to search for knowledge in a different way than we can do in the classroom.” The reason she gave was that she was alone in the classroom but at the 5thD there are many adults present. She was also asked if the 5thD would change her way of working in the classroom. She said that even though she had been working as a teacher for thirty years and has been trying all kinds of new methods, “the 5thD might be a step for me to learn a new way that I can use on the children.” Despite this statement she considered the 5thD as something extra, not a natural part of an educational toolkit even though she was positive about the program:

**E6:11**

You’re spending a couple of hours on a Sunday night writing questions [task cards] when you’re thinking you have a lot of children that have problems and one wants to do things to help them read and write. (Interview by undergraduate students in spring 1999)

In the interviews and in her behavior in the 5thD one could see that she favored the educational software (drill-and-practice) and was very ambivalent to gameware:
E6:12
Sandra approached Sam and me and implied that the students could have an unlimited number of free passes. I sensed a negative attitude. She said something about playing Croc endlessly. She was referring to two children that had obtained two free passes but Sam said that they had earned them by completing the expert level. Sandra said something about getting as many as they want and pointed out that there is a vicious circle, an outcome that we certainly have to look into. (Fieldnote 04/02/99)

Sam put a lot of work and time into the 5thD during the spring. In the spring of 1999 he became the principal because Patricia went on sick leave. Sara, a schoolteacher who had shown interest in ICT work, became the site coordinator. As it turned out, Sara took on the role and ran the site with the same enthusiasm as Sam had.

6.3 Fall Semester 1999 – Institutionalization?

After the first semester with the 5thD it was unclear who would take the initiative to organize for the upcoming school year. In late August Sara, the new site coordinator, called me and asked if I had made any plans with the high school:

E6:13
Sara called. She wanted to know if I had been in contact with the high school regarding the 5thD in the fall semester. I had not. I was just wondering if Sam had done it, which he obviously had not. I said that I could do it though I felt it should be their job. But she is new … I promised to contact her after I had talked with the high school.

The high school wanted to participate despite the problems that had occurred last year. There was just one small problem. Their students were on practical training during the fall semester and therefore they could only participate in a couple of sessions at the beginning and at the end of the semester. However, they could participate in the spring semester as they had done the year before. Due to this problematic situation New Forms, now called the Learning Lab, offered to finance the salary for Ulla and Unni, two undergraduate students from the university who had occasionally helped out in the previous year, as stand ins for the high school students. Consequently, during the fall semester of 1999 there was a lack of assistants. On the plus side was that the two undergraduates would offer computer competence since they were enrolled in an applied computer science program at the university.
The teachers in the VT had decided that in the present year the six-year-olds were not going to participate. The teachers considered them too young. The main problem, according to them, was that the children were not literate and therefore the activity did not make sense to them, which was expressed, for example, in their inability to read and therefore understand the task cards. They felt that the children were not ready for this kind of activity. The 5thD therefore was assigned to the first and the second graders during this second year. These children were now familiar with the 5thD since they had already participated for one semester.

Because that the 5thD was subject to discussions and questioned by some of the teachers, Sam asked me to give a workshop for the teachers about the 5thD. This took place during the preparation weeks for the school year of 1999/2000. Ulla, Unni, and I ran the workshop. We were all a bit nervous since we knew that some of the teachers were very critical. The meeting we had had with the teachers when we started the in-school 5thD was fresh in our memories:

E6:14
I bumped into Sam, Ulla and Unni outside the principal’s office. We said hello and then walked in to the dining hall where it had been arranged to hold the workshop. There were about twenty people in the room. After an introduction, presentation, and an apology for the poor quality of the printout of the 5thD article (Sam had told me that they had complained) that had been handed out beforehand, I suggested a time frame for the session, which was accepted. The first thing on the agenda was a video about the 5thD, produced at the university in San Diego. Before showing it I translated and explained main (and for them probably new) words and concepts, which turned out to be a survey of the main ideas and content in the 5thD. After the video we were divided into three groups for discussions about the video and the article. Not many had read it, probably because of the English and to them an unfamiliar research language. In my group we had a good and interesting discussion. We talked about the difficult issue of balancing the aims of letting the 5thD be fun and voluntary with having it be educational and structured.

After the group session Unni and Ulla made an excellent presentation of material from their bachelor thesis. The theme was: What can be learned from pure entertainment programs? They presented seven categories of skills and knowledge that they had found: problem solving, cooperation, concentration, coordination, imagination, and other skills. They illustrated their findings with some very nice case studies. One was a narrative about Peter, a dyslectic boy who developed his literacy skills by playing a “puzzle game” and making a home page. I sensed doubtfulness in some questions from the teachers, but Ulla and Unni turned them brilliantly into a productive and engaging discussion. It
was like the negative attitude and suspiciousness not was given room to grow -
instead they were turned into curiosity and interest.

After that, we had planned to have a group session again. But the meeting ran
time so we took a break and encouraged the teachers to think of what gains
and what difficulties would be incurred if they used the 5thD as a resource in
their classrooms. After the break, a teacher immediately answered that the large
number of adults would be a big advantage. A discussion broke out about the
problems we had faced because of the lack of graduate students and that we had
been forced to rely on high school students which unfortunately was a risky and
shaky business. We were also asked if there are “proofs” that the 5thD really
improves the children’s skills and knowledge, and if so, in what ways. In my
answer I referred to what was discussed in the article and I think they were
satisfied with that. One teacher stressed that it is important not to build up
boundaries and refereed to the discussion about the school in the article; she had
found it a bit hostile towards teachers. I referred to Cole’s claim in the video that
the 5thD is not an alternative to school but a complement. I said that you have
your curriculum that constrains your freedom etc., and that she was calmed
down. During the last five minutes I summarized the main ideas of the 5thD by
showing a transparency that said:

“All humans little as big are both learners and teachers …
It has to be fun and challenging to learn...
One learns together with others...
The combination and use of artifacts help to make us smarter…”

I said something about being proud helping my father with his new computer
though I am past forty (and obviously still a child of his). I saw some smiles. I
also described a memory, from when I was a child, of swimming and playing
together with the adults in the lake at our summerhouse. What I especially
enjoyed was when the adults also really enjoyed it and had fun, which was a rare
event. That is the feeling and atmosphere we want to have in the 5thD, I said. I
saw some nodding as a sign of shared understanding. I noticed that some of the
most negative and defensive teachers smiled and looked really interested. At
that time I knew that we had made, if not a total victory, at least a partial one.

After breaking up I went to the staff room and encountered one of the teachers.
She looked at me and asked something, which was more a sign of wanting to
talk more than wanting an answer to a question. I felt she wanted to start a
dialogue. The teacher who had said something about boundaries approached me
and repeated herself. I pretended I did not understand, taking our good
relationship for granted, and then she said something like, “this is sensitive.” She
clapped her chest and said, ”yes this is sensitive for teachers.” She had both a
question and a statement in her glance. In the next moment she looked at me with warm and unprotected open eyes and said, “my kids learned everything about the world from reading Donald Duck” but then she added “not everything of course,” we both laughed. I went away, happy, feeling it would be easier from now on to go to the school for my fieldwork (Fieldnote 17/08/99).

The workshop turned out to be constructive and pleasant. I felt that it contributed to some kind of acceptance of the 5thD and I learned that the teachers were approachable if treated with an attitude that was not offensive or critical. Rather, a dialogue with them seemed to be welcomed as long as the approach was based on respect and willingness to obtain insights into their situation and perspective.

Because there were no high school students participating in the major part of the fall semester there was a short supply of assistants. This resulted in a division of the groups. Half of the children did 5thD work and half stayed with the teacher in the classroom. Half way through the class they switched. Susan was happy with this; she said she got extra time to catch up on activities - math and literacy - the class had fallen behind on. Rebecca, co-worker with Susan in VT 2, on the other hand, did not seem to agree. She thought that half an hour was not enough time. Just when the children got started and became immersed it was time to finish:

E6:15
The children showed up together with Rebecca. I asked what the plan was for today and if we would switch children half way through the session. She told us that they have discussed the issue in their VT-team but that they are not in agreement. I asked if it is about the 5thD in general, that they don’t want to continue with it, but that was not the case. On the contrary, she said. Susan wants to split the time, otherwise the second graders will be disappointed that they will not be able to attend the 5thD every week. Rebecca argued that they should take turns – having 5thD every other week. Her argument was that it is so stressful with only half a session. Eventually we decided to go for Susan’s proposal because we do not want to disappoint the children! It felt good to oblige Susan. (Fieldnote 10/27/99)

During the fall semester there were several discussions about changes in the local design of the 5thD. Sara wanted to make new task cards that were more intriguing than the present ones. She also wanted to remodel the media room, where the 5thD took place, by rearranging the computers’ placement. The room was small, causing a feeling of over-crowdedness. In order to keep the noise down, Sam had invested in two pairs of headphones for each computer. This kept the noise away but it caused problems in the interactions between the assistants and the children. Some
of the high school students had complained that the headphones made it impossible for them to participate in the games and interact with the children. In addition, Ulla and Unni had lodged complaints that the children were divided into fixed sets of pairs, which was a requirement from the VT teachers. This, according to Ulla and Unni, prevented natural and spontaneous creation of pairs and groups as well as individual trajectories through the maze. However, there seemed to be a constant lack of time to have necessary discussions and to do the rearrangements. Eventually Sara, Ulla, and Unni obtained some time to realize some of the changes. The computers were distributed around the room but the headphones and the structure with the fixed pairs of children was retained.

During the fall several meetings were held with the VT teachers aimed at redesigning and developing the 5thD activity. In these encounters perspectives and standpoints were negotiated and discussed. The excerpt below is from one of these workshops. The discussion regards the hierarchical game structure in the maze and particularly whether it should be permitted to go directly to a higher level or whether the child should have to begin at the Start level:  

**E6:16**

Pre-school teacher: If you are going through this level with Beginner, Good, and Expert, if one child is Expert but someone is starting the game [the children were supposed to work in pairs].

Unni: Then you can give them a special assignment, that they teach the newcomer the game, for example, or that the skilled child becomes the adult so to speak. The smarter child will help the other to reach the Good level. Then the newcomer can jump directly onto the Good level.

Sara: I can think that if they arrive at Expert level for some reason and then, next time, hopefully Mulle Meck [arcade game] is free and the child plays it and does Beginner and Good brilliantly which would have been impossible if they had not obtained the insight from the Expert level. This is not to say that you must start at the bottom, at that level. Especially not with a game like Mulle Meck.

From several: Nooo.

Sandra: Yes, what I think about... is how to get the children to finish the assignment... How shall we solve that? So that the children are everywhere and in places that has not been decided.

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131 In the original 5thD model the children decide on which level they want to play a game, i.e., there is no restriction in this regard.

132 The task-cards guiding each game can be played on three levels; Beginner, Good, and Expert.
Sara: But I think that is what you do when you work with the children; look here! Here you have missed a lot – shall we look it over again?
Sandra: But how do you check the children when you have two and they are in different places? How to manage that? (Workshop 11/15/99)

Sara’s and Ulla’s way of reasoning was in accordance with the “zone principal” and seemed also more flexible. They reasoned that less experienced children learn from the more experienced by interacting on a level slightly above their own. By doing so they would find that they would easily be able to solve problems on a lower level. Sandra, on the other hand argued that with such an approach it would be hard to control the children’s learning and progress.

Later in the meeting the Internet was discussed as a tool in the learning process. In this next excerpt the children’s frequent choice of particular web pages was discussed. Ulla tried to convince Sandra that what is considered subject matter, in this case English, can be learned as a side effect of browsing web pages on the Internet. Again, this way of learning is a challenge to the way Sandra thinks about teaching and learning:

E6:17
Sandra: About dogs, it is often too much [look at home pages with domestic animals].
Ulla: Why, maybe they will learn some English.
[Laughter, inaudible talk]
Sandra: But not the whole time.
Ulla: No, but if we can turn it around to something. If they search for pop-groups. Great, that you look for Spice girls, what country are they from? Perhaps they don’t know. Check it out. That you have printed a lot of pictures of the Spice girls, they are great, I think so too.
Sandra: We have rules at the school [hinting at the amounts of printouts].
Sara: But...
Ulla: You can save it on a floppy, so you do not have to use paper. (Workshop 11/15/99)

Despite sometimes conflicting views and goals, attempts to work out a local redesign was seen. This design had to be responsive to both the teacher’s need and to the idea of the 5thD being a place where children can work at their own pace and style:

E6:18
Sandra: I was thinking; the goals should be stated in the task cards. Internet, writing, searching for facts. You can write on the task card that you can always
write to the Wizard, that you can always go to the Internet if there is something you want to find out.

Ulla: You will encourage...
Sandra: Yes, encourage ...
Ulla: ...them instead of stopping them – no, now is not a good time to search on the Internet. No, that is nothing we do now, we will do that some other time. Then we have killed their interest. (Workshop 11/15/99)

Sam continued to take an active role in promoting the 5thD. In November, Learning Lab arranged an open seminar about the 5thD in which Sam was one of the key speakers. The fieldnote from this event reveals Sam’s engagement with both the 5thD and computers as a learning tool:

**E6:19**
Sam gave a fantastic Power Point presentation. Among other things he emphasized the importance of play and learning belonging together. Later in the discussion Sam proposes that it should be investigated and discussed why certain computer programs are popular among the kids and others are not. (Fieldnote 11/03/99)

In the end of the fall semester I had a meeting with Sam and Sara about the long-term arrangements of the 5thD in the school. It seemed that the 5thD had come to stay. Until now Learning Lab had supported the project but in the future North Valley had to finance the site coordinator themselves. Learning Lab was prepared to pay for Unni and Ulla, but as mentors rather than as assistants replacing the students. Part of this mentorship implied support for the teachers in the high school. Despite these drawbacks North Valley was prepared to continue with the 5thD:

**E6:20**
Sam said immediately that he wanted to continue with the 5thD, that it has become a part of the activity in the school and that they have to find resources for the site-coordinator. He talked about the budget situation and it did not look completely dark. Sara said that there is no complaining among the teachers about the 5thD any more - that “they are sitting there in front of the computers.” The 5thD has become accepted. She said that Sandra always has been the driving force but even Susan thinks it is ok now. There is no resistance any more. The change took place after the seminar last fall. Sam said that now everybody knows what we are doing and what the 5thD is about. (Fieldnote 16/11/99).
6.4 Spring Semester 2000 – Sustainability?

With the start of the spring semester of 2000 coming up, Sara, Ulla, and Unni were in charge of the introduction to the new high school students. An incident during this introductory session revealed the mix of traditions and cultures that were involved in this inter-institutional collaboration:

E6:21
We walked to the media room where Sara already had started to instruct the high school students. Helen, their teacher, was also there. After Sara had gone over everything she gave everybody a piece of paper which among other things said that they could not chew gum in the school. It seemed that she was a little ashamed that she had done it, blaming it on being a junior level teacher and that they had to stay with the rules. The students were quiet, they seemed annoyed and sulking. After that we sat down at the computers. Most of them played Croc. That seemed to cheer them up. (Fieldnote 09/14/99)

The lack of assistants continued in the spring semester even though the high school students were back from their practical training. Also, the system of children taking turns had continued. Sandra was disappointed with this arrangement and that the 5thD no longer was as it used to be:

E6:22
Sandra came up to the media room and said hello. She grabbed a couple of kids and left. We had time to chat for a short time about the division - that each child only participated for half the session. She did not like that, she wants it to be as before. I did not entirely know why the division existed but had the feeling that it had to do with the high school students. I told her that I would find out when I met with the high school teachers on Wednesday. I promised to come and talk to her on Monday. Afterwards I talked to Helen, the high school teacher. She told me that the high school students complained about it being messy and noisy but that it is quieter if the children are divided into smaller groups. Sara said something about her time is occupied with making sure that the high school students are content and taken care of. (Fieldnote 03/07/99)

The problems with the high school students continued during the spring. Ulla and Unni had conducted a survey in which it was evident that this years’ high school students also had complaints. They felt they were being used, they came there to help North Valley but what did they gain in return? A second major complaint was that they felt excluded from interactions with the children due to the earphones that the children used. This was an issue that had been discussed before but that
remained unchanged. Obviously it was important to the teachers to keep the noise level down.

Due to emerging tensions regarding the high school students’ participation, a meeting was arranged with the high school teachers. They told us that they had spent a lot of time arguing with the students about their participation in the 5thD. They were now hesitant as to whether they would keep up the collaboration in the fall and coming year. We all concluded that the students seemed to enjoy the 5thD while at site. The complaints seemed to take place outside the 5thD.

An outcome of the meeting was that Sara offered to tutor each student individually about his or her participation and progress in the 5thD. She even offered to go down to the high school so that they would not need to walk to North Valley. But she also conveyed her opinion that she considered the students somewhat lazy and lacking drive. We began to discuss how to deal with the students’ lack of energy and negative attitudes and it seemed as if we were not entirely in agreement:

E6:23
Hans implicitly turned towards me and said that one certainly has to listen to the students when they complain. I recalled that I once told him that instead of “listening” to their rhetoric about the 5thD one should focus on their behaviour in the 5thD activity (everybody agreed that they are happy when they are finally there). I had said that that might be a way to break a bad pattern of behaviour and vicious circles. Hans did not agree, I think, neither did Helen who seemed a little resigned and confused. (Fieldnote 03/22/00)

As a result of these interactions the research group at the university planned for and established a course that was going to be offered to schoolteachers who in their profession work with or want to start 5thD.

At the end of the spring semester the research group at the university was working with grant applications aimed at obtaining the needed resources to maintain and develop the local 5thD work. At the time Sam did the same - he worried about the continuous financing of the 5thD in North Valley. In addition, he was worried about the problems with the high school students and searched for alternatives:

E6:24
Sam started to comment on the problems with the high school students and said that they had started to think about the fall. They want to turn it into an ITIS
project\textsuperscript{133}, using the 5th graders as assistants and connecting it to communication between diverse age groups. The teachers would obtain in-service training. Sam said that when he read about ITIS – (the aim of ITIS was to locate computer use in a pedagogical framework) he immediately related it to the 5thD!

His idea of a 5thD framed ITIS project was discussed with the schoolteachers and some of them had shown an interest. He told me about Sissi - an intermediate level teacher. She initially had not supported the idea but later changed her mind. Obviously she was an important indicator of how the teachers would react – she had a strong position in the school. He also told me he had to think of the distribution of teachers. He had to figure out to whom he would assign the second-graders in the fall since it is the second graders who have the 5thD.\textsuperscript{134} He had thought it would be Susan but since she is not interested in computers and the 5thD he had to reconsider that arrangement. He said that she is isolating herself to the class-room and does not want to have any part of anything else other than her traditional duties. He said that we can't have it like that. Sam was informed that the research group had applied for a EU-grant and that we intended to invite them to collaborate. We concluded that we would work in parallel with the applications and see what happens. (Fieldnote 04/11/00)

The work during the rest of the semester turned out to be successful. The high school teachers claimed that a change had taken place after our meeting and they ascribed that to Sara and her nice work with the students. Sara herself said that she had to take criticism from her teacher-colleagues that she spent more time and energy on the high school students than on the children in North Valley. In May there was an international 5thD research conference in which Sara participated. The conference gave Sara several chances to get perspectives on both her work as a teacher and site-coordinator:

\textbf{E6:25}

Hi and thank you,
I want to take the opportunity to thank you for letting me take part.
It was really interesting last Friday. What a chance to be able to listen to all the others!

