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**Nadezda Blagoeva**

**An artist-teacher-researcher in action:  
Facilitating integration of contemporary art forms  
into primary after-school visual arts activities**

DOCTORAL DISSERTATION

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**Abstract**

This dissertation presents an artist-teacher-researcher's exploration of the use of the integrated approach to teaching visual arts to primary students, aged six-to-eight in the after-school clubs organized by an international school in Helsinki. The study is necessitated by the fact that in our postmodern world the availability of visual information is growing with dazzling speed and children, even at an early age, more than ever before are flooded with images through a multitude of channels. Therefore, they need guidance and sharing in order to construct their own knowledge about the world around them and to become multi-literate (Räsänen, 2015a; Räsänen, 2015b), all-round individuals (Finnish National Agency for Education – EDUFI, 2016), able to comprehend the complexity of this diverse visuality. In our fast-changing social and technological environment, dominated by the visual, new means of expression, and methods and materials for art creation are constantly emerging. So, in order to suggest answers to the educational challenges of the future in the field of visual arts it is becoming increasingly necessary to expand curriculum horizons, to find suitable ways for making use of the new and the contemporary (Watts, Cox, & Herne, 2009) and to establish links between different spheres of knowledge and life.

For these reasons, the theoretical background of the study relies upon central tenets of the socio-constructivist and integrated approach, while at the same time takes into account some aspects of contemporary art forms and practices. The latter are shown to be essentially integrative in their nature and are viewed as a suitable means of introducing students to the varieties of ways for seeing the world around them and using their knowledge acquired in other subjects for the creation of new original artworks. Contemporary art effortlessly brings together, unites, combines, reuses, recycles, up-cycles, re-contextualizes and remediates materials and ideas to express the interconnectedness between various conceptual entities and, in this way to construct new meanings, just as the integrative approach aims at bridging the gap between disciplines in education. In this dissertation contemporary art forms and practices are considered to be integrative in terms of three of their main aspects: their materialization, their conceptualization and the collaboration during their creation.

In view of this understanding of integrative teaching and contemporary art, the dissertation seeks to answer the following broad research question: How can the integrative potential of the three basic art-making principles of contemporary art – alternative materials utilization, conceptualization and collaboration – contribute to the successful integrative teaching of visual arts to primary school students to promote knowledge construction? In order to answer this research question, four artistic projects were planned, developed and implemented, each exploring various aspects of applying the integrated approach to my teaching of visual arts to six-to-eight year old students.

The dissertation presents the research and teaching process as a developmental spiral consisting of five action research cycles. Employing action research method for the implementation of all the projects offered a clear methodological procedure that facilitated the data collection as well as the natural flow of the research process – the results and conclusions drawn from each action research cycle inspired the research questions for the next cycle (artistic project). The specific learning objectives as well as the artistic qualities of the artworks created during the projects implementation explored different aspects of the said integrative potential of contemporary art forms and practices.

This research in action gave the opportunity to arrive at theoretical conclusions that stemmed directly from my authentic artistic experience applied in the teaching-learning process. These conclusions are presented as a three-tier model for facilitating integrated knowledge construction in the primary visual arts after-school activities by means of introducing contemporary art forms and practices. The model suggests that practical pedagogical utilization of the integrative potential of contemporary art forms can be materials-driven, concept-driven and collaboration-driven integration. These were the specific aspects of contemporary art that were explored in the course of the study and were observed during the implementation of the projects to have the potential to foster collaboration and knowledge integration that transcend disciplinary boundaries.

In addition, employing action research allowed me to explore my artistic and teaching approaches thoroughly, to evaluate their development, and to gain awareness of the similarities between the artistic and the research process. In this way, the overlap of professional identities – an artist, a teacher and a researcher – was recognized as an opportunity for guiding the students into authentic artistic processes through artistic action research (Jokela, 2008; Räsänen, 2005), which affected positively the pedagogical and theoretical outcomes of the teaching and research process. The adoption and pedagogical adaptation of the kaleidoscopic diversity of contemporary art's materialization, conceptualization and collaborative practices fostered collaborative interdisciplinary integration, which is in line with the current Finnish National Core Curriculum for basic education (EDUFI, 2016). They facilitated integrated knowledge construction among the primary after-school students, made the educational process more inspiring and

meaningful (European Commission: Eurydice, 2019) and provided the young learners with a creativity toolbox to remix and remediate knowledge and experience, to think outside the box, so as to meet the visual challenges of the post-modern world.

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*Keywords:* contemporary art; action research; integrated approach; primary after-school activities; visual arts education; multi-professional collaboration

**Nadezda Blagoeva**

**Taiteilija-opettaja-tutkija työssään:**

**Nykytaiteen muotojen integrointi peruskoulun iltapäiväkerhon taidetoiminnassa**

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## **Tiivistelmä**

Väitöskirja tarkastelee taiteilija-opettaja-tutkijan pohdintoja integroivasta kuvataiteellisesta toiminnasta 6-8 vuotiaille oppilaille Helsingissä sijaitsevan kansainvälisen koulun järjestämässä iltapäivätaidekerhossa. Tutkimuksen tarpeellisuus perustuu lapsiin kohdistuvan visuaalisen informaation kasvuun postmodernissa maailmassa. Lapset tarvitsevat opastusta ja tiedon jakamista luodakseen tietämystä ympäröivästä maailmasta, tullakseen monilukutaitoisiksi (Räsänen, 2015a; Räsänen, 2015b), monipuolisiksi yksilöiksi (Opetushallitus, 2016) sekä kykeneviksi ymmärtämään visuaalisen informaation kompleksisuutta. Nopeasti muuttuvassa visuaalisuuden dominoimassa sosiaalisessa ja teknologisessa ympäristössämme syntyy jatkuvasti uusia ilmaisutapoja ja taiteen luomisen metodeja ja materiaaleja. On siis yhä kasvavassa määrin tarpeellista laajentaa opetussuunnitelmaa, löytää sopivia tapoja hyödyntää uutta ja nykyaikaista (Watts, Cox, & Herne, 2009) sekä luoda yhteyksiä eri elämän ja tietämyksen alueille, jotta tulevaisuuden kuvataiteen opetuksen haasteisiin voidaan vastata.

Näistä syistä tutkimuksen teoreettinen tausta pohjautuu keskeisiin sosiokonstruktivistisiin integroiviin lähestymistapoihin. Viitekehyksessä otetaan huomioon eräitä nykytaiteen näkökulmia ja käytäntöjä, joiden osoitetaan olevan pohjimmiltaan integroivia ja jotka nähdään sopivina keinoina tutustuttaa oppijat moninaisiin tapoihin nähdä ympäröivä maailma ja käyttää muista oppiaineista kerättyä tietoa uusien taideteosten luomiseen. Nykytaide yhdistää ja kierrättää materiaaleja ja ideoita, sekä luo niille uusia asiayhteyksiä esittääkseen monien käsitteiden yhteyden toisiinsa, ja tällä tavalla luo uusia merkityksiä samaan tapaan kuin integroiva lähestymistapa tähtää yhteyksien löytämiseen eri tiedon- ja taiteenalojen välillä. Nykytaiteen muodot ja käytännöt nähdään tässä väitöskirjassa integroivina niiden kolmessa eri päämuodossa: luomistyön aikana tapahtuva materialisaatio, käsitteellistäminen ja yhteistyö.

Integroivan opetuksen ja nykytaiteen käsityksen valossa väitöskirja hakee vastauksia seuraavaan laajaan tutkimuskysymykseen: Miten hyödyntää kolmen taiteen luomisen peruseräkkeen – vaihtoehtoisten materiaalien hyödyntäminen,

käsitteellistäminen ja yhteistyö – potentiaalia onnistuneeseen integroivaan kuvataiteelliseen toimintaan iltapäiväkerhon taideoppilaille monipuolisen tiedon rakentamisen edistämiseksi? Neljä taideprojektia suunniteltiin, kehitettiin ja toteutettiin vastauksen saamiseksi tähän tutkimuskysymykseen. Jokainen projekti tutki monia näkökulmia integroivan lähestymistavan soveltamiseksi kuvataiteelliseen toimintaan 6-8 vuotiaille oppilaille.

Tämä väitöskirja esittää tutkimus- ja opetustapahtuman spiraalisesti kehittyvänä prosessina, joka koostuu viidestä toiminnallisesta tutkimussyklistä. Toimintatutkimuksen käyttäminen jokaisen projektin toteuttamiseksi tarjosi selvän metodologisen tavan, joka helpotti tiedon keräämistä sekä tutkimuksen luontaista etenemistä. Jokaisesta toiminta-tutkimussyklistä johdetut tulokset ja johtopäätökset herättivät uudet tutkimuskysymykset seuraavaan taideprojektisykliin. Täsmälliset oppimistavoitteet sekä projektissa luotujen taideosten taiteelliset piirteet käsitelivät eri näkökulmia nykytaiteen muotojen ja käytäntöjen integroivasta potentiaalista.

Toimintatutkimus antoi mahdollisuuden päätyä teoreettisiin johtopäätöksiin, jotka ottivat huomioon myös omat kokemukseni taiteellisesta toiminnasta sovellettuna opetus- ja oppimisprosesseihin. Tuloksena esitän kolmitasoisien mallin integroidun tiedon rakentamiseen peruskoulun iltapäiväkerhon taidetoimintaan ja nykytaiteen muotojen käsittelyyn. Malli osoittaa, että integroivan potentiaalin pedagoginen hyödyntäminen taidetoiminnassa voi pohjautua materiaaleihin, käsitteisiin ja yhteistyöhön. Nämä olivat ne nykytaiteen ominaiset näkökulmat, joita tarkkailtiin projekteja toteutettaessa.

Toimintatutkimuksen käyttäminen antoi minulle lisäksi mahdollisuuden tutkia omia taiteellisia ja opetuksellisia lähestymistapoja läpikotaisesti, arvioida niiden kehitystä, ja hankkia tietoa taiteellisen ja tutkimuksellisen prosessin samankaltaisuudesta. Tällä tavalla eri ammatillisten identiteettien – taiteilija, opettaja ja tutkija – päällekkäisyydet tunnistettiin mahdollisuutena ohjata oppilaita autenttisiin taiteellisiin toimintoihin taiteellisen toimintatutkimuksen menetelmin (artistic action research, Jokela, 2008; Räsänen, 2005), mikä vaikutti positiivisesti opetus- ja tutkimusprosessin pedagogisiin ja teoreettisiin tuloksiin. Käyttämällä taiteellista toimintatutkimusta opetustapana ja soveltamalla pedagogisesti kirjavia nykytaiteen materiaalisia, konseptuaalisia ja yhteistoiminnallisia käytäntöjä aitoihin ja luoviin opetustapahtumiin voidaan niiden nähdä edistävän tiedonalojen välistä integraatiota opetustapana, mikä on sopusoinnussa myös Suomen tämän hetken perusopetuksen opetussuunnitelmien perusteiden kanssa (Opetushallitus, 2016). Opetustapa edisti integroidun tiedon luomista iltapäivätaidekerhon oppilaiden kanssa sekä teki opetusprosessista inspiroivampaa ja tarkoituksellisempaa (European Commission: Eurydice, 2019). Lisäksi se antoi nuorille oppilaille luovat työkalut muodostaa uudenlaista tietoa ja kokemuksia ja näin vastata paremmin postmodernin maailman visuaalisiin haasteisiin.

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*Avainsanat:* nykytaide, taiteellinen toimintatutkimus, integroiva lähestymistapa, peruskoulun iltapäiväkerhotoiminta, taidekasvatus, moniammatillinen yhteistyö

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Helsinki, 14 June 2020  
Nadezda Blagoeva

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## List of original publications<sup>1</sup>

This dissertation is based on the following publications (journal articles), referred to in the text by their corresponding Roman numerals (I –IV). For clarity of the presentation, the publications are numbered and listed here chronologically, following the order of the action research cycles rather than according to year and month of official publication (see footnotes below).

### Article I<sup>2</sup>

Blagoeva, N. V., Karppinen, S., & Kairavuori, S. (2019). The integrated approach to teaching visual art in after-school activity classes, *International Journal of Art and Design Education*, 38(1), pp. 224–239. doi: 10.1111/jade.12173

### Article II<sup>3</sup>

Blagoeva, N. V. (2019). Project-based integration of contemporary art forms into teaching visual arts to primary school students in the after-school art clubs, *International Journal of Education & the Arts*, 20(18). doi: 10.26209/ijea20n18

### Article III<sup>4</sup>

Blagoeva, N. (2019). Utilizing contemporary art forms in the primary after-school: An artist-teacher-researcher perspective, *International Journal of Education through Art*, 15(2), pp. 183–200 (18). doi: 10.1386/eta.15.2.183\_1

### Article IV<sup>5</sup>

Blagoeva, N. (2018). Promoting integrative teaching through interdisciplinary arts and crafts collaboration between after-school clubs. *Nordic Journal of Art and Research*, 7(1). doi: 10.7577/information.v7i1.2709

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<sup>1</sup> The articles are reprinted with the kind permission of the copyright holders and the original publishers.

<sup>2</sup> The article reports the results of two action research projects: Project 1 and Project 2, which were conducted during the 2014-2015 academic year. The article is co-authored. It was submitted for publication in June 2016 and was first published online in September 2018.

<sup>3</sup> The article reports the results of Project 3, which was implemented in 2015-2016 academic year; it was submitted for publication in February 2018 and published in October 2019.

<sup>4</sup> The article reports the results of the conceptualization stage of Project 4, which was implemented in 2016-2017 academic year; it was submitted for publication in February 2018 and published in June 2019.

<sup>5</sup> The article reports the results of the materialization stage of Project 4, which was implemented in 2016-2017 academic year; it was submitted for publication in April 2018 and published in December 2018.



## 1 INTRODUCTION

This dissertation is article-based and presents an overview of four studies which discuss different pedagogical aspects and outcomes of implementing the integrated approach to teaching visual arts to primary school students attending after school art clubs. By assuming a socio-constructivist perspective to the discussed issues, the dissertation describes the professional pedagogical development of an extensive teaching process undergone by the artist-teacher-researcher in search of possible ways of enriching the integrative teaching practice with methodological suggestions for the presentation of contemporary art to young learners. An action research method is employed in the process in order to arrive at a proposal for a practically-derived theoretically-informed model for integrated visual arts teaching which utilizes contemporary art forms and practices.

In view of the aims of the study and its overall results, the Introductory Chapter places the research within the broader context of our contemporary postmodern society, the challenges it poses to visual arts education and its influences on educational theory and practice. Considering the current postmodern environment and its call for strengthening learner multi-literacy through integration of knowledge and skills, this chapter introduces the recent reform in basic education in Finland as an institutional answer to the pressing demand for such an innovation in education that would reflect the values of our times. Within this discussion the chapter formulates the aims of the research in relation to my teaching, artistic and research journey and pinpoints the increasing role of the arts in providing engaging quality education for fostering creativity and diversity.

The Second Chapter is organized in three sections. The first section defines the socio-constructivist theoretical perspective assumed in this thesis from the point of view of educational sciences, and unpacks relevant terminology related to it and the integrated teaching approach which was applied in the empirical part of this research. The second section discusses three central aspects of contemporary art forms and practices and explains their integrative nature and potential to promote integrated knowledge construction, thus justifying the use of contemporary art production within the integrated teaching approach as part of the socio-constructivist learning theory. Finally, this chapter provides some pedagogical implications of the theoretical assumptions used in this dissertation. Chapter 3 formulates the main research questions dealt with in this dissertation. Chapter 4 presents the research design by providing details about the research setting, the participants, the data collection, the applied methods and methodological procedures as well as the principles which guided the analysis of the results. Chapter 5 is dedicated to research ethics which is especially important when young students are involved in the study. Chapter 6 summarizes the origi-

nal articles and comparatively discusses the main findings of the research. Chapter 7 offers a general discussion of the research results in relation to the main research question posed in the dissertation. Chapter 8 concludes the dissertation in view of its implications and contributions to the field of educational sciences and teaching practice and makes suggestions for further research. At the end of the dissertation text a list of references is provided.

## **1.1 Early visual art education and the challenges of the postmodern world**

For more than two decades now the availability of visual information in our everyday lives has been growing unprecedentedly fast. With the dazzling development of technologies, the channels of information have constantly been multiplied and refined in a strive to make information more and more digestible, and all this has gradually led to a marked shift from verbal to visual means of expression. Through television, the Internet, advertisements in the street, and in the press, labels, packaging and whatnot, we are constantly being bombarded from an early age by various images, often themselves compiled by other appropriated images. The resulting state of intervisuality (Mirzoeff, 2002, p. 124) and hypervisuality, we are immersed in, sets high demands on our processing abilities, and this fact coupled with the technological boom of the last two decades turns the visual image into a ubiquitous and overwhelming power, shaping our perceptions of the world and our social relations.

These changed postmodern conditions were defined by Lyotard (1999) as “incredulity toward metanarratives” (p. 999). The collapse of the grand-narratives that have kept Western societies unified and totalized since the Enlightenment he points as the essence of this new social phenomenon (Hopkins, 2000, p. 198) in which people’s lives are no longer guided by one or several omnipotent texts shaping their reality. Over the years the power of religious texts and political manifestos slowly diminished to allow free expression of individual ideas, beliefs and truths. The singularity, characteristic of the past, was shattered to pieces, setting free the colourful plurality of opinions, choices, decisions and truths of the future. Celebrating diversity became the driving force of human behaviour, and respectively a source of inspiration in art. This plurality of the world and the tendency to “remix”, “reconstruct” and “reuse” (Deuze, 2006) separate artifacts so as to produce a uniform and meaningful piece of art is justified by the fact that nowadays there is hardly one official truth governing the world but a multitude of individual truths and narratives. This situation, more than ever before, necessitates additional guidance through the multi-coloured *visual jungle* of our times, which is to channel the visual perception of every person and to enhance the formation of taste.

These tendencies in art and culture have led a number of researchers and curriculum developers since the beginning of the 1990s to turn their attention to the

challenges that postmodernism poses to the teaching of visual arts (Efland, 1992; Neperud, 1995; Hopkins, 2000; Freedman, 2003; Hardy, 2006; Slattery, 2012). In his discussion of the effects of postmodern phenomena on current teaching practices among art educators, Efland (1992), for example, justifies the purpose of teaching art by comparing it with teaching science. He argues that “the fundamental reason for teaching the sciences is ‘to enable students to understand the natural world’”, while the arts are ‘taught to enable students to understand the social and cultural worlds they inhabit’ (Efland, 1992, p. 118). In support of Efland’s views, it should be added here that the plurality of postmodernism, democratic as it may be, can lead to a confusion of aesthetic choices and an inability for each individual to develop an understanding of the quality work of art. It is only natural, then, that these social phenomena cannot be overlooked by any educational system if it is to be up-to-date and keep up with the requirements for social and visual literacy set by the technological progress. This situation triggers the necessity to constantly improve the existing teaching programmes and materials and to reconsider the forms and approaches to teaching and evaluating art in and out of school even when they seem to be functioning smoothly and successfully.

In relation to the Finnish educational system this necessity for improvement and reform is explained in a clear and simple way by Halinen (2014): “We are often asked why improve the system that has been ranked as top quality in the world. But the answer is: because the world is changing around the school.”

Understanding ‘why to change’ is not enough, however. The more pressing question is ‘how to change’, how to reconcile the postmodern pluralism with the prescriptive nature of curriculum documentation, or in other words, how to plan, design and organize formal education (Götsch & Mateus-Berr, 2015; Steers & Hardy, 2006) so that it can be adequate to the fast-changing social and technological environment that surrounds us.

And this is where the essence of the challenges to postmodern art teaching lies. As Emery (2002) has pointed out:

For teachers the curriculum is a modernist paradigm. It is a meta-narrative or grand story which describes the nature of learning. And while postmodernists refute and mistrust meta-narratives as being reductionist and based on hypothetical norms that do not really exist, it really is impossible to live in contemporary society without them. Societies do live by creeds, belief systems and mission statements and as long as postmodern skeptics continually challenge the limiting nature of metanarratives, many find it easier to live within some guidelines than to live without them. (p. 3–4)

This, in my view, should mean that curricula are not incompatible with our reality and they are not something obsolete, belonging to the past because we still live in organized societies that have their own “creeds, belief systems and mission statements” (Emery, 2002, p. 3–4). So, postmodernism, permissive as it

is, allows the development of teaching guidelines and ideas that would not suffocate creativity, diversity and plurality of ideas, but would give freedom to educational experts, curriculum developers and teachers to find the appropriate ways for helping students to make sense of the social phenomena around them, and for guiding them into constructing their own future.

And this is the main aim set in the Finnish Educational Reform as stated in Halinen's speech (2014), citing Mary Helen Immordino-Yang Ed.D.: "It really could be about this that we try to help our kids know how to make meaning and sense of what they are learning so they can see who they are".

## **1.2 Towards integration: the Finnish curriculum reform in basic education**

In view of the debate of *how* to modernize formal education so that it can relate to the educational challenges of the future, it is becoming increasingly necessary to expand curriculum horizons and to implement teaching-learning approaches that encourage the use of the *new* and the *contemporary* (Watts, Cox, & Herne, 2009). In the postmodern educational situation of today, an important step towards promoting plurality and openness of the educational process is to acknowledge the fact that although school-gained knowledge is filtered to comply with certain pedagogical aims and therefore is intentionally structured by topics and domains, it *is* in fact part of a meaningful whole, holding together all human knowledge and life as an entity. This 'entity' also includes all other, often seemingly random and disconnected, pieces of information and experiences that the students receive out-of-school. So, in the *colourful* variety of knowledge and experiences that contemporary life offers, it is of utmost importance to equip the young learners with information processing tools and approaches for seeing conceptual connections that transcend constructed disciplinary categories, i.e. through suitable guidance to unveil the inevitable relationship between "the core of one subject and the content of another subject" (Karppinen, Kallunki, Kairavuori, Komulainen, & Sintonen, 2013, p. 149) so as to grasp the links of these 'subjects' to phenomena and experiences that go beyond school-gained knowledge in general.

To smoothly introduce such innovative approaches to the presentation of educational content into the teaching process the traditional organization of school education, which artificially puts knowledge into categories without providing conceptual links between them, has to be re-evaluated and re-formed. So, with the aim of providing top quality contemporary education for all, and thus to respond to the growing need for educating multi-skilled individuals, at the beginning of 2016-2017 school year Finland introduced a major reform of its National

Core Curriculum for Basic Education (Finnish National Agency for Education<sup>6</sup>, 2016). Some of the building-blocks structuring the newly-reformed guidelines put strong emphasis on developing the students' abilities to actively create, interpret and communicate with different kinds of "texts" (EDUFI, 2014b, p. 3) or "modalities" (Räsänen, 2015, p. 22). Following the reform, the integration of visual, aural, kinesthetic, verbal, numeral modes, which the separate disciplines (arts and crafts, music, languages, mathematics, natural sciences, etc.) represent (Räsänen, 2015a; Räsänen, 2015b), should be promoted through the provision of "multi-disciplinary, phenomenon- and project-based studies" (Halinen, 2015, para. 5), introduced and organized around "collaborative classroom practices" (Halinen, 2015, para. 5). Such integrated and multi-disciplinary study projects and modules would support collaborative knowledge construction by guiding the students into discovering interrelatedness between different spheres of knowledge and life. By encouraging the learners' ability to make "associations beyond the different subjects" (Karppinen et al., 2013, p. 149), the reformed curriculum demands integration across a wide range of disciplines (Turkka, Haatainen, & Askela 2017, p. 1404) and emphasizes the importance of development of transversal competences as a result of the integrated learning process.

Active student involvement at all stages of the teaching-learning process is strongly encouraged so as to make the studying "more inspiring and meaningful" (European Commission: Eurydice, 2019, "Teaching Methods and Materials", para. 6). Reformed in this way, the new curriculum guidelines for basic education (EDUFI, 2016) not only encourage the application of the socio-constructivist integrated approach to teaching of all subjects but make it an obligatory part of the provision of basic education in Finland which every student should be offered the opportunity to benefit from. The after-school activities provide an extension to these teaching practices and "provide opportunities for creative self-fulfilment; well-organised and high-quality before- and after-school activities guide children to gradually grow into a healthy, active and sustainable lifestyle and towards living in a world that has become international and technologically minded, while taking children's needs and abilities into account" (EDUFI, 2011, p. 7).

For these reasons, my research, which focuses on finding practical pedagogical solutions to integrative teaching of visual arts to primary school students attending after-school activities in an international school in Helsinki, is timely and relevant to the educational processes in Finland as the research was initiated in the light of the debates for curriculum renovation as early as 2014, much be-

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<sup>6</sup> English translation until 2017 'Finnish National Board of Education'. English translation after 2017: 'Finnish National Agency for Education (EDUFI)'.

fore the introduction of the reformed core curriculum for basic education and continued a couple of years after it.

### **1.3 The state-of-the-arts development in integrated teaching and research**

The main focus of this dissertation falls on the practical application of the integrated approach to teaching visual arts. This is not only in line with the recommendations in the reform of the core curriculum for basic education in Finland (EDUFI, 2016). It also reflects the increased interest towards integrative teaching practices demonstrated in the various research projects conducted in recent years which deal with exploring conceptual relations between the traditional school subject areas. A significant number of studies discussing these issues (e.g. Becker & Park, 2011; Barrett, Moran, & Woods, 2014; Englehart, 2016; English, 2016; Redman, 2017; So, Zhan, Chow, & Leung, 2018; Martín-Páez, Aguilera, Perales-Palacios, & Vilchez-González, 2019) report meaningful research results on different educational levels from integrative teaching processes that connect Science, Technology, Engineering and Mathematics (STEM).

It becomes evident from these studies that revealing relevant conceptual links between different scientific subject areas is beneficial for the learning process and for its pedagogical outcomes. However, I would argue here that regardless of the positive results of such projects, the relationship between content areas should not be introduced mechanically and for its own sake but, in my view, it should be revealed in an exciting manner so that it sparks the interest of the learners towards the scientific fields that are integrated. So in recent years, more and more researchers recognize the potential of *art* in all its *colourful* incarnations as a more inspiring pedagogic alternative to explaining complex abstract scientific notions in the classroom. This is demonstrated by the proliferation of scientific publications which report inclusion of various artistic practices into the teaching-learning process of STEM. Thus, a growing number of the recent research in the field of STEM actually tends to include art in their teaching methodology as “a means of humanizing science and technology-enhanced learning” (Burnard et al., 2017, p. 248). This tendency resulted in the emergence of the STEAM as an integrative teaching approach. STEAM sees art as a valuable source of using artistic means for finding innovative ways to explain or illustrate concepts that originate from non-artistic fields of knowledge. Some examples of research in STEAM include, among others, reports of discipline-based integration of visual arts into teaching geography and physics (Tani, Juuti, & Kairavouri, 2013) on an undergraduate university level; a multi-disciplinary course in physics, crafts and drama for student-teachers (Kallunki, Karppinen, & Komulainen, 2017); interdisciplinary craft designing and invention pedagogy in teacher education (Karppinen, Kallunki & Komulainen, 2019); the results of a survey of science teachers sporadic art integration into their practice (Turkka et al.,

2017); early childhood teacher's integration of mathematics and art (Börklund & Ahlskog-Björkman, 2017); integrating arts and STEM for gifted learners (Wilson, 2018); the positive effects of engaging with visual arts for the development of scientific thinking (Root-Bernstein & Root-Bernstein, 2013); or attempting to equally address the learning objectives of both art and the core subject under investigation such as chemistry and pottery (Leysath & Bronowski, 2016), etc. The successful application of STEAM projects, demonstrated in these papers, confirms that teaching modules which integrate art into their process have the potential to develop deeper understanding of the subject matter as well as creativity and visual-spatial awareness that is necessary in grasping the essence of STEM disciplines (Wilson, 2018).

However, what many papers researching STEAM integration have in common is that in most cases art is reduced to its illustrative functions of a supportive tool to express science and to boost scientific creativity and imagination, which leaves out discussion on the aesthetic qualities of the created artwork, or on the sources of inspiration for its creation. In this sense, art is used *subserviently* (Bresler, 1995) to serve scientific explanations, to illustrate concepts or to spark interest in other scientific content.

Other researchers elevate the benefits of art in integrated art programmes, which focus exclusively on establishing relationships between the different art forms, leaving out of the discussion the scientific disciplines within STEM. For example, Overland (2013) speaks of the place of music in integrated art teaching, whereas others (Bautista, Tan, Ponnusamy, & Yau, 2015) explore the integrative concept of “space” as an example for a common theme to work with and discuss in relation to dance, music, drama, and visual arts, not including in the scope of research the relation of the topic to any STEM subjects.

Unlike these previous studies where visual arts and artistic practices are used either as a tool for explaining phenomena belonging to other scientific areas, or for establishing links within their own artistic domains, the present thesis seeks to find a balance between these two polarities in research. It places *art* and the aesthetic experience in the center of attention and gets the inspiration for the conceptualization of the empirical projects from notions outside the realms of traditional art forms. Just as an authentic artistic creative process draws inspiration from life, which includes all possible scientific, philosophical or artistic means of understanding what existence on Earth is, the artistic projects in this study connect knowledge and experiences about various phenomena from different scientific disciplines with the aim of demonstrating how our environment reflects itself in our aesthetic perceptions and how this understanding of the world can be revealed through the expressive devices of visual arts. In other words, the integrative nature of the projects, presented in this dissertation, suggests contemporary artistic paths for achieving their learning objectives and illuminates the importance of developing *transdisciplinary* understanding in the

young learners as a way of promoting creativity and innovation which goes beyond traditional discipline-based school knowledge construction.

The choice of focus on the use of contemporary art forms and practices in education is also justified. After 2014, when my data collection and research was already initiated, other researchers also explored contemporary art and various aspects of its incorporation in educational settings. For example, Vahter (2016) seeks to find ways of changing the Estonian primary school art education by offering students opportunities to talk about and understand contemporary art; Leng Twardzik Ching (2015) is also interested in how contemporary art can be introduced on a primary school level and used effectively for stimulating the children's curiosity to achieve better understanding of art as a whole, but the study focuses on teacher training; Knif and Kairavuori (2018) study the relationship between multi-literacy and contemporary art on primary school level, based on their observations from a visual arts course taught to university student teachers; Jokela, Hiltunen and Härkönen (2015) examine the fostering of international collaboration through introduction of contemporary art on a university level. All these studies certainly contribute a lot to the scientific discussion of the significance of using contemporary art for educational purposes and show that contemporary art is a suitable learning environment, but they either refer to other settings and upper levels of education, or the perspectives they take are different from the one of the artist-teacher-researcher, assumed in this dissertation. So the study I report here would hopefully add one more stroke to the overall picture of the role of integrating contemporary art forms and practices in primary after-school education.

#### **1.4 Towards empowerment of the artist-teacher-researcher**

My personal motivation to plunge into such an extensive research project, focused exclusively on my teaching practice and respectively on methodological issues arising from it, derives from my previous studies in visual arts education as well as from my long-term teaching experience as an after-school visual arts activity leader at the European School of Helsinki, Finland, where I have worked for over ten years now. As a student of art at the Department of Teacher Education at Sofia University, my undergraduate programme put strong emphasis on making us aware, both theoretically and practically, of various classical and contemporary artistic tendencies and practices, but somehow kept their operative approaches away from the pedagogical modules included in the programme. The relationship between being an artist and being a teacher of art, or a teaching artist, was not explicated and was left to us to find on our own.

However, during my studies and my subsequent work as a teacher of visual arts, I was first and foremost identifying myself as an active artist. I worked productively in my studio towards developing my own artistic skills, ideas and

conceptualizations on a personal level and eventually came to the conclusion that I could utilize my creative force into developing teaching assignments and modules that draw direct inspiration from my artistic processes, rather than repeat the well-known generativist activities that fulfil the expectations for school art production but stray from authentic artistic practices.

Working as an after-school visual arts and crafts activity leader required me to plan and conduct different elective visual arts courses, targeted for primary school students who voluntarily attend the after-school clubs, organized by the school. Since the club activities in this school are part of the extracurricular school programme, their content and format is not fixed or constrained by any curriculum requirements or expectations. On the contrary, during the ten years of its existence so far the after-school environment in this school used its potential and resources to provide a variety of thematic clubs of interests which aimed at enhancing the pupils' holistic well-being by guiding their leisure activities (EDUFI, 2011, p. 5), extending their scope beyond mere supervision and establishing them as a continuation to the educational tasks of primary school basic education in a methodologically flexible way.

So from the very beginning I was given complete freedom regarding the content of the visual art and crafts clubs and the methodologies I used as long as they were suitable, interesting and enjoyable for the primary school pupils that decided to attend them. And it was this freedom of choice *what* to teach and *how* to teach it that encouraged me to experiment with different topics, methods and materials of artwork creation and eventually made me realize that a lot of my teaching ideas came directly as a result of my artistic work, knowledge and experience of the creative process. This realization encouraged me to reflect upon my artistic and teaching practice and the possibilities to combine the experience and expertise I possessed. As a result, I decided to go deeper into analyzing systematically the relationship between my artistic and my teaching work and their connection to other spheres of knowledge and life. Such systematic analysis was only possible with the methods and tools offered by scientific research.

It seems that even before enrolling into the doctoral programme of School, Education, Society and Culture at the University of Helsinki and starting this research I already had a clear idea what I wanted to investigate. At that point I started pondering about the mechanisms behind my creative process and came to the conclusion that the varied sources of inspiration I benefited from in my artistic work related to the socio-constructivist integrative principles guiding the reform in basic education discussed above (EDUFI, 2016). I was intrigued by the official recommendations to involve the students in “phenomenon- and project-based studies” (Halinen, 2015, para. 5) that encourage the establishment of “multidisciplinary” (para. 5) connections. I wanted to explore the possibilities of strengthening the students' abilities to make such connections in their visual artworks, just like a professional artist does, by offering them specific teaching

content that answered these demands. At the same time, I was fascinated by the pedagogical implications of utilizing my personal artistic experience into my teaching. Thus, the whole research can be perceived as a process of development which led to a transformation of my pedagogical practice as it happened and resulted in implementation of new artistic activities in the after-school clubs.

And finally, I would like to point out that this dissertation differs from other research output in the field of integrated teaching done in Finland in recent years, which views arts education either in relation to the learning environments, community and well-being of the students (Nevanen, 2015), or analyses student narratives (Tani et al., 2013; Kallunki et al., 2017). It takes the artist-teacher-researcher's perspective to interpret the results from the implemented visual arts projects and to view them through the analytical prism of the socio-constructivist integrated teaching approach and its related terminology. Giving voice to the artist-teacher-researcher as an active *co-equal* participant in the teaching-learning and research processes allowed close self-observation, analysis and discussion of my integrative contribution to the educational process as well. In that sense, this is an opportunity to present the point of view of the teaching professional who develops and applies the educational content and to follow the exact stages of that professional development in time so as to draw meaningful conclusions from them.

## **1.5 Aims of the study**

During the years I collected, processed and analyzed the data for this research by planning and implementing various integrative artistic projects into the after-school visual art clubs that I led. Each of the projects that constitute this dissertation explores different pedagogical aspects of the nature of teaching art through integration and the practical possibilities of implementing such an approach to teaching visual art to six- to ten-year-old students in the after-school art clubs. Each of these projects was a step in an action research cycle that ascended along a spiral to a new level of professional and methodological development of the artist-teacher-researcher – the results and conclusions drawn from each action research cycle inspired the research questions for the next cycle (artistic project), so the ideas for the projects and the research focus arose directly from the creative and teaching processes and from their thorough analyses.

So this dissertation takes a longitudinal view at those processes and aims at summarizing the overall results of the four separate articles which constitute it so as to reveal the connection between them and to arrive at unified conclusions about the pedagogical implications of the practical application of the integrated approach to teaching visual arts to primary school students described in each of them. Looking back in time it follows the logic of the proposed practical and theoretical developments by viewing the unity between theory and practice; it arrives at general theoretical conclusions about the set issues and offers method-

ological solutions that could be broadly applicable in other educational situations. It is an attempt to contribute my experience to the field of visual arts educational research in Finland and abroad by offering a theoretically constructed model for integrated teaching of visual arts, which derived from practice and could serve as a basis for finding pedagogical solutions to planning and implementing diverse contemporary visual arts integrated projects which are adequate to the increasing need to educate multi-literate (Räsänen, 2015a; Räsänen, 2015b) individuals who are prepared to understand, participate and be creative in our complex present-day visuality.

## **2 THEORETICAL BACKGROUND**

The presentation of the theoretical background of this thesis covers two main aspects. The first one offers the broader theoretical perspective assumed in this dissertation related to research and terminology within the field of educational sciences. The second one unites these theories and terms with concepts and ideas related to contemporary visual arts production and reception. This results in a unified theoretical background which provides context and terminology to be used for the analysis of the empirical data collected during the implementation of the artistic projects and for formulating the final conclusions of the dissertation.

### **2.1 Educational sciences perspective**

#### **2.1.1 The socio-constructivist learning theory and the sociocultural guided construction of knowledge**

An extensive study such as this one, concerned with practical pedagogical ways of connecting knowledge from different disciplines, calls for a firm theoretical framework to rest upon and lead the research process and the analysis of the results from its very beginning. As it was conducted at the threshold of the introduction of the current reform in basic education in Finland (EDUFI, 2016) and at a time of increased local and international research interest in STE(A)M methodologies (e.g. Lindeman, Jabot, & Berkley, 2013; Tani et al., 2013; Ge, Ifenthaler, & Spector, 2015; Englehart, 2016; Grant & Patterson, 2016; Kallunki et.al, 2017; So et.al., 2018; Perignat & Katz-Buonincontro, 2019), it was only natural to assume a socio-constructivist theoretical perspective, originating from the Vygotskian (1978) views of shared knowledge, to serve as the lens through which the separate stages of the study were conceptualized and analyzed.

The socio-constructivist learning theory (e.g. Tynjälä, 1999; Rauste-von Wright & von Wright, 2000; Burr, 2003; Säljö, 2004; Swan, 2005; Best, 2008; Gergen, 2009) together with the socio-cultural approach of “the guided construction of knowledge” (Mercer 1995, p. 66) explain knowledge acquisition as an event which happens in action through interaction. This understanding of the learning process stems from the idea that knowledge is not “something that a person has or doesn’t have” (Burr, 2003, p. 9), i.e. an “individual mental possession” (Mercer, 1995, p. 66), rather it is a shareable experience and more importantly “an outgrowth of communal relations” (Gergen, 2009, p. 131). This means that knowledge is constructed when people interact, exchange ideas, thoughts and experiences. In the field of educational sciences the idea that knowledge is produced through active interaction between people who share their personal experiences of and with the surrounding world has become grounding for the emergence of contemporary learner-centered teaching methodologies which see learning as a holistic process that unfolds while sharing

thoughts, solving problems together (e.g. Miller, 2011; Edwards, 2009; Engeström, 2001) and reflecting upon the shared knowledge to draw conclusions about the studied concepts or phenomena. Thus, applied in educational settings, through relevant teaching-learning approaches, the socio-constructivist learning theory encourages learner participation through collaboration and contributes to construction of integrated knowledge which reflects on the students' all-round development.

Such a way of understanding and theorizing about the teaching-learning process is relevant in the current educational environment as it is, in its essence, postmodern, allowing the co-existence of multiplicity of ideas and means of expressing them. So in the postmodern educational situation of today it is essential to acknowledge that there exists not one official truth, written in the textbooks, the curriculum or the guidelines for teaching, but also a huge variety of structured or unstructured information constantly available, easily accessible and streaming from different channels and in different formats. The rapid digitalization facilitates non-stop exchange and flow of information and it is inevitable for us as social beings to avoid this tendency for information overflow in everyday life and leave it outside of the school doors. As it is already part of the students' out-of-school life experience it should not be excluded from their basic education either. Hence, a social environment, which nourishes plurality, should also reflect its values in an educational context so that within any teaching content and on any educational level each individual's unique experiences and multiplicity of ideas are not only regarded but are also utilized as part of a "guided construction of knowledge" (Mercer, 1995) in the classroom.

But in order to be able to be an active contributor to the collaborative knowledge creation one should also have the ability to process a given piece of information, to link it with other sources of information and with one's previous experiences and to be able to express it in a meaningful and structured way. So, one of the aims of basic education in my opinion should be to equip the students with relevant *cognitive* tools to process all these diverse pieces of information and to find hidden links that exist within them so as to construct new structures. In this train of thought, the reform of the National Core Curriculum for Basic Education (EDUFI, 2016) follows these tendencies and offers guidelines for innovation of the educational process through the introduction of collaborative study modules which promote *multidisciplinary* integration and emphasize knowledge and skill-transferability across subject areas.

Having these socio-constructivist ideas in mind not only allowed broad discussions on various practical aspects of the pedagogical application of the artistic projects that generated my empirical data. They also played a leading role in conducting the research: from the conceptualization of the teaching and artistic process to the practical implementation of the projects and their subsequent analysis.

### **2.1.2 The integrated teaching approach: Levels, styles and methods of application**

Following the socio-constructivist process for knowledge construction which implies connecting old and new information so as to construct new meanings through interaction (e.g. Edwards, 2009), this dissertation focuses on exploring ways of enriching the teaching-learning process in visual arts by encouraging the primary students, who participated in the projects, to establish connections between the knowledge and skills acquired in different school subjects and to utilize these conceptual links creatively. So, it was quite logical for me that the projects analyzed in Article I to IV should put these socio-constructivist ideas into practice by embracing the integrated approach to teaching as the most suitable one in relation to the aims of the separate studies and the outcomes of the whole dissertation.

Instead of the traditional curriculum designs which perceive knowledge of the world as divided into separate disciplines, by definition, the integrated teaching approach aims at uncovering a relationship between different scientific areas and by doing so facilitates construction of new knowledge which in turn promotes a richer, holistic view of the world (e.g. Tani et al., 2013, p. 172; Juuti, Kairavuori, & Tani, 2010; Karppinen et al., 2013; Kallunki et al., 2017; Karppinen et al., 2019). This general definition, however, does not capture the varieties of combinations and possibilities to connect and integrate new ideas within the existing frameworks of reality, nor does it indicate the degree to which contents between disciplines are integrated, interwoven and recognizable as separate entities within the studied content.