\textsuperscript{133} A nation wide project financed by the KK-stiftelsen (Competence and Knowledge Association).

\textsuperscript{134} In North Valley the schoolteachers hold on to their class for three years. This meant that they were given a new class every third year. That the second graders were to have a new teacher at this time was due to the cease of the VT.
It feels like a new lease on life. Otherwise I feel like nothing is happening. But after such a day one pays attention to what one is doing.
See you,
Sara
(E-mail 29/05/00)

The last 5thD session of the semester was turned into a party. It started with play rounders out on the schoolyard. Some of the high school students showed signs of resistance. They were not going to play rounders. However they eventually did and they seemed to have a great time. So did the children. When the game was over each high school student received a diploma, drawings from the children, hugs from Sara and “their” children, and applause from the crowd. Afterwards there were snacks. I talked to Hans and he kept repeating that things have changed, the students were much more positive to the 5thD now. In this last fieldnote I wrote:

E6:26
It feels like I am leaving school for the last time. My story is complete and I can withdraw from the field to the work at the desk that is waiting. It feels a little sad. The last thing I see when I leave the school yard is Petra and Paula digging together in the compost. The feeling that the leisure-time center, the pre-school class, and the school have returned to their old forms is apparent. Thinking that it is the 5thD that has survived these years. (Field note 05/30/00)

In May the high school teachers decided to go for another year. In an e-mail to Sara they say:

E6:27
Hello!
We have discussed and arrived an agreement about the 5thD. We think we should give it another try. However we have some “small requirements” in order for it to work better for us: We would rather only have one group because this new class will only have 14 students in the fall. Then we also have to take into consideration some absence........[of high school students]. Wednesday is the best day for us. That day it will not collide with a lot of other things.

During the fall semester the class will be on internship so the best thing would be an introduction of the 5thD before Christmas when they are back from their internship. After that they can go full speed the rest of the spring semester.
In the class there is a visually handicapped girl who needs zoom text on her computer but perhaps that can be taken care of. Why don’t you think about this and get back to me. I tried to reach you on the phone today but without success so therefore this e-mail. I will be working Wednesday and Thursday this week. Take care!
Helen
(E-mail 05/14/00)

6.5 Summary

The 5thD activity in North Valley started in January 1998 and is still running as of this writing in October of 2002 (see Epilogue). The project started on my initiative both in the form of the after-school and the in-school program. From the start there was an interest in the 5thD in the school, represented primarily by Sam and Patricia. The school was already "computer-literate" and the 5thD seemed to fit right in to their needs to take further steps in that direction.

The 5thD became part of the VT. The interest in and appreciation of the program was independent of institutional affiliation. Susan, one of the schoolteachers showed a genuine interest while the rest of the teachers in varying degrees seemed to value the program. This situation remained over the two years.

The lack of students from the university resulted in a collaboration with the high school. The high school students’ participation enabled a continuation of the 5thD and at the same time comprised a learning environment for the high school students. The high school’s participation from the start was a shaky business and required great efforts on the part of Sara, the site-coordinator, in terms of negotiation, persuasion, deliberation, and time spent in communicating with the high school students and teachers. But it also required hard work on the part of the high school teachers in their discussions with their students.

The 5thD meant opportunities for learning. Discussions and dialogues between players from the university and the schools were frequent. Pedagogy was discussed on a theoretical level but also in a practical and applied way.

In the beginning of the project I had a significant role in the coordination. I was both the “glue” and the force that made the project come alive. Many phone calls and e-mails were conducted and meetings arranged to inform, bridge, secure, and make sure that everything was in place in order to start and run the program. This ranged
from applying for resources to making sure people were informed and took on and carried out their respective roles and duties. When the program became somewhat institutionalized my role as the “spider” (Nocon et al. 2001) was down-played and I could gradually hand over the responsibility first to Sam and later to Sara, Ulla, and Unni and the high school teachers.

In the next chapter I will analyze the narrative told in this chapter focusing in what way the 5thD can be said to have facilitated the VT teachers’ work and thus in what way it played a role in the efforts to change the pedagogical practice in North Valley.
7 Analysis: The 5thD – a Tool in School Development?

As stated previously, my idea in bringing the 5thD “back to school” was that it would become something like a “third space” (Gutiérrez et al., 1995) or a “boundary zone” (Konkola, 2002) for the teachers to make sense of each other’s culture and traditions. In that sense I thought of the 5thD as a “tool” for the VT teachers rather than as the model was initially designed: as a research lab. I asked how the 5thD would be taken up and utilized by the teachers in the VT, if at all. Later I asked if the 5thD in-school site would qualify as a communicative and conceptual tool, something I had found to be lacking in the integration process as discussed in Chapter 5.

As described in Chapter 2, the 5thD is an environment with multiple agendas. Historically, the 5thD was initiated as a field laboratory serving the purpose of providing a “natural” setting to conduct research on the human mind, particularly child learning and development. As it was designed, it simultaneously comprised a field site for college students to practice and explore theories. For children, the laboratory became an after-school activity to play, learn, and have a good time together with a proportionately large number of adults – preferably on a more equal footing than children are used to in traditional learning situations and settings.

In the 5thD research community, it is common to conceptualize the 5thD as a boundary object (Star, 1989; Star & Griesemer, 1989) in order to describe the aspect of diverse and multiple uses of the 5thD. Nocon (2000), for example, claims:

The Fifth Dimensions can be considered boundary objects in that they are used by children as after school play spaces and computer labs, by undergraduates as sites for fulfilling field work and lab practicum requirements, by researchers as laboratories, and by parents as child care providers. (p. 110)

As previously discussed in Chapter 3, boundary objects presuppose motives from different worlds at the same time as making cooperation possible. Star describes a

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135 See section 2.5 in Chapter 2.
boundary object as one that different people or groups can use simultaneously to achieve their own goals. A boundary object may be a blackboard, or as Star & Griesemer (1989) show, a history museum or a standardized form to code specimens. A natural history museum can be used as a place of research by zoologists and environmentalists; a place of display by artists, sculptors, and taxidermists; and a place of work by maintenance employees. The main idea is that boundary objects are “elastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites” (Star & Griesemer, 1989, p. 393).

In North Valley, the 5thD activity came to deviate from the above described design. First, it was an in-school site. Second, instead of conducting research in the 5thD, the research interest was on the 5thD. Third, instead of college students, high school students participated as assistants.

The 5thD in North Valley was not initiated as a laboratory to conduct research on child development. The research that was carried out can instead be thought of as some kind of action research aimed simultaneously at school development and knowledge building. There was no research activity outside the agenda of schooling. Moreover, the high school students’ participation was initiated due to a lack of undergraduate students. The high school students’ participation never became systematically incorporated into their curriculum. Their participation took place more in an ad hoc manner. As the story in Chapter 6 reveals, the goal of their participation was ambiguous which caused problems. Nor was the 5thD established to provide children with a learning environment, or parents, and teachers, with a child care provider. It had a different purpose.

For me, as the initiator, the 5thD represented an alternative way to perceive, organize and structure learning. I thought and hoped that it would facilitate the VT teachers in the integration attempt. I also hoped that the 5thD “mentality” and way of working with the children would influence the school and the classroom practice. In my view this environment possessed the potential for a different pattern of interpersonal interactions between adults and children compared to what traditionally can be found in school settings.

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136 In reality the distinction between in and on is not that straight-forward. In most 5thD sites research on child development is paralleled with, for example, issues of institutionalization, sustainability, and community building (see, for example, Nocon, 2000; Tripp, 2002).
It also represented a dynamic means of using a variety of artifacts. The maze, for example, is designed to relocate power from the adult to the child. Thus, instead of the teachers having the entire control and authority, the maze enables the children to set goals, have a strategy, and make choices (Cole, 1996a).

The 5thD also stresses the collective aspect of learning, that it is a shared and collaborative endeavor mainly taking place as actions and interactions between and among people and physical artifacts, rather than exclusively in individuals’ heads. It is a rule based activity. Yet, the rules are supposed to be “owned” by the participants, constitute resources for action, and be negotiable rather than dictated from above, constraining, and static. Moreover, it is an environment where play and learning go hand in hand. In this regard, I thought it might serve as a model for how play and learning can be integrated. In other words, my perception and intention was that the 5thD had the potential to be a “tool,” mediating actions and interactions, and in that regard contribute to a changed pedagogical practice.

Thus, the components of research and college education, which together with its usefulness to children and parents identify it as a boundary object, was not present in the North Valley adaptation in the way it traditionally is in 5thD programs. Consequently, the concept of boundary object seemed less applicable in this particular adaptation of the 5thD.

*If the 5thD in North Valley was not a boundary object in the traditional 5thD sense, what was it and what role did it play in the school?*

Below I will employ Wartofsky’s concept of artifact and suggest that the 5thD was utilized as a primary and secondary artifact. My conclusion is that as such, it had limited value as a tool mediating the VT-teachers’ actions and interactions in the integration attempt. However, I will also show that the 5thD in North Valley can be conceived of as a tertiary artifact. As such it had the potential of becoming a tool for school development. In this chapter I will discuss how and why.

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See Nocon (2002) for a discussion on resistance in the 5thD as a source for learning and development.
7.1 The 5thD as a Tool in the School

Wartofsky (1973), as we have seen in Chapter 3, discusses the mediation of human perception by cultural representations. The purpose of his work was to develop what he called a “historical epistemology,” for which the genesis of human perception comprises a building block. For Wartofsky, human perception has its origin in “historical human praxis,” which is the “fundamental activity of producing and reproducing the conditions of species existence, or survival” (p. 200). What characterizes this activity is the creation and use of artifacts. He makes a distinction between primary, secondary and tertiary artifacts. To Wartofsky an artifact is mainly a tool. Primary artifacts are those directly used in a practice, such as a hammer or an axe. Secondary artifacts are used to preserve and model primary artifacts and the use of such artifacts. Tertiary artifacts are imaginations and possible worlds, for example art and fiction. Tertiary artifacts hint at what might be possible but they also come to “color and change our perception of the ‘actual’ world, as envisioning possibilities in it not presently recognized” (1973, p. 209).

What kind of representation or tool was the 5thD in North Valley, if any?

As shown in Chapter 6, from the start the 5thD was controversial at the school. Several times the value of the 5thD as a pedagogical tool was addressed and questioned, especially by the schoolteachers: What do they learn in the 5thD? Do children that participate in the 5thD achieve better on tests? They seem to stick to games that they like, for example, Croc and FIFA – is it so? These were the kinds of questions that we encountered, especially in the beginning. These questions conveyed several messages including: only what can be measured and evaluated can be considered knowledge; play, and having fun in general, is not considered a means of learning and development and is therefore not appropriate at school.

Also, the child care teachers did not seem to entirely “buy into” (Nocon, 2000) the 5thD, although their concern was from a different angle than the schoolteachers’. They seemed to react to the computer element of the program. In their opinion, children should not sit in front of computers; they should be out playing in the yard (Pramling Samuelson, 2000). This attitude is probably better understood in the context of the pre-school tradition and connected concepts such as the child as “nature” (Dahlberg & Lentz Taguchi, 1994) and the child in his or her garden – kindergarten - as discussed by Fröbel. In addition, it seemed that using computers
was uncomfortable for both the schoolteachers and the child care teachers due to a lack of experience.\textsuperscript{138} This may have contributed to their reluctance.

However, Sandra, as mentioned in the previous chapter, was one of the supporters of both ICT in general and the 5thD program in particular. As described (E6:10), she used the 5thD not only to enhance her students’ computer skills but also, as it seemed, as a tool in her classroom practice. The aspects of the 5thD that differed from classroom practice in general seemed harder for her to appreciate. For example, she was upset when the children did not play according to the (her) “rules” (E6:12) and she favored the practice and drill programs.

Susan, on the other hand, showed interest neither in computers nor in the 5thD. Despite that, she did not prevent her students from taking part when it was decided to run the 5thD as part of the VT. Her way of utilizing it was to take the opportunity it offered to give additional time for individual instruction in math, literacy, etc. to her students. I got the impression, though, that the schoolteachers enjoyed the 5thD because it furnished them with an opportunity to work with only one or two children at time in a coherent and focused way, which was different from what they were used to or could do in the classroom (see E6:7). They also seemed to appreciate the mentality and the atmosphere of peace and quiet that prevailed in the 5thD sessions. I think it is correct to say that in different ways – corresponding to their individual goals and motives – the teachers utilized the 5thD as a primary artifact.

When I introduced the 5thD to the school I thought of it as a model that represented a different way, when compared to traditional schooling, of conceiving learning and knowledge. Engeström (1987) discusses secondary instruments of expansion in terms of general (instrumental) models that may be nomalistic and classificatory, procedural, systemic, or germ cell. Nocon (2000) considers the 5thD as a “system artifact” in that it is a complex system of tools, rules, and roles. The 5thD as a systemic model therefore represents this complex structure that in many ways deviates from the traditional classroom practice. This systemic model seemed to evoke strong feelings in the school but also to fascinate and inspire. Particularly Sam and Sara, the two site-coordinators, showed an interest. They explored it, (re)presented it (E6:19), and used it to trigger discussions in the school. For example, in order for Sam to design the in-school site he had to read through

\textsuperscript{138} Despite the school’s participation in several ICT projects, it seemed that several of the teachers lacked experience with computer use.
articles describing and showing the model. A sign of his understanding of the system was demonstrated by deviances from the original model that he incorporated into the VT adaptation. Deviation from a model often indicates that the model has been internalized.

One such deviation had to do with how to move around in the maze. Sam decided on a prerequisite, which forced the children to begin from the Start Level and continue to Good, and then Expert. He did not, as the original model did, accept that the children could or could be allowed to work with tasks in any other order. This structure was later questioned by Sara which seemed to upset Sandra, who supported Sam’s design (see E6:16). Another example of deviance from the model was the rule that the children had to be grouped in fixed pairs, which also became a subject of discussion. This rule was created by Sam and the schoolteachers and was later questioned mainly by the undergraduate students who helped out with the 5thD work.

In meetings and workshops outside the school Sam presented and accounted for the in-school program. Moreover, discussions about the implications of the model took place both at formalized events such as workshops and meetings (E6:14, 16, 17, 18) and as more informal conversations (E6:8) in both the VT and in the rest of the school. Thus we could say that the secondary artifact constituted by the systemic model of the 5thD was explored, transformed, questioned, discussed, and turned into practice. In that regard it was a tool that modeled, to the school, a novel, yet plausible practice.

In sum, we could say that I “gave” or offered the 5thD to the VT teachers with a certain outcome in mind. I expected to be able to study and evaluate how it would be utilized, if at all. The VT-teachers came to employ it as a primary artifact for their purposes. The way that the members in the school utilized the 5thD can be conceived of as a model that mediated novel ideas and practices.

Engeström & Escalante (1995) point out that there is nothing in the material makeup of an object as such that will determine whether it is an object or a tool. What constitutes a tool is its placement and meaning in the activity. This means that the object in the activity has a say in the constitution of the tools, as Keller and Keller put it:

We will argue that selection of materials and implements are governed by the blacksmith’s constructed notion of appropriate means derived from his stock of
knowledge in light of his understanding of the problems to be solved in accomplishing a task at hand. (1996, p. 91)

The idea of placing a tool in someone’s hands and expecting it to be used for a purpose deviating from its object-oriented activity is therefore a misapprehension, or as Wells (1999) puts it “…in order for them [material tools] to perform this function [carry inventions of the past into the present in order to bring about a desired future], they had to be in the hands of one who understood their purpose and had the know-how to use them” (p. 60). Consequently, the VT teachers used the 5thD in a way suitable for their purposes. At this time it was the school structure that dominated the work in the VT and consequently it influenced how the 5thD came to be utilized. Instead of asking if and how the 5thD would be utilized by the VT teachers, a more useful question would have been: under what circumstances would the 5thD have become a useful tool for teachers and at the same time promote transformation of the present school practice? I will return to this question.

A different aspect of the 5thD becomes visible if instead of only perceiving it from inside North Valley, we take a step back and look at it from a perspective outside North Valley. In doing so the 5thD turns into a “bridge” – not in the sense I had in mind when thinking of it as a “third space” (Gutiérrez et al., 1995) or “boundary zone” (Konkola, 2002) in the VT, but similar. In the next section I will explore what that might mean.

### 7.2 The 5thD as a Bridging Artifact

From a perspective outside the North Valley, we can see that the 5thD was a result of a collaboration between four different institutions: North Valley, the high school, the university, and the Learning Lab. Agents from these institutions coordinated their work and collaborated to make the 5thD happen. Why? Looking into the history of the participating institutions it seems reasonable to believe that a common denominator was an interest in improving school practice. But why did they (we) choose the 5thD as the locus of interactions? If we don’t believe that it was at random, there must be a reason.

The concept of boundary object in this perspective makes sense because we can ask what the structure of the 5thD is that made it recognizable by North Valley, the high school, the university, and the Learning Lab. But in order to ask that question,
we have to know something about the culture and history of the diverse institutions.

As we have seen in Chapters 2 and 5, North Valley had a history of computerization and of collaboration between institutions that stressed play and learning, respectively. The high school had a vocational program with the aim of educating students to work with children and the 5thD offered a space for their students to practice this kind of work. The university had an interest not only in research and education, but also in outreach work (in Sweden called the “third mission”). The research was not an activity “in” the 5thD but about the impact of the 5thD as a learning environment. The aspects of research and outreach work were therefore reasons for the university to take part. The mission of the Learning Lab was to support and initiate new teaching practices and methods based on ICT use. The 5thD made possible these different motives/objects. Taken together it seemed that the 5thD embodied a structure that made it worthwhile for all the involved institutions to be part of, use, and maintain it.

Once established, this boundary object, i.e., the in-school 5thD, provided a bridge for intense traffic to and from North Valley. It made it possible for university and high school people to enter into the school and in reverse, it enabled teachers and school managers to exit the school for experiences outside the school environment. For example, Sam and Patricia went to the US, Sara became involved with the university, the high school teachers expanded their work site and relationships to North Valley and the university.