Since in the course of the research the specific focus of each study required a number of theoretical aspects of the integrated approach to be taken into consideration, at this point it is pertinent to introduce the ways the integrative value of the studied projects and the observed processes will be discussed in the context of this dissertation. In the paragraphs that follow I distinguish between the levels, styles and methods of application of the integrated approach as defined in research literature and comment on their relevance to my research.

- **Levels of integration in teaching**

Three main levels of integration (Vasquez, 2014) have been defined and utilized theoretically in research literature – *multidisciplinary*, *interdisciplinary* and *transdisciplinary*. Their definitions clarify (1) whether a teaching process involves the “sequential presentation of topics drawn from separate disciplines” (Wentworth & Davis, 2002, p. 16); (2) or emphasizes integration both on conceptual and on instructional level (Wentworth & Davis, 2002, p. 16); (3) or takes integrative teaching one step further into allowing problems that arise naturally in the process of learning to lead the integration.

The *multidisciplinary* level of integration combines knowledge and expertise from separate subjects in order to view the studied themes through different scientific lenses (Harden, 2000, cited in Tani et al., 2013), and to gain multiple perspectives about a studied concept. It focuses on how the theme is explored in different scientific fields and searches for points of connection between them.

Similarly, *interdisciplinary integration* connects elements from different subjects, but the aim is to go beyond subject-specificity by finding associations “between the core of one subject and the content of another” (Karppinen et al., 2013, p. 149). Although in interdisciplinary integration the different subjects seem to be blended they are still recognized as identifiable entities (Lederman & Niess, 1997, as cited in Turkka et al., 2017, p. 1404). Applying interdisciplinary integration in teaching calls for “integrating both substance and process” (Wentworth & Davis, 2002, p. 17), which means that all participants in the teaching-learning process – teachers and students alike – are involved in active interdisciplinary communication, sharing of ideas and interaction, which contributes to a socially creative atmosphere (Mercer, 1995; Edwards, 2009 as cited in Karppinen et al., 2013, p. 149) and offers them the opportunity to find new connections that would, otherwise, remain hidden.

*Transdisciplinary integration* occurs when knowledge and skills acquired from different disciplines and areas of life are combined and utilized in authentic (or, when it comes to educational situations, near-authentic) problem-solving situations which shape the learning experience (Vasquez, 2014, p. 13). This level of integration is considered to be most challenging to put into practice because the educational process is organized around problems that arise in the process of students’ active collaboration and interaction (Tani et al., 2013, p. 173). In this way new knowledge which transcends disciplinary boundaries is constructed and shared within the group. Such a level of integration requires a high degree of professionalism on the part of the teacher/instructor, as well as time and resources to go deeper into integrated teaching.

Elements from all these levels of integration were observed to a greater or lesser extent during the process of implementation of each of the four art projects summarized in this dissertation. However, *interdisciplinary integration* seems to best correspond to the overall learning outcomes of the projects and their relation to the research questions. Therefore, the term *interdisciplinary* will be used to discuss some aspects of the research results. References to *multidisciplinary* and *transdisciplinary* integration will be provided in the analysis only where necessary. Furthermore, to strengthen the analysis of the observed processes I connect the above-mentioned levels of integration and the following four styles of integration as defined by Bresler (1995) with other relevant theoretical concepts, which refer to similar phenomena but add another dimension to my observations (e.g. Chemi, 2014).

- **Integrative teaching styles and artful teaching**

In addition to the distinction between *multidisciplinary*, *interdisciplinary* and *transdisciplinary* levels of integration, which denote the specific teaching content and the degree to which disciplinary knowledge is integrated into the studied projects, and in order to capture the nuances of the complexity and specificity of integrating artistic forms and practices within the teaching-learning process, this research benefits from Bresler's (1995) definition of four integrative teaching styles and their implications for arts integration.

In her discussion Bresler (1995) makes a distinction between four styles of art integration: *subservient*, *affective*, *social* and *co-equal*. Each of these terms reflects "different roles of art in school" (Bresler 1995, p. 35) by synthesizing the degree to which any form of art (visual; audial; performative) is incorporated within the general school curriculum, the general ways by which art integration can be achieved as well as the relationship between art and other subject areas and life experiences. In Bresler's (1995, p. 33) words the most "prevalent" and widely-used instance of art integration is the *subservient* integration teaching style. The term refers to the pedagogical implementation of art forms into the teaching process only as supportive tools, overshadowed by other content area (Bresler, 1995, p. 33; May & Robinson, 2016, p. 14). Completing such integrated pedagogical activities does not require higher cognitive efforts or critical thinking skills and does not aim at contributing to the development of complex understanding of the creative process. Rather, art is introduced by means of simple, "technical" (Bresler 1995, p. 33) tasks to assist classroom teachers "with little expertise in the arts" (Bresler 1995, p. 33) in illustrating "academic contents with the inclusion of modes other than the verbal and numerical" (Bresler, 1995, p. 34). Although the subservient integration style might add variety and clarity to the explanation of abstract academic notions, this manner of art integration places the aesthetic experience of creating and perceiving art in the background. In my view, such instrumental inclusion of artistic material may leave the students with the wrong impression that art is a simple endeavor, requiring little effort to complete, whereas there are more *important*, more *useful*, *higher-level* school subjects that need more effort and attention.

As seen from section 1.3., discussing STEAM education, artistic practices are increasingly being recognized as playing an important role for knowledge integration on different educational levels, yet in many STEAM projects the role of art is still supportive, i.e. *subservient* to other academic content. However, my view is that art can significantly contribute to raising the quality of the integrated learning experience if its intrinsic value and creative mechanisms are on a par with the scientific educational content. So one way of diverting away from a mechanical *subservient* use of art as the *easiest* pedagogical tool for knowledge integration (May & Robinson, 2016, p. 14) is to develop engaging teaching projects that highlight the inherent value of the arts (Chemi, 2014, p. 375), by ele-

vating the *affective* aspects of the creative process as well as the aesthetic qualities of the artistic product.

In this train of thought, the other three integration styles identified by Bresler (1995): the *co-equal*, the *affective* and the *social* integration teaching styles place the role of art at the center of attention, defining different aspects of its integrative pedagogical utilization.

The *co-equal* (Bresler, 1995, p. 34) cognitive integration style focuses on art-specific contents, skills, expressions and modes of thinking and at the same time emphasizes the aesthetic qualities of the artwork. This integrated teaching style requires “higher-order cognitive skills” (Bresler, 1995, p. 34) in perceiving a given art piece and in relating its aesthetic values to other non-artistic ‘information’ contained in it in order to come up with relevant creative solutions to the given educational tasks and in doing so to gain integrated knowledge experience. Thus, the successful practical application of the *co-equal* cognitive style depends very much on the degree of artistic professionalism on the part of the teacher. So, often, ensuring high-quality *co-equal* integrative teaching calls for collaboration between the subject teacher and an art professional (Nevanen, Juvonen, & Ruismäki, 2012) who equally contribute their expertise in presenting a multi-layered integrated teaching content from different perspectives.

Unlike the *imitative* subservient style and the curriculum-expansive *co-equal* integrative style, the former being product-oriented, while the latter aiming at providing certain practical knowledge or skills, the teaching process in the *affective* integrative style is guided solely by “mood” and “creativity” (Bresler, 1995, p. 34). It involves open-ended learning activities that immerse the students in art so as to elicit emotional response to a given artwork and to encourage individual self-expression. Perceiving art and responding spontaneously to the feelings it evokes stimulate the students’ imagination and is a source of inspiration which develops creativity and shape the students’ emotional experiences (Bresler 1995, p. 34). The affective integration style with its freedom of expression elicits a multiplicity of unique individual responses to art, which makes the learning outcomes of such activities rather unpredictable, and for this reason the style is often perceived as complementary to curriculum integration. However, I believe, that an emphasis on the emotional perspective of teaching and perceiving art can spark questions in the classroom that are not strictly linked to separate subjects or disciplines but arise from the students own experiences and active collaboration (Tani et al., 2013, p. 173), and from the process of artistic creation itself, which in turn can facilitate application of the higher-level – *transdisciplinary* integration as defined above.

The *social* integration style defined by Bresler (1995) is perceived as “supportive” too, because its primary purpose is to serve the school community in preparing artworks and performances for school events and celebrations, promoting publicity of art and art appreciation (Bresler, 1995, p. 35). This style

relies on the power of the arts in bringing people together, thus strengthening communal belonging. Important as this might be, in my view, if implemented for its own sake, i.e. without specialized/relevant educational emphasis on the aesthetic, stylistic, or affective aspects of the arts and ideally on their relationship with other spheres of science and life, social integration could remain only a superficial decoration to the curriculum and, as Bresler (1995, p. 35) also reports, an additional burden for class teachers to prepare quality artistic products for public display. The projects presented in this dissertation differ from this ‘decorative’ application of the social integrative style as they are implemented within the curriculum-free after-school programme and are conceptually and pedagogically planned to incorporate public presentation of the final artistic products.

Different aspects of the four integration teaching styles set forth by Bresler (1995) were observed during the implementation of the four artistic projects presented in the empirical part of this dissertation (Article I, II, III and IV). The complexity of the artistic and pedagogical processes that unfolded in the course of this research, however, called for an expansion of the analytical terminology so as to capture finer details of the teaching-learning processes in question and enrich the discussion of my results. So, where applicable, Bresler’s (1995) four integration styles are aligned with pedagogical conceptual models and ideas for art integration which include discussions of the role of the artist’s expertise in the teaching process and uncover the relationship between positive experiences, learning processes and the arts. For instance, in her recent discussion on the possibilities for art integration, Chemi (2014) summarizes two polarized pedagogical models for art integration: one that elevates the intrinsic values of art, and one that “advocates instrumental application of the Arts in other contexts” (Chemi, 2014, p. 375). I would add here that the former model in Bresler’s terms (1995) corresponds to the *affective/co-equal* approach whereas the latter is the *subservient* integration approach (Bresler, 1995). Having these conceptual models of art integration united, the artistic educational projects implemented as part of this research, aim at reconciling these theoretical polarities in practice too by integrating students’ self-expression with “knowledge about, understanding of, and appreciation for artworks’ formal qualities and the artistic generative processes” (Chemi, 2014, p. 381). Such direction of my research inevitably led to an interest in the pedagogical and the integrative role of the artist as part of the learning process. Therefore, to use Chemi’s (2014) terms the teaching projects described in the empirical part of this study were designed in an *artful* manner: such that combines “the artist’s mindset” (Chemi, 2014, p. 381) with the teacher’s pedagogical expertise in order to strike a balance between process-oriented and product-oriented instruction. Embracing an “artful mindset” (Chemi, 2014, p. 381) made it possible to design high quality *co-equal* integrative teaching modules which strengthened the educational role of the arts and allowed “de-

tours” (Chemi, 2014, p. 380) and experimentation in my art creation and teaching journey.

• **Methods of application of the integrated approach**

In addition to the levels and styles of integration presented above which refer either to the degree to which specific content is integrated (*inter-, trans-, multi-*) or to the place of art as part of the teaching-learning process within the educational community, for the purposes of this research it is also important to categorize the most common methods of organization of the teaching content by means of which knowledge integration can be organized and practically introduced in the classroom. Although the different methods for integration reported in the current literature on the topic address knowledge construction in various ways, here I would suggest that they be grouped broadly into the following two categories:

- Methods that reflect the organizational aspects of the teaching content within the educational programme/curriculum such as:
  - project-based integration (e.g. Tamim & Grant, 2013; Blagoeva, 2019)
  - integration of thematic teaching modules (e.g. Björklund & Ahlskog-Björkman, 2017)
  - Learning Through the Arts (LTTA) programmes which promote subject-teachers’ collaboration with artists (e.g. Elster, 2001; Smithrim & Upitis, 2005; Ruokonen, Salomäki, & Ruismäki, 2014, p. 83; etc.)
- Methods that focus on the orientation of the integrative activities in terms of the sources of integration that lie at their basis such as theme-based (e.g. Björklund & Ahlskog-Björkman, 2017); phenomenon-based (e.g. Symeonidis & Schwarz, 2016); discipline-based (e.g. Tani et al., 2013); problem-based (e.g. Lou, Shih, Ray Diez, & Tseng, 2011); inquiry-based (e.g. Hallmark, 2012); experiential learning (e.g. Grant & Patterson, 2016); etc.

Yet, regardless of the chosen method for putting integrated teaching into practice, the most crucial points that in my view should guide its implementation are the ways the learning objectives are set, the means through which they are fulfilled, and the quality of the selected integrative teaching arrangements (Kallunki et al., 2017). Well-planned integrative teaching organization may create favourable conditions for the holistic construction of knowledge if the teacher’s integrative guidance is profound, well-considered, analytical, constant and reflective (Kallunki et al., 2017).

All teaching content included in the empirical part of this research is organized around artistic projects separated into teaching modules with specific focus and learning objectives planned in relation to the general conceptual artistic frameworks of each project.

Applying the integrated approach in my teaching practice has allowed me as a teacher to experiment with content and methods across subject boundaries, to draw inspiration from different fields of knowledge and life, and thus to “extend[ing] the learning opportunities” (Björklund & Ahlskog-Björkman, 2017, p. 98).

## **2.2 Contemporary art forms and practices meet the integrated approach in education**

The previous chapter gave a general description of the socio-constructivist integrated teaching approach and its practical application and clarified some common terminological notions found in research literature on the topic. As discussed earlier in this dissertation, enhancing the students’ multi-literacy capabilities by filling the gap between traditional discipline-based studying and real life (EDUFI, 2014b, p. 3) is one of the main objectives formulated in the newly reformed Finnish National Core Curriculum for Basic Education (EDUFI, 2016). In this respect the *integrated approach* to teaching proves to be suitable for the new educational demands in basic school art education as well because it, by definition, encourages multi-disciplinary knowledge construction through the introduction of topics, work materials, techniques and methodologies from various spheres of knowledge and life.

What is more, as the hectic eclectic permissiveness of society nowadays demands innovative ways of approaching the educational process in order to develop creativity and originality in the young learners, this should also lead to the adjustment of the way art is presented, analyzed and taught in school. So, applied to the teaching of visual arts, I would suggest that adopting the integrative approach in practice would open the possibilities for the (art) teacher to develop her own teaching content and to enrich the educational process by including not only traditional arts forms (e.g. painting, drawing, sculpture, applied arts, etc.), but also examples of this “art of the moment, *that* [...] is now being offered to the ear, the eye and our sensory experience as a whole [which] tells us about reality and about ourselves” (Saarnivaara & Varto 2005, p. 491). And even though it still remains a “peripheral” part of basic art education (Saarnivaara & Varto 2005, p. 490), “contemporary art is [nevertheless] seen to have the potential to make a significant contribution to the art curriculum [and respectively to] students’ learning” (Watts et al., 2009, p. 219). So I believe that its introduction in the art classroom (whether in regular or extracurricular classes) would enhance the opportunities for knowledge integration, as advised in the reform (EDUFI, 2016) by allowing inspiration that goes beyond the established forms of artistic expression in school. Hence the aim of this chapter, as well as of the whole dissertation, is not to whine about the marginal role of contemporary art in basic education, or to praise it as the only possible solution for quality art instruction. Rather, it is about the integrative benefits for the art educational

process gained from the introduction of contemporary art forms and practices and about some methodological solutions for their pedagogical utilization particularly in after-school activities.

In view of the main goals of the dissertation, this chapter aims at expanding the understanding of the integrated teaching approach as applied in this research by mapping some of the principles of integrated teaching discussed previously, with some contemporary artmaking practices, thus revealing the integrative potential of contemporary art when applied as a teaching tool. This conception is based on my analytical process accompanying Article II which, I would claim, is a milestone in my research practice. At the time of its planning and subsequent project implementation, by connecting central notions from both fields, I established a theoretical connection between contemporary art and the integrated teaching approach. The results of this theoretical conception were then used as premises for developing the artistic project for Article II. In the course of the action research cycles for Article III and Article IV, I continued exploring empirically and theoretically how the principles of contemporary art creation relate to integrative teaching and how they can be utilized pedagogically in practice. Although it is quite difficult to separate an artwork's material expression from its underlying idea, especially when it comes to conceptual contemporary art, in this chapter I summarize my theoretical findings about contemporary art and its integrative potential in terms of the following three aspects:

- Contemporary art materialization
- Contemporary art conceptualizations
- Contemporary art collaborative practices

### **2.2.1 The integrative potential of contemporary art materialization**

The process of establishing a theoretical link between contemporary art forms and practices and the integrated teaching approach started with the planning and materialization of Project 3 (Article II). It explored the introduction of contemporary art forms into my visual arts teaching to primary students by means of the production materials used for building an artwork (installation) as well as the site of exhibition which the artwork in question occupied. It was quite natural for me to start my journey into exploring the integrative potential of contemporary art, first through the introduction of alternative materials for artistic expression because this gave both the students and me, a sense of discovery, originality and a tactile impression of the immediacy of the creative process.

So here I would start my discussion on the integrative nature of contemporary art with what I believe is one of its main qualities when it comes to production materials and techniques, namely, their versatility. Artistic freedom has always given artists the opportunity to be inspired by everything and anything in our living and spiritual world, but ever since visual art left the canvas (or the pedestal), the materials for expressing artistic ideas diversified significantly. From

re/up-cycling natural and artificial materials, ready-made objects, analogue or digital manipulation of images, to hybrid mix of art forms, to name but a few, nowadays anything that expresses an artistic idea (even a lack of coherent idea, deliberate nonsense, etc.) is possible, acceptable and relevant in art. What is more, the new art forms that started emerging as early as the first Dadaist exhibition at the beginning of the 20<sup>th</sup> century (Parks, 2015, p. 58) and developed into their postmodern state, blurred the boundaries between high and low art, moving visual art out of its official establishments (museums and galleries) and expanding the possibilities for exhibiting it. This gave rise to new art forms such as site-specific installations, land art, some forms of urban and street art which are exclusively dependent on the space (and time) they occupy. The non-traditional exhibition spaces had an impact on the use of alternative materials and vice versa and for this reason, my understanding of space and material is part of the same discussion, i.e. the materialization of an artistic idea.

The variety of material expression that thrives in today's art world, is a result of the permissive postmodern environment which allows endless sources of artistic inspiration to give birth to original art presentations. This fusion between the visual form and the conceptual diversity supporting art making, made me realize that the visual art of today has already achieved what the integrated approach in education aims at, i.e. to be able to effortlessly connect pieces of visual or linguistic knowledge and information into a meaningful whole that opens new doors of perception to our world and leads towards creativity and innovation. So, here I suggest that the means by which a contemporary artwork's conceptual background is materialized, are very similar to the integrated approach in education, in the sense that the very essence of contemporary art's material diversity can be aligned with the principles of integrative teaching. Just as the integrative approach aims at eschewing the discipline-based boundaries in education, contemporary art effortlessly brings together, unites, combines, reuses, recycles, upcycles, re-contextualizes materials to express the interconnectedness between various conceptual entities and, in this way to construct new meanings. With this premise in mind and in spite of the diversity of expressive artistic devices nowadays, I would focus only on two basic contemporary postmodern principles for artmaking as well as on the integrative role of the exhibition space. These are the aspects of contemporary art production that have been empirically applied in the materialization of the site-specific installation for Project 3 (Article II) and are, therefore, relevant to the purposes of my research and its overall results.

The first principle utilized in my research relates to the eclectic tendency of contemporary art to constantly seek original and innovative forms of presentation and alternative modes of expression. This strife for originality in the presentation allows juxtaposition (Gude, 2004) of "images and objects from various realms and sensibilities com[ing] together as intentional clashes or random happenings" (Gude 2004, p. 9). Incorporating "bits and pieces" (Hartley 2002, p.

22), mixing media, constructing new forms from anything available as part of a contemporary artwork's materialization can be explained with the French word *bricolage*, originally meaning *do-it-yourself*, which was introduced in philosophical discourse by Lévi-Strauss (1966) to refer to the creation of objects and meanings with found materials. *Bricolage* is one of the characteristic features of contemporary art's materialization (visible in various collages, assemblages and other such installations), which opens possibilities for artistic experimentation and, when applied in a visual arts educational setting, could contribute to *multi-, inter- or even trans-disciplinary* integration.

The second principle of contemporary art production that I find relevant in describing the object of my study (Project 3, Article II) is *remediation* – “the representation of one medium in another” (Bolter & Grusin, 1999, p. 45). Or in other words, the term refers to the result from the process of changing the medium of presentation of an (artistic) object: substituting its original material for another material, to serve underlying artistic purposes. In my view, remediation is a valuable source for debate about the nature of material presence in art and more specifically about the power of the medium of (re)presentation to alter the essence of objects and thus to express meanings beyond the literal (e.g. symbolic, metaphorical, etc.).

Lastly, in this research I use the postmodern idea that art can be found and placed anywhere and that the site-of-exhibition of a contemporary artwork is an important carrier of conceptual artistic meaning which has the power to affect the audience's aesthetic perceptions much like the actual material of which the artwork is constructed. On the one hand, the exhibition space could influence the constructional qualities of the artwork and its spatial arrangement especially when it comes to site-specific installations, such as the one produced by the students in Project 3 (Article II). On the other hand, the public space, which a contemporary artwork occupies when exhibited, is the channel of communication between the artist and the audience. As such, the space plays an important role not only in making art visible but also in elevating its social value. Transferred to an educational setting this quality of contemporary art to be flexible in choosing places for its public presentation, can contribute to strengthening the social integration, which Bresler (1995) talks about.