The 5thD also provided a bridge between school units, i.e., the different levels in North Valley and the high school that otherwise were largely isolated from each other. For example, Sam initially involved the six graders as instructors and was prepared to make them assistants in case the high school collaboration failed (E6:3). This bridging artifact139 offered people the opportunity to cross boundaries, try out new roles and move between existing ones, and interact in new ways and with new partners.

In this context it might be interesting and useful to mention Woolcock & Narayan (2000) who use the concepts of bonding and bridging when discussing social capital. Poor people have a close-knit and intensive stock of bonding social capital but they

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139 The term “bridging artifact” came up in a conversation with Honorine Nocon.
lack the more diffuse and extensive bridging social capital deployed by the nonpoor to “get ahead.”

However, this boundary-crossing motivated and mediated change as well as expansion. The inter-institutional collaboration not only evoked production of new rules, roles, instruments, but also new activity systems. In North Valley the involvement of teenagers introduced difficulties in maintaining strict order (E6:21). I do not believe that chaos drives learning, but I suggest that the input of a divergent norm system forces reflection and discussions about the present, which might have a developmental effect. The collaboration with the high school also revealed the enormous problems of motivation that the high school struggled with. These problems came to impact the operation of the 5thD. In that regard the 5thD triggered contradictions in the activity system of the high school, an issue I cannot further analyze and discuss in this study, though it is a tempting prospect.

The bridging artifact of the 5thD also implied new and revised roles. Sara became a mentor for both high school and college students. She invited them to utilize North Valley as a model and a learning lab - not only the 5thD, but also classroom activities. High school students encountered the role as adults in their relationship with the children, which caused self-reflection. Moreover, the 5thD as a bridging artifact implied a challenge to the university to reconsider the existing method of collaboration with organizations in their surroundings (Nilsson & Sutter, 2002). It highlighted the important role of a reciprocal relationship that was flexible enough to respond to local needs. Concretely, it meant establishment of an in-service training course for schoolteachers, as well as a collaborative effort in teaching high school students by the school teachers together with university students.

I started to think of the differences between the 5thD as a bridging artifact and as a boundary object. My conclusion was that boundary objects enable people from different worlds to collaborate and communicate without having a shared object (here I mean object in a activity theoretical sense) by instead communicating through overlapping objects (here object applies to artifacts such as for example the 5thD) and without significant involvement in one another’s worlds. For example, Star and Griesemer discuss the generation of “boundary objects which would maximize both the autonomy and communication between worlds” (1989, p. 404).

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140 Reports from the Swedish Ministry of Education show that students in grade ninth in compulsory school and the third year in the high school express powerlessness in term of lack of influence upon the school activity (Pramling, 2000).
Bridging artifacts, on the other hand, enable people from different worlds to not only collaborate and communicate but also to be involved in one another’s worlds and develop shared objects (in an activity theoretical sense).\textsuperscript{141}

Engeström (1987) points out that while general models (as secondary instruments of expansion) are instrumental in that they are primarily needed to envision and project the evolving object and motive in a new activity, a microcosm is a miniature of the community upon which the new form of activity will be based. The 5thD as a bridging artifact gave me reasons to think of the 5thD as a microcosm, an idea we will explore in the next section. We could therefore conclude that the 5thD, in the context of North Valley, also became a tertiary artifact in keeping with Wartofsky’s scheme. It created a possibility for the North valley community to envision new possibilities. So let us return to the question posed previously: under what circumstances would the 5thD become a useful tool for teachers and at the same time promote transformation of the present school practice?

### 7.3 The 5thD as Tool, Boundary Object, or Microcosm

As we have seen in Chapter 3, a microcosm is a secondary instrument of expansion and as such a miniature of the community upon which the new form of activity will be based:

A microcosm is a social testbench and a spearhead of the coming culturally more advanced form of the activity system. The conscious formation of a microcosm as a substep of expansive research corresponds to the formation of a vehicle for the transition from cooperation to reflective communication. In other words, the microcosm is supposed to reach within itself and propagate outwards reflective communication while at the same time expanding and therefore eventually dissolving into the whole community of the activity. (Engeström, 1987, p. 334, italics added)

What would a testbench and a spearhead of a coming culturally-more-advanced form of the activity mean in the context of the 5thD in North Valley? These metaphors encourage us to think of a laboratory where ideas can be tested and tried out.

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\textsuperscript{141} Konkola et al (in press) discuss boundary objects as tools which “help us understand and develop the shared object between school and workplace as interacting activity systems” (p. 16). A “boundary tool,” for example, might be what Konkola et al. call a “learning task.” A “boundary tool” might be compared to what I here call a bridging artifact.
As I explained previously, I had difficulties in elucidating the purpose of my study to the teachers. The 5thD is considered to be a “field-research laboratory” and thus it assumes that research, for example experiments will be conducted. I was asked what kind of research I conducted in the 5thD. Since my primary object of investigation was not child learning and development but rather, the teachers’ and the institution’s, this was often a hard question to answer. A resolution to this problematic situation triggered the idea of a collaborative research laboratory. What would happen if I invited the teachers to utilize the 5thD as a research laboratory instead of placing it as a tool in their hands, a tool that they did not understand the purpose of and did not have the know-how to use (Wells, 1999)? The idea also corresponded to my experiences of encountering teachers who were posing questions about how to motivate students and expressing a need to know more about how children learn. The 5thD would be the place to collaboratively explore and investigate such questions.

Thus, what I started to imagine was a research laboratory where research important to both teachers and researchers could be conducted. Such a laboratory would preferably comprise a team of researchers with expertise in both child learning and school development. At the same time this laboratory would be an experimental learning environment for college-, high school-, compulsory-school-, and pre-school-students. As such it could be both a testbench and a spearhead.

Let us relate the kind of laboratory sketched above to what Engeström (1987) calls a tertiary instrument of expansion, of which the Developmental Work Research (DWR) approach is an example. As described in Chapter 3, DWR has been instantiated as a Change Laboratory (Engeström, in press) sometimes called a Knowledge or Competence Laboratory (Ahonen et al., 2000). A Change Laboratory provides members of an organization or community with tools that facilitate reflection, comprehension of contradictions in the system, and creation of models featuring a new reconstructed and potential activity. A Change Laboratory implies an intervention that is thorough as well as time and labor intensive on the part of

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142 Andrae Thelin (1999) coordinates research at the National Agency of Education (Skolverket) and often discusses her research with teachers. She claims that when she asks them what they would be interested in researching - if they had the chance – it would be about how children learn. "If you would do research, what would it be about? The nearly consistent answer that I obtain when I pose the question to a group of teachers, principals, and teacher educators is, I would do research on how children learn. That is something I would like to know more about. What interests them is learning and the conditions for learning" (p, 42, my translation). See also Hansen (1999).
both the researchers and the members of the organizations. However, this kind of holistic and “revolutionary” intervention is not always possible or requested by organizations.

The expressed need I encountered in North Valley was not of such a radical kind. What was expressed to me, though, was a need for mentorship. As I said, the teachers wanted to learn about what motivates children and to deepen their knowledge about how children learn. They also seemed to need tools that would conceptually guide them in new ways of working with the children based on what the integration offered in terms of the teachers’ diverse traditions and cultures.

Moreover, as I have shown in Chapters 4 and 5, they seemed to need tools to enable them to reflect on their practice and how to take developmental steps. Thus what was needed was a mix of a Change Lab, aiming at intervention, and a research-, or as I would call it, experimental laboratory. I perceived that the 5thD as a microcosm had such a potential. I imagined a laboratory where it would be possible for teachers to test hypotheses and to study learning. This laboratory would also facilitate their own reflection on their practice and a way of organizing the activity. In this regard, the 5thD as a microcosm would perhaps imply a substep of expansive research. The major reason for believing so is that the 5thD is a place to explore a variety of learning tools and new patterns of interactions guided by the idea of peer guidance (Vygotsky, 1978) and communication, as Engeström et al. (1997) define the concept. Moreover, it is a place that is informed by ideas of learning and development that can be investigated, discussed, applied, and compared to present school and classroom practice. We could say that it is both a material and conceptual artifact. As such it encourages and enables both “doing new” and
“thinking new”\textsuperscript{143} in combination. In considering an activity such as the one outlined above, the 5thD would answer well to both those needs that I claimed above I saw in North Valley, i.e., needs for what I call conceptual and communicative tools.

The 5thD as a microcosm can be considered a \textit{conceptual tool} because it allows for exploration – in theory and practice - of concepts, theories, and methods that might mediate imagination and conceptualization of what a new object in schooling might mean.

The 5thD as a microcosm can be perceived of as a \textit{communicative tool} because it is designed to facilitate members in their reflection upon and communication about their present as well as future activity.

For the purpose of building a 5thD as a shared research-, learning-, and intervention laboratory, as depicted above, the concept of boundary object does not seem applicable. The intention of a boundary object is that the diverse collaborating parties apply their own separate and partly independent interests. As a microcosm the 5thD has to be created as a \textit{shared} object. It is in the creation of the 5thD as a shared object that, to allude to Wells (1999) again, those who have the know-how can share it with those who do not but are willing to acquire it.

The “sharedness” in 5thD collaborations has been discussed by Nocon (2000). Nocon observed three specific challenges in an interinstitutional attempt to build a coalition aimed at operating and sustaining 5thD sites in San Diego, California:

\textsuperscript{143} Hörberg & Hultman have been studying the use and transmission of educational research to teachers and schools. They claim that there is a need for meeting places, “in other words, increase the \textit{prerequisite} to establish a closer connection between preschool/schools and college/universities” (1999, 32, my translation). They claim that there is a shift in attitude on how change in schools will come about. “Previously the research community rarely took into account the teachers’ own change capacity. Today there is a tendency to look at teachers as \textit{change agents}” (Ibid, my translation). They further state that at the present time, discussions are taking place about the opportunities for teachers to participate to a greater extent in research which is in close connection with their own teaching practice and activity. The idea and thought is that it is here that the core or the most important part of learning, growth, and development is taking place. This idea is based on a notion that change takes place in both communication and work activity. Communication between people is of a decisive importance in order for knowledge to grow both collectively and on an individual level. They claim “It is what happens between people in work that more than anything else is decisive for what change or development that will be generated in the school” (Ibid, my translation).
Additional challenges arose that affected individuals’ and institutional partners’ commitment to remain engaged in communication. These are: 1) representation of engagement, particularly presence and attention; 2) the co-construction of a shared object vs. persuasion to “buy in” to an existing model; and 3) the construction and maintenance of organizational boundaries. (2000, 307)

Nocon draws the conclusion that presence in the 5thD activity on the part of the university is necessary, either in terms of research or education. Cole’s third item (see Chapter 2) about withdrawal of external resources – understood, among other things, as university participation – is questioned by Nocon’s argument. According to Nocon, the presence of the university is decisive. It is decisive because the researchers contribute to the development of a shared object or goal rather than presupposing that the collaborators “buy into” the existing concept or model.

I believe these findings indicate the difficulties of entertaining a complex systemic artifact, such as the 5thD, as a boundary object. Star and Griesemer point out that boundary objects “are weakly structured in common use, and become strongly structured in individual site-use” (1989, p. 46). My interpretation is that the 5thD – though flexible – is a highly structured artifact. Moreover, it is an artifact that does not allow for purely common or individual use. For example, the research cannot be conducted independently of the everyday operation of the site, as Nocon shows, and the operation of the site cannot be operated independently of the educational element. That boundary objects are weakly structured in common use, and become strongly structured in individual site-use makes sense due to the fact that boundary objects “are a major method of solving heterogeneous problems” (Star & Griesemer, 1989, p. 46). According to Star, who developed the concept of boundary object from studying scientists cooperating and working together, the issue the concept addresses to is the problem of cooperation and working together. Boundary objects are mediators between subjects, and as such they need to be recognizable by these heterogeneous users. The invention of the 5thD was not due to a problem facing parties who were trying to cooperate in order to reach their independent goals. On the contrary, the 5thD was an object created for a purpose – research – for which the diverse parties were needed, and therefore invited to collaborate, in order to realize the ideas built into the model.

That a blackboard can take on the role of a boundary object (mediator) is understandable. This artifact is rather simple and unambiguous. The 5thD, on the other hand, represents an alternative way of thinking in the field of learning and
interacting with children. It is alternative, and thus not yet institutionalized and taken for granted. The ideas have to be made alive and concretized in a constantly continuous and conscious process. Thus, when operating a 5thD in order to explore its potential for learning and development, it is not appropriate to displace *why*-questions with *how*-questions as could be done in the history museum Star and Griesemer studied. “Collectors do not need to learn theoretical biology in order to contribute to the enterprise. Potential differences in beliefs about evolution or higher-order questions tend to be displaced by a focus on ‘how’, not ‘why’ “(1989, p. 407). Therefore the attentive presence, by those who advocate the ideology and theory guiding the 5thD, is decisive. It is those who have the know-how to use the artifact that have the responsibility and capability to guide.

Moreover, boundary-crossing in the 5thD is taking place equally as much in the consumption or *use* of the object as in its production or *creation*. A blackboard is used by heterogeneous tool users but not produced by them. The same is true for a museum, even though it should be pointed out that in Star and Griesemer’s case the boundary objects, such as specimens, fieldnotes, and maps, could be said to be building blocks in the history museum. Nocon’s findings might suggest that construction requires more interaction than consumption. We might therefore say that the design and ideology of the 5thD requires an approach and attitude toward it as a shared object rather than a boundary object. At least, that seems to help in the creation, maintenance, and sustainability of local sites.

In the process of co-construction, which Nocon claims is required to run and sustain a 5thD program, there is a potential and condition for reciprocal exchange of ideas and ideologies. As Nocon’s findings imply, the parties have to “own” the idea rather than “buy-in” to it in order to make the tool useful to them. Applying the framework of intersubjectivity that was used in Chapter 5, we might say that coordination and cooperation are not sufficient; ownership of the 5thD also requires communication, i.e., a reflective attitude both to interactions and the creation of a shared object (Engeström, et al., 1997).

144 Cole considers the 5thD complementary rather than alternative in relation to the school. My opinion is that the ideology of learning implicit in the model, which also shapes the concrete actions and interactions is alternative. I agree that the local adaptations serve the role as complement to the school.

145 Nocon (2000) borrows a definition of attention from Bellah, Madsen, Sullivan, Swidler, and Tipton: “expressing our deepest concerns and aspirations and listening to those of the other” and further “Attending means to concern ourselves with the larger meaning of things in the longer run, rather than short term payoffs” (p. 277).
The building of the 5thD in North Valley required some work that has been described in Chapter 3 in terms of emergent action ethnography. The work of initiating, planning for, and operating the site was an emergent and incremental process. From the start I assumed responsibility for coordinating and pushing the work forward. My work ranged from searching for monetary and human resources to making sure things “happened.” It also meant making sure that the various involved partners were informed as well as “translating” (Nocon, 2000) between parties, for example, between undergraduates and the schoolteachers. I came to think and talk of this work as “leading with my little finger” as described in Chapter 3. I consider this “little finger work” as a process of co-construction of a shared object.

Thus, creation of a 5thD as a microcosm in terms of co-construction might constitute it as a communicative tool since the formation of a microcosm as a substep of expansive research corresponds to the formation of a vehicle for transition from cooperation to reflective communication. Because it is alternative and because it requires that the participants understand the concepts composing it, it indicates change.

The idea of a microcosm as expansive and eventually dissolving into the whole community calls attention to the research question that provoked the creation of the 5thD in the first place. Cole (1996) was interested in understanding why “proven” successful educational innovations fail to survive when funding resources cease. In considering the 5thD as a microcosm, and therefore as a communicative tool in the school, this question takes on a different meaning. Rather than asking how the 5thD can be sustained, the question would be how might it reach within itself and propagate reflective communication outwards while at the same time expanding, and therefore eventually dissolving into, the whole community of the activity.

In other words, the meaning of sustainability, from this perspective, is not sustained 5thD sites or programs, i.e., educational innovations, in terms of spatially bounded activities. Instead, what we want to sustain is an attitude, or let me say mentality, in which interactions, communication, tool use, etc., promote learning and development as it is discussed within the culture-historical activity theory as well as the socio-cultural approach. However, mentality is dependent on instrumentality. A new mentality is not just located inside people’s heads – it is embedded in artifacts and infrastructures. A nice example of that is Sam’s expressed reason for why he was attracted to the 5thD model. He saw that the model implied new ways of working for both children and teachers.
Ultimately this means that if the practice, both inside and outside the classroom, in North Valley becomes influenced by the 5thD mentality as well as (or in conjunction with) its instrumentality, the 5thD is ultimately sustained.

Nevertheless, as Nocon’s findings imply, a precondition for building a shared object is that the collaboration is built on a respect and an understanding of the constraints and conditions that institutional boundaries imply. This is true for both the university and the local hosts. For the university this might mean constraints due to the traditional missions of research and education as relatively encapsulated and independent tasks. For the local hosts this might mean that the model should be adjusted to their particular culture and needs. In the 5thD research community, an issue often discussed is the question when a 5thD is a 5thD and when it is not. The model is meant to be flexible and adaptable but only, of course, within the conceptual framework. In North Valley, minor deviances from the model took place but, by and large, the model was appropriated as originally designed.

The idea of collaboration between universities and local organizations are not unique to the 5thD even though this kind of research and education is rare. At the Center for Community Partnerships at the University of Pennsylvania, an institutionalized practice has been developed that combines education, research and community service. It is based in Dewey’s ideas that real advances in knowledge occur through a focus on the central problems of society. One example is a project where university students carry out both research and teaching at a public school. The subject matter is health care. The goal is knowledge development in terms of research and education, but also changed eating habits and health conditions for people in the city. Service to, and collaboration with, the surrounding society is characteristic of the Center; they claim American urban universities are “forced” to take on these responsibilities due to external crises as well as internal difficulties resulting from the separation of community service from teaching and research (Harkavy, et al, 1996).

Both Nocon (2000) and Harkavy et al. (1996) point out the significance of universities’ commitment to building long-term and stable relations with local communities, institutions, and organizations. Our building of the bridging artifact (at North Valley) implied change and development, and as has been shown in Chapter 6, it required trust and long-term commitment. The idea of the 5thD as a microcosm would imply a long term, perhaps even permanent collaboration that therefore would eventually transform the way research, at least part of it, is conducted as well as how higher and compulsory education is organized and
carried out. If we make another comparison with a Change Laboratory, we can see that that is an intervention limited in time, although it often implies that researchers stay for periods from three to twelve months (Engeström, in press). It is an explicit interventionist approach.

As discussed in Chapter 3, Cole (1995, 1996b) considers the 5thD to be an instantiation of Utopian Methodology, implying long-term commitment to collaboration with local organizations aimed at education and research. However, organizational intervention is not the goal and purpose of Cole’s methodological approach. The idea of the 5thD as a microcosm combines intervention, education, and research designed not just as a long-term relationship but as a new form of outreach work (Nilsson & Sutter, 2002).

### 7.4 Summary and Conclusions

Thus, would it be appropriate to claim that the 5thD facilitated the integration attempt in North Valley? Could we conceptualize it as a communicative and conceptual tool?

My conclusion is that it did not facilitate the integration attempt in the way I had thought, from the outset, the 5thD would. Conceptualized as a microcosm, however, the 5thD has a real potential to become both a communicative and conceptual tool.

The analysis shows that the 5thD was utilized by the teachers in the school as a primary artifact informed by their schooling activity. The 5thD was also approached and employed by the site-coordinators as a model, i.e., as a secondary artifact. They explored the model, adapted it, presented it, and used it for discussions in the school. Moreover, the North Valley 5thD adaptation became a bridge in that it offered people opportunities to cross boundaries, to try out new roles and move between them, and to interact in new ways and with new partners. As a bridging artifact it motivated and mediated change but also expansion. It evoked the production of new roles, rules, and instruments, as well as new activity systems.

The analysis of the 5thD as a bridging artifact gave birth to the idea of the 5thD as a microcosm. The 5thD, as a microcosm, is a collective and shared endeavor. It is simultaneously an educational environment and a research and change laboratory for teachers and researchers. This kind of intervention implies a long-term
commitment that entails new ways of organizing university research as well as both university and compulsory school education. Thus, the approach provides teachers and schools with a potential tool for further and continuous development of their school practices. In this regard the 5thD in my study became a tertiary artifact in the sense that it came to envision “possibilities not presently recognized” (Wartofsky, 1973, p 209).

As shown in Chapter 5 (Figure 5.7), the third expansive cycle in North Valley was interrupted and thus not completed. My interpretation of this was that the school did not have sufficient tools, what Engeström calls secondary and tertiary instruments of expansion, which, in this context, I call communicative and conceptual tools. Based on the above discussion I suggest that the 5thD as microcosm potentially constitutes such tools and therefore might facilitate integration attempts.

The 5thD as a microcosm can be considered a conceptual tool because it allows for exploration, in theory and practice, of concepts, theories, methods that might mediate imagination and conceptualization of what a new object in schooling might mean.

The 5thD as a microcosm can be perceived of as a communicative tool because it is designed to facilitate members in their reflection upon and communication about their present as well as future activity.

The four approaches to the 5thD that I have discussed in this chapter are depicted in the table below.
<table>
<thead>
<tr>
<th><strong>Function</strong></th>
<th><strong>The 5thD as Tool</strong></th>
<th><strong>The 5thD as Boundary object</strong></th>
<th><strong>The 5thD as Bridging Artifact</strong></th>
<th><strong>The 5thD as Microcosm</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development of school pedagogy</strong></td>
<td>Development of school pedagogy</td>
<td>Research, college education, complementary education for school children</td>
<td>Open up school to inter-institutional exchange and collaboration</td>
<td>Research, college and compulsory education, and school intervention</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>Given</td>
<td>As coordination and cooperation</td>
<td>Emergent through coordination cooperation, and communication</td>
<td>As cooperation and communication</td>
</tr>
<tr>
<td><strong>Aimed for/use</strong></td>
<td>Teachers</td>
<td>Researchers, college students, and children</td>
<td>Researchers, teachers, and students at different ages and levels</td>
<td>Researchers, teachers, and students at different ages and levels</td>
</tr>
<tr>
<td><strong>Adaptability to local worlds</strong></td>
<td>Adaptable to institutional needs</td>
<td>Flexible within the conceptual framework</td>
<td>Situated design</td>
<td>Resilient and flexible</td>
</tr>
<tr>
<td><strong>Art of sustainability</strong></td>
<td>Sustained as changed mentality, instrumentality, and way of working in schools</td>
<td>Spatially sustained sites</td>
<td>Transitional</td>
<td>Sustained as changed mentality, instrumentality, and way of working in schools and as new forms of university outreach work and research, i.e., relationship between university and societal institutions</td>
</tr>
</tbody>
</table>
The table invites to an interpretation of the different 5thD conceptualizations as progressive: from a simple to a more complex or advanced artifact. Even though there might be a value in such an interpretation it is also problematic because it implies valuation. An alternative would be to perceive the diverse conceptualizations and their respective merits as dependent on the purpose of the local 5thD instantiation.

Moreover, it should be pointed out that this multifaceted conceptualization of the 5thD is a construction of a researcher. One could assume that different teachers have different conceptual understandings of the 5thD as an emergent phenomenon. A hint about that was given in the interview with Sandra (E6:10). This is of course an empirical question that would require a study in itself, for example, by applying a phenomenological framework (see for example Marton, 1994; Alexandersson, 1994).

In the next chapter I will further explore what the concept of conceptual tool might mean in the context of compulsory education. I will survey learning theories, concepts, models, and practices that might facilitate integration processes at the same time that they envision a new object in the school. Perhaps we could say that they suggest and hint at what the vision of culture- and knowledge-creation might imply in concrete terms.
8 New Forms of Learning

As we have seen in Chapters 4 and 5, old rules, instruments, and division of labor were applied to the new activity system of the VT. This turned out not to be sufficient to establish an activity in line with visions expressed by the principal and the school authorities. The conclusion I have drawn is that the teachers were in need of both conceptual and communicative tools – something they never really obtained. Without tools one should not expect other than poor performance. In this chapter I will start by exploring three theoretical approaches to learning and development that I think have a potential to facilitate processes of creating integrated activities such as the VT in North Valley. The three approaches are based on the cultural-historical and socio-cultural traditions and are discussed as the “situated,” the “developmental,” and the “expansive” approach to learning.

Engeström (1991b) identifies the three above mentioned approaches as “context of discovery,” “context of practical application,” and “context of criticism.” I will relate these, as I perceive them, intra-dimensional contexts of learning to three additional learning contexts that I call inter-dimensional: “inter-cultural,” “inter-generational,” and “inter-institutional.” The identification of the inter-dimensional contexts is done in the context and analysis of the integration reform in general and in the North Valley example in particular. The three inter-dimensional contexts will be discussed and defined below. I conceive of them as enrichment to the cultural-historical and socio-cultural approaches to learning. They complement, as I understand it, the intra-dimensional learning contexts and create a framework to look at learning from a multitude of perspectives. Such a framework opens up for a range of possible learning practices and blurs the boundaries of what is in-school and out-of-school, respectively.

The discussion will be conducted through concrete examples of learning practices. These examples will draw on experiences from the present study but also on other research on cultural-historical and socio-cultural frameworks or on closely related ideas.
8.1 On Learning

All societies have to deal with transmission of experiences and knowledge from one generation to the next. In western societies transmission takes place in a historically developed institution - the school. I have discussed earlier how this process takes place in the school in terms of knowledge- and culture-reproduction. The concept of learning is for most people still equated with this process of reproduction taking place in the institution of schooling. Learning is about receiving and remembering what the teacher teaches. The transmission approach to learning, to which Säljö (2000) applies the pipeline metaphor, has been challenged from many directions and for a long time. Among these challenging traditions are the cultural-historical and the socio-cultural approach. Sutter (2001) points out that in these traditions learning has three main characteristics:

(1) Learning takes place in and as a part of social practice, in communities of practice or in activity systems, (2) learning is mediated by artifacts, and (3) learning is connected to development. Thus learning is a practical activity enacted with the help of artifacts, which are material and ideal. Learning takes place between people, and is something that not only occurs “in the head” but also “in the world.” (2001, p. 4)

Engeström expresses the same conception in the following way:

Learning is meaningful construction and creative use of intelligent cognitive tools, both internal mental models and external instruments. Learning is also participation, collaboration and dialogue in communities of practice. Finally, learning is also criticism of the given, as well as innovation and creation of new ideas, artifacts and forms of practice. (1994b, p. 1)

Based on a discussion about the discontinuity between learning in school and cognition outside school, as well as the encapsulation of school learning, carried out initially by Resnick (1987) and continued by Brown, Collins, and Duguid (1989), Engeström (1991b) compares three approaches in the socio-cultural/cultural-historical tradition aimed at overcoming encapsulation of the school. The approaches Engeström discusses are (1) Davydov’s theory of “developmental teaching and learning,” also called “ascending from the abstract to the concrete.” (2) Lave and Wenger’s (1991) “situated learning” or “Legitimate Peripheral Participation” (LPP) approach, (3) Engeström’s own approach called “expansive learning.”
Engeström bases his discussion on a study about students’ misconception of the phases of the moon. He shows that the misconceptions are not due to the students’ immature thinking but to culturally produced artifacts. These artifacts are biased spatial and dimensional depictions of the solar system in textbooks. It is these biases that give the students a basis for the misconceptions that they express. Moreover, the diagrams and the phases of the moon as explained in textbooks are not constructed and applied by the students as instruments for the analysis of reality. They are given as such, in a finished form. The adjunct materials contain tasks that demand the identification, naming and classification of the different phases or shapes of the moon. The dynamic model behind the diagrams is never constructed and tested by the students.

To this prime example of traditional classroom practice Engeström first applies Davydov’s experimental and developmental method and theory, which is based on the idea of ascending from the abstract to the concrete (see footnote 55 in Chapter 3).

For Davydov (1982, p. 39) the motive of learning activity is formation of a theoretical relation to the reality. The approach builds on the idea that children’s learning should be arranged by “subject matter analysis” (see e.g., Chaiklin, 2002; Hedegaard, 1996, 1999 a & b; Stetsenko & Arievitch, 2002) and by challenging the students’ misconceptions in order to follow the traces of the original achievements of knowledge-building. In Davydov’s words:

Learning tasks, whose solution implies a full-scale learning activity, require that pupils analyze the conditions in which the particular concepts of theoretical knowledge originated, and that they appropriate generalized ways of acting. In other words, while solving learning tasks school children discover original or relevant relationships inherent in the respective material. (1999a, p. 128)

The developmental teaching approach implies that “the basis of developmental teaching is its content” (Davydov 1988, p. 19). Davydov’s developmental teaching approach is mainly devoted to learning at school framed by traditional schooling and as such “it is focused on ‘learning the given’ (Sutter, 2001, p. 63).” Sutter argues that the problem is not that the learning-the-new orientation is not acknowledged; rather, as he claims, “the teaching experiments are organized within a context of the present school institutions, although there are opening-up-of-school experiments” (here Sutter mentions Moll & Greenberg 1990; Hedegaard 1996). In Davydov’s own words “approaching learning activity, the most important aspect is to understand the conditions of its right organization in the classrooms” (1999a, p. 123).
Davydov’s approach implies that the encapsulation of school learning is due to an empiricist, descriptive, and classificatory bias in traditional teaching and curriculum design. The solar system is a good example of this: school knowledge fails to become an instrument to support students in their efforts to make sense of a phenomenon they encounter outside school. This is, according to Davydov, because school knowledge is not taught genetically, because its “kernels” are never discovered by students, and because, consequently students do not get a chance to use those “kernels” to deduce, explain, predict, and master practical concrete phenomena and problems in their environment. Thus, the encapsulation can be broken by organizing a learning process that leads to a type of concepts radically different from those produced in prevalent forms of schooling. A Davydovian approach would, according to Engeström, teach the solar system – and the entire conceptual system of astronomy – by first discovering and modeling the simple initial abstraction of astronomy. What that initial abstraction might be is a question to be solved by intensive analysis conducted jointly by subject-matter specialists, psychologists, and educators. The movement of the heavenly bodies, including the curious phases of the moon, would be problematized, observed and explained concretely with the help of the “kernel” formulated on the basis of the initial abstraction. Engeström claims that this Davydovian approach to the solution of the encapsulation of school learning is to:

*Push school knowledge out into the world* by making it dynamic and theoretically powerful in facing practical problems. In some sense, this looks like a narrowly cognitive and scientistic strategy. The basis of school learning doesn’t seem to be altered by this strategy, which makes one wonder whether there will be motivation among the students to carry out the strategy. (1991b, p. 251)

However, despite these critical comments Engeström perceives the Davydovian approach as fundamentally different from most cognitivist approaches to instruction in that it makes the practical historical context of discovery of theoretical knowledge the object of learning. In this way it opens up a whole new dynamic of contents. Moreover, “it does not pretend to eliminate the power of the teacher, but by putting the students into dialogue with the discoverers of the past, the strategy may well empower the students” (1991b, p. 251).

The next step in Engeström’s exploration of what the socio-cultural approach to learning can contribute when learning about the solar system is to examine the situated LPP of Lave & Wenger (1991) perspective.
Rather than defining learning as acquisition of propositional knowledge, learning were considered situated in everyday practice. Instead of being interested in cognitive processes and conceptual structures, this approach focuses on what kinds of social engagements provide the proper context for learning to take place. This implies that meaning, understanding, and learning are contextual. It also implies that the locus of learning is shifted from the individual to a process that takes place in a participation framework, in a community of practice. Moreover, learning is distributed among co-participants and is a feature of practice, i.e., learning is an integral and inseparable aspect of social practice, or as Sutter (2001) puts it; learning is a by-product of everyday life and work.

Apprenticeship learning is of special interest. Lave and Wenger (1991) take the process of what they call “legitimate peripheral participation” as the central defining characteristic when viewing learning as “situated.” The concept “provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice” (p. 29). For Lave and Wenger, learning, as an aspect of social practice, implies becoming a full participant, a member in a community of practice, which in turn implies “becoming able to be involved in new activities, to perform new tasks and functions, and to master new understandings” (p. 53). Learning is about moving from the periphery of a community of practice toward the center, i.e., toward full participation. In short, what is emphasized with this concept is the significance of shifting the analytical focus from the individual as learner to learning as participation in the social world, and from the concept of cognitive process to the view of social practice.

Lave and Wenger relate their approach to approaches and scholars that interpret Vygotsky’s zone of proximal development from a “collectivist” or “societal” perspective, among them Engeström’s activity theory. They claim:

They share our interest in extending the study of learning beyond the context of pedagogical structuring, including the structure of the social world in the analysis, and taking into account in a central way the conflictual nature of social practice. We place more emphasis on connecting issues of sociocultural transformation with the changing relations between newcomers and old-timers in the context of a changing shared practice. (p. 49)

As I understand it, this implies that the LPP approach does not focus on and is not mainly concerned with creation of the “new” i.e., learning activity or “learning III” or “expansive learning.”
Engeström points out that, according to Lave and Wenger, learning as participation in communities of practice is particularly effective:

(a) when participants have broad access to different parts of the activity and eventually proceed to full participation in core tasks, (b) when there is abundant horizontal interaction between participants, mediated especially by stories of problematic situations and their solutions, and (c) when the technologies and structures of the community of practice are transparent, that is, their inner workings can become available for the learner’s inspection. (1991b, p. 252)

Engeström’s interpretation of the LPP approach leads him to conclude that its practical implication would be to change the social organization of the school so that it would allow for communities of practical activity demonstrating the criteria listed above. This would, for example, mean, according to Engeström, and based on attempts by Collins et al. (1989), that one would simulate what astronomers, or those who apply astronomical knowledge, do in their daily activity. Such practices might involve astronomical observations, calendar making, or similar tasks where the phases of the moon would become a practically relevant question within the framework of a broader activity. Moreover, technologies that make astronomical phenomena transparent – perhaps computer simulations and videodisc applications – would be employed.

According to Engeström, the object of this activity would be the context of practical application, which differs from the Davydovian approach of context of discovery. As Engeström (1991b) puts it, “innovations are not precluded from the context of application, but the genetic origination of the key ideas of the discipline is not systematically sought and replicated” (p. 253).

The viability of the LPP approach, according to Engeström, is dependent on the successful identification of a meaningful social practice that can be transferred into school and still retain some degree of authenticity. It runs the risk, however, of being turned into theoretical legitimation for building technology-intensive micro worlds in schools without serious consideration of the meaning of those worlds in the lives and social circumstances of the participants.

In summary, the legitimate peripheral participation approach seems to propose to solve the problem of encapsulation of school learning by pushing communities of practice from the outside world into the school. (1991b, p. 253)
Finally, what would be an expansive learning solution to the solar system learning problem and encapsulation of school learning? Let us take a brief look at this approach.

If we use Bateson’s level learning theory (see Chapter 3) we can make a distinction between learning the given and learning the “new,” i.e., what is not yet “there.” In Learning I both the object/outcome and instrument are given. In Learning II the given tasks are repeatedly accomplished within Learning I, but also a tacit representation or image of the way of accomplishing the tasks is generated. However, in Learning III and in its further conceptualization by Engeström, the focus is moved from the single individual’s learning or knowledge acquisition to the individual within the system. Engeström calls “Learning III” “expansive learning” or “learning activity”:

The essence of learning activity is production of objectively, societally new activity structures (including new objects, instruments, etc.) out of actions manifesting the inner contradictions of the preceding form of the activity in question. Learning activity is mastery of expansion from actions to a new activity. While traditional school-going is essentially a subject-producing activity and traditional science is an instrument-producing activity, learning activity is an activity-producing activity. (1987, p. 125)

In expansive learning the activity system is understood as a learning entity and development of societal productive practices becomes the object. In this process both the individual and collective subject learn. They learn directly because they are part of changing the system and they learn indirectly because the new object will motivate and cause new actions. According to Sutter this implies a “quantum leap”:

I believe, this can be regarded as a “quantum leap” in the relation between learning and development. From a focus on the transformation of the individual (which is at the heart of “learning” in our culture) to a focus on the transformation of an activity system. In the first case, the learning activity system also changes, and in the latter case, individual members of the activity system also do. One can say that the specific activity has changed from learning/development to development/learning” (2002, 25).

Engeström derives learning activity from the evolution of the general concept of activity, on the one hand, and, from the cultural evolution of learning within other activities, on the other hand. These other activities are school-going (or schooling), work, science, and art.
The original forms of human learning are those where learning occurs predominantly as an unintentional and inseparable aspect of the basic work activity (Sutter, 2001; Engeström, 1987). In terms of activity theory this kind of incidental learning consists of non-conscious learning operations, embedded in the daily participation in joint work. On this level, primary artifacts (Wartofsky, 1973) mainly mediate learning. In schooling or school-going (Engeström, 1987) transmission of knowledge and experiences brings about the first conscious learning actions. Transmission generates learning actions such as conscious imitation, conscious memorizing, and conscious trial-and-error. The means of transferring knowledge and experiences from one generation to another are representations in the form of written language, models, maps, diagrams, etc. With Wartofsky’s (1973), we call them secondary artifacts. Despite the potential for critical examining and reflection that secondary artifacts posses, they remain objects rather than tools in schooling.

Knowledge in the European Middle Ages was considered understanding texts.

According to Engeström, learning as action is also what characterizes learning at work though, as he claims, “there is an objective pressure, manifesting itself in various forms, toward taking over the mastery of the whole work activity into the hands of the people who participate in that activity” (1987, p. 114).