The innovative and alternative modes of expression created through bricolage and remediation as well as the possibilities to use alternative exhibition spaces, encourage contemporary artists to cross the boundaries of traditional representation by “remixing, reconstructing and reusing artefacts, actions, ideas, signs, symbols and styles” (Deuze, 2006, p. 70) and in this way to discover new means of communicating their artistic ideas which leads to the emergence of new, often hybrid, art forms. This endless variety of combinations and associations utilized by contemporary art's expressive devices demonstrates once again that the very mechanism of producing art nowadays is integrative because it results in estab-

lishing conceptual links between various seemingly unrelated entities, offering its viewers original perspectives and points of view. Thus, I believe that, if adapted specifically for the educational purposes of the integrated approach, the use of contemporary art materials and modes of presentation in visual arts education has the potential to spark fruitful discussions that could promote interdisciplinary integration in the classroom. This premise was used for the pedagogical conception of Project 3 (Article II) which illustrates how the processes of bricolage, remediation and reuse of found materials by the students for the production of a site-specific installation create *interdisciplinary* artistic quality in the visual arts classroom.

### **2.2.2 The integrative nature of contemporary art conceptual frameworks and conceptualization processes**

Experimental and random as it appears to be, applying the above-mentioned principles of contemporary art materialization is often a result of thorough artistic reasoning which guides the choice of expressive devices and determines the structural/material qualities of an artwork as it is presented to the receiver/viewer. Hence a discussion about the educational and, more specifically, about the integrative potential of contemporary art forms would not be complete without taking into consideration the existence and importance of a conceptual/ideational framework in textual format supporting a contemporary art occurrence as well as the process of ‘artistic concept’ formation which unfolds prior to its materialization. At this point it is important to clarify the connotations of *contemporary* and *conceptual* as used in this research.

In art historical terms most of the common definitions of *contemporary art* refer to its temporal connotation of ‘art produced today’ but, nevertheless, place its historical origins in the 1960s with the rise of *conceptual* artistic practices (Parks, 2015, p. 46). This definition requires additional clarification about the nature of art today and how it will be understood in this research. Firstly, it is important here to point out that not all artistic production of the present day (i.e. what I call ‘contemporary art’) originates from ‘conceptual artistic practices’, so it does not necessarily possess an artistically-developed ‘conceptual’ background. For the purposes of this research, in the discussion that follows I would exclude these ‘non-conceptual’ instances of contemporary art production since they were not part of my research interest.

Secondly, following this definition and the current developments in art (e.g. Robertson & McDaniel, 2009; Leduc, 2019; Kiasma, April, 2019; Kiasma, December, 2019) it will not be ungrounded to claim that a huge part of the artistic production today is also ‘conceptual’. So this discussion would benefit from other clearer definitions of ‘conceptual art’. One such definition is provided by The Dictionary of Art & Artists (Chilvers, 2005) which states that ‘conceptual art’ is “a type of art in which the ideas or idea that a work represents are consid-

ered its essential component and the ‘finished’ product, if it exists at all, is regarded primarily as a form of documentation rather than an artefact” (Chilvers, 2005, p. 135). This definition raises an important question about materiality as it points out that some conceptual works do not assume a physical form at all but remain just within the sphere of the textual expression of ideas and this makes them appear random or incomprehensible as artefacts to the uninformed viewer. For this reason, I believe that the awareness of the presence of a conceptual framework which puts any random or deliberate artistic act within a coherent narrative is what distinguishes art from non-art. So, in order to fully understand and appreciate a contemporary (and conceptual) art piece, it is essential to be able to grasp the mechanisms constructing its conceptual background. And here comes the role of art education – to explain, to make visible, to prepare an informed audience which has the mental capacity to formulate their own opinion about art and be active participants in artistic production and ‘consumption’. Hence this dissertation is based on my conviction that such goals of present-day art education can be achieved via the application of the integrative teaching approach, and the students’ understanding of the underlying principles of contemporary art conceptualization could be one of the ways of strengthening their abilities for constructing integrated knowledge which would facilitate their creative and analytical thinking.

Another question relevant to explaining the complexity of understanding contemporary conceptual art arises from definitions which suggest a possible clash between the concept and its physical artistic expression. For example, the Oxford Companion to Philosophy (2005) includes in its definition the Duchampian idea that “anything has the potential to be art” (Tregenza, 2005, p. 146). Other definitions state that “the point of a work of art may be something that has nothing to do with how the work looks” (Kiasma, n.d.). In spite of the diverse understanding of what categorizes conceptual art as such and the attempts to exclude materiality from some definitions, it seems that when talking specifically about visual art (not music or literature) the physical sense of vision plays a significant role in its perception. So, the artwork’s presence, in space and time, which affects the viewers’ cognitive or sensual perceptions, is still a relevant factor which determines the visual arts expression. Thus the ‘material’ and the ‘concept’ are interconnected, often inseparable, as the very principle of postmodern art creation is quite often “a fusion of a visual form and a conceptual artmaking strategy” (Gude, 2004, p. 8) and it is the artist’s decision how and to what extent to express that relationship. So when having contemporary art forms as a teaching tool in an educational setting it is important to reveal the connection between the artwork as it appears to be and the abstract idea/text/narrative which supports it by gaining understanding of the processes of conceptualization, transformation of an idea and decision-making on its materialization.

In the discussion dedicated to utilizing contemporary art forms' conceptualization as a tool for integrative teaching (Article III), my understanding of the phrase 'contemporary art forms' includes artworks that can be classified as conceptual in the sense that they possess some form of materiality but exist alongside a narrative, developed and offered by their creator (the artist or group of artists), which complements their meaning and (facilitates or) gives clues about the intention of the artist concerning their reception.

Based on my observations of the current contemporary art scene in Finland and abroad and on my personal artistic development, research and teaching practice (Article III and Article IV) I would suggest here three aspects of contemporary art conceptual background development which, in my view, are most relevant in discussing the results of the present research.

Firstly, art in general reflects the spirit of the times of its creation, so as mentioned earlier in this chapter, in the postmodern environment of today, the contemporary art scene is no more confined to specific art forms or themes that have to be visually expressed. The postmodern ideas of diversity and individuality, which came with the collapse of the Grand narratives (Lyotard, 1999), have given *art* special freedom to draw inspiration from various sources of knowledge and life: to combine ideas, notions and visuals into complex conceptual structures which transform into narratives and vice versa, uncovering inner logic between seemingly unrelated entities and reflecting upon our deconstruct (Derrida & Caputo, 1997) reality through visual artistic means. Just as materials can be used in diverse ways, so too borrowings, bricolages, remixes, reconstructions, recycling and upcycling can apply to ideas and topics from any field of life and science nowadays. They can be connected in structured intertextual (Kristeva, 1984; Beaugrande & Dressler, 1981) narratives which support conceptual artworks, providing the viewer with background information and possible clues about artistic meaning. Such conceptual frameworks add depth to the artworks' visual comprehension by verbalizing hidden emotions and values, expressing idiosyncratic symbolism or constructing new knowledge. Experimenting with multiple sources for inspiration allows visual artists nowadays to cross disciplinary boundaries and integrate concepts, knowledge and experiences, which originate in scientific research and practice (e.g. Jeffreys, 2018), to transfer this newly-acquired knowledge onto their artworks' conceptual background and materialize it in the finished product. Described this way, the tendencies characterizing contemporary concept development are essentially integrative and, therefore, in line with the principles underlying the integrated teaching approach. For this reason, in this dissertation, I see conceptually-based artistic practices as a valuable source for developing integrative teaching solutions that allow various degrees of disciplinary integration (*multi-*, *inter-*, or *trans-*). The potential of contemporary art's conceptual diversity to reveal such relations in the educational

process and to facilitate the students' creative and analytical thinking abilities was explored in Article III.

Secondly, the immaterial conceptual ideas are subject to complex transformations which eventually lead to their *remediation*, thus, strengthening further their integrative potential. One of the definitions of conceptual art provided earlier stated that materialization is secondary to the existence of the conceptual artwork as such, and it is the artistic idea behind the artefact that is central to its understanding. In this respect, I see the sources of inspiration – the notions that give shape to the artistic idea – to be lying at the core of contemporary art conceptualization. But between the occurrence of an artistic intention, which is the moment the idea comes to mind, the decision about its material expression, and its final physical 'birth', there lies a cognitive process of transformation from an amorphous abstract idea about the artwork into a structured narrative, which contains details about its intended readings. This conceptual transformation leads to the moment, when at the border between the immaterial concept and its materialization, the planning of the idea's *remediation* occurs. That is the moment when technical decisions are made about the possible physical appearance and dimensions of the artwork. The actual *remediation* is the physical creation, that is to say when the artistic idea is expressed in another (physical) medium. So the very fact that conceptual art exists in the physical world as a result of the interplay between the immaterial idea (in the form of 'text') and the material expression, i.e. idea and form are integrated into a meaningful whole, is yet another proof of the integrative nature of such artworks. Hence the process of concept-development and subsequent materialization can be utilized pedagogically to fulfil the objectives of integrative teaching by guiding the students into the planning and implementation of conceptually-driven artistic projects.

Thirdly, the existence of a conceptual framework in the form of a narrative that goes hand in hand with the physical appearance of the art work, presupposes that language plays a central part in the process of concept-development. Bearing in mind the above-mentioned integrative potential of the sources of contemporary art inspiration, it is important to note that such complex knowledge integration would not be possible without going through the cognitive process of concept development and the crystallization of the abstract ideas supporting the artwork's existence and its remediation into physical entity. This process of concept-development is integrative as it involves brainstorming, preliminary research, and decision-making related to the artwork. And in order to make use of the integrative potential of contemporary art as a teaching tool, this cognitive process needs to be explicated to the students so as to lead them back into the integrative nature of the sources of inspiration and to guide them into gaining awareness of the diversity of possible ideas that can be integrated into the artistic narrative about their artwork in order to be able to verbalize and defend one's artistic intentions but also to appreciate the diversity of possible readings.

The integrative potential of contemporary art conceptual framework-development was the focus of research of Article III. The study aimed at exploring pedagogical possibilities for strengthening knowledge integration through artistic-based approaches for teaching conceptualization. It came as a result of the previous action research cycle reported in Article II. Article III benefited from the artist-teacher-researcher's own artistic conceptualization process which is deeply rooted in linguistics and, more specifically, in semantics. By using a semiotic approach to equate text to image I transferred that authentic artistic conceptualization into the primary after-school visual art club. Then I observed the effect of leading the students through this process on their verbal-to-visual transformative thinking so as to explore the collaborative creation of a conceptual framework to be remediated into a contemporary artwork. Article III also revealed the integrative role of the artist-teacher-researcher as an active participant guiding the students through an authentic artistic conceptualization process via *artistic action research* (Jokela, 2008; Räsänen, 2005). An overview of the results from that study is included later in this dissertation. A detailed report of that action research can be found in the published article (Article III).

### **2.2.3 The integrative nature of the collaborative practices in contemporary art**

Earlier in this dissertation I provided a definition of the integrated approach which stated that participation and collaboration are central to achieving integrative knowledge construction (e.g. Burr, 2003; Gergen, 2009). Following this definition, here I would suggest another characteristic feature of some contemporary art forms, which can be directly related to the principles of interaction and cooperation guiding the socio-constructivist integrated approach to teaching. This feature stems from the multifaceted nature of most contemporary artworks which require the expertise of many different specialists, and this makes the materialization of such artworks multidisciplinary. So, active participation and collaboration on different professional levels and at various stages of the artworks' development turn out to be necessary factors for the artworks' successful public presentation. Some contemporary art practices such as happenings, performances, (large-scale) installations, digital installations, some forms of monumental land art and site-specific art interventions into public/nature spaces, as well as research-based art projects etc., are a result of collaborative (artistic) endeavours. This maps such contemporary art activities with the integrated approach, which puts emphasis on exploring new combinations and innovations by constructing knowledge through shared experiences, collaborations and interactions between people. With this in mind I discuss some aspects of the contemporary art collaborative practices in terms of the possibilities they would offer if implemented as part of integrated teaching. I see three main features in the above-mentioned creative processes that are based on interaction, participation

and reflection and, in my view, are therefore essentially socio-constructivist. These are multi-professional collaboration, participant collaboration and audience participation.

The present day art scene offers multiple examples of the first feature – the multi-professional collaborations between artists from different artistic fields, artists and scientists (e.g. Jeffreys, 2018; IHME, December 12, 2019), artists and/as researchers, etc. Some recent examples of such collaborative integrative artistic practices include, among many, the expansive multimedia art installations of artist collectives working towards implementation of common artistic projects (e.g. Studio Drift in Amos Rex, March 2019; teamLab in Amos Rex, August 2019; Lux Helsinki, 2019), multimedia artworks of performance/installation artists (e.g. AAVE, 2018; Ääniaalto, February 4, 2019), co-equal multi-professional collaboration between visual artists, performance artists, dancers and musicians, art-based/driven research projects inspired by scientific practices and research (e.g. Jeffreys, 2018; IHME, December 12, 2019), etc.

In the field of education such professional collaborations leading to knowledge integration have manifested themselves in formal and informal teaching arrangements where a practicing artist joins forces with a class/subject teacher in order to contribute their artistic expertise. Recent research (Fiske, 1999; Smithrim & Uptis, 2005; Bamford, 2006; Wichers & Poncelet, 2011; Hallmark, 2012; Nevanen et al., 2012; Ruokonen et al., 2014; Selkrig, 2017) on such multi-professional collaboration reports positive integrative outcomes on the teaching-learning process as a result of co-equal collaborations between practicing artists and educators. In such projects the students get to work with the artists whereas the teacher ensures that the pedagogical objectives of the projects are met. This way the students are offered the opportunity to get first-hand experience about the authentic artistic processes from practicing professionals in the field. Here I would suggest that such a collaboration is threefold: (1) multi-professional (between the artist and the teacher), (2) between these two professionals and the student-participants, and (3) among the students themselves during group planning sessions (e.g. in the projects described in Article II, III and IV). In my research multi-professional collaboration developed naturally as part of the joint teacher-planning work and also as a result of the introduction of complex contemporary art forms into my visual arts teaching which called for sharing professional experience and expertise. The positive *co-equal* examples of multi-professional cooperation between artists, teachers and students, reported in this earlier research and observed in my own practice confirm the relevance of introducing real-life artistic practices in the classroom that inspire collaboration and cooperation, and strengthen knowledge and skill integration.

The other integrative feature of some contemporary art practices is related to the necessity for active participant collaboration during their development and presentation to an audience. Art happenings, performances and actions which

include more than one artist-participant materialize as a result of cooperation between all ‘actors’ involved in their presentation. So, since such artworks cannot come into being without interaction and collaboration, they essentially possess integrative qualities and therefore can be utilized pedagogically to facilitate participant interaction in the classroom and during their performance. Here performance should not be equated with theatrical performance on stage. For example, Abell (2002) discusses the introduction of ‘performance’ as a teaching tool to promote integrative learning at higher educational levels, but the presented performances were of traditional theatrical nature; they were utilized *subserviently* as a tool to teach other (literary) content and there was no exploration of the integrative potential of the contemporary performance event to promote collaboration. In this dissertation, however, performance art is seen within the tradition of contemporary art practices. It shares common features with theatre performances only in the sense that it is staged, combining elements of drama, music and visual arts (Chilvers, 2005, p. 447), but it also diverges from this tradition as it has no plot or story to tell, no dance but natural movements, no real music but noise and sound produced by the participants, etc. The potential of performance art to spark collaboration as part of its development and presentation was observed during the classroom implementation of the art project described in Article IV. This article focuses on researching the pedagogical outcomes of developing and introducing a performance art piece in primary after-school visual arts clubs and views it as a multi-level collaborative effort: on the one hand between the teacher-professionals involved in the process and on the other hand between the student-artist participants. The non-traditional nature of the performance art piece which was developed in this study as well as the significant number of participants involved in its presentation, necessitated multi-level participant collaborations which demonstrate that aspect of the integrative nature of contemporary art collaborative practices in the implementation of this project.

Yet another integrative feature of some contemporary art forms is their ability to provoke (audience) participation, involvement, social interaction. For example teamLab’s (Amos Rex, August 2019) audience participation in digital drawing; participatory and experiential artworks (e.g. *The Stage is Yours* in Kiasma, February, 2019b); tactile installations (e.g. *Nervescape VIII* in Kiasma, February, 2019a); interactive installations that invite the audience to intervene and influence their appearance (e.g. Ateneum, 2019), site-specific artworks which invade social spaces and spark public discussion (e.g. Javacheff & de Guillebon, 2016), etc. This integrative quality of contemporary art forms and practices was most evident in my observations of the process of presenting a site-specific installation which was produced by the students as an intervention into the school’s public space (Article II) as well as in the presentation of the performance art piece described in Article IV. These artistic acts are discussed in

the relevant studies in terms of their potential to elicit audience participation which would contribute to the young artists' recognition among their community, thus strengthening *social* integration (Bresler, 1995).

Based on these theoretical assumptions, the studies reported in the current dissertation, aimed at exploring collaboration in the classroom which was triggered specifically by the integrative qualities of the artworks created in the educational process. Because I assume a socio-constructivist perspective towards contemporary artworks that materialize as a result of the joint efforts of their creators, my belief is that transferring the principles and the processes inherent to such artworks onto an educational setting would reflect positively on the collaborative work, turning knowledge construction in the classroom into a fulfilling social experience (Mercer, 1995, p. 1). I believe that, if utilized pedagogically, the collaborative aspects of the contemporary forms and practices I introduced above could enable the 'co-presence' in the classroom of the different integrative styles suggested by Bresler (1995) and would facilitate the pedagogical awareness about the degree of subject integration (*multi-, trans-, inter-*), which may have implications on future planning of integrative educational artistic modules and projects.

### **2.3 Pedagogical implications of the theoretical background**

In order to achieve the goals and to answer the main research question of this dissertation, the analysis and conclusions provided in the final chapters would rest upon the socio-constructivist theoretical principles and terminology related to the integrated teaching approach presented in the first part of the theoretical background, coupled with the principles of contemporary art production discussed in the second part of the theoretical background. The overall theoretical background was shaped as a result of the action research, reported in this dissertation. Different aspects of the pedagogical outcomes from the introduction of the integrative approach to my teaching were observed cumulatively in my practice as I delved deeper into reflecting upon the results from each action research cycle and planned the next one as its natural continuation. The results and implications stemming from the practical implementation of the separate art projects were gradually enriching the theoretical background of each study as well as my professional awareness of the integrative educational potential of contemporary art forms and practices. So, the development of a theoretical link between the socio-constructivist integrated teaching approach and contemporary art forms, and the provision of theoretical evidence about its existence arose directly from my teaching and research practice. In this way, the idea that contemporary art forms could turn into a suitable pedagogical tool for knowledge integration in teaching visual arts to primary students is justified on a theoretical level. In the course of the research each theoretical assumption was supported empirically and analyzed so as to draw meaningful conclusions about the integrative poten-

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tial of contemporary art forms as a teaching tool. As a result each separate study of this research aimed at exploring different possibilities of utilizing contemporary art forms pedagogically to promote integrative knowledge construction and to encourage creativity. It was believed that the introduction of different contemporary art practices as part of the visual art teaching would enhance the pedagogical visibility of the relations between different spheres of knowledge and art, which is set as a main objective in the curriculum reform in basic education in Finland (EDUFI, 2016).

### 3 RESEARCH QUESTIONS

When I started planning the research for this dissertation six years ago, the Finnish National Agency for Education (EDUFI) had just published a draft of the curriculum reform in basic education in Finland (EDUFI, 2014a) which was due to be implemented a few years later (EDUFI, 2016). This document made it clear that the Finnish educational system is reforming for the future by recommending introduction of integrated educational modules which would encourage interdisciplinary knowledge integration, thus, facilitating the development of transversal skills. In light of these major changes in the curriculum for all subjects in Finnish basic education, as a primary after-school leader of visual art clubs and a practicing artist myself, I was fascinated with the possibilities that the integrated teaching approach opened for transferring my artistic expertise to my visual arts teaching. My main intention was to develop such art projects (1) that are contemporary, i.e. corresponding to the postmodern environment the students live in; (2) that are suitable for the primary student level but at the same time come as close to authentic creative processes as possible in putting no limitations to the sources of inspiration and the art forms they materialize into; (3) that give *art* and the aesthetic experience of creating and perceiving it a leading role in the educational process, i.e. projects in which *art* is not subservient to other subjects but vice versa; (4) and that would help the students connect the knowledge and skills they acquire from the compulsory school disciplines, to see the interrelatedness between the school-gained knowledge and other spheres of life and to utilize these newly-found links creatively in their artworks.