The third activity that constitutes the foundation and origin for learning activity is science and art. Engeström claims “the learning actions inherent in scientific and artistic activity are those of learning to imagine, learning to ‘go beyond the given’, not in the privacy of the individual mind but in public, material objectifications” (1987, pp. 122-123). In sum, the internal contradictions in these three activities constitute the potential for development of learning activity.

Engeström’s fundamental take on learning activity is that it produces a new activity: “In learning activity, development itself becomes the object of learning” (Engeström 1987, p. 155-156). Thus, the outcome of learning activity is an activity. This implies that the subject is also transformed, though indirectly, as a result of the new activity.

Engeström suggests that since the school is a historically formed practice, the initial step toward breaking its encapsulation might be that students are invited to look at its contents and procedures critically, in the light of their history. He asks, “why not let the students themselves find out how their misconceptions are manufactured in the school?” (p. 254). He connects such an approach to Bateson’s Learning III and points out that in order for level III learning or expansive learning to be
nonpathological, the learners must have an opportunity to analyze critically and systematically their current activity and its inner contradictions. Engeström would call such an activity in school the context of criticism. He suggests that a critical analysis of current school practice could start with a hard look at textbooks and curriculum in particular content areas. The “hidden curriculum” of tacit classroom practices could be investigated, for example by using videotaped lessons. Students could analyze their own test and examination questions and answers, as well as outcomes of their own learning in terms of duration, understanding, and transfer. Moreover, the relationship between the school knowledge represented in the textbooks and the fantasies nurtured in the popular could be of interest in the context of criticism.

However, this is not enough to make learning III productive. The learners must also have an opportunity to design and implement in practice a way out, a new model for their activity. This means that the learners work out a new way of doing school work. “In other words, students must learn something that is not yet there; acquire their future activity while creating it” (Engeström, 1987). Engeström points out that this also proceeds through particular contents and that it therefore seems possible that the three approaches discussed, i.e., the Davydovian, the LPP, and the critical or, could be employed as complementary modes of inquiry by students and teachers in particular content areas. “This would make the relationship between the context of criticism, the context of discovery, and the context of practical social application the new, expanded object of learning” (p. 255).

Engeström suggests that a combination of these approaches is possible in terms of successive phases starting in the context of critical analysis and proceeding to a kernel analysis and simulation of a community of practice. The tree might also be implemented in parallel providing for multivoiced exchanges. Engeström claims that each of the suggested three complementary modes of knowing and learning has distinctive cognitive, motivational, and social strengths. The context of criticism highlights the powers of resisting, questioning, contradicting, and debating. The context of discovery highlights the powers of experimenting, modeling, symbolizing, and generalizing. The context of application highlights the powers of social relevance and embeddedness of knowledge, community involvement, and guided practice. Engeström points out that such an expansion of the object implies a qualitative transformation of the entire activity of school learning. It requires formation of networks of learning that transcend the institutional boundaries of the school. These networks might include educational researchers, researchers of
certain fields of knowledge, practitioners, teachers, parents, and students. An example of such a network will be described in section 8.2.3.

The ultimate goal for Engeström is that the school institution turn into a collective instrument for teams of students, teachers, and people living in the community. The object of school learning then has become development, i.e., reflective reorganization of itself as an activity system. This would imply that “collectives of people must become good expansive learners, so that they can design and implement their own futures as their prevalent practices show symptoms of crisis” (p. 256).

8.2 Inter-Dimensional Learning Contexts

The aim of the integration reform, as I understand it, is to move from learning as transmission to a learning practice that takes into account that learning takes place in social interactions and active relations with the environment. The rhetoric, as we have seen, is a vision of the child as knowledge- and culture-creator. It is unclear and not evident in the official reports whether that also means that there is an aspiration for learning III (or learning “the new,” i.e., “learning activity”).

However, a move away from learning as transmission does not mean that learning the given should or can be outdated and abandoned. Thus, we might ask what kinds of methods and teaching/learning practices would enable children both to acquire knowledge and at the same time become members of a creative learning activity. Or put differently, how can learning be meaningful for the students? From the point of view of the integration reform, the presence of the pre-school class and the leisure-time center in the school is meant to act as a trigger and stimulant of development in this direction.

The findings accounted for in Chapters 4 and 5 imply that teachers are not prepared to give up their duty to teach and make sure that their students learn what is expected, which we here can call the “given.” However, I have also shown that teachers do not, by definition, resist change. Rather they are open to new forms and approaches, both in terms of rules, tools, and division of labor, but only insofar as they will be assured that these new artifacts will support their tasks and duties or

Engeström gives as examples Miettinen (1990), Moll & Greenberg (1990), Sutter & Grensjö (1988).
at least not jeopardize their efforts. Now, what kinds of artifacts possess the duality of simultaneously being acceptable to teachers, in terms of answering to their objectives, and promoting learning that can be considered developmental, expansive, creative, and meaningful to the students? In other words, what are the features of useful and productive tools in the process of expansive learning in school settings geared to integration reform? What could culture- and knowledge-creation (or an individualized and holistic pedagogy) really imply?

The integration reform and the North Valley instantiation made visible three new learning contexts. I call these learning contexts the inter-cultural learning context, the inter-generational learning context, and the inter-institutional learning context. With the inter-cultural learning context I mean a context where learning takes place due to incorporation of elements from both the school and the child care tradition. The importance is that transformation takes place - that a “third new” is created as a result of the encounter between these traditions. The concept of inter-cultural learning context grew out of the attempts I perceived in North Valley and the VT to produce new instruments, rules, and division of labor based on their respective cultures and traditions. In addition, research on integration from a socio-cultural perspective, which I account for in the next section (Davidsson, 1999a), contributed to this conceptualization.

With the inter-generational learning context I refer to a context where learning and motivation can emerge due to the encounters between learners of different ages, at different levels, and from different school forms. The idea and need for conceptualizing the inter-generational learning context emerged out of the structure of the VT but also from collaboration between North Valley, the high school, and the university involved with the 5thD. The VT structure highlighted a need to conceptualize learning based on age-heterogeneous groups. Interactions between students of diverse ages seemed to have promising potential both in terms of motivation and knowledge development. The concepts of peer-guidance (Vygotsky, 1978) and community of learners (Rogoff, 1994) were influential.

With the inter-institutional learning context I refer to a context where learning takes place due to collaboration between diverse institutions in the society such as the compulsory school, the high school, the university, but also other institutions such as the municipality, companies, etc. The concept of inter-institutional learning context also emerged as a by-product of the efforts of different institutional parties to run the 5thD program. The inter-institutional learning context differs from the inter-cultural in that it does not aim at a merger and creation of a new permanent
activity system. Instead it should be understood as a context of learning in which institutional actors take part in a flexible manner based on interest and competence. The notion of “knotworking”\textsuperscript{147} (Engeström et al., 1999) might serve as a reference and illustration as well as the idea of “dynamic networks” (Posch, 2000) of which I will give an example in section 8.2.

In the next sections I will take concrete learning practices as the point of departure when discussing the three learning contexts introduced above. Some are generated from this study but others are taken from the literature. The reason for going beyond what could be is seen in North Valley as examples of inter-dimensional learning contexts is that what was developed there can be described as attempts toward new forms of learning rather than mature activities. Thus, what we are aiming at now is what in figure 3.2 is called a “culturally more advanced central activity.” The aim of the discussion below is to provide a matrix of learning contexts that should have the potential of serving as a conceptual tool, or in reference to Vygotsky (1978), as a “more advanced peer” in the school’s collective zone of proximal development triggered by the integration reform.

I am well aware that tools of these kinds are “given new” and that in order to be beneficial they have to go through a process of creative local modifications to become “created new” (Engeström, 1987).

\subsection{8.2.1 The Inter-Cultural Learning Context}

I. Johansson (2000c) asks what impact the guiding principals and working methods of the pre-school pedagogy would have on the content in the school and vice versa. Davidsson (1999a) indirectly answers this question by employing the LPP approach. She discusses creating a theme around shopping and a store - the Sunflower shop.\textsuperscript{148} The example is from a study where teachers with diverse experiences meet in order to create a new practice for six and seven year-olds.\textsuperscript{149}

\textsuperscript{147} “The notion of knot refers to a rapidly pulsating, distributed and partially improvised orchestration of collaborative performance between otherwise loosely connected actors and activity systems” (Engeström, et al., 1999, p. 97).

\textsuperscript{148} I find her example especially interesting since creation of a shop was one attempt in North Valley to create a new learning tool/practice as a consequence of the integration. Since these kinds of studies are rare and I find this study of particular interest I will give a quite extensive account of it.

\textsuperscript{149} It is not explained in the paper whether the project was spontaneous or mediated by the researcher or any other agent or agents.
Davidsson’s theoretical perspective is LPP (Lave & Wenger, 1991) and the community of learners approach (Rogoff, 1994). She also draws on Vygotsky’s theories on play.

Davidsson describes the school instruction and education as mainly verbal. Practical elements often fill the role of illustrations of verbal reasoning. Learning in school is described as decontextualized, i.e., it has no direct connection to everyday life situations in which the knowledge is supposed to be utilized. Davidsson asks if play might be a bridge between the world of instruction in the school and the world around. Does play provide a space where kids can produce and use knowledge in a contextualized manner? Is it necessary that the “reality” enters the school or can it stay outside while play comprises a bridge?150

Play, as we have seen in previous chapters, is historically a significant characteristic of the pre-school practice both in terms of teacher-led and “free play.” Play in the school, on the other hand, takes place in recess or in special occasions and is most often teacher-controlled. However, in the integration reform and now also in the new curriculum, i.e., Lpo94, (p. 84) the importance of play for children’s learning is stressed. It is also stated that it should be part of the school’s classroom practice.

The starting point for the theme “The Sunflower shop” was a section in the arithmetic textbook for the first graders on tens (tiotal) and related tasks. In the instructions to the teacher the textbook author suggested an exercise to change money, which in combination with the teacher’s idea of letting the children simulate shopping resulted in the idea of creating a store. In discussions preceding the creation of the store the teachers’ diverse experiences from shop play and mathematics were displayed, and because of that, were subject to reflection. What were the features of the diverse “shop play practices” possessed by the pre-school and the schoolteachers respectively? What was common and what separated the views?

The schoolteacher’s experience implied that she had used the “shop play” as a means to teach math. She organized a corner in the classroom as a shop where the children could purchase and sell products. She followed the instructions in the textbook and controlled the activity and the children’s understanding by always being the counterpart in the transactions. The teacher’s goal was that the children would practice calculation. She had not emphasized the store as a societal practice.

150 See also Broström (1999).
She focused on each child’s individual learning and did not encourage collaboration between them.

The pre-school teacher’s experience from shop play of course came from the pre-school. Her role had been to support the creation of the shop, which was very much the children’s work. The children were encouraged to bring items for the shop from their homes but the pre-school teacher never reflected upon the play activity as such. What kinds of articles there would be in the shop or how the shop would be used was never discussed. When the shop was ready the pre-school teacher took on a passive and observing role. She did shop now and again but mainly she overlooked and made sure that all children had access to the shop. There were no rules about how much money each child would get and she did not stress or make visible math related tasks embedded in the play. Math was not a subject for discussions or talk in connection with the shop, except about the prices of the items. In pre-school it has traditionally been the concept of free play that has guided the shop-play, and pre-school teachers’ assumption has been that the children learn about shopping through playing.

Davidsson claims that the two practices differ in the ways the activity is directed, but also regarding aim and focus of the work. In the school it was the teacher who planned and decided upon the activity with little influence from the children. In the pre-school the pre-school teacher planed the shop more in collaboration with the children but during the play she adopted a more wait-and-see policy and observing attitude. Play is the children’s arena where they decide on the rules.

None of the teachers had problematized the role of the shop in society. The schoolteacher’s focus of interest was the children’s learning about mathematics, i.e., subject matter, while the pre-school teacher focused on learning as something that came naturally in play. Her goals were connected to the children’s development of social competence. In this cross-road Davidsson asks what the children are supposed to learn, how the new practice is supposed to be created and what features it will have, and if there is room for both perspectives in the constitution of a new practice.

Davidsson gives an account of the outcome of discussions between the teachers about a new aim of the shop play activity. The shop was supposed to be an activity in which the children learn about mathematics but also about the role shops play in society. A shop is a place where the children go with their parents. With help from the shop play activity social skills were supposed to be developed. The teachers
asked themselves questions such as: How do you shop? What is needed in order to shop? What do you need to know in order to shop? It was in the context of such questions that mathematics would be part of the activity, which therefore could be a new way of thinking of instruction. The children would experience situations both in the shop play and in the real store, which would comprise a basis for formulating questions about the teaching and learning of mathematics.

The teachers considered it important that the children were given responsibility but also that the children were active and participated in the work. They wanted the children to experience learning as meaningful and as something that was connected to the children’s experiences – in this case to their experiences of shopping. There should be opportunities for collaboration between the children but also between the children and the adults.

In order to make the children engaged in and part of the activity from the start, the teachers discussed the shop as a concept with them. The aim was to obtain information about the children’s understanding of shopping, for example, what experiences the children have from the societal activity of shopping. They discussed questions such as: What is a store? What can you do in a store? What kinds of stores are there? What stores have the children been to? Which ones are fun and which are boring to go to?

After this discussion they decided what kind of store to build. There were many suggestions, ranging from grocery store to sport and toy store. They eventually decided to build a grocery store - “The Sunflower shop.” The next step was to discuss what items to offer in the store. The children were divided into groups with one teacher in each, in order to discuss what you buy in a grocery store. The teacher took notes of the children’s suggestions and after the group sessions the groups compared their lists. The comparison revealed and expanded the children’s experiences.

The next question on the agenda was to figure out how to get the items into the store. The children offered diverse solutions ranging from getting them from a store, the school and their homes. They discussed the possibility to have authentic items in the Sunflower shop. Some children recalled that they used to have empty food containers when doing the shop play in their pre-school. It was decided that they would bring such objects from their homes. Fruit, vegetable, sweets, pastry and bread would be produced in the school using clay. A group of children and a
teacher took on the responsibility of designing and setting up the store. To get ideas they visited a local grocery store.

When the store was ready and filled with items a discussion began regarding pricing the items. This took place in small groups. The aim was to have the children think of what things cost. Therefore the children were urged to guess the prices. Their estimations were listed and later compared to the prices in a real store. When visiting the store the children were asked to explore the store and to pay special attention to how to find out the price of an item, how to find a particular object, where to pay, etc.

Back home the children and the teachers jointly created price tags, signboards, and solutions to diverse problems that occurred. The store also carried bags, money, wallets, paper and pencils, calculators, and baskets. When the store was completed there was an inauguration where a ribbon was cut, speeches were held, photos taken, and ice cream offered to all visitors.

When the children occupied the store a teacher usually participated in order to encourage reflection. For example, the children were encouraged to write down the prices of the items, manually calculate the bill and use the calculator to check the calculation. One child was the cashier and the other children were given money to shop - as Davidsson points out, all in accordance with the math book. If the money was not enough the teacher initiated a discussion about possible solutions. Questions to think of were: Is it possible to shop without money? How do you know if the money you have is enough to buy particular items?

The children taking the cashier’s role found it hard to keep in mind all the prices. Either they had to ask the “customers” about the price or they had to run to the shelf and find it out. This inconvenience caused the children to create a price list located next to the cash register.

The shop play became a popular activity. The children contributed to the shop play with knowledge they gained by shopping with their parents in their everyday life. For example, they obtained accurate prices and suggested producing advertisements and “special offers.” They took responsibility for replacing old and damaged containers and producing new fruits, etc. when necessary. The store was also used in other role-play activities such as playing family. It was occupied by both the six- and seven-year-old children who often played together.
Davidsson points out that the purpose of the store was for the children to develop their knowledge and understanding of both mathematics and shopping as a social practice. That play is important for school children was not obvious to the schoolteacher and the math aspect was not considered by the pre-school teacher. The schoolteacher worried that the children would just play and not do enough arithmetic while the pre-school teacher worried that math would dominate. However, the new activity turned out to satisfy both teacher categories. The schoolteacher came to appreciate the possibility of dialogue with children that the store activity offered. In this context she was able to help the children increase their knowledge and she was no longer occupied with correcting and controlling their answers, i.e., the store became more than just a part of the math book. The shop activity was also used in different contexts, for example to create written narratives about shopping experiences.

The pre-school teacher discovered new aspects of the store play. Through her own active participation the children were stimulated to develop new and more advanced forms of the activity. In concluding remarks the teachers claimed that in the course of making visible, discussing, and reflecting their earlier experiences they were able to make use of the competence that they as a collective possess in creating the new activity. The Sunflower store also helped the children to become expert shoppers in terms of handling calculations in real life situations.

Davidsson claims that the shop activity in many regards is similar to what Rogoff (1994) calls the “community of learners” approach in that it is about participation in a collective practice. The most obvious change in this new shop play approach was the teachers’ changed way of participation and the essential role of play. In the two “old” practices the play was either marginalized, as in the school, or something the teachers did not take part in, as in the pre-school. In the new activity everybody was a participant, though in different ways, and play comprised a link or platform where the students and the teachers interacted with each other and with the content with the aim of joint learning.

This learning environment also illuminated the collective and collaborative nature of learning. Learning takes place in collective practices, i.e., knowledge is distributed among people and artifacts and therefore is available and shared. According to Davidsson, the children were given the chance to learn the shopping activity in a playful manner from the adults who have more experiences in that domain. This new knowledge could be tried out in the play, which in turn became
altered both in terms of form and content. This perspective also shifts the responsibility for learning from the individual to a collective practice.

Another aspect of the shop play can, according to Davidsson, be compared to the community of learners approach and that concerns the way of communicating. The activity seemed to afford dialogue and conversation. It could be seen in the small group constellations as well as in the play activity itself. Also, reflection, which is considered a significant element in learning (Resnick, 1987), was given room through the play. When the need for a pricelist became important enough the child left the play until the list was created and could be put in use.

Davidsson also compares the shop play with the apprenticeship approach in LPP. She claims that the children learn the shop practice in an apprentice way in that they learn from and together with the teachers and other children who have more knowledge and experience. Another aspect is that the participation becomes expanded. The changed membership can be illustrated by the trajectory in which the children become more involved and gain influence and expertise in the shop practice. Davidsson claims a change took place in who “leads” and who “follows.” In the old practices this was static – in the school the teacher had the “lead” and in the pre-school it was the children. In this new shop practice the participants moved between the roles of being the master vs. the apprentice. There was also alternation between being passive or observing and being active and taking initiative.

Did this activity enhance the children’s math competence? Davidsson gives an example. Some of the children took it as a rule to check fluctuations of the price on some items in the “real” store and forwarded this information to the Sunflower shop. These fluctuations thereby came to influence the mathematical operations carried out in the shop play. This everyday understanding of the concept of price was not the case before in either the school or the pre-school. Davidsson concludes that the children gained an understanding both of shopping as a social practice and of mathematics.

From a Davydovian perspective we could ask, and be uncertain about, whether the children gained any substantial understanding of the concept of, for example, money and prices through this activity. In other words, could the shop play be complemented by a developmental teaching approach, and if so, in what way? I will approach this question by letting Hansen (2000a) reflect on a collaborative activity between a leisure-time center and a school; it eventually led to an activity where the children were given the chance to understand a developmental process
where I think we come close to Davydov’s idea of ascending from the abstract to the concrete.

The history of the differences between leisure-time center and the school can be described as a division between hand and head. In collaboration and integration between schools and leisure-time centers the schoolteachers remain in charge of the intellectual activities while the recreation pedagogues are assumed to provide illustrations of theory in terms of practical applications (Hansen, 2000a; Calander, 1999). This outlook has shaped the division of labor in integration attempts and projects, and it was encountered in present study. However, as we will see, Hansen’s example makes visible a need for a shift in this division of labor. Hansen shows that the practical activities that recreation pedagogues carry out together with the children can be designed in a way that encourages intellectual creativity.

The two institutions in collaboration operated a garden allotment as part of their pedagogical practices. The harvest in the fall nicely linked up with some of the subject matter in the curriculum and was a popular event among the children. A recurrent problem, however, was motivating the children to do some of the hard work that horticulture requires. Often the children were happy to sow and harvest, but digging and loosening up the soil was fun only for a short period of time. The children developed strategies to resist, for example by refusing to weed with the argument that it is not nice to kill the poor carrot or that there will be more carrots if they don’t weed them. The adults spent a lot of time motivating, nagging, and explaining the necessity of carrying out the boring tasks – but without any success. In order to obtain a harvest the work had to be done by the teachers.

Thus, it was not possible to verbally convince the children of the necessity of the tasks. However, the solution was to be found in a bag of dried peas. Peas both sprout and grow fast which makes the distance in time between action and outcome short - a process that is good for learning. Discussions and dialogues regarding conditions for growth and development took place as well as experiments that were recorded and depicted in drawings. What happens if the pea is not given water, light, or warmth? What happens if it is given water and warmth but no light, and what happens if it is given light but no warmth, etc? What is the outcome between many peas planted in a pot or just a few? How deep can a pea be planted and yet come up? What is the difference between keeping the soil fluffy or tight? What happens if it is irrigated a lot, a little or in between?
The experiences from the pea cultivation were later used in the spring when the children were working outside in the allotment and it turned out that it was much easier for them to understand the significance of the diverse tasks required in the garden. This understanding also influenced the children’s patience with the hard work. The schoolteacher was also able to notice the differences in the children’s comprehension. They were able to see the parallels between farming and their own efforts to nurture and grow their garden. “When the teacher in the subsequent fall began teaching about the farm she reported that the children spontaneously had made a comparison between the plot of vegetables and agriculture: to plow – *It is like when we dug in the plot!* to harrow – *we raked instead!* etc” (2000a, p. 157, my translation).

Even though Hansen stresses the experienced-based part of this approach and that practical application should precede theory and not just serve as an illustration of the theory\textsuperscript{151} the pea cultivation has interesting aspects from a “germ cell” perspective (see e.g., Chaiklin, 2002; Hedegaard, 1996, 1999 a & b; Lompscher, 1999 a & b; Stetsenko & Arievitch, 2002). By experiencing the entire cycle of the pea the children gained understanding of the inner dynamics of agriculture.

The shop play was an outcome of a collaboration that drew on the pre-school and the school culture in order to create a “third new” practice. What facilitated this hybridisation was the idea of learning as a social practice. The pea example hints at possible new practices invoked by inter-cultural collaboration. The leisure-time center tradition of providing illustrations to theory in terms of practical applications was replaced with an explorative and investigative approach that combined theory and practice even though the practice element dominated. In conjunction with the school practice the children were able to make conclusions and learn about agriculture in a deeper sense.

My conclusion is that the encounter between pre-school teachers, recreation pedagogues, and schoolteachers constitutes an arena for rethinking learning given that it is mediated by alternative theories of learning and development. In that process I believe that pre-school teachers and recreation pedagogues have a lot to gain from recapturing and reconsidering their, in many regards unsorted, history. For example, I agree with J-E Johansson (1994) that the Swedish pre-school pedagogy has a strong knowledge tradition, which is collective, systematic, and technical in nature. The heritage from Fröbel, both in terms of pedagogical ideology

\textsuperscript{151} See also Fischer & Madsen, 1984 for a discussion on this matter.
and methodology, implies that pre-school teachers are well equipped, if they capitalize on this inheritance, in their encounter with the school (see for example Wallström, 1992). For example, recall Fröbel’s statement (Chapter 2) about the significance of adults participating in play. Or, how about putting the Davydovian and the “Fröbelian” pedagogy into a conversation: for example, Fröbel’s elaboration on the relationship between the parts and the whole vs. Davydov’s kernel approach? I believe that they would enjoy and understand each other very well and perhaps make a contribution in the efforts to create an “integrated pedagogy.”

In the same way as in the pre-school tradition, there is a legacy in the leisure-time center tradition, as we have seen in Chapter 2, to draw from in terms of handicraft and craft labor. I believe there would be a value to recapturing these traditions in the encounter with the school, perhaps not in terms of shoemaking or basketry but in terms of knowledge and skills that are of significance in our contemporary society, such as computer skills (Calander, 1999).

In this section I have discussed learning contexts where the focus has been on influences from heterogeneous cultures and traditions. In the next section I will discuss learning contexts where the focus is on interactions between learners of different ages or generations.

### 8.2.2 The Inter-Generational Learning Context

Since the system of monitorial schools was abandoned in the mid 1800s (see Chapter 2) students have mainly been taught in age-homogeneous groups. I take as an assumption that age-homogeneous groups have been the most efficient system, given the idea of learning and teaching as transmission. However, when this idea is now being questioned as the only way to teach and learn, this structure is complemented by alternatives. In this section I will focus on interactions and ways of organizing interactions between learners of different ages, grades, and school levels (pre-school, elementary school, high school and university). Let us consider the idea of the Vertical Track structure (see section 2.4) as the point of departure for a discussion on this issue.

The VT structure implied that the teachers and the students would be divided basically into two main groups of eighty students between the ages of six to twelve and ten teachers as shown in Figure 2.1. What does such an organization offer in terms of potentials for a transformed practice?
In *Pedagogiska Magasinet*, a magazine published by the teachers’ trade union (Sveriges Lärarförbund), a report was published about a school with a VT structure. The school is a P-9 school (pre-school class up to ninth grade). All teachers belonged to one of the three VTs which meant that the VTs were made up of teachers from all grades. The VTs were responsible for a number of children and their P-9 education. The teachers in each VT were also organized in teams: grade P-2, 3-5, and 6-9. The teams planned and carried out the teaching in their classes/groups of students. Apart from that the teachers also met in mixed groups with teachers from different fields and grades. This happened especially in discussion and seminar sessions.

The project took place in collaboration with a local university. A theme in the work was literacy development and dialogue as a base for learning. The teachers in the report claimed that they used their resources in a more efficient way and both the teachers and the students gained from this. They also claimed that the project had increased motivation and the pedagogical discussion. Different “teacher perspectives” met and interacted. They had embarked on a long and difficult journey as they said. The aim was to develop a new and more meaningful practice in the school (Hugosson, 2000).

The issue of age-mixed teaching (*åldersblandad undervisning*) in schools has been investigated by the Swedish school authorities (Andrae Thelin, 1992). Age-mixed teaching is understood as the teaching of groups of students of different ages. The practice of age-mixed teaching tends to increase in Swedish schools (Sundell, 1993). One driving force behind creation of age-mixed teaching and education is, according to Andrae Thelin, the integration reform. Andrae Thelin (1992, p. 27) outlines the ideas behind attempts to develop age-mixed education:

- Making it possible for students to work at their own pace.
- Students learn to collaborate and help each other in a natural way.
- Utilization of each other’s different competencies and features.
- Support of the students’ social development by having classmates of different ages.
- Strengthening the students’ self-confidence and status in that no particular student need be the weakest.
- Provide adequate basic knowledge.
- Development of teachers’ and students’ independence, creativity, responsibility and tolerance.
- Development of the idea of teacher-team and more collaboration between teachers.
- Increased contact with parents.
The report gives an account of projects in which age-mixed teaching is described. It claims that the major contributions are social. For example, the spirit of comradeship between the students increases. Students tend to help each other more often and more spontaneously. It also claims that the traditional knowledge of the students is equally good, sometimes even better, in age-mixed compared to age-divided groups. Theme-based activities tend to replace traditional subject matter teaching even though the textbooks still have a significant influence. The students work more independently but, also are more isolated from each other. However, there is a tendency for the work to become too individualized, “silent,” and “paper-and-pencil” work predominates. The teachers seem to have a hard time knowing how to utilize the students’ diverse expertise and experiences. Yet, the report states from students in age mixed groups learn different kinds of skills, than students in age-based groups, for example, how to search for knowledge.

It is claimed that the structure of age-mixed groups tends to facilitate teacher teamwork. It is often a desire to change the teacher role from that of being the one transmitting knowledge to becoming more of a supervisor and guide. This in turn implies moving away from the transmission pedagogy. This puts pressure on the teachers to monitor each child, which in turn forces the teachers to change their work methods. They have to rely on their colleagues – search for support by helping each other out. Teamwork is one solution. Giving more responsibility to the students and to parents is another.

Difficulties are also reported. The complexity in the new structure is difficult to handle. It is difficult to keep the curriculum alive for so many grades at the same time. There is a span in maturity of the children, which makes it difficult to satisfy different interests and needs. It is harder to turn the class into a “community” or social unit. Instead the individual work activity seems to increase with the effect that shared experiences do not take place and the children’s capacity to work in groups is disregarded. A lot of work is required for planning and follow-up.

The significant conclusion from the study is that “the age-mixed teaching” is not a final aim but a continuous process, where essential ideas about goal and realization

152 See Madse’n (2002) for a critical discussion on the teacher as supervisor and guide.
constantly should be the subject for discussions” (Andrae Thelin, 1992, p. 41). In other words, age mixed teaching should be a tool for realization of a vision rather than a goal in itself.

Sundell (1993) shows a more hesitant attitude toward age-mixed teaching. For example, Sundell claims that age-mixed instruction has a negative impact on parts of the students’ learning, foremost arithmetical knowledge. Sundell also claims that the social and personal benefits might not be as significant as they might seem. He asks for more research on the issue and cautions us to beware of a blind faith that organizational change will take care of problems that in their nature are pedagogical.

In the 5thD in North Valley I saw several examples of productive inter-generational interactions. During the time when it was unclear whether the collaboration with the high school would take place, Sam prepared the sixth graders to become assistants. This was never put in action since the high school decided to participate. Since the students in North Valley were rather familiar with and skilled on computers, Sam instead decided to have them instruct the high school students (see E6:3). This turned out to be a very positive experience. Age-based roles came to be altered – the younger students taught the older. The outcome was a session that featured pleasure as well as learning. Rogoff (1994) describes a community of learners as one in which “both mature members of the community and less mature members are conceived as active; no role has all the responsibility for knowing or directing, and no role is by definition passive” (p. 213). She adds that a community of learners is characterized by flexibility and asymmetry of roles. Members fluidly move between the roles of teacher and learner, more experienced and less experienced peer, as all reciprocally “learn through engagement with others (in a system of ongoing guidance and support) in the everyday mature activities in their community” (pp. 216-217). As was described in Chapter 2, Fröbel stressed this fluidity in roles and the significance of adults learning from children.

The high school students’ subsequent participation in the 5thD gave several examples of interactions of the kind Rogoff describes. The high school students were constantly exposed to situations where they had to deal with and work with their identity and roles. In relation to the younger children they were expected to be adults, yet in their relation to their teachers they were still “a child.” Some of the younger children were more knowledgeable and skilled in computers, which also influenced traditional roles. But, the high school students also took on the role as
guides and mentors, in that they were more experienced and skilled in academic subjects.

The fluidity of roles and exchange of experiences and knowledge in the 5thD was also reinforced by the participation of undergraduates from the university. Thus, the 5thD is an example of what I call an inter-generational learning context. Thus, the 5thD should be a source of inspiration in regard to the problems Andrae Thelin described. It is a model of how to capitalize on the inter-generational structure in the classroom. Again we could also allude to Fröbel and his ideas that learning tools and material have to be equally appealing to the adult and the child (see Chapter 2).

8.2.3 The Inter-Institutional Learning Context

In their book on situated learning and legitimate peripheral participation, Lave and Wenger (1991) make clear that legitimate peripheral participation is not an educational form, a pedagogical strategy or a teaching technique. However, they do suggest that the analytical perspective of legitimate peripheral participation could very well inform educational endeavors by “shedding a new light on learning processes, and by drawing attention to key aspects of learning experience that may be overlooked” (p. 41). They claim that such analyses would “raise questions about the place of schooling in the community at large in terms of possibilities for developing identities of mastery” (p. 41). This implies rethinking the relations between “school practices and those of the communities in which the knowledge that schools are meant to ‘impart’ is located” as well as the relationship between the world of schooling and the world of adults more generally” (p. 41).

Dewey (1990) discussed the internal organization of schools and the school institution’s relation to the surrounding society: the home of the children, the environment, the business world and the university. He claimed that not taking these components into account in the school practice is a waste. “The primary waste is that of human life, the life of the children while they are at school, and afterward because of inadequate and perverted preparation” (1990, p. 64). Dewey wanted to see a reorganization of the school “by relating it so intimately to life as to demonstrate the possibility and necessity of such organization for all education” (p. 94).
Vygotsky stressed an education “oriented to life” and claimed that the classroom is too small an arena for developing important passions and also too narrow to cultivate the social instinct (Vygotsky, 1997/1926).

The 5thD as a bridging artifact (see Chapter 7) inspired me to think of possible ways to overcome the encapsulation of the school that Dewey, Vygotsky, and others talk about. As I discuss in Chapters 6 and 7, the 5thD as a bridging artifact opened up the school for intense traffic to and from North Valley. This implied and gave hints about possible new activities and activity systems in which students collaborate with actors outside the school. I will give an account of a study with an excellent example of how an inter-institutional learning context might look. It is about how a secondary school became a productive and significant partner in a community-based dynamic network.

Posch (2000) describes a project in which a biology teacher initiated a project on energy use. The pilot investigation was the school building and the students’ homes. Later the project expanded to analyze the use of energy in four small villages, which were the home communities of most of the students. The first step in the project was to design a questionnaire for which they received support from an energy expert. The students had to learn to master the theoretical and social demands involved in collecting the necessary data. This took place through role-plays where possible reactions of inhabitants were anticipated and discussed. Groups of children went from house to house with their questionnaire, informed people about their intentions and offered assistance to fill the questionnaires out. Nearly 70% of the households completed the questionnaire. The students then processed the data and conducted a comparative analysis of the use of energy for each house and for each village, and of possibilities for using renewable energies such as bio-gas, wood and solar energy.

The teachers and the students kept “research diaries” to facilitate reflection on the progress of the work. The students presented the results at a public event. They acted out sketches to illustrate experiences and conflicts during data collection. The main part was the presentation and discussion of findings and proposals.

Two months after the event a few students together with their parents started to build sun collectors for their own houses. This stimulated the foundation of a local association for renewable energy, and within two years 700 installations for solar water-heating were built in the whole region. A number of other investments
followed. For example, in one village the school building was insulated to reduce energy consumption. In this project a number of relationships were established:

- Contact with an energy expert to receive professional assistance in the design of the questionnaire.
- Cooperation with a teacher of computer science in order to get classroom time and assistance in processing the data for comparative analysis and for presentation to the public.
- Contact with the mayors of the communities to get the support of the community councils and financial assistance. (p. 59)

The students learned about energy consumption and that they could gain public approval. The next step for the teachers and the students was to build networks with other schools and to disseminate experiences and knowledge gained in the work. They took on consulting duties and helped other schools to start similar projects. One piece of strategic advice was to involve political actors and to inform the public from the very beginning of the project. As a result the school organized public evenings to inform the community, initiated discussions with the community council, held press conferences to involve the regional media, etc. In subsequent years the logistics were continuously improved, involving local enterprises such as chimneysweepers and plumbers. The teacher with his students won awards and gained national and international reputation.

However, years later a shift in emphasis took place. The teacher was convinced that in order to stabilize the energy network it had to have many “parents.” His main interest became the creation of local groups, with broad participation and strong emphasis on the training of local coordinators. In terms of students and teachers schools were still, and in some cases, heavily involved but the community projects were no longer fully dependent on their participation.

Years later the teacher was invited to speak about his concept of an energy network at a meeting of mayors of thirty seven municipalities in a rural region. Twenty-eight municipalities decided to develop an energy concept, with the strong involvement of local enterprises and schools.

Posch (2000) states that the aim with the networks that were established was to integrate schools in long-term community activities. “They are actively involved in a network that goes beyond schools and has its center of gravity in organizational structures which have manifold roots in the public, economic and private domains” (p. 61). It also had an impact on motivation, not least the teachers: “…major reasons
for their involvement were being able to participate in shaping the conditions of their work, to open routes for more satisfactory work with the children and to gain respect in their communities” (p. 61). Other indications of learning and motivation were the high participation rate of students and their involvement in relatively complex activities such as writing reports, contributing to press conferences and making presentations in public.

Posch concludes:

Dynamic networks are specific ways in which people share their abilities for joint enterprises and for mutual learning and assistance. They contradict one of the traditional assumptions of schooling: the assumption of separation of school and society. If dynamic networks develop it is difficult to say where the educational organization ends and where society and its abundance of personal and institutional relationships begin. (p. 63)

The narrative by Posch indicates that in this inter-institutional learning context both students and teachers gained knowledge and motivation at the same time that productive new activities and products were created and produced.

Posch’s narrative exemplifies in an interesting way an inter-institutional learning context that has some similarities with the inter-institutional work that took place in North Valley. Students participated in activities that societal members found valuable at the same time that the students gained diverse kinds of knowledge, skills, and experiences. The high school students’ participation in North Valley and the VT inspired exploration of additional ways in which this kind of inter-institutional collaboration might be designed and expanded.

8.3 Summary and Discussion

The aim of this chapter has been to provide a conceptual tool to be used in integration attempts. The result of the discussion is such a tool framed as a matrix of intra-dimensional and inter-dimensional learning contexts. The intra-dimensional learning contexts are identified by Engeström (1991b) as the context of discovery, the context of practical application, and the context of criticism. The identification of the inter-dimensional contexts, i.e., the inter-cultural, the inter-generational, and the inter-institutional stems from the integration reform in general and from the North Valley instantiation in particular. The six learning
contexts have their base in, or are made visible through, the lenses of cultural-historical and socio-cultural theories of learning.