To achieve these aims, four separate artistic projects were developed, each following a single-cycle action research and exploring different aspects of introducing the integrated approach to teaching visual arts to primary school students. The results and conclusions from these projects were reported in the four articles included in this dissertation. Each of these articles narrowed the research perspective by setting their own research questions. Each set of research questions arose from the natural progression of the action research method applied in this dissertation. By definition (Cohen, Manion, & Morrison, 2005, p. 235) action research develops in cycles where reflecting upon the results of a certain cycle and drawing relevant conclusions from it influenced the subsequent projects' planning and respectively the focus of the research projects. This process of planning, acting, observing and reflecting upon the results gave the artist-teacher-researcher an opportunity to explore different aspects of the integrated teaching process, to view it from multiple perspectives, to draw conclusions from analysing the results and to decide on the next action research cycle steps taken for the completion of the study. The aims and the research questions dealt with in each of the separate articles are presented below:

**Article I:**

- How can the integrated project-based approach be used in the after-school art activities to support knowledge construction?
- How can the knowledge gained in school and through the students' individual experiences be applied pedagogically in the after-school art activities?

**Article II:**

- How can the project-based integrated approach to teaching visual arts to primary school students in the after-school promote collaborative knowledge construction through the introduction of contemporary art forms and materials?
- What are the pedagogical outcomes of introducing contemporary art forms and materials for primary students in their visual arts learning?

**Article III:**

- How does the integrative role of an *artist-teacher-researcher* impact the teaching-learning process in the visual art classroom?
- What are the expected pedagogical outcomes of applying *artistic action research* to teaching visual arts integratively by means of contemporary art expressive modes?

**Article IV:**

- How does the integrative nature of contemporary art forms encourage integrative teaching through multi-professional collaboration within the after-school environment?
- How the *subserving, co-equal, affective* and *social* integrative teaching styles are realized through multi-professional collaboration?

Based on the specific issues explored and analysed in the separate articles, this dissertation attempts to give an answer to the following broad research question:

- How can the integrative potential of the three basic art-making principles of contemporary art – alternative materials utilization, conceptualization and collaboration – contribute to the successful integrative teaching of visual arts to primary school students to promote knowledge construction?

It is expected that providing an answer to this research question would shed light on the following aspects of integrated visual arts teaching through the use of contemporary art forms:

- the diverse opportunities for artistic expression that contemporary art materials utilization can offer;
- the potential of authentic contemporary art conceptualization processes for strengthening integrated knowledge construction;

### An artist-teacher-researcher in action:

- the multi-level collaborative practices in contemporary art that open up various opportunities for collaborative knowledge construction in the visual arts classroom;

The pedagogical implications for integrated teaching that would follow may suggest some methodological solutions for planning and implementation of visual arts integrated teaching in order to strengthen students' abilities for constructing integrated knowledge which would facilitate their creative and analytical thinking so that they can become an informed audience with the mental capacity to formulate their own opinions about art and be active participants in artistic production and 'consumption'.

## 4 RESEARCH DESIGN

This chapter provides information about the research setting, the participants in the studies, the methods and procedures for project implementation and for data collection as well as the principles guiding the analysis of the results.

### 4.1 Setting

The four studies comprising this dissertation were conducted at the same place – the European School of Helsinki, Finland, where I have been working since 2010 as an after school visual arts activity leader and an art teacher substitute for the regular classes. The long experience of planning, organizing, teaching and collaborating with my colleagues and students in producing various artistic works, and all the methodological questions that arose from these teaching-learning processes have become the source of inspiration and motivation for this research. Here I would comment on the organizational side of the after-school activities in this school and how this type of organization facilitated my research.

The after-school activities in the school are supported by the school's authorities, represented by the schools' principals, the school's parents' organization and the teacher's board. The activities follow the club type of organization. Their attendance is elective and voluntary for the students so their content and arrangement is student-oriented. This complies with the guidelines set in the National Framework for Before- and After-School Activities in Basic Education for the primary school levels (EDUFI, 2011), namely that the extracurricular activities should provide support “for parents' and school's educational tasks” (EDUFI, 2011, p. 8), “for the well-being, emotional life and social development” (EDUFI, 2011, p. 9) of the primary student and should ensure involvement, equality and social empowerment that support the students' “ethical growth” (EDUFI, 2011, p. 9–10). All elective disciplines offered to the primary students who attend after-school activities in this school are designed to fulfil these main objectives for extracurricular school activities content and organization as defined in the National Framework (EDUFI, 2011).

In practice, the educational content of each of the clubs is developed by an after-school team of educators (activity leaders), who are also professionals in different artistic, scientific and educational spheres. The multi-professional aspect of the after-school activities in this school and its impact on the educational process is the focus of research of Article IV.

The school provides a large variety of activities to choose from in accordance with the thematic contents suggested in the National Framework (EDUFI, 2011). The types of activities offered by the school are summarized in Table 1.

**Table 1.** Thematic content for before- and after-school activities according to the National Framework (EDUFI, 2011) and their implementation in the European School of Helsinki

Thematic contents suggested by the National Framework (EDUFI, 2011, p. 13) for the before- and after- school activities	After-school clubs and activities at the European School of Helsinki where the research was conducted
"ethical growth and equality"	group problem solving; debating; individual and team work on different projects and through different activities
"physical exercise and outdoor activities"	Sports (such as Yoga, Martial Arts, Football, Jogging, Gymnastics) which can be performed indoors or outdoors
"play and interaction"	Free Play and Interactive Games; Board Games (Chess, Game Go, etc.)
"meals and rest"	afternoon snack time
"culture and traditions"	museum visits and event organization;
"manual skills and crafts"	Art Constructions; Origami and Paper Crafts; Textile Art; Sewing; Weaving; Pottery, etc.
"visual, musical, bodily and linguistic expression"	performative arts (Dance; Drama; Circus; Physical Theatre) visual arts (Painting; Drawing; Sculpture; Art Installations; Print-making) music (Choir Singing; Band Club; Voice Expression) foreign language courses (Finnish; English; Chinese) Creative Writing
"media skills"	Multimedia and Animation; Computer Knowledge (IT skills); Gaming
"daily chores, the living environment and a sustainable lifestyle"	Nature Club; Life Skills Club; Entrepreneur's Club
"various areas of knowledge and skills"	Science Club; Cool Maths

As seen from Table 1, by offering clubs that fully meet the requirements for thematic content as suggested by the National Framework (EDUFI, 2011), the school ensures the practical fulfilment of the main objectives set in the official document regulating their provision (EDUFI, 2011).

At the beginning of each term every child is given the opportunity to choose which club to join according to their personal interests and availability as well as how many clubs to attend per day and per week. The clubs of interests occupy the first two after-school hours between 14:30 and 16:30. The last hour Homework and Play (16:30 – 17:30) is designed for the students to do their homework or play freely while waiting to be picked up by their parents. Thus the activities are scheduled so as to “support reconciliation of school attendance, parents’

work and family leisure time in the best possible way” (National Framework, EDUFI, 2011, p. 19) and in this way they fulfil the first major objective of the after-school classes – to help families in the supervision of their children.

Concerning the other main aspect of after-school classes – their voluntary character – it should be noted that this school has introduced a very flexible organization which allows the children and parents to choose the time when to attend, to switch clubs and to discover their favourite pastime activity. This typically happens officially at the beginning of the term, sometimes even during the term, if a student expresses a strong desire to join a certain club, or on occasion – for example, if on a particular day a student does not feel like going outside or doing sports, they can join, say, the art club. This, in my opinion, is a very good practice that could contribute to stirring the children’s interest in various fields.

Also, the after-school activities in this school are in accordance with the principle set in The National Framework (EDUFI, 2011) that activities should be built as a continuum to the educational tasks of school hours and should be guided by the general educational objectives of basic education. They do not repeat the lessons and activities covered during regular classes but complement them and further expand the thematic repertoire. The club-type organization allows topics that are covered over two or four teaching hours in the general curriculum to be offered as separate after-school courses, which gives more time to acquire and perfect students’ skills in the respective area whereas the free nature of the activities encourages interaction between the different clubs.

As The National Framework (EDUFI, 2011) gives only the general organizational guidelines for extracurricular activities, the after-school teaching professionals have the freedom of choice as regards the methodologies and content of the offered after-school clubs. It is this free nature of the activities that encouraged me to embark on my research as it sparked artistic practice-based teaching ideas, fruitful interdisciplinary interactions and multi-professional collaborations between the different clubs in the process of ensuring quality extracurricular education during the years.

All these factors made the after-school environment in this school a suitable setting for conducting my research. It provided the necessary relaxed atmosphere, the time and resources to plan and implement educational modules which aimed at establishing interdisciplinary connections between different spheres of knowledge and the visual arts. In practice, applying the socio-constructivist integrated approach to my teaching of visual arts to primary six-to-eight year old students was achieved by conceptualizing teaching ideas for conducting collaborative contemporary art projects which opened the possibilities of cross-disciplinary multi-professional collaborations between the various clubs. Such projects encouraged the students to notice the connection between the different subjects, and trained them to put to practice their integrated knowledge and skills in different near-real-life situations.

Conducting such educational projects is in line with the main principles of the newly reformed National Core Curriculum for Basic Education (EDUFI, 2016). As stated earlier, its emphasis falls on the introduction of “collaborative classroom practices” through the organization of “multidisciplinary, phenomenon- and project-based studies” (Halinen, 2015, para. 5).

In this integrative environment it was possible to utilize new experimental approaches to teaching visual arts in a way that encouraged the students to discover and make “associations beyond” different disciplines (Karppinen et al., 2013) so as to develop transversal skills and competences (Halinen, 2015, para. 3) and reach a level of understanding of the interrelatedness between the different school subjects, art and life, which became the main aim of this research.

## 4.2 Participants

The four empirical projects which constitute this research were conducted between 2013 and 2017 with groups of primary school six-to-eight year old students who attended my elective after-school visual arts classes. The number of participants in each project was determined by the size of the respective visual art club, the participant involvement in each project and the project’s technical specifications. The development of the action research cycles influenced each subsequent project planning and implementation and gradually attracted more and more participants both on the side of the learners and on the side of the teaching professionals, which was also necessitated by the collaborative nature of the contemporary art practices involved in the projects. Table 2. summarizes the participants in each of the four artistic projects discussed in this thesis.

**Table 2.** Projects and participants

Article No	Project	Action research cycle No	Participants			
			After-school clubs	After-school leaders	Student No	Student age
I	<i>Moomins</i>	1	Sculpture and installations	the artist-teacher-researcher	15	six- to eight-year old
I	<i>Space Disco</i>	2	Sculpture and installations	the artist-teacher-researcher	30	
II	<i>Snow Castle</i>	3	Sculpture and Installations; Painting and Drawing; Art Mix and Crafts	the artist-teacher-researcher	45	
III	<i>The Four Elements</i> (conceptualiza-	4	Sculpture and Installations	the artist-teacher-researcher;	60	

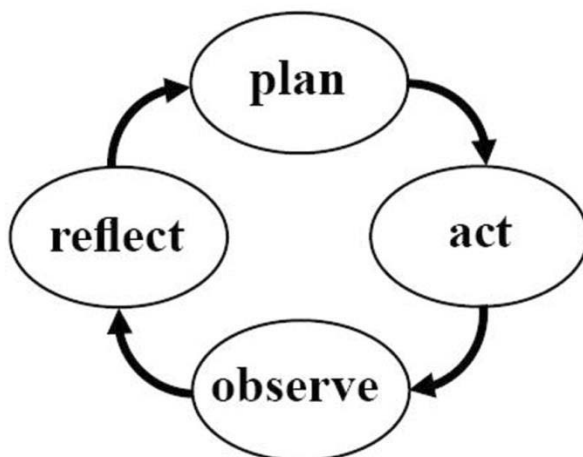
	tion and collaboration)			assistant after-school colleague		
IV	<i>The Four Elements</i> (materialization and collaboration)	5	Sculpture and Installations; Textile Art and Crafts	the artist-teacher-researcher; dance, drama, music, textile arts and crafts leaders; after-school coordinator	60	

### 4.3 Methods

- **Project implementation research method**

Since the main focus of this dissertation falls on the development and enhancement of the after-school visual art teaching process by employing new teaching approaches in real-life situations, the empirical phase of the whole study required adequate and consistent research tools that would be operative for the achievement of the main aims of the study and practical during the implementation of all the projects. In order to ensure the consistency of the research procedures throughout all projects, *action research* (Cohen & Manion, 1989; Cohen, Manion, & Morrison, 2005; MacNaughton & Hughes, 2009) was applied as the most suitable research method for direct in-class intervention. It allows the researcher to conduct “a small scale intervention in the functioning of the real world” (Cohen & Manion, 1989, p. 186), in our case, after-school art projects, and to carry out “a close examination of the effects of such intervention” (Cohen & Manion, 1989, p. 186) so as to draw conclusions about its possible outcomes on the teaching-learning process. The application of the action research method provided a clear cyclical framework to the research procedure, consisting of the following steps: **Plan** ⇒ **Act** ⇒ **Observe** ⇒ **Reflect** that ensured integrity of the research processes by providing a consistent, yet, simple structure at each stage of the research.

Figure 1. graphically represents the cyclic nature of the method and the idea that it is a process where each step feeds into the next. It also shows that it is possible to enter the cycle at any stage and follow it through its logical sequence until all four stages are executed to close the cycle.



**Figure 1.** Action research – general steps

This research method gives an opportunity to involve and interconnect more than one cycle in the process so that “the insights gained from the initial cycle feed into planning of the second cycle, for which the action plan is modified and the research process repeated” (Riding, Fowell, & Levy, 1995, p. 2). So each of the subsequent cycles included in this dissertation can be viewed as an upgrading to the teaching methodologies employed previously in my teaching practice. This progress can be visualized as a developmental spiral of teaching though integration, which was initiated by the first project (Article I) and went on to feed the planning and realization of the subsequent ones with the insights, experiences and results gained from those that immediately preceded them. Figure 2. below graphically presents the flow of the five cycles into each other.

Consistently following these four steps while conducting the research for each of the separate studies provided me as an artist-teacher-researcher with relevant tools to actively participate in the classroom processes at all steps of their development. It made my pedagogical practice open for self-reflection and visible for interpretation while at the same time monitored my teaching progress by allowing comparisons with previous research cycles.

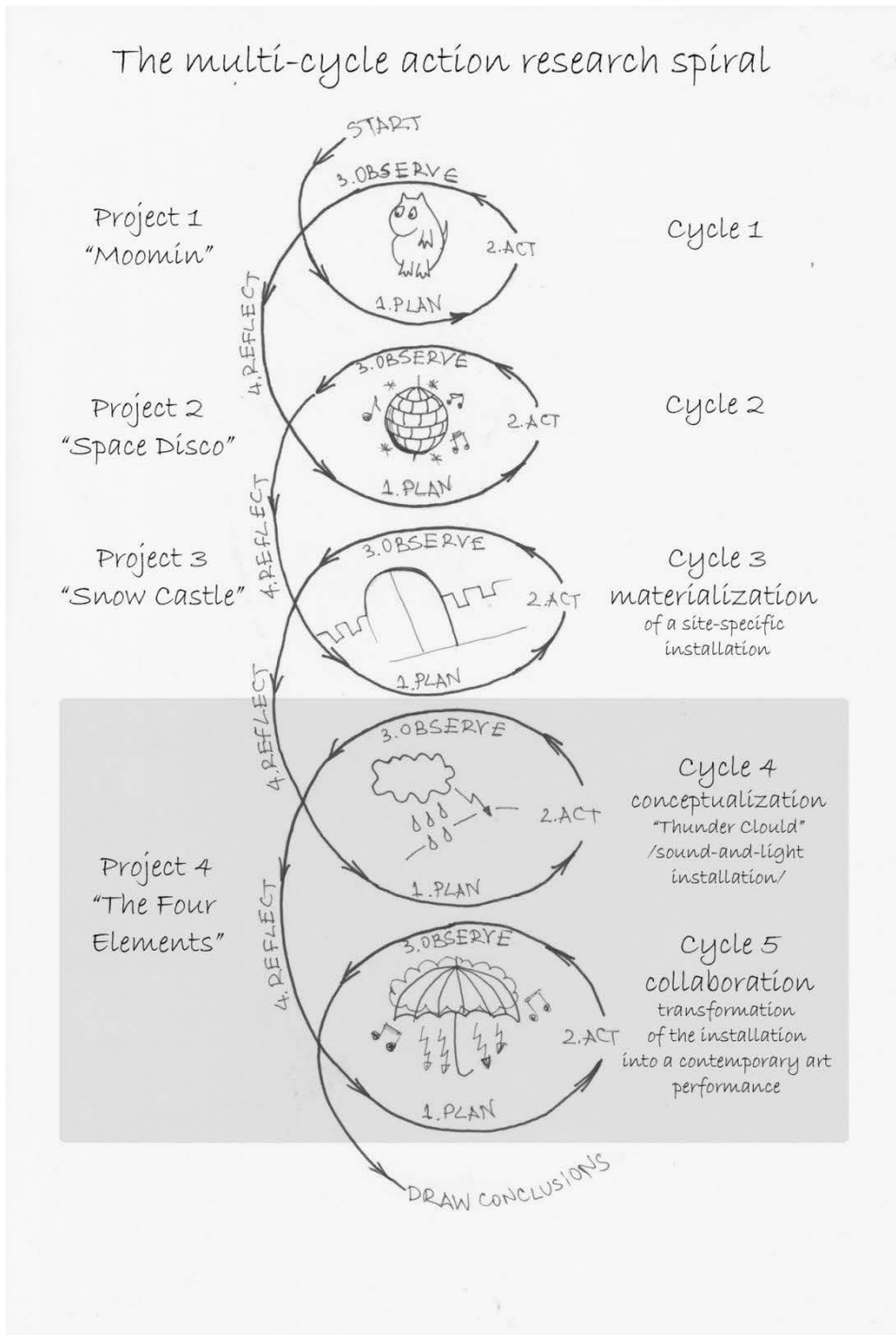


Figure 2. The multi-cycle action research spiral

Typically action research may involve more than one participant, but this dissertation focuses on self-reflection of the individual teacher-researcher's practice with the aim of introducing new teaching approaches in real-life situations and reflecting upon them so as to improve her teaching and to suggest possible positive pedagogical developments. So all studies embrace the idea suggested by Stenhouse and Whitehead (as cited in Cohen, Manion, & Morrison, 2005, p. 230) that action research might not necessarily be a group activity but also an individualistic matter as well when it is related to the teacher-as-researcher practice. In other words, the teacher-researcher has the freedom to construct her own teaching plan but also, by actively participating in its implementation, to let it develop, thus gaining first-hand experience and research data from each unique classroom process and telling about it in her own voice while at the same time sharing her views with the rest of the participants to improve the final artistic product.

The four articles present the teacher's perspective on the analysis of each action research stage from the initial pedagogical conceptualization of the project to the presentation of the main results of teaching visual art through knowledge integration. Each action research step required written and visual documentation of the process and in this way allowed the teacher to verbalize and visualize her teaching experiences and observations. It gives an opportunity for the teaching professional to learn and create knowledge by critically reflecting upon her own actions, creating her own knowledge and understanding of a situation and acting upon it, and in this way improving practice and advancing knowledge in the field (Riding et al., 1995). The action research approach allows the teacher to be both producer of educational theory, and user of that theory, and thus it contributes to bringing theory and practice closer together.

Structuring the research in a way that clearly determined the actions taken at each stage of the process turned out to provide not only integrity to the research procedure. It made me analyze my own artistic practice through the years and to see it as a structured mental process that involved: artistic conceptualization of a certain idea through preliminary planning and research that is directly related to the idea within an existing field of knowledge. This planning/research process (Step 1: PLAN) led to formulation of the conceptual framework of a project and facilitated the decision-making about its actual materialization. Step 2: ACT of the action research gave it a material artistic form, while Step 3: OBSERVE and Step 4: REFLECT finalized the creative process by observing and reflecting upon the achieved result and its impact on the next artistic idea that was inspired or extended the experience from the previous one.

The analysis of the artistic result facilitated a flow of ideas where each new idea came as a result of my previous experience of engaging with an old idea and in this way turned the process into a spiral of cycles that followed the same steps as the action research cycle. This realization had a huge impact on my re-

search, teaching and artistic process as it allowed me to transfer my artistic experience directly onto my teaching practice and use it in addition to the general method of action research as the teaching method of idea-generation and project conceptualization described in Article III. So the term *artistic action research* (Jokela, 2008; Räsänen, 2005) used in Article III denotes the teaching approach applied in the implementation of the investigated art project which “proceed[ed] in cycles in much the same way as traditional forms of action research. This involve[d] a planning stage, an art activity stage, an evaluation stage and an improvement stage” (Jokela, 2008, p. 233). In addition, the *teacher*, as a *practicing artist*, *researched* the impact of the artist expertise on teaching art, i.e. “the artist, teacher and researcher roles overlap[ed]” (Räsänen, 2005, p. 62) and the artistic process was pedagogically utilized and transferred onto the teaching process.

For clarity of the presentation Table 3 associates each action research cycle with a number that is linked to the respective project and to the article in which it is analyzed.