I have placed the reported examples, which could be understood as “best practices,” in the matrix presented in Table 8.1. The categorization is based on what I consider to be the main feature of the practices. For example, the Sunflower shop is a prime example of an inter-cultural learning context that can also be described as a context of practical application. Of course we could analyze in what way it comprises elements from the remaining four learning contexts. For example, did the children develop a “kernel” understanding of money and mathematics? These kinds of questions are of course applicable to all examples.

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<thead>
<tr>
<th>Intra-dimensional learning context</th>
<th>Inter-dimensional learning contexts</th>
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<td></td>
<td>Inter-cultural</td>
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<tr>
<td>Context of discovery</td>
<td>The Pea-project</td>
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<tr>
<td>Context of practical application</td>
<td>The Sunflower-shop</td>
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<tr>
<td>Context of criticism</td>
<td>The Energy-use project</td>
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Table 8-1 Matrix of Learning Contexts.

Perceiving learning contexts in this way tends to blur, or perhaps bridge, the boundaries of what is inside or outside the school and classroom walls. When students from kindergarten, high school, and the university work and learn together in the 5thD, is that taking place inside or outside the classroom? It also tends to blur the boundaries between the categories of developmental teaching, situated learning, and expansive learning. The narrative by Posch is a good example of that. The students gained a genuine understanding of energy-use which in turn implies that what is the kernel in the developmental teaching approach was present, i.e., a dynamic understanding of how concepts relate to each other. The situated learning or LPP approach also seemed to be applicable. The dynamic network was a productive community of practice in which both the students and the teacher, together with parents and local actors were members. The need for stabilization and sustainability created expansion in terms of a new activity system: the expanded dynamic network. This expansion was due to activities that had significance outside the school as well as for the students and their families. As Engeström puts it, “to aim at developing historically new forms of activity implies
an instructional practice that follows the learners into their life activities outside the classroom” (1987, p. 185).

The matrix is meant to prompt and encourage questions, thoughts, discussions, explorations, and practical pedagogical experiments. What, for example, would be examples of best practices in the empty squares? In other words, the matrix is meant to facilitate teachers’ and schools’ collective zones of proximal development. It is meant to be a tool in the efforts to create a more advanced activity. Thus, the matrix also provides for discussions about what a new object and activity in the elementary school, framed by the integration reform, might imply. In a concrete way it represents possibilities and ideas about what culture- and knowledge-creation might really mean.
9 Summary, Conclusions and Implications

The general aim of this thesis has been to contribute to our understanding of how the school’s pedagogical practice can be changed. How can we create a school where both students and teachers regard their work as meaningful and where teachers, students, and the institution learn and develop? My starting point in this discussion has been the integration reform of the pre-school class, the leisure-time center and the school itself that was prompted by the 1992 Swedish law allowing six year olds to start compulsory school. A number of those involved hope that such an integration will lead to a new kind of practice in the school. Changes will take place in the school due to its encounter with the pre-school’s and the leisure-time center’s more progressive form of activity and view on children, knowledge and learning. The child will become a culture- and knowledge-creator instead of a culture- and knowledge-reproducer (Dahlberg & Lenz Taguchi, 1994).

Research conducted on this type of integration has repeatedly shown that instead of a change taking place in the school, the school’s traditions and culture have dominated attempts to integrate. Even if these attempts have not failed completely, they have not brought about the desired changes. It is in this context that I have asked: What is the desired goal of integration, and where and how is that goal to be realized?

Authors of earlier studies suggest that teachers and pedagogues taking part in integration attempts must be aware of the value systems, traditions, cultures, discourses, codes, etc. which guide their actions. It is not until they have reached this level of awareness that they can reflect on what they are doing and, as a consequence, bring about any changes. My starting point in the present thesis was that change does not come about as a result of insight in or consciousness of what governs our actions. This study has strengthened my belief that a changed activity as well as the process of creating a new activity stimulate new actions and insights. My position is based on a cultural-historical activity theory perspective implying that change takes place in practice, or to be more specific, in object oriented activities which are mediated by both conceptual and material tools. It is here that human consciousness is created and re-created. This approach led me to argue that (1) integration of the elementary school, the pre-school class and the leisure-
time center possesses potential for expansive transformation of the school’s pedagogical practice, and (2) in order for this to come about, the process of integration must be remediated and new tools must be provided.

Moreover, I found the integration discussion lacking theorizing about goal of the integration in terms of what a new outlook and practice might imply (SOU, 1997:21, p. 21). This shortcoming might be one reason why integration attempts tend to fail.

*Thus, the purpose of this thesis is to explore the potentials and alternative goals for change and development of the present school pedagogy and classroom practice that integration of the school and child care institutions implies. Special attention will be paid to what tools might potentially mediate in processes of integration.*

For two years I followed a project known as Vertical Track (VT) in an elementary school in the south of Sweden that I call North Valley. VT is one of a number of ways of organizing integration of the pre-school class, the school and the leisure-time center. I interviewed and observed two VT teams comprising two pre-school teachers, two schoolteachers and two recreation pedagogues. I also interviewed and discussed with the school principals and other teachers at the school. My role was that of an observer although I also took actions.

In addition, I initiated and, together with teachers at the school, implemented a program called the Fifth Dimension. This program comprises learning environment which was developed by Michael Cole and Peg Griffin at the University of California, San Diego (Cole, 1996a). The Fifth Dimension concept is based on theories derived from cultural-historical activity theory as well as the American school of pragmatism.

It was my idea to start the Fifth Dimension in the VT in the belief that it could function as a “third space” (Gutierrez et al., 1995) or a “boundary zone” (Konkola, 2002), and as such mediate the teacher’s interactions. I was interested in exploring if the Fifth Dimension as a complex tool had the power to facilitate the integration attempt.

The theoretical perspective in the study is cultural-historical activity theory and the unit of analysis is activity system (Engeström, 1987). I have conceptualized the VT as an *emergent boundary system* due to its border characteristics. In activity theory development is considered to be the result of dynamic processes caused by internal systemic contradictions.
In the present study I have analyzed the potential for a changed and developed school activity by applying the concepts of contradiction and expansive learning in an analysis of the VT. I have scrutinized contradictions that emerged in the construction of the VT system both from a historical perspective and in relation to the vision of a new object.

The results of my observations and analysis show that attempts at expansion took place even though the expansive cycles were never fully completed.

The new VT organization with its pronounced vision of a more individualized pedagogy and holistic view was initiated and designed by the principal as a consequence of the new law. In the initial stages there were signs of opposition to the new organization, particularly from the schoolteachers. Despite this opposition the VT teachers together created an activity which proved to be richer and more multifaceted than education traditionally provided by schools. This came about as part of the process of combining traditions, experiences, and knowledge that the pre-school teachers, the schoolteachers and the recreation pedagogues brought with them into the collaboration. Although a richer activity was created there was no fundamental change in the object even though tendencies in that direction could be discerned. The object could still be described as reproduction.

Gradually, however, the new structure and vision were adopted by the teachers and led to expansive actions. That the latter were not transformed into consciously completed collective expansive cycles which would have changed the object and the entire system was not, I suggest, because the teachers were unaware of their value systems, traditions, cultures, discourses, codes, etc. Teachers, like people in general, do not conceptualize and reflect on their actions in terms of culture, codes, discourses etc. The fact that the teachers were not aware of their colleagues’ “culture” was not, I believe, the reason why the expansive tendencies which I observed failed to produce a fundamental change in the activity. Rather, the problem was a shortage of tools. There seemed to exist and emerge no tools which could in a productive and sustained way mediate an image or provide knowledge about what the new object in practice could mean. Neither did there seem to be tools which could mediate insight into the contradictions between the existing structure in the school’ and the teachers’ system and the new envisioned object.

What was missing is what I have called communicative and conceptual tools. By *communicative tools* I refer to tools that facilitate members’ reflection upon and communication about their present as well as future activity. For example,
instruments that support discovery of contradictions, incongruities, and double bind situations in their activity systems are such tools. By conceptual tools I have in mind concepts, theories, and methods that would, in the teachers everyday-work-practice, mediate imagination and conceptualization of what a new object in the school would imply in practice, i.e., in the school’s everyday life. There are two important properties of conceptual tools: they must be regarded as a support by teachers in their object-oriented teaching and they must simultaneously promote change.

Despite these inadequacies one must draw the conclusion that the integration attempt in North Valley, instantiated as VT, represented an arena for potential expansive transformation. The activity in the boundary system of VT as well as in North Valley as a whole began to motivate new actions. Moreover, the encounter between the three different institutions made necessary the creation of solutions to diverse situations and problems. In that regard, the activity became transparent and open to reflection and discussions. I have analyzed the efforts to redesign the school activity as construction of a new object. The analysis makes clear that a new object in this kind of merger is formed by redesign of the existing division of labor, instruments, and rules. This is a finding that puts a new dimension to the theory that object formation arises from a state of need on the part of one or more actors (Leont’ev, 1978a). The VT teachers were asked to create a new activity that was not initially based on their own needs. In this situation the division of labor, instruments, and rules were negotiated and redesigned in a way that generated new needs and implied a potential for object formation or expansion of the object.

Moreover, the analysis shows that contradictions were not the only basis for change. The vision of a new object and activity, materialized as the VT, comprised a platform for imagining and taking new actions as well as making visible the inappropriateness of the existing systemic structure for the new envisioned object.

As a response to my claim that the integration discussions lack theorizing about the new object of schooling I have provided a discussion about what the concept of the child as a culture- and knowledge-creator might mean in practice. The outcome of this discussion is a Learning Context Matrix that I also see as a conceptual tool. My discussion is based on three “intra-dimensional” learning contexts formulated by Engeström (1996) to which I have added three “inter-dimensional” ones: the intercultural learning context, the intergenerational-learning context and the interinstitutional learning context. These three inter-dimensional learning contexts are based both on observations of the integration reform in general and the integration
project in North Valley in particular. The matrix makes visible questions that need to be further researched. For example, in the context of inter-generational learning, one might ask what the motive would be for older students to assist younger or less advanced ones. Another issue would be to explore the tension between play and learning and how to use it to motivate children to learn.

Complementary conceptualizations of the Fifth Dimension, for example, as a bridging artifact and a microcosm exemplify what may be understood as conceptual and communicative tools. The Fifth Dimension as a mediating tool in VT did not fulfill my initial expectations. The 5thD as a bridging artifact, however, facilitated opening up the school to inter-institutional collaboration. As a microcosm, it promises collaborative research between teachers and researchers, intervention, and meaningful education. Also in this context new research questions emerged. For example, what would be the outcome in terms of structural change in the school activity if we would consciously incorporate aspects of the school curriculum into the 5thD design in a way that promotes problem-based and developmental learning (Davydov, 1999a)?

The main results and the concepts which have been created and discussed within the present study are presented in the table below.

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Table 9-1 Main Concepts and Findings from the Study.

Finally, what in sum are the theoretical, practical and methodological implications of the conclusions that I have drawn and presented? When it comes to making a contribution to the research concerned with integration of the pre-school class, the school and the leisure-time center, it is my belief that the present study has
demonstrated a potential for development of the schools’ pedagogical practice. This potential is embedded in the integrated activity itself, i.e., in “doing the new.” However, in “doing the new” or in the creation and construction of the new activity, members need support and guidance. I argue that members' actions need to be mediated by new kinds of tools. Thus, although there is no automatic causal relationship between cultural integration and development, integration projects should be perceived as an arena for bringing about change and development.

Theoretical tools are constantly being developed and refined. The field of cultural-historical activity theory has now moved to, what is called, the third generation (Engeström, 1996, in press). The focus is now on the potential for expansion due to interaction and co-operation between activity systems. The creation of a new sustained object and activity as a result of merger of systems is the core of what I mean by the concept of emergent boundary system. In the present case it took place by someone formulating a vision for a new object of schooling. The object formation took place as reconstruction and redefinition of the existing division of labor, tools, and rules. This suggests that object formation in emergent boundary systems should be understood not only as straight-forward answering to an existing need but as creation of new structural components and thus emergent new needs.

Even though the VT project was initiated from top-down, it nonetheless constituted an arena for change thanks to its vision of a new way of looking at children, learning and knowledge. One conclusion therefore is that structural contradictions in a system when combined with a vision of a new object constitute creative forces in the process of change and development. It is of decisive importance, however, to recognize that processes of change demand mediating material and conceptual artifacts.

I have called the methodological approach in the present study emergent action ethnography. It comprises both action research and ethnography. These two have traditionally been kept separate. The purpose of action research is to bring about change while at the same time developing knowledge. Action research presupposes that members of the organization being studied, or within which one studies, are interested in the study itself. Ethnography, on the other hand, is concerned with descriptions of an organization from a cultural perspective. An important principle is to make visible how members create and recreate structures of meaning, and how these structures guide actions and activities. Members of the organisation being studied do not usually take part in ethnographic research. Such
studies are not normally concerned with bringing about change. I argue that these two perspectives are compatible.

That the approach was emergent meant that both the forms of co-operation and the research questions gradually emerged as a result of a long-term collaboration. This long-term collaboration resulted in what seems to be a sustained relationship with vital impact on the change process (see Epilogue).

What I call emergent action ethnography thus draws on both ethnography and action research and combines these two methodological approaches in a new way. The main contribution of ethnography is the comprehension of human action and activity as culturally and historically mediated and produced. This invites us to view actions and activities as changeable. Action research in this context represents the potential that intervention, or in my case involvement (Nocon, et al., 2001), has for development of both practice and knowledge in collaboration with members. The intervention/involvement is based on the ethnographical, or cultural-historical, understanding of the site and its members. This understanding and thus respect for the members, in this case teachers, should be considered an asset.

As I suggested at the beginning of this summary, an important aim of this study has been to contribute to the discussion of how the school’s pedagogical practice can be developed and improved. My point of departure in this discussion has been integration between child care institutions and the school. Given that my conclusion is that integration of this kind has the potential to influence the pedagogical activity at school, it must follow that efforts to integrate must be continued. One word of warning, however, should be issued. Without tools of the kind which I have argued for here, it is unlikely that integration will produce the desired effects. The Swedish National Agency for Education (Skolverket, 2001) recommends in its report (see Chapter 2) that one discusses the need for reinforcement of knowledge, a mutual view of knowledge and learning, development of expertise and reflection among colleagues. I believe that it is of decisive importance for the results of integration projects that those concerned can visualize in clear, concrete terms what that means and what kind of measures are required. What kind of knowledge should be reinforced? What type of expertise should be developed? What needs to be reflected on, and what is the view that should be common? I am convinced that the knowledge, expertise, common view, etc. that are to be developed must be based on a clear vision of what one hopes to achieve in one’s contact with children. Moreover, this process of change must, in
order to be successful, take its point of departure in teachers’ every-day work and practice, that is, in a concrete analysis of the object and the activity in the school.
Epilogue

This epilogue is based on interviews I conducted with some of the VT teachers and Sara, the site-coordinator in the 5thD, in the summer of 2002. Sara is still, in the spring of 2003, the site coordinator in North Valley.

After the VT organization ended, life returned to “normal” in North Valley. The grade system was reintroduced: Sandra took on the first graders and Susan the second graders. After one year Susan left for a different school. Rita got a permanent position at a leisure-time center in a nearby town and Rebecca left for a new job. Rose is still working in the leisure-time center and Petra and Paula in the pre-school class.

The parents were disappointed that the VT ended. As a response, the VT teachers tried to keep up with small group activities in mixed groups in the mornings during the fall of 2001. This lasted only for a couple of months.

Despite the recreation pedagogues’ resolution to give precedence to the leisure-time center, and therefore restrict their support to the school, they eventually did help out. They took on responsibility for sports lessons and gave drama and arts classes. When this happened the schoolteachers took the opportunity to catch up with wherever the children were lagging behind in math and literacy. The recreation pedagogues also helped out with children with special needs. Theme-work also became an element in the collaboration between the leisure-time center and the first and second grades. Once a week during the fall there were groups of approximately ten children and one teacher working with themes such as baking, creativity, or outdoor activities. In the spring of 2001 the collaboration was organized into days devoted to a particular theme or topic, for example, ecology.

The collaboration between the pre-school class and the school by-and-large returned to the way it used to be organized before the integration and the VT. At the end of each fall semester the six-year-old children start to visit the first grade. Each time a group of two to four children takes part in lessons. This also continues on a regular basis during the spring semesters.
However, during the spring semester of 2002, a themework, based on book reading, took place as a collaboration between the pre-school class, the first grade and the leisure-time center. This was initiated by Paula, one of the pre-school teachers, who had taken a class in child literacy at the university. A recurrent theme in the course had been that children need to experience literacy-learning as pleasurable. Another theme had been that the activity should be initiated much more by children. Thus, once a week for five weeks, ten children and one teacher met to read from a children’s book on the children’s initiative. Each group decided on a way to show the rest of the class what the group had been reading and doing. Different methods were used such as puppet theatre, exhibition, and handmade books.

The 5thD is still alive as this is written in the spring of 2003. During the fall of 2000 the activity consisted of preparation for the spring semester. As is clear from the story in Chapter 6, the high school could not provide students during fall semesters due to obligatory internship for the students.

During the spring of 2001 the 5thD continued in Sandra’s class. According to Sara, this semester turned out to be very successful. The high school teachers had organized it so that after each 5thD session the teachers met with the students to discuss and reflect about the session. This seemed to result in a more meaningful activity for the high school students. Sara told me, “that time we were on our way. We started to feel that we had found the forms. When the semester ended everybody agreed to continue during the next school year -- there was do doubt about it.”

In April, 2001 the 5thD research group in Sweden together with 5thD researchers from Spain and Denmark received a three-year grant from the European commission. The grant is one of several sub-projects in a research and development project aimed at development of the compulsory school. This allowed Sara to be employed part-time by the university with the aim of developing, working with, and spreading the 5thD both locally and globally.

In the fall of 2001 collaboration took place between the fourth grade in North Valley and a fourth grade in an elementary school in Denmark. The project was initiated by the Danish research group that had been working with a software called “Active Worlds.” Active World is a three-dimensional virtual world where the player designs a home, a city, etc. Sara told me that the project reminded her of very advanced ICT projects that she sometimes had heard about and felt somewhat
alienated by: “It was like meeting the new technology, the new school so to say. It was very different from what we commonly do at school.”

The project was greatly appreciated by the children, the parents, and the teachers even though Sara said that “it was on a level that made the teachers scared and uncomfortable. I think they thought that they never would have the guts to try it.” Sara felt that the work should have been more integrated into the school curriculum, for example, when teaching English. Thus, she claimed that the project had had marginal impact on the pedagogical work carried out by the teachers in the school. Sara herself saw the element of building as interesting and important. It reminded her of programming which for her represented a new way to use computers in the school.