**Table 3.** Projects and action research cycles

Article №	Project № and name	Method of implementation
I	Project 1: <i>Moomin</i> Project 2: <i>Space Disco</i>	Action research Cycle 1 Action research Cycle 2
II	Project 3: <i>Snow Castle</i> (materialization)	Action research Cycle 3
III	Project 4: <i>The Four Elements</i> (conceptualization and collaboration)	Action research Cycle 4 <i>Artistic action research</i> as a teaching approach
IV	Project 4: <i>The Four Elements</i> (materialization and collaboration)	Action research Cycle 5

## 4.4 Data

In order to ensure consistency and integrity of the research procedures, the method applied for the collection of the written and the visual data for all the projects included in this dissertation was the same. Because of the direct involvement of the teacher-researcher as an active participant observer (Mills, 2007, p. 58) in all action research cycles, *pedagogical documentation* (Carr & Lee, 2012; Dahlberg, Moss, & Pence, 2007; Paananen & Lipponen, 2018) of *structured classroom observation* (Silverman, 2000, p. 3) was the most suitable data collection procedure that did not hinder the teaching process but at the same time allowed the teacher-researcher to obtain relevant information directly from the process of work. This procedure includes taking notes and photos during all stages of the action research process. Such meticulously prepared and structured written and visual record of the processes provided the teacher-researcher with enough data to “revisit, analyze and evaluate” the teaching experience over time (Cochran-Smith & Lytle, 1993 as cited in Mills, 2007, p. 70), ensuring the transparency of the pedagogical practice and rendering the data “open for reflection” (Rintakorpi, Lipponen, & Reunamo, 2014, p. 188).

The varied nature of the collected data during the whole research period required me to apply relevant coding categories that stem directly from the “theoretical concerns” (Rose, 2007, p. 65) of the studies included in this dissertation. The specific coding categories for the research stages described in each of the four articles are presented in detail below. The way they are determined is guided by the following three principles outlined by Rose (2007, p. 65): (1) *exhaustiveness* where the chosen categories cover every aspect of the research focus; (2) *exclusiveness* because the categories do not overlap and (3) *enlightening* or in other words they are “analytically interesting and coherent” (Slater, 1998, p. 236 as cited in Rose, 2007, p. 65), grounded in the theoretical frameworks of each study and directly linked to the research questions. This process of meticulous data handling gave me enough resources to compare specific data samples in order to ensure the validity of the study.

- **Content Analysis**
  - **Coding Stage 1**

Following these methodological procedures for data collection, the data gathered during all projects was initially classified into two main categories according to the medium of representation: **written** and **visual**, which was the first stage of organizing and coding the data. In the subsequent process of data coding and analysis these categories were refined in order to link data material to the specific action research stages and further to the research questions and theoretical notions of each study so as to provide data-grounded theoretically-informed answers to the specific research questions.

### **Written Data**

For all four articles in question the **written data material** consists of two sub-categories collected during the first two steps of each action research cycle: (PLAN and ACT) (see Figure 1):

- loose-leaf teacher notes with sketches and comments from the planning stage of each project (total 40 pages)
- loose-leaf hand-written teacher diary field notes with observational commentaries, accompanied by quick pencil sketches from the process of implementation (approx. 20 pages)

All written notes and supporting sketches on paper were digitized (scanned or photographed) as early as the initial stage of collecting and managing the data, they were grouped into folders according to the action research stage they refer to, and assigned a unique number/name for further reference. This was the first stage of coding the written data. Subsequent re-coding of the written data was performed at the reflection stage of the action research in order to match the written data items with relevant visual data capturing the same teaching/learning event.

### **Visual Data**

The **visual data** used to support and illustrate the research stages falls into two main categories – static (photos) and kinetic (videos) – which predetermine its content and further categorization.

Static visual data was collected for all projects and consists of:

- Paper images of teacher and student sketches from the planning stages of the projects. This part of the visual material was digitized as early as the initial stage of collecting and managing the data – scanned or photographed, saved in jpeg format, assigned a unique number/name for further reference and placed in relevant folders corresponding to the type of image and the research stage it referred to.

- Digital photos were obtained during the projects' implementation (action research stage: Act and Observe) through the process of photo documentation (Rose, 2007, p. 243). The finite number of images taken by the teacher-researcher or her colleagues during each of the projects' action/observation stages were first coded into categories and placed in relevant folders, according to the process of artistic/pedagogical work they refer to within the action research cycle. At this stage of data treatment each image was assigned a unique number within the folder it was placed in so as to ensure its easier identification for research purposes (Rose, 2007, p. 65). This first stage of data coding allowed its further categorization in the second stage of data coding and analysis. As the types of teaching activities performed during each project were different, the action research stages are used as general descriptive labels for analysis of the visual data.

Kinetic visual data was collected for the purposes of Article IV, whose final artistic product is an art performance. The kinetic visual data consists of 38 video recordings of various lengths. All videos were filmed either by the researcher or by the researcher’s colleagues. In the analysis of the results of Article IV, the video data is used as a source of analytical material that not only supports the written and photographic material in providing answers to the issues in question but also documents authentic processes in action (sounds and movement) that would otherwise remain uncaptured. The project-specific first stage of written and visual data coding is presented in Table 4.

**Table 4.** The first stage of written and visual data coding

Data			
Article №	Written Data	Visual Data	
		Static visual data	Kinetic visual data
I	a 10-page hand-written teacher diary of the process of planning and implementation	Process photos Photos of sketches Photos of rehearsals Product photos (209 photos in total)	-
II	loose-leaf teacher notes from the planning stage of the integrated project a loose-leaf 10-page hand-written teacher diary from the process of implementation	Sketches on paper from the project’s planning stage: <ul style="list-style-type: none"> <li>pedagogical teacher sketches (15)</li> <li>student plans and drawings (20)</li> </ul> Digital photos from the process of work in the classroom (30) Digital photos of the final installation on site (2)	-
III	loose-leaf 10-page teacher notes with sketches from the planning stage of the integrated project loose-leaf hand-written teacher diary notes with observational commentaries, accompanied by pencil sketches from the process of implementation	Photos of sketches on paper from the project’s planning stage: <ul style="list-style-type: none"> <li>pedagogical teacher sketches (6)</li> <li>student plans and drawings (18)</li> </ul> Digital photos from the process of work in the classroom (134) Digital photos of the final installation (10) Digital photos from the performance (6)	-
IV	loose-leaf teacher notes with sketches from the planning stage and hand-written teach-	Digital photos from the process of work in the class-	Video recordings of various lengths:

	er diary field notes from the process of implementation	room (157) Digital photos of the final installation (6 photos) Digital photos from the rehearsals (120 photos) Digital photos from the final performance (69)	<ul style="list-style-type: none"> <li>• short videos of the process of work (16)</li> <li>• videos of the rehearsals (7)</li> <li>• short videos of the final artwork (5)</li> <li>• 10-minute-long video of the final performance from the after-school show (1)</li> </ul>
Total	approx. 60 pages	802 photos	38 videos

○ **Coding Stage 2**

Refined coding of both written and visual data was performed by the teacher-researcher during the reflection stage of each action research cycle in order to be able to compare written and visual data sources that capture the same phenomenon. Visual examples were matched with written instances capturing the same teaching moments. The differences in the research focus of each of the four empirical studies as well as the varied theoretical frameworks supporting their analyses required regrouping of data material within the categories, defined during the first stage of data coding. This involved renaming of folders by assigning them project-specific descriptive labels (Rose, 2007, p. 64) that correspond to specific pedagogical activities, which supported the materialization of a given artistic project. In this way the second stage of data coding mapped data samples with each study’s specific research questions and respectively with the theoretical notions applied in the analyses of the results in order to make data samples “more obviously interpretative” (Rose, 2007, p. 65).

Although visual data was collected at all stages of the four projects implementation, Article I, II and IV use the visual data images only as supportive material to the diary notes. For this reason, in this second stage of data coding, visual data samples were selected and linked with written data samples to illustrate the process of developing artistic ideas pedagogically, to capture the materialization of these ideas in the teaching-learning process and to document the final artistic products. The research focus of Article III called for a semiotic analysis of specific visual data samples which were linked to respective written data samples. The projects’ specific second stage of data coding is summarized as follows:

- At the reflection stage described in Article I, the visual and written data collected during the action research steps (plan, act and observe, see Figure 1), was coded into categories that reflect the three aspects of the guided construction of knowledge discussed in the paper. This refined coding of the written data uncovered data samples that denote instances

outlining the ways “language is going to be used to create joint knowledge and understanding” (Mercer, 1995, p. 66) while the visual data coding helped in selecting images that show the students experiences as participants in the creative process (Lipponen, Rajala, Hilppo, & Paananen, 2016), helping each other to learn (Mercer, 1995, p. 66).

- The written data collected for Project 3 (Article II) follows chronologically the process of conceptualizing and implementing the project. Content analysis of the teacher notes reveals details of the teaching process and the challenges met while introducing contemporary art as a tool for integrative teaching. The main focus of the notes was defined after coding the written data into categories that were directly linked to the research questions. These categories include: (1) notes referring to teaching mechanisms for adopting contemporary art at primary school student level; (2) notes focusing on the expected results of such intervention and (3) field notes summarizing the actual results from the classroom activities. Comparison between the written data presenting the teacher’s expectations for the project implementation as recorded in the teacher planning notes with the written and visual data of the actual project implementation in the classroom revealed deviations (Silverman, 2014), or paradoxes (Mills, 2007), from the intended plan which turned out to be meaningful for the teaching process as well as for the project’s final results and these were taken into account in the analysis.

Further analysis of the notes from the planning stage of the project shows that the initial theoretical and methodological framework of the research project was set prior to its implementation in the classroom, while the teacher diary filed notes uncover the practical applications of the chosen teaching methodology. Reflecting upon the teacher planning process and the subsequent classroom activities described in the diary reveals that the theoretically frameworked teacher planning, chosen for this research, marks a positive change into my art teaching practice and takes the implementation of previous action research stages (Article I) one step further.

- The complex contemporary artwork produced as a result of the teaching activities performed in Project 4 gave rise to different research issues related to the integrative potential of contemporary art forms. Various aspects of the teaching process and the pedagogical outcome of introducing contemporary art forms with the aim of enhancing art integration were captured in the written and visual data collected during the project’s materialization. For this reason the data coding and analysis was more complex and was described in two separate papers (Article III and Article IV) with different research focuses.

In order to provide answers to the research problems set in Article III, which focused on defining the project's conceptual framework, written and visual data coding was performed on two levels.

First, for a study dealing with the mechanisms of conceptualization of a certain artistic intention, semiotic analysis of the written and visual data proved to be most suitable as it allowed the teacher-researcher to draw comparisons between verbal and visual modes of expression found in the data. Peirce's notions (Lyons, 1977; Potts, 1996) of *icon*, *index* and *symbol* were used to code written and visual data and to find relevant samples for analysis where *icons* denote a physical resemblance to the signified object; *indexes* give evidence of what is being represented and *symbols* have no resemblance between the signifier and the signified but the connection between them is culturally learned. For example, a portrait is an icon, smoke indicates fire, and letters in the alphabets are arbitrary symbols of sounds, which are established by convention and decoded through common knowledge in the different communities using them.

The application of these theoretical notions in the second stage of data coding with the final aim of drawing conclusions about artistic learning (Räsänen, 2005, p. 62), provided me with the exhaustive, exclusive and enlightening (Rose, 2016, p. 92) data codes that enabled comparisons between the artistic processes reflected in the visual and written data taken from the teacher diary at the art-teacher planning stage (Plan) and the sketches produced by the students at the student planning stage (Act and Observe).

Second, the next level of data coding mapped data samples from the teacher's diary notes and sketches taken during the project planning stage with field notes, supported with visual data samples, from the action and observation stages, all of which pointed to the learning objectives of the project and the actual educational processes observed on site. Subsequent analysis of these data instances uncovered the pedagogical outcomes of utilizing artistic conceptualization of contemporary art forms and of adapting the artistic action research integration to the primary student art teaching (Act and Observe).

- Article IV continued the presentation and analysis of Project 4 by following the process of materializing the artistic concept into a unified artwork and the transformations it underwent until its completion. In the second stage of data coding, written and visual empirical data material fell into various categories that originated from the theoretical framework of the study. Some of these coding categories were named after Bresler's (1995) styles of integration discussed above ('*subservient*', '*affective*', '*co-equal*', '*social*'); others denoted specific instances where 'multi-professional collaboration' or 'knowledge integration' were planned and materialized; and yet, another category documented what Mills (2007) calls *paradoxes*, or "unintended consequences of a particular teaching strategy" (Mills, 2007, p. 61) that became evident post fac-

tum. These ‘paradoxes’ were spotted in the process of work and their influence on the final result was compared to the initial teacher planning data notes so as to arrive at further conclusions about the on-going artistic teaching process.

- **Principles of data analysis**

The project implementation of each study involved active collaborative work between me (the artist-teacher-researcher) and the other after-school activity leaders at different stages of the projects’ development. Depending on the project-specific educational tasks and the complexity of the final artwork produced as a result, some projects (Article III and Article IV) invited other after-school activity leaders into the art creative process who also contributed to the visual data collection (Article II, III and IV). This enriched the variety of the data samples and ensured that different aspects of the creative process were captured for analysis. The varied nature of the collected data gave the researcher enough resources for the qualitative content analysis (Silverman, 2000) of the results so as to “produce a more accurate, comprehensive and objective representation of the object of study” (Silverman, 2014, p. 91). To enhance the validity of the study the pre-analysis and analysis of the data were guided by the principles defined by Silverman (2014, p. 95) for “comprehensive data treatment”, “constant comparative method” between data sources and acknowledging “deviant cases” (or in Mills’ (2007) terms *paradoxes*).

The reports on the pedagogical implications of the integrated projects presented in each study as well as some important details about their implementation appear in chronological order following the structure of a single-action research cycle, which includes Planning, Action, Observation and Reflection (see Figure 1). This structure served as a basis for conceiving the analytical frameworks (Bryman & Burgess, 1994) and for reporting the results of the projects in a clear-cut consistent manner. For the purposes of this dissertation the results of the single action research cycles are compared and viewed as a development of my artistic, teaching and research practice where each action research cycle is an upgrade to the next one (Figure 2).

The descriptions and analyses of each action research step in a cycle were always supported by respective reflective passages based on the teacher’s diary notes and the corresponding visual data that illustrates them.

Content analysis (Silverman, 2000, p. 3) of the written and the visual data, revealed the main educational tasks and objectives of the art activities as well as the pedagogical thinking behind the introduction of innovative teaching approaches through various means of visual expression with the aim of facilitating integrative knowledge construction.

## **5 RESEARCH ETHICS**

All research projects constituting this dissertation comply with the guidelines set by the Finnish National Board on Research Integrity (Tutkimuseettinen neuvottelukunta –TENK, 2009). Following the principles of research in the humanities and social and behavioural sciences (TENK, 2009), for respecting the autonomy of the research participants, avoiding harm, ensuring privacy and data protection (TENK, 2009, p. 6), all measures were taken to ensure that participation in the research was voluntary, with the exclusive informed consent of the students and teachers involved in the projects, their parents and the school officials. All written, photographic and video data collected for the purposes of this research is taken, selected and stored by the teacher-researcher or her colleagues on the school's premises and as part of the regular work of the after-school activities. Since the research focuses on exploring integrative teaching processes and the pedagogical outcomes of their implementation in the classroom from the teacher's point of view rather than the individual student receptions of the processes, the written and visual data material does not contain directly identifying information of the participants. Visual data is obtained with confidentiality in mind either in a way that conceals the identity of the participants or is strictly anonymized so the identity of the participants is not revealed and cannot be recovered at any time of the research analysis and presentation. Written and oral permissions related to the data collection for conducting this research and for disseminating the research results among the scientific community were obtained prior to the research from the director of the school at the time of conducting the research and the respective after school activity coordinator.

## 6 OVERVIEW OF THE ORIGINAL ARTICLES

The following section summarizes the four articles included in this dissertation and offers a comparative discussion on the main findings common for all projects. In-depth analyses of the project-specific teaching processes from each action research cycle and precise details from the project implementations can be found in the original publications.

### 6.1 Article I: *The integrated approach to teaching visual art in after-school activity classes*

Article I is co-authored. It marks the beginning of this research and the observation and data collection from my teaching practice so I implemented the projects, collected the data and analyzed the results, and my co-authors contributed to the writing of the theoretical and methodological background.

This study aims at investigating how the socio-constructivist integrated approach to learning, which promotes collaborative knowledge construction, can be put into practice in the visual arts teaching process in primary after-school clubs, attended voluntarily by six-to-eight year old pupils, and led by me. The research was conducted at a time when the newly reformed National Core Curriculum for Basic Education (EDUFI, 2016), which promotes multidisciplinary integration, was planned to come into force in Finland. In view of that reform, the socio-constructivist perspective was assumed in conceiving and implementing two artistic projects, each with a different integrative focus, described in the empirical part of the paper. Action research was chosen as the most suitable in-class intervention method for this study, as it allowed not only the smooth introduction of the integrated approach into the teaching process but also gave a clear structured model for development of the teaching practice and provided favorable conditions for collecting first-hand empirical (written and visual) data to reflect upon and theorize.

The specific research questions, addressed in the article, aimed at finding out how, by resting upon the knowledge gained in school and through the students' individual experiences, a project-based integrated approach to planning and guiding the teaching-learning process, can be applied pedagogically in the after-school art activities to support knowledge construction.

The first project *The Moomin Project: Celebrating 100 years of Tove Jansson's birthday* offered an insightful teaching practice focused on a literary work and the original visual material related to it, which served as a basis for inspiration and creation of independent artworks by the students. The project consisted of various practical activities, intended to strengthen interdisciplinary integration by incorporating the students' previous knowledge and skills obtained from different visual arts spheres, literature, television, and multimedia, and by encouraging the young learners to utilize this varied experience in their creative process. These classroom activities included group discussions focusing on the stu-

dents' recent museum visit and on their previous knowledge of the literary work; sketching their favourite Moomin character; recreating it into a three-dimensional figurine from clay; and finally exhibiting the artworks in public as part of the annual spring time after-school show exhibition.

Data analysis of this first action research cycle provided enough evidence to evaluate the final results of the project positively. On one hand, the students' artworks and overall attitude to the activities demonstrated that they were prepared to proceed with more complex tasks. On the other hand, I, in my role of the teacher who planned and implemented the project, was now more confident to integrate more spheres of knowledge into my teaching and to extend the integrated approach across several different after-school clubs, inviting collaboration with other after-school activity leaders in the process.

So the insights and experience gained from the implementation of the *Moomin* project flew smoothly down the developmental spiral of action research, visualized on Figure 2, into the planning and realization of the second integrated teaching project (*The Space/Disco project: Getting ready for the school show*), reported in this article. The implementation of this project was again structured to follow the action research cycle steps. They included activities related to the planning of the project (e.g. joint after-school activity leader discussion sessions that set the topic and the conceptual idea of the show as well as the educational objectives of the classwork activities; individual teacher planning to define specific artistic activities that would be both integrative and leading towards the project's successful completion) as well as to its introduction into the visual arts lessons (e.g. designing the costumes, multimedia and stage decorations, posters, in accordance with the performance needs and the music used during the show). The final goal of the project was to contribute to the production of an integrated art product through active after-school club collaboration. In this case, the art product was a one-hour performance show for the end of the school year organized around a common concept.

Such collaborative teacher planning sessions to define a common topic for the after-school spring show were to be organized annually from that moment onwards which means that the general topics for the other projects included in this dissertation were also set as a result of collaborative teacher discussion.

Analytical comparison of the classwork processes recorded in the teacher's diary notes and illustrated by visual samples suggest that the relaxed nature of the after-school environment, unrestricted by curriculum constraints, facilitates the integrative presentation of teaching material and the fruitful multidisciplinary collaborations between after-school clubs. Furthermore, implementing well-planned integrative educational projects demonstrates in practice how knowledge is socially constructed (Mercer, 1995; Michaels, O'Connor, Hall, & Resnick, 2010) in the classroom and how this process enhances the students learning abilities to make associative connections between different subject are-

as, equipping them with tools to structure and view their acquired knowledge in its entirety. The results of the projects confirm the usefulness of the integrated approach to produce a beneficial effect on the students' skill transferability (Riding et al., 1995) and multi-literacy (Räsänen, 2015) and on their holistic learning process.

## ***6.2 Article II: Project-based integration of contemporary art forms into teaching visual arts to primary school students in the after-school art clubs***

Following the successful implementation of the first two integrative projects reported in the first article, Article II marks a significant milestone in the conceptual development of my teaching practice. The study continues the exploration of the practical implementation of the socio-constructivist integrated approach but as a result of reflecting upon my pedagogical practice and my artistic observations on the development of visual arts nowadays, the study shifts its research focus. By establishing theoretical links between the principles guiding the integrated approach in education as well as the conception of contemporary art forms, the paper suggests that the eclectic permissiveness of contemporary art is essentially integrative and therefore could be turned into a suitable pedagogical tool for providing the students with learning opportunities to establish interdisciplinary connections. Resting on this assumption the study addresses issues connected with the pedagogical outcomes of introducing contemporary art forms and materials for the promotion of collaborative knowledge construction.

The empirical part of the paper reports the implementation of an integrative contemporary art project, *The Snow Castle*, whose aim was to test the above-mentioned theoretical link in practice by introducing the six-to-eight year old visual art after-school club participants to the possibility of applying knowledge acquired in other school subjects (e.g. Art and Crafts, Design and Architecture, Natural Sciences and Environmental Studies, Mathematics: Geometry, Algebra, Combinatorics) to the creation of an original contemporary artwork. To strengthen the potential of contemporary art forms and adapt their principles pedagogically for the primary school level, a huge, yet simple, site-specific installation from a recyclable material found in the trash was planned to be created by the students and exhibited as an intervention into the school's public space. The conceptual framework of the art installation was loosely inspired by Christo Javacheff's (2019) early site-specific artworks (Blackbourn, 2011), wrapped in white canvas, whereas its pedagogical adaptation was based on the principles guiding contemporary art conception, namely reusing, remixing and reconstructing (Deuze, 2006) by means of remediating (Bolter & Grusin, 1999), bricolaging (Lévi-Strauss, 1966) and re-contextualizing. In this case, alternative recyclable materials were used "in order to create new insights or meanings" (Deuze, 2006, p. 70).

The paper offers the teacher's perspective in providing data-based analytical comments on specific moments from the teaching-learning process where *collaboration*, *knowledge integration* and *art appreciation*, triggered by the contemporary art material utilization were observed in the classroom. The structure of the research continues the good practice established in my previous article (Article I) to use a single action research cycle as an in-class research tool and teaching framework. Following its logical steps, the activities, during which the written and visual data was collected, involved: collaborative after-school leaders' planning to set a general after-school show topic; individual art teacher planning of the installation in relation to that topic and to the integrative learning objectives of the project and the possible innovative solutions to them; and actual classroom intervention divided into two teaching modules to introduce and materialize the site-specific installation with the students.

The results of this action research cycle proved that teaching projects designed in a way to use the integrative potential of contemporary art forms and alternative materials, could upgrade the young learners' awareness of the various sources of art inspiration, encourage collaboration and art appreciation and contribute to the development of their aesthetic awareness in a world where the visual image is dominating all aspects of our lives. Finding innovative ways to promote integrative knowledge construction was in line with the current Finnish reform in basic education so their application to the teaching process through different projects facilitated the smooth introduction of the reform in my teaching.

### **6.3 Article III: *Utilizing contemporary art forms in primary after-school: An artist-teacher-researcher perspective***

The results and conclusions reached in Article II, that the integrative nature of contemporary art forms has the potential to turn them into a powerful pedagogical tool for knowledge integration, laid the theoretical and practical foundations of Article III. Seen as an upgrading to the teaching and research experiences gained during the previous studies, this one, continues the exploration of the integrative powers of contemporary art by delving into the pedagogical implications of utilizing authentic artistic conceptualization for encouraging knowledge integration in the primary student visual art classroom.

To achieve its aims, the study employs a single action research cycle, conducted and analyzed by the art teacher, who, in this case, acts also in her role of a practicing artist and a researcher (referred to in this study as the artist-teacher-researcher) in the same international after-school environment once again with groups of six-to-eight year old primary students. By drawing a comparison between *action research* as a structured methodological framework for in-class research interventions and *artistic action research* which also "proceeds in cycles [...involving...] a planning stage, an art activity stage, an evaluation stage

and an improvement stage” (Jokela, 2008, p. 233), the empirical part of the study presents the artist-teacher-researcher’s perspective on her professional role in the process of applying *artistic action research* as a teaching approach for the implementation of the investigated integrative art project.

Following the action research steps, the specific activities described in the empirical part of the paper include: an in-depth presentation and analysis of the artist-teacher’s planning of the project and its teaching objectives in accordance with the general topic for the annual after-school spring show, which for that year was decided to be *The Four Elements*. Based on that topic, the semantics behind the arbitrary linguistic signs (Saussure, 1992) signifying the four elements (*fire, air, earth, water*) and the natural phenomena associated with them were taken as a starting point for the artist-teacher’s process of verbal-to-visual idea-generation. This process led to conceptualization of a light-and-sound-installation of a *thunder cloud* that was to be presented as part of the after-school show. The subsequent classwork activities involved: a teaching module dedicated to the introduction of the topic to the students; their individual and collaborative verbal and visual planning of the installation; a teaching module which gave the students an opportunity to explore the materials for the installation by crafting simpler small-scale thunder clouds from cardboard and cotton, used in a promotional pre-show art installation hung-over on both sides of the school’s staircase. As a result of this collaborative teacher-student planning, it was decided that the final work would be produced from found materials (two umbrellas, cotton, a string of battery-powered LED-lights added to the construction to visualize the rain) to recreate thunder clouds, and a recording of thunder sound would be added to accompany the public presentation of the installation.

Peirce’s notions (Lyons, 1977; Potts, 1996) of *icon, index and symbol*, were applied to the semiotic analysis of the written and visual artistic production, collected during the teacher’s planning stage and the project implementation in the classroom. This analysis revealed the artistic mechanisms leading to the formulation of a conceptual framework of the contemporary art installation. Furthermore, an analysis of the teaching-learning process uncovered the integrative potential of the artistic action research for internalizing artistic conceptualization and the possibilities for adapting the same process as an approach for integrated teaching of visual arts. Planned in an engaging way, these activities guided the students through the steps of artistic action research into experiencing an authentic artistic transformational process similar to the one the artist-teacher passed through. Interdisciplinary integration, observed as a result of the project conceptualization in the classroom supported the “students in utilizing these [authentic artistic] practices” (Gude, 2013, p. 14), enriched them with a different viewpoint about the set problem and encouraged them to experience, investigate and arrive at unconventional conclusions (about natural phenomena) which promoted their creativity. Thus, the study offers a practical example of the pedagogical effects

of utilizing the artistic action research for conceptualization as a teaching approach that strengthens the integrative knowledge construction in the classroom.

The conceptual richness of the installation, developed during this action research cycle, as well as its contemporary art qualities, however, opened opportunities for its transformation from an immobile art installation to a performance piece which involved intricate multi-professional collaborations between the after school teaching professionals. These multi-professional collaborations that finalized the materialization of the artwork into a light-and-sound performance are presented in Article IV.

#### **6.4 Article IV *Promoting integrative teaching through interdisciplinary arts and crafts collaboration between after-school clubs***

The work on the development of the contemporary art installation *The Thunder Cloud*, discussed in Article III, inspired multi-professional collaboration between after school clubs. This collaboration manifested as various joint activities that stemmed from the concept of the artwork. So my research naturally proceeded with an exploration of the potential of contemporary art forms for interdisciplinary integration and focused on the collaborative processes that occurred during the materialization of this concept. Taking the art teacher-researcher's perspective, in this single action research cycle, the observed artistic, educational and collaborative processes were analyzed in the light of the four integrative teaching styles, as defined by Bresler (1995): *subservient, co-equal, affective and social*.

The *Planning* stage of this action research cycle reflects the *co-equal* (Bresler, 1995) aspect of the project: the discussions of the after school activity leaders which defined the pedagogical possibilities for cross-club interaction. During this mutual teacher planning it was decided that the clubs would collaborate, first, on the level of ideas. Based on the concept of the installation, the Visual Arts club participants were to make two fluffy 'rain clouds' with battery-powered led-lights to symbolize rain and lightning. The colleague teaching Textile Arts and Crafts, inspired by this conceptual idea, decided that her club can contribute to the creation of a soundscape around the cloud installation, so they crafted percussion sticks that could produce the sound of rain when shaken. This collaboration raised the visual art product one level higher by transforming the *light installation* into a *sound-and-light installation*. The multi-layered complexity of the *Thunder Cloud* conceptual art project inspired further multi-professional *co-equal* teaching collaborations which unfolded during the common rehearsals for the after-school *Four-Elements* themed spring show. The professional advice and direct interventions of the Music, the Drama and the Dance after-school activity leaders integrated the presentation of the installation within the show, transformed it into a *sound-and-light contemporary art perfor-*

*mance*, thus contributing to the synesthetic value of the art piece and highlighting the *social* aspect of the integrative teaching style. This is how the ideas that originated in the planning stage were materialized and then analysed during the next stages of this action research cycle.

During these activities, the students not only experienced the constructional potential of recyclable and found materials, used for creating the installation, and discovered their physical qualities, but also mapped them onto their semiotic meaning within the artwork's conceptual framework (Article III) and became aware of their influence on the aesthetic qualities of the final piece, which revealed the *affective* side of art creation. Working on the same art piece simultaneously in the Visual Arts and the Textile Art and Crafts after-school clubs added audial qualities to the otherwise visual object. In this way, the participants' active collaborative efforts allowed them to integrate different knowledge entities and skills, which enriched their capacity to establish logical connections between different natural phenomena, science, art and life. In this case all these interdisciplinary knowledge turned out to be *subservient* to art.

The hybrid nature of this contemporary art piece and the collaborations that were necessary for its materialization strengthened the integrative links between the different artistic fields that each after-school club represented and demonstrated how artistic multi-professional collaboration, triggered by the contemporary art expression can in practice extend the integrative learning opportunities by putting the students into authentic creative processes.

The results of this action research again confirmed that the informal and flexible after-school teaching-learning environment provides favourable conditions for quality integrative teaching. Being free from curriculum constraints and expectations, it supports process-focused phenomenon learning and allows for *detours* (Chemi, 2014) and experimentation in designing the teaching content, in conceptualizing the teaching-learning interaction and in introducing project-based teaching modules that come as close as possible to real-life interdisciplinary aesthetic practices (Gude, 2013).

Such projects unfold the possibilities for learning in collaboration through artistic expression and multi-disciplinary discovery which in turn fosters knowledge and skill transferability that go beyond the discipline-based school curriculum.

## 6.5 A comparative discussion of the four articles

The interdisciplinary project-based method for introducing integrated content, applied throughout all studies, proved to be suitable for the investigated extra-curricular teaching-learning in visual arts. Each project focused on different practical activities leading towards completing the educational objectives and the final artistic goal in relation to the set research questions. The students participating in the projects were encouraged to internalize concepts, establish interdisciplinary connections, and transfer skills, knowledge and experience obtained in other subjects onto their art-making. At all stages of implementing the projects, the integration of subjects was intended and planned by the teacher, even though the subjects themselves were not overtly pointed out. Rather, they emerged naturally during the completion of the activities as some of the tasks required application of knowledge gained from various fields. In this way it was the creative process that led the content integration and all integrated subjects, notions and concepts served the purposes of the art process and the final artwork. Therefore, unlike most examples of STEAM projects where art is *subservient* to the other integrated subjects, i.e. used as a tool in explaining and illustrating scientific content, in this research all texts, concepts, notions and ideas borrowed or inspired by other scientific disciplines and spheres of life, were *subservient* to the art expression, adding to the conceptual understanding of the artworks and aiming at elevating their aesthetic qualities.

Returning to the four projects in terms of achieving *social, affective* and *co-equal* integration as defined by Bresler (1995), I should note that all artworks created in the course of this research were exhibited as artistic interventions in the school's public space and served as examples of different modes of public presentation within the annual after-school show celebrations, which attracted the whole school community. More specifically the sculptures from the *Moomin* project were exhibited in a traditional way just before the after-school spring show; the *Space Disco* balls were hung freely in the hall as part of the scenography; the *Snow Castle* gate was displayed as a site-specific installation and a deliberate intervention into the public space; the *Four Elements* project transformed into a contemporary art performance which involved all participating students and was integrated into the general programme of the show. Such a variety in the presentation of the artworks contributed to the *social* integration (Bresler, 1995) and made the students aware of the ways contemporary visual art materializes and participates in public spaces. Furthermore, as discussed in the original articles, the contemporary nature of most of the artworks raised not only the students' awareness of the creative potential of the chosen art form, the elements that structure it, the spaces it can assume (e.g. Article III, Article IV), but also developed their ability to find, recognize and appreciate varieties of artistic

expression offered by the utilized contemporary art forms and practices. In this way *affective* integration (Bresler, 1995) was achieved. Also, the collaboration that started with the planning and the production of the artworks reached its final expression in the annual shows where the joint effort of everybody who participated was seen, shared and appreciated, thus, materializing the *co-equal* integration of the whole process.

In the next section I provide a closer look at my methodological development through action research and pinpoint specific improvements and implications for integrated visual arts teaching, which has resulted in the proposal of a three-tier model of contemporary art integration and integration through art. This model outlines my professional journey to a higher level of my practice as an artist, a teacher and a researcher, and has raised my awareness of the significance of these three roles for the quality of the educational process.

## **7 GENERAL DISCUSSION**

The previous chapter provided an overview of the four articles on which this dissertation is based as well as a comparative discussion of the reported results in the light of the general terms introduced in the theoretical framework of the dissertation. Bearing in mind the analyses and results from the four articles as well as their conclusions and implications for integrated teaching, the goal of this chapter is to summarize and unite them in order to provide answers to the main research question of the dissertation, which would give grounds for drawing conclusions about their practical and theoretical implications. To do this the overview of the results would proceed in the following two directions:

1. Discussion of the implementation of the three basic art-making principles of contemporary art – use of alternative materials, conceptualization and collaboration – to achieve successful integrative teaching of visual arts to primary school students for promoting integrated knowledge construction. Practical pedagogical implications of the implemented methodologies would be offered in the form of a proposal of a three-tier model for contemporary art integration.
2. Discussion of the possibilities for professional teacher development through action research, artistic action research and multi-professional collaboration in view of the pedagogical outcomes from introducing authentic artistic practices and competences into the teaching process.

### **7.1 Introducing contemporary art in visual arts education in after-school clubs for integrated knowledge construction**

The aims of the integrated visual art projects implemented in the empirical parts of each article were to explore in practice different pedagogical aspects of the application of the integrated teaching approach to my visual arts teaching practice. For this reason the projects were developed with specific research questions in mind which stemmed directly from the process of work and flew gradually into the steps of the respective action research cycles.

Article I set the socio-constructivist theoretical perspective as well as the general framework of the research procedures, which were followed throughout all projects and which served as an introduction for implementing the project-based integrated approach to my visual arts teaching. My desire to provide quality visual arts instruction on the primary school level, which is relevant for the postmodern environment we inhabit, inspired me to embark on researching the pedagogical potential of visual arts to encourage the students to construct associative links between different sources of visual and verbal information gained in- and out- of school. So quite naturally I chose to apply and observe the outcomes of introducing the integrated approach to my teaching as a way of producing a beneficial effect on the students' holistic learning process which, as I argued at the beginning, would prepare them to face the challenges of processing and

evaluating the overflow of visual and verbal information they are faced with on a daily basis. Hence, the main aim of this first study was to explore the effects of the application of the integrated project-based approach on the students' integrative learning in the extracurricular after school activities by referring to school- and out-of-school-gained knowledge and experiences. The first two projects developed for this study (*Moomin* and *Space Disco*) explored these two sources of knowledge integration by drawing inspiration from texts, notions and experiences, familiar to the primary students from their *regular school lessons* such as Mathematics (taking measurements, Arithmetics, Geometry), Natural Sciences, Physics, Earth Science, Astronomy, or their *out-of-school life* such as literary works for additional reading, videos, multimedia, museum experience, use of Moomin merchandise, etc.

The results observed in the course of carrying out these first two projects and the conclusions drawn from analyzing the collected data, confirmed the importance of social interaction and knowledge exchange achieved via the integrated presentation of the teaching content. The teacher-facilitated integrated activities in the classroom sparked informal discussions and collaboration which encouraged the students to actively apply their previously acquired knowledge and experiences and to transfer (Riding et al., 1995) them onto new educational situations. Since the same group of students participated in both projects such skills transferability was observed in both the first and the second project (e.g. knowledge about proportions, shapes, resemblance, etc. acquired in the *Moomin* project transferred onto crafting the decorations of the *Space Disco* show; arranging exhibitions of the artworks at the end of each project, etc.). These first two artistic projects can be regarded as positive practical examples of achieving skills transferability by encouraging associative thinking, analysis of diverse visual and verbal information and understanding the complexity of the creative process. This enabled the students to view various pieces of disciplinary school-gained knowledge as a unified whole and facilitated construction of new knowledge that transcended disciplinary boundaries. It was concluded then that, depending on their educational objectives, implementation of such integrative projects in curricular or extracurricular educational settings, has the potential to achieve various degrees of disciplinary integration in the classroom and to inspire skill- and knowledge- transferability.

Since the artistic product from the second project (*Space Disco*), described in Article I, was a stage décor made of recycled and found objects, this use of unconventional materials in the teaching process inspired the next action research cycle. Thus, Article II moved deeper into investigating the integration of knowledge and in order to do so it narrowed its focus to explore the integrative pedagogical potential of those visual art-forms (such as stage décor, installations) which do not fall within traditional genre categories taught at primary school level, and of their material expression. Following the theoretical con-

struct, introduced earlier in this dissertation, about the integrative potential of contemporary art materialization practices, I chose the principles of bricolage, re-contextualization and remediation as suitable authentic contemporary artmaking strategies to initiate the planning and conducting of the next project and to analyse its pedagogical outcomes in order to achieve the goals of the research. In this way, the *Snow Castle* site-specific installation, which was the art product of Project 3, became an example of an integrative art project, specially designed to be interdisciplinary and to draw upon and upgrade the primary students' knowledge and experience gained from other non-artistic school subjects (e.g. Mathematics – Geometry, Algebra, Combinatorics, Nature and the Environment, as well as Literature, Fine Arts, Crafts and Design, Architecture, etc.), and at the same time it incorporated the idea of using unconventional materials and the site-specific environment where the installation was to be displayed.

The results from the *Snow Castle* project (Article II) provided practical evidence to confirm my preliminary ideas reflected in the theoretical part of this dissertation. Namely, that being integrative in their nature, utilizing pedagogically the integrative potential of contemporary art forms materialization provides the art teacher with the opportunity to step out of the traditional artistic techniques and practices, and opens possibilities for integration of multiple sources of information and inspiration into the planning of the art lessons. Putting this particular project into practice demonstrated how the integrative potential of contemporary art forms can be achieved through the introduction of various materials and sites of exhibition inspired by authentic contemporary art creative approaches.

So, following the results and conclusions drawn from this study and based on the theoretical assumptions made above, I would suggest that the first integrative principle for introducing contemporary art into the educational process could be termed *materials-driven integration*. The use of unconventional materials (found packaging materials, polyethylene boards – NEFAB, 2019) in the contemporary art creative process was observed to facilitate higher level of *transdisciplinary* knowledge and skills integration through learning about alternative modes of expression and materials utilization in the art classroom. It raised the students' awareness of innovative creative approaches in visual arts production, offering alternative viewpoints and developing their ability to evaluate and appreciate art. Therefore, I would suggest that the proposed *materials-driven integration* could be used pedagogically as a starting point for planning integrative teaching modules that could serve not only the objectives of visual arts education but could contribute to the smoother integration of other STEAM subjects.

The general conclusions from Article II served as a basis for further exploration of the potential of contemporary art forms to promote knowledge integration in the primary art classroom. Drawing on the teaching and research experience gained from the action research cycle of Project 3 – *Snow Castle* (Article II), the

results of which suggested that introduction of contemporary art can be *materials-driven*, Article III shifted its focus from the formal aspects of art-making to the integrative potential of the complex ideational load that an artistic product carries. In practice, Article III presented the process of conceptual transformation and the materialization of a contemporary art product. The semiotic analysis of the collected written and visual data, generated by the artist-teacher-researcher and the students revealed the specific artistic transformative processes guiding the conceptualization mechanism which led to the structured verbalization of the project's conceptual framework. In this way, by presenting a case of an artist-specific conceptualization for the project, the research conducted for Article III investigated the integrative potential of contemporary art conceptualization, thus, upgrading the theoretical suggestions made in Article II.

On the one hand, by taking inspiration from specific scientific phenomena as a basis for working on the artistic concept development for the *Four Elements* (Project 4), this Article (III) demonstrated in practice that any notion, phenomenon or abstract idea can become a source of artistic inspiration which can be conceptualized and expressed by means of visual arts. This confirms my preliminary theoretical assumption that the diversity of sources for development of contemporary art conceptual frameworks possesses an integrative potential and, if used in the teaching-learning process, can promote knowledge integration and encourage collaborative knowledge construction. This result has implications not only for integrated visual arts teaching but also for developing of STEAM and LTTA projects to promote better understanding of different phenomena by establishing conceptual links between the integrated scientific contents and transforming them from sources of information into sources of inspiration for artistic expression.

In fact, although it was Article III which dealt specifically with the integrative aspect of contemporary art *concept* development, a comparative longitudinal look at the planning and implementation of all art projects included in this dissertation shows the diversity of the sources of inspiration for their conceptual frameworks. Project 1 (Article I) and Project 3 (Article II), for instance were both inspired by literary texts which opened possibilities for integration not only of that previously acquired knowledge but also of knowledge and experience gained from other school subjects and out-of-school experiences. Project 2 (Article I) and Project 4 (Article III and IV) were inspired by non-artistic school subject-specific themes and notions (Physics and Astronomy, and Music for the *Space Disco* Project 2; Nature and the Environment for the *Four Elements* Project 4) which were integrated to fulfil the purposes of the produced visual artwork. In this train of thought, in the conceptualization of all projects, the creative expression gained an upper hand, while the non-artistic concepts integrated within played a supportive role, i.e. they were *subservient* to the visual art work but were still important for the shaping of the artistic concept.