During spring 2002 a regular 5thD took place in Stephanie’s first grade. Sara told me that she and Stephanie discussed the design together, yet Sara took the main responsibility. When Sara met with the high school teachers to plan the work, the teachers had asked for a redesign of the 5thD structure. The reason was that this semester they had, as they claimed, more advanced students, which would require changes in the 5thD. It had to be more “advanced” they said. Sara responded to this request and took her time to make changes that she had been thinking of doing anyhow. She got rid of all the old task cards and made new ones. She also got rid of or replaced software, based on two principles. One was that she eliminated those that had encountered the most criticism from the high school students and their teachers. The other was to keep only those that she thought facilitated children’s learning. Her strategy was to complement the task card with the software and vice versa. For example, if the software was “educational,” as for example a drill-and-practice math program, the task card should be more contextual or, as Sara expressed it, “more extensive in the children’s activities. A task card to an entertainment program would include more school-like tasks such as writing or a math assignment.

Another part of the “new design” was that a group of college students took part on a regular basis helping out with web page work. Moreover, the high school teachers proposed the idea that the high school students sould conduct child observations. The idea was well received by Sara but regrettably it was never realized.
This time the high school participation did not turn out to be as successful as last spring’s. According to Sara, this was because the organized feedback after each session could not take place due to the schedule in the high school.

The recognizable theme, that the high school students did not see how the 5thD was beneficial to them, returned. Several meetings took place where the situation was discussed. A lesson learned from these meetings was the importance of what kind of task or software mediates the students’ and the children’s interactions. For example, the students seemed to find it hard to enter into close interaction with the children when they played entertainment games. It was easier to collaborate when, for example, they were writing something together. Sara’s attitude was that the students and their teachers did not realize and seize the opportunity to study and understand learning that the 5thD offers.

During this semester a group of college students ran a Lego Mindstorm (see Papert, 1995) project in the fifth grade that turned out to be very successful. The project was planned, run, and evaluated in collaboration with the college students and the fifth grade teacher. Students, children and the teacher built and programmed cars, cuckoo-clocks, catapults, windmills, and a garage door that could be opened and closed, etc. Sara reported that the teacher was very pleased and looks forward to this kind of collaboration in the future.

According to Sara, the Lego project, in comparison with the Active worlds, had an impact on the school. She said “it was a more lively activity, it demanded space, they used the premises in a different way, it was visible what they were doing.” The premises were utilized and filled with the activity, there were cars running around in all the hallways, she said, “It was so alive, you could not pass it unnoticed, everybody commented on it.”

Sara was approached several times by a number of teachers who wanted to try the project out. She told me that there will be no problem in obtaining teachers next time there is a Lego project. In addition to the in-school 5thD and the Lego project there was also an afternoon 5thD site during the spring semester.

In September, 2002 Sara wrote an e-mail to the 5thD research group:

What actually happened after showing the film [a film about the 5thD with pictures from North Valley] was that the teachers and the principal discussed how to continue and develop the Fifth Dimension project, perhaps without any assistance from students. One idea which emerged was that children in class 6
could act as assistants to the younger children. This would provide the younger children with the necessary help while at the same time improving the social skills of the older ones, who would also be given the opportunity to take part in the younger children’s learning process.

Stephanie (who had the Fifth Dimension in the spring) was highly enthusiastic about the Fifth Dimension and could explain in very concrete terms exactly how the project had benefited both herself and her children. Stephanie and Sandra (who led the Fifth Dimension project in 2001) played a leading role in the discussion and were able to answer the questions from their colleagues. Stephanie also described how sceptical she had been about the Fifth Dimension project when it was first introduced at school. She thought it sounded as if the children were just going to play computer games all day. She discovered, however, that the Fifth Dimension project makes effective use of every single minute. She said that the project has made possible what would otherwise have been impossible.

I just wanted to tell you - it felt so good… (E-mail, 09/15/2002)

So, what does this epilogue tell us in regard to the research questions and purpose of the study?

First of all, it demonstrates that the everyday life in North Valley is an on-going process of change and development. As Cole and Engeström (1993) point out – also highly institutionalized practices such as schools are dynamic activity systems. Moreover, the integration attempt was a step in the transformative path upon which this school had embarked at its inception and which it is still travelling. It carried the potential for transformation also after the VT ceased even though the integration attempt was never sufficiently exploited. The 5thD turned out to be, and still is, a meaningful and significant activity in this process.
Appendix I: Evaluation of VT August – December 1998

Questions for the VT teachers

I asked the following questions, with a few variations:

- To what extent do your expectations of and questions about the VT correspond to the way in which you work today?
- What are the positive and the negative aspects of the VT?
- How do you feel about the developments planned for the fall?

Teams and resources

Working in a team together with others seems, according to those interviewed, to be one of the most positive effects of the VT. Having colleagues with whom to discuss problems and not having to work alone with large groups are considered to be two major advantages. The VT allows one to share responsibility with others and staff feel in control of their work situation. It is a definite advantage that there are so many different groups of children: different activities can be run, especially when the groups are small, thanks to the time and resources freed by the VT. A disadvantage is that problems may arise when a team is suddenly depleted due to illness etc.

Sometimes the schoolteachers miss the feeling of belonging to and co-operating with a regular teaching staff who have the same training and experience.

Sharing responsibility is convenient as, for example, it allows one to leave a group in the hands of another member of the team. This is not always easy, however, if in previous positions one has been used to taking the sole responsibility for everything. Getting to know the different members of a team and how everyone works takes time.

It has been stressed that the resources are too meagre for the very young children in the blue group (seven-year-olds) during the morning period (8.20 – 10.40); this is the case in the Swedish and mathematics sessions. The problem is accentuated
when the children in the red group (six-year-olds) enter the room. There are normally two members of staff present during such periods during those times when the work falls within the framework of regular school activity as special teachers are called in. One solution to the problem would be to bring in another member of the team. This has been discussed and even tried but with mixed success due to illness etc.

**Decision-making and preparatory activities**

It seems that more information and discussion were required before deciding to implement the VT and during the preparatory stages. Many felt that they did not have the time to make the proper preparations before the idea was put into practice. It might have been better to have used the time with the consultant for planning and organising practical details. People felt stressed, which prevented team members from getting the most out of the day. One respondent suggested that the best way to get to know one another is to work together.

It was a useful experience to visit other schools where VT is practised. It seems that there is a general desire to re-visit these schools now that new questions have arisen. It would also be a good idea to talk to those who have not managed to make teaching work in order to establish the reasons for their failure. It would also be useful to talk to those teams who have managed to achieve individualisation.

Attention has also been drawn to a lack of pedagogical guidance in the VT project partly in relation to discussions about what activities should be introduced and partly with respect to how the overall project should progress. It might be a good idea to have someone outside the work team to ask questions which would, for example, lead to discussions about how and when learning takes place, how work can become more individualised and how VT may be developed in the future.

Team members expressed a wish for time to be allocated for development work, e.g. the production of different kinds of material which would introduce more variety and individualisation into their teaching. One example is a laboratory-type maths room or books etc.
**Integration/individualised work methods**

At the beginning of term the blue and red groups visited each other more frequently. As a rule, children from the red group went into the classroom for a while. As the term progressed, the visits became less frequent as the “blue” children moved ahead faster and the pre-school class children found it increasingly difficult to keep up with what is being done in the blue group. Children from the blue group sometimes took part in the preschool class activities because they needed to move around and play. The result is that such children lagged behind and it became necessary to decide if they should be in the red or the blue group. They have remained in the blue group. This decision may have been affected by how the parents would react, though this has not been put into so many words. It is perhaps possible to argue that the colour groups prevent a more flexible way of working. Children participate in either the blue or the red group’s activities even if as a six year old it would be possible to join the blue group; similarly, a seven year old may need more play and greater freedom of movement even if s/he is ready to start school. It is not possible to satisfy fully the needs and expectations/pre-conditions of each individual child. It is perhaps possible to argue that the groups have come closer together when it comes to work methods since the red group also has a timetable, and in the blue group the children may draw or leaf through a book if they are tired. The VT is a more varied form of activity, even though it entails direct steering, than the old classroom model due to work in small groups and/or according to selected themes. It may be that a more personal timetable could be a partial solution in the effort to find a more individualised work form.

**Leisure-time center activities**

The leisure-time center activity have suffered as a result of the VT. Child care personnel do not have the energy to organise still more planned activities in the afternoon. Neither do the children themselves perhaps. Nonetheless, there does seem to be a need for some form of planned activity for the children. This is perhaps something that should be discussed so that the staff do not suffer from a bad conscience about not providing the same kind of activities as those offered before the VT was introduced. Needs seem to have changed; this is something which should be clarified for all parties concerned.
Planning time

The planning time, and particularly that which is shared, is too short according to several members of staff. Planning and preparatory work sometimes takes place during the breaks. This is hardly ideal considering that staff must conserve energy in order to cope with a full working day in the different groups. A great deal of time is spent discussing about individual children, which has a negative effect on the amount of time left for planning. Staff need to talk and discuss various measures for improvements. No one appears, however, to have any suggestion as to how to solve the planning time problem. In the past, child care personnel have used the evening for planning; this has not been the case with school personnel. Evening meetings are not, however, a good idea as there will be less time for the children’s groups during the day. Planning in the afternoons and evenings has a detrimental effect on the leisure-time activities. Should the morning be used for planning as there are less children? Should one or two evening meetings be held per term in which one could plan for a longer period of time?

As already demonstrated, staff need the time and opportunity to develop existing activities. Could this take place during the summer holidays when there are fewer children to take care of?

The fall activity

There appears to be a desire to continue the VT in some form. Most members of staff do not wish to return to the old way of working despite its acknowledged good qualities. The VT is used everywhere and seems to be something of a trend. One of the main reasons for the popularity of the system is that staff enjoy working as members of a team. It is difficult to anticipate how the VT will develop in the future because of the problem of forming a general picture of the consequences. I have suggested a number of alternatives in an effort to form such a picture. The following alternatives should thus not be viewed as ready-made suggestions; they are intended to form the basis for discussion.

Alternativ P-1

There should be a new intake of six-year-olds; the old seven-year-olds should not stay on, i.e. the children should stay in F:1. The old seven-year-old group can either be looked after by a new teacher, or Susan or Sandra could take them; one of the work teams must then be split up. Should this happen and the children stay in F:1,
the one who takes over the seven-year-olds can return to one of the VTs after two years. If the teachers take it in turns to take the second year group and keep it on to the third year, the result will be that four teachers will alternate between the different years within the teams.

**Questions to consider:**

- What will the consequences be for half of the seven-year-olds/all of them if they change teacher?
- How are the work teams affected by regular changes in personnel?
- How will teachers feel about leaving "their" children after one year (two years if you see the six year olds as ‘yours’)?

*Alternativ P-2A*

A new group of six-year-olds is taken on and the seven-year-olds stay on. The two VT groups will thus have thirty-nine children, i.e. 12 + 12 + 15. Each VT would be reinforced by either a pre-school teacher or a schoolteacher. This could be achieved by employing one full-time member of staff or two part-time members. The latter solution is perhaps the more advantageous of the two since two hands are needed in each VT. On the basis of the model currently in operation, it would be necessary to extend one group, perhaps the green group, to include the six year olds.

**Questions to consider:**

- How does one manage a group of thirty-nine children?
- Is such a large group possible or must one abandon the idea and keep together the whole track as one group?
- What would such a solution mean in terms of new group constellations?
- If it is essential that there is one teacher in both the blue and red groups, is it not necessary to employ two (part-time) teachers?
- Is such a solution workable?
- What are the other alternatives when it comes to working with school assignments in the two groups?
- How should one use the premises, e.g. the second years’ classroom?

*Alternativ P-2B*
As an alternative, only twenty-four of the new six-year-olds may be included in the tracks. A pre-school teacher could take care of the six children not taking part in the VT.

**Questions to consider:**

- What will the six-year-olds who are not taking part in tracking do?
- Which six-year-olds will not be included in the VT, and what are the criteria for selection?
- How does one justify selection to the parents whose children have been excluded?
- When will the excluded six-year-olds be permitted to participate in VT?
- How should the pre-school-teacher-resources be used in the two VTs?

*Alternativ P-2C*

The VT are divided into three groups. The present work team would thus need to be split up. Are there sufficient personnel resources in the form of pre-school teachers, three recreation pedagogues and three schoolteachers to implement such a measure?

Whichever solution one chooses to develop, the events of the fall 2000 should perhaps be taken into consideration. If one chooses to develop the VT for P-3, each VT will have just over fifty children. What personnel resources are available in such a case? What will happen during the rest of the year, i.e. what is the aim? Will there be children between the ages of six and twelve in the same group?

*Conclusions in the form of questions stemming from the above alternatives*

When it comes to a more individualised way of working, are there alternative methods of organising work? Is it advisable, for example, that the idea of colour groups be abandoned and specific sessions be introduced instead, e.g. Swedish and mathematics in which children irrespective of their age can take part in accordance with their expectations and different levels of ability?
Questions to consider:

- What kind of material is required and how can this be obtained?
- How would this method affect joint run-throughs of subjects etc.?
- Do the staff have knowledge of one another's age groups and activities?
- If they do not have such knowledge, is it possible to acquire the same knowledge and skills as other team members? If the answer is "yes," how can this be achieved?
- Is special training required? What form should such training take?
- Who is responsible for keeping track of the development of each individual child, and how can this be done?
- Who is responsible for the children's social, epistemological and emotional development? And who bears the responsibility for contact with the parents?
- Is it possible to have small groups of children of mixed ages, e.g. ten in each group?
- This alternative perhaps presupposes two part-time teachers, one for each track?

Summary

Most of those questioned believe that one of the greatest advantages of the VT is the opportunity to work with more adults than in traditional teaching methods. As a result, teachers feel that they are able to cope. The other great advantage is the opportunity to work in a team. On the negative side, it seems that there is a danger that one uses up all one's energy in the morning and as a result, the leisure-time center activity activities suffer. Another problem is that teachers feel they have fewer resources when working with mathematics and Swedish.

The greatest problem is the time for planning: when should this be done and how can one overcome the problem that planning time is too short?

There are a number of questions that need to be discussed, e.g. how can the work become more focused on the individual (if indeed this is to be one of the aims)? How should the reorganisation in the fall be viewed in the long-term? Is this organisation better in terms of the children’s ability to develop? I also believe that it is necessary to consider how to involve parents in a discussion of their children’s
education in such a way that they understand and can exercise influence over the latter in accordance with the new law. To sum up, what needs to be discussed are the aims and goals of the VT.
Appendix II

Following is the letter from the teachers to the new principal. This comprises separate documents from the three groups of teachers; these were subsequently compiled into one unified document by the teachers themselves.

Schoolteachers:

Positive

P-1
- Working as part of a team. More adults taking responsibility for the children; adults know the children and how they react in different situations.
- There is always someone with whom to discuss problems.
- Smaller groups: the children are divided up into small groups making it possible to talk to and help them. This is not possible in larger groups.
- We work in premises close to each other so that we see the children all day.
- We use all the premises available and learn to get along with one another. Everyone knows everyone else.
- There is no problem with discipline and obeying the rules either for the children or the adults.
- We gain insight into one another’s ways of working and co-operating.

1-2
- The transition is smooth from year 1 to year 2 given that we as teachers have the opportunity to teach in both years. This creates security both for the children and the new teacher.

Negative

After nearly two years’ experience of working in this way we feel there are few disadvantages.
Last year, we had one more lesson per day which allowed us to get much more done. It has become more difficult to develop and carry out extra activities in teaching reading and writing.

The work with P-1-2

- The age differences are too great sometimes. We should perhaps concentrate on encouraging co-operation among the children in P-1 and 1-2. As adults we can work in P-1-2 and have joint environmental days, outdoor activity days etc.

The pre-school teachers

Positive

- An overall view as we see the children all day.
- The children know each other well. We never hear them calling one another nasty names.
- There is a high degree of creativity in the children’s schooling.
- Many adults – small groups.
- Children of different ages learn to care for one another.
- Members of a team stand in for one another if someone needs to be free or is ill (this saves a great deal of money).
- Different kinds of knowledge and expertise.

Negative

- Too many different groups and adults for the six year olds in the fall. This can cause worry and insecurity. It is sufficient if co-operation exists in P-1, as last year. Contact between the first and second years can be provided for by organising environmental days, sports days and joint outdoor activities.
- There are too many interruptions in six year olds’ games. They do not have time to finish their playing. Many do not know how to play. This worked better the first year when the six-year-olds did not automatically follow all the breaks: we took a break when it fitted in with the children’s activities. Breaks were gradually added to during the spring term.
- The first years need to join in activities together during the spring term in order to get to know one another and work together as a class.
- It is not a good idea to have a planning session in the afternoon as this leaves one teacher alone with the children. The time for planning is insufficient as there are three different kinds of activity going on.

**The work with P-1**

- It would be going back one step to abandon P-1.
- The VT is more stimulating and provides more opportunities for self-development.
- The school guidelines stipulate that children shall be encouraged to co-operate with one another; we feel that we have come at least part of the way in this respect.

**The recreation pedagogue’s work in the VT**

As recreation pedagogues we believe it is an advantage that we have an overall view of the children. We see the children the entire day and are in close contact with them. Should anything happen during the morning we can follow it up in the afternoon.

We work in teams and complement one another well in terms of knowledge and expertise. We divide up the work and share the responsibility in the group, team and at school as a whole. In this way, we have a high ratio of adults to children. We can complete tasks together and any problems which may arise are jointly solved within the work team. It is essential to understand the value of being able to help one another.

We exchange views of child development and learning and are able to act as an extra resource for children with special needs since the teacher has more time to help the other children in the class. Our work is more stimulating and provides more opportunities for self-development.

A recreation pedagogue has a sound practical training in sports, art and drama etc. This is important. We are able to use this knowledge and expertise to the full in the different groups, especially in the mornings when we meet all the children.

We have close contact with parents when they drop off and collect their children; this makes it easier to discuss matters of importance within the work team and to pass on any necessary information about the child or how s/he is doing at school to his/her parents.
A possible negative result of the VT is that our main activity in the leisure-time center comes second as it is more stressful to work with two different kinds of activity. The afternoon planning sessions become harder work since teachers are not involved in the leisure-time center.

The consequence of returning to a more traditional form of schooling is that the groups will become larger and the number of adults smaller. The leisure-time center is responsible for minding children during the morning; the result is that recreation pedagogues are more tied up in the afternoon. Our pedagogic, social and practical knowledge is not made use of to the same extent as previously as the children are often tired after school and wish to play more freely.

To sum up, we believe that it is important to remember that it is the responsibility of recreation pedagogues to organise their work in such a way that it is in line with the school guidelines and the general committees and to ensure that it results in a suitable overall plan of operations for the leisure-time center, a scheme which is based on co-operation with the pre-school class and compulsory school.

North Valley, March, 14, 2000

Rose and Rebecca
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