On the other hand, in order to utilize pedagogically any form of contemporary/conceptual art expression and to reveal its integrative potential, for the purposes of this research it was important to gain understanding of the complex transformative conceptualization processes performed prior to the contemporary art form materialization. To achieve this aim, Article III presented a case of artistic conceptualization process and demonstrated an artistic-based approach for teaching concept development by employing *artistic action research* (Jokela, 2008; Räsänen, 2005) as a teaching method. In this article, verbalizing the concept and the decision for its visual expression are presented as a combination of the linguistic act of transforming abstract notions into simple visual images. The semiotic analysis applied here to compare the linguistic and visual data produced by the artist teacher-researcher and the students served as a basis for re-contextualizing (Deuze, 2006) and remediating (Bolter & Grusin, 1999) the linguistic conceptual framework into a material artefact, connoting (Barthes, 1977) meanings and suggesting symbolic interpretations.

The results of Article III showed how the process of artistic conceptualization of a contemporary artwork allowed multi-concept integration, transcending subject boundaries and bringing new creative perspective which broadened the students' ability to place familiar objects and phenomena in an interdisciplinary setting, thus, fostering conceptual relations beyond their traditional contexts. Having defined the integrative potential of the diverse conceptual sources of inspiration as well as the integrative aspects of the subsequent process of artistic conceptualization, gives me grounds to propose the second principle for knowledge integration – *concept-driven integration*.

The planning, implementation and materialization of all these projects and the production of the final artworks would not have been possible without the joint effort of all participants – after-school club leaders, the artist-teacher-researcher and, most importantly, the students, who contributed their ideas to the conceptualization as well as their class work to the materialization of each project. As the theoretical perspective assumed in this dissertation is socio-constructivist, an important integrative element planned by the artist-teacher-researcher, observed during the implementation of the projects and recurrent in the analyses of the results from all stages of the action research was the achievement of collaborative knowledge construction. All projects demonstrated how collaborative knowledge construction happens in the process of work and how it is specifically encouraged by the structural, material and conceptual complexity of the contemporary artworks created by the students. For instance, collaboration with other after-school club leaders started as early as the planning stage of Project 2 (*Space Disco*) and continued up until the end of the last project with the presentation of the *Thunder Cloud* performance in the annual after-school show. The data collected during the implementation and observation stages of the action research cycle of Project 3, shows that the introduction of

contemporary art forms through alternative materials achieved not only the pedagogical objectives of the project to inspire *interdisciplinary* integration in the classroom but also sparked collaboration between the students and the teacher as well as between the students themselves in the problem-solving situations which were triggered by the integrative nature of the contemporary art material expression and emerged naturally during the classwork. In fact, in the collaborative creative processes that unfolded in all projects, the teacher was not just an instructor who overtly provided guidance and ready-made answers to the problems but an active *co-equal* participant, who worked together with the students towards finding solutions.

All these levels of collaboration (between the different after-school clubs and their leaders, between the students and the artist-teacher-researcher, and between the students in the clubs) happened naturally as part of the working process and were inspired by the contemporary art collaborative practice that stemmed from the conceptualized projects. As mentioned in the theoretical part of this dissertation, certain contemporary art forms and practices such as performances, happenings, multi-media installations, site-specific installations, etc., require collaboration in their conceptualization, materialization and presentation which relates them to the socio-constructivist integrated approach, i.e. their collaborative nature carries integrative potential so they can be utilized pedagogically for the purposes of the integrated approach. The collaborative potential of such contemporary art forms was explored in Article IV in detail. The results of this study confirmed my preliminary theoretical assumption that authentic collaborative contemporary art forms and practices can turn into a valuable tool for collaborative knowledge construction for all parties involved in the teaching-learning process. And my journey through all the projects that I implemented together with students and colleagues outlined the third aspect of my model for integrative teaching of visual arts as *collaboration-driven integration*.

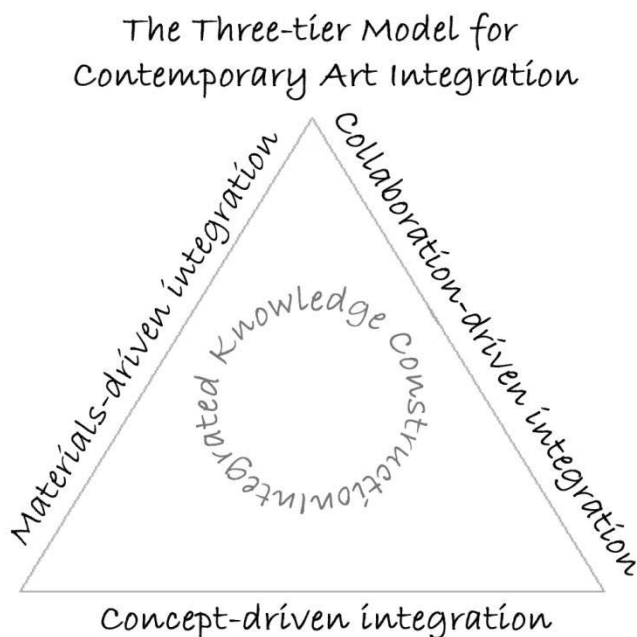
Based on all these assumptions, results and conclusions, I propose a three-tier model of integration of contemporary art forms into the integrative teaching of visual arts and teaching through art. This model is my answer to the main research question posed in this dissertation, namely that the integrative potential of contemporary art forms and practices can be utilized pedagogically to promote knowledge construction through the use of alternative materials, authentic conceptualization processes and collaborative practices, either together or separately. The three aspects of the model can be defined in the following way:

- *Materials-driven integration* is the choice of alternative materials for any contemporary artwork materialization with the aim of guiding the creative process and fostering knowledge integration and collaborative knowledge construction.
- *Concept-driven integration* is the process which takes the students through authentic conceptual framework development of the artistic

project, making the links between disciplinary subjects and visual art more visible and open for discussion and interpretation.

- *Collaboration-driven integration* can occur in the creative process between the participating students, the art teacher and other teaching professionals, and between all of them and the audience when the artwork is presented.

Figure 3 visualizes this model.



**Figure 3.** The three-tier model for contemporary art integration and integration through contemporary art

This three-tier model for contemporary art integration and integration through contemporary art can serve as a pedagogical reference tool for designing *artful* (Chemi, 2014) integrated educational projects with different learning objectives or expected outcomes. The directionality of this integration could be two-way depending on the teaching/learning objectives. The model could be used either *subserviently* to explain other subject content through contemporary art, or *co-equally* to plan and create contemporary artworks in order to raise the awareness of the students about their *affective* and *social* qualities. Various degrees of subject/knowledge integration can be achieved either by taking into account each of the sides of the model separately (such as in Article II through

the use of unconventional, in that case, found materials and by exhibiting the work as an intervention into the school's public space), or as a combination between the different sides of the model (e.g. Article III and Article IV which presented an example of a project's conceptual framework development, its materialization into a physical artefact through bricolaged materials and its collaborative transformation into a performance). The proposed model could provide starting points for structured and theoretically-grounded teacher planning while at the same time it could give the teaching professional the freedom to decide on the specific integrated subject content (e.g. Mathematics plus Art, History plus Art, or any other combination of subject content), the degree to which knowledge and information is integrated (*multi-, inter-, trans-*), the realization of particular integrative teaching styles separately or in combination (*subservient, co-equal, affective* and *social*), as well as the collaborative teaching-learning arrangements.

When combined, the three proposed principles of the integration: *materials-driven* (including the space of exhibiting, the place of materialization or happening of the art event), *concept-driven* and *collaboration-driven* were observed to have the potential to facilitate interdisciplinary and higher-level transdisciplinary knowledge integration, offering the students different perspectives to the creative process concept-development and materialization and opportunities for exploring cross-disciplinary connections, as well as arriving at conclusions about the integrated concepts and phenomena.

## 7.2 Professional development in action

This section of the general discussion offers a close view of the path of professional development of the artist-teacher-researcher. These three roles were performed simultaneously, yet they were clearly distinguishable in the process and were crucial for the outcomes. The process of teacher learning is viewed as a form of transformation enabled by the integrated teaching and the action research applied here, by her personal artistic practice and by the influence of the educational environment which promoted multi-professional collaboration.

The very nature of the *action research* method suggests professional development and upgrading of knowledge in the process of planning, acting, observing and reflecting. For me these steps provided a clear and straightforward structure to all research procedures, calling for close analysis and evaluation of the results in each cycle before proceeding with the next one. The analysis of the collected data after each project (full cycle) allowed me to evaluate the pedagogical outcomes in light of the investigated innovative approaches for integrated art instruction, pinpointing specific issues and asking more questions about the creative educational process. Such analysis provided good grounds for drawing conclusions about the usefulness of the implemented methodologies and brought new awareness of the role of the teacher in the educational process. This process

of asking, researching and reflecting led to enhancement of my teaching practice and influenced the specific theoretical conclusions that stemmed from it, which affected my subsequent work activities. So in terms of my professional development, *action research* as a method encouraged me to learn directly from my practice and allowed me to reflect and theorize about my work, thus, bridging the gap between general theory and specific practice.

Another phase of professional development that had a positive impact on my teaching practice was the application of *artistic action research* as a teaching method which displayed a potential to strengthen knowledge integration. The adoption of *artistic action research* happened in the project *The Four Elements* described in Article III as a result of my search for a practical solution to gain better understanding of the conceptualizing mechanisms behind my own artistic practice, and to transfer that experience onto my visual arts teaching. It was inspired by my belief in the ideas expressed by several other authors (Sullivan, 2005; Thornton, 2013; McArdle & Boldt, 2012; Britzman, 2003) that the imaginative and intellectual work undertaken by artists can be likened to certain research practices and therefore it could be a valid source for generating theory from practice. By stepping on the results from Article II, in Article III I moved on to explore the integrative potential of the contemporary art conceptualization process and my aim was to try and find a suitable artistic-based approach to lead the students through authentic conceptualization and materialization of the collaborative contemporary artwork they were to produce. The overlap of professional identities – an artist, a teacher and a researcher – was an opportunity for strengthening integration by guiding the students through the same authentic transformative conceptualization process I experienced as an artist during the planning stage of the project (Article III). Reflecting upon my creative process connected “the artist and teacher role models in artistic action research” (Räsänen, 2005, p. 61), revealing that in my work as an artist I go through the same steps of planning, action, observation and reflection similar to the action research steps I follow as a researcher. Therefore, *artistic action research* (Jokela, 2008; Räsänen, 2005) was employed as a teaching method at all stages of the pedagogical process. This allowed me to “combine research, pedagogy and the various ways of creating art in a manner that suits the nature and objectives of art education” (Jokela, 2008, p. 233). The results of this study demonstrated in practice the integrative role of the artist-teacher-researcher as a mediator between the students and the authentic artistic conceptualization and materialization. In terms of professional development, this project (Article III) raised my awareness of the integrated competences an artist possesses and the possibilities of applying them in teaching. The practical implementation of my authentic creative process through *artistic action research*, utilized as a teaching tool produced new forms of artistic quality in the classroom by bringing the students closer to authentic creative practices. This realization had a great impact on my

professional learning and transformation. It occurred in the process of work and brought new perspectives to the practical implementation of the integrated teaching approach in the visual arts classroom, which resulted in the conclusion that *artistic action research* is a suitable teaching approach even at primary level, fostering integrative learning.

The third factor that influenced my professional development throughout this research was the *multi-professional collaboration*, discussed earlier in this dissertation in relation to the fruitful results it produced on the integrative teaching-learning process. Here, my focus would shift to discuss the observed co-equal multi-professional collaboration in terms of the opportunities it opened for professional development. Multi-professional collaborations were observed as early as Project 2 (Article I) and throughout the whole research. They first occurred during the annual after-school collaborative discussion sessions, organized to freely brainstorm, discuss and decide on a common topic for the spring show.

The conceptual and structural complexity of the contemporary art performance presented in Article IV, however, was another case of multi-professional collaboration. The contemporary art installation promoted collaborative team work in the classroom between the art teacher and the students, but it also inspired first the colleague of the Textile Art club to join in and contribute to the presentation of the installation (Article IV). In this way, in the process of work and talk the static sound-and-light *Thunder Cloud* installation was transformed into a contemporary performance, which as a *collaborative-driven* practice per se, involved participation of all students, but also required integration of visual arts and crafts, science, performance art (drama) and music for its public presentation. Thus, *collaboration-driven* integration guided the creation of the installation elements and the presentation of the planned contemporary art performance. At this point, the integrative nature of the performance quite naturally sparked multi-professional collaborations between the respective after-school teaching professionals involved in the production of the spring show. As all were working towards a common goal – to put the performance together in the context of the after-school show – these collaborations between me (the visual art teacher), the Textile Arts and Crafts teacher, the Music club teacher, the Dance teacher and the Drama teacher, were all of *co-equal* nature. Moreover, being representatives of different artistic fields each of these professionals contributed their expertise to the creative process, adding to the authenticity and strengthening interdisciplinary integration. This is how “learning [became] a collective endeavor” (Engeström, 2005, p. 67) not only for the students but through collaboration with other professionals in the field of art, for the art teacher as well. So, based on my experience, observations and data analysis of the projects, I would suggest that such multi-professional opportunities for collaboration in the teaching process would have positive outcomes on integrated teaching as they would enable teachers to step out of their subject area, to experiment and learn from the expe-

rience of others, thus offering possibilities for further teacher-training and professional development.

In summary, in this section I viewed my professional development as a form of learning, enquiry and transformation through personal inquiry and multi-professional collaboration. In this process I was not an omniscient narrator of the educational content but a co-creator and collaborator in the on-going integrative art creation. This process of professional growth and awareness as an artist-teacher-researcher had a positive impact on the practical outcomes of the four projects, on the final theoretical conclusions I draw from these results and on the pedagogical implications they offer for integrated teaching of visual arts. Having completed the projects now I have enough evidence to evaluate my journey into professional teacher-researcher growth as a *transdisciplinary* integrative learning opportunity, asking and answering questions that arose directly from the process of work.

## **8 CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

This article-based dissertation reported results and conclusions drawn from practical experimentation with different ways of introducing the integrated teaching approach into the primary after-school visual arts clubs led by the author in her triple role of artist-teacher-researcher. Researchers are usually not in authority to directly interfere in and change curricula but are here to explore current practices and offer suggestions for improvement and possible innovation. In this sense, the aims of this study was to suggest possible ways of upgrading and expanding the integrated teaching methodology in the field of visual arts education by suggesting new ways of facilitating interdisciplinary integration, collaborative knowledge construction and skills transferability. These aims were practically achieved through the introduction of contemporary art forms and practices into the after-school visual art clubs for primary six-to-eight year old students. The integrative potential of certain tendencies in contemporary art-making was justified both theoretically and in practice through the implementation of four integrated art projects, reported in the articles on which the dissertation is based. The specific learning objectives as well as the artistic qualities of the artworks created during the projects implementation explored different aspects of the said integrative potential of contemporary art forms and practices. The particular theoretical assumptions and the idea of utilizing them pedagogically emerged directly from the authentic teaching-learning process and were a consequence of the reflection stages of the applied action research methodology. Specific answers to the research questions set in each article were sought by putting into practice the integrated teaching approach. New theoretical knowledge about the pedagogical usefulness of contemporary art integration into teaching visual arts was produced in the course of carrying out the projects and analyzing the results in order to achieve the broader goals of the dissertation.

This dissertation summarizes the results of each study and reports an overview of the theoretical findings which stemmed directly from the described teaching and research practice. The theoretical background of the dissertation which established a conceptual link between the principles guiding the integrated teaching approach and those of contemporary artmaking practice outlined three aspects of contemporary art forms and practices in view of the integrative qualities they possess: (1) the modes of contemporary art materialization, (2) the sources for conceptual inspiration and the actual process of artistic conceptualization as well as (3) their collaborative nature with a potential to spark team work and *social* integration. The planning and implementation of the artistic projects, the collection and analysis of the data and, finally, finding answers to the specific research questions of each article confirmed the assumption that contemporary art forms and practices can turn into a powerful pedagogical tool

for cross-disciplinary networking (Bautista et al., 2015). They showed their integrative potential for facilitating cross-disciplinary interaction and strengthening integrative teaching, promoting collaborative knowledge construction, nurturing art appreciation in the primary visual art classroom, and reflecting positively on students' development of transversal skills.

Within the socio-constructivist scientific debate and STEAM the results and conclusions from this research contribute to the discussion (e.g. Bautista et al., 2016; Leysath & Bronowski, 2016; Burnard et al., 2017; Gude, 2013) on the possibilities for the practical application of the integrated approach to teaching visual art through the pedagogical adaptation of contemporary art forms and practices. The contemporary art forms and practices, integrated within the projects, were seen as powerful triggers for achieving interdisciplinary understanding, so the final conclusion from all studies is that if adapted pedagogically for the educational aims of the integrated approach, these contemporary art forms can promote integrated knowledge construction through collaboration. The observed integrative complexity of the artworks planned by the teacher and created in *co-equal* collaboration by the students throughout the research, added richness to the integrated contents in terms of the required modalities they incorporated and called for their completion. This multi-modal interdisciplinary integration contributed to enhancing the students' analytical skills, multi-literacy (Räsänen, 2015), transversal skills and integrated knowledge construction (EDUFI, 2016) which are part of the requirements for provision of holistic development and well-being of the students, set in the recommendations of the Finnish National Agency for Education for the provision of after-school activities (EDUFI, 2011) as well as in the reformed National Core Curriculum (EDUFI, 2016).

The results of the separate studies proved that contemporary art forms and practices possess the potential to foster collaboration and knowledge integration that transcend disciplinary boundaries. Based on these findings, the general methodological implications of the research as a whole led to the proposal of a three-tier model for contemporary art integration which can serve the pedagogical purposes of the integrated approach. The model can be used as a starting point in planning integration of contemporary art forms and practices into teaching not only visual arts but also other subjects within STEAM education. In practice, depending on the learning objectives and the aims of those educational professionals to whom the proposed model would be of use, it can become a source of preparing integrated lessons, longer teaching modules (that stretch over several teaching hours), projects, and other visual arts educational programmes (such as LTTA) that aim at achieving integrated knowledge construction. The model can provide structure to the pedagogical planning as well as freedom to define the degree of disciplinary integration (*multi-*, *inter-*, *trans-*). It can also outline the teaching style by which the integrated learning content is introduced depending on the desired outcomes. In Bresler's terms (1995), it can

be *subservient* integration of contemporary art to visualize other scientific content; it can be *co-equal* subject integration which can spark *transdisciplinarity*; it can be *affective* integration focusing on the aesthetic aspects of artmaking, perception and evaluation; and finally it can be *social* to celebrate art within a community. In more general terms, the results and conclusions of this dissertation could contribute to the practical introduction of the integrated teaching approach in visual arts through the use of pedagogically meaningful methods (EDUFI, 2016; Symeonidis & Schwarz, 2016; Mattila & Silander, 2014, p. 17) such as inquiry learning, experiential learning, phenomenon-based learning, problem-based learning, providing an opportunity to design educational integrated programmes and projects that are inspired by authentic artistic processes and that aim at a maximum approximation of actual art-creation experience and real-life interdisciplinary aesthetic practices (Gude, 2013).

The aims of the research to derive theoretical generalizations based on practice required it to be exclusively focused on presenting my artist-teacher-researcher's perspective on the creative and educational processes, and the way I viewed and experienced them. This gave me the opportunity to explore my artistic and teaching approaches thoroughly, to evaluate their development, and to gain awareness of how the artistic personality and the research process are inter-related and can affect positively the pedagogical and theoretical outcomes of the teaching and research process. Narrowing the research to the art teacher's point of view allowed thorough observation, precise data collection and deeper reflection upon the teaching processes and their intended and produced outcomes. The clear research procedures that were followed throughout, however, ensured that the results are reported in an objective manner, and are supported by relevant theoretical and empirical evidence. The researcher and the after-school educators participating in these processes contributed their experience and expertise to the teaching. Their active involvement in the planning and project implementation enriched the collected data and the results. Presented in this way the results can serve as a positive example of an authentic teaching practice that can be of use for professional development of other art educators.

The results of this dissertation show that contemporary art forms and practices cannot be reserved for upper educational levels only (e.g. Tani et al., 2013; Abell, 2002; Bautista, et al., 2015), but though appropriate teacher planning and understanding of their essence, they can be adapted to suit the pedagogical needs of integration on the primary school level as well. Further research into the application of the integrated approach in primary visual art education through contemporary art could contribute to a deeper understanding of the pedagogical benefits of the approach and of the proposed three-tier model for integration. Development and implementation of process-focused, *artful* (Chemi, 2014) *co-equal* curricular designs (Hallmark, 2012), could unfold the possibilities for learning in *collaboration* through artistic expression and cross-disciplinary dis-

covery, turning the teaching-learning process into an engaging creative experience where students solve problems that do not arise from artificially created lesson abstractions but are *transdisciplinary*, emerging from real-life artistic situations.

Finally, the three-tier model for contemporary art integration suggests *how* to broaden “curriculum horizons” by making use of “the new and the contemporary” (Watts et al., 2009, p. 229) in art in order to provide adequate up-to-date visual art instruction that unveils the integrative nature and the complexity of the creative process. The pedagogical application of this model can strengthen the young learners’ abilities for constructing integrated knowledge and can affect positively their aesthetic outlook, which would lead to formation of appropriate criteria for evaluating the aesthetic properties, pleasantness and functionality of their postmodern environment. Thus, introducing the *art of now* to the educational process and utilizing its kaleidoscopic colourfulness to inspire multi-level integrative thinking, fulfils the necessity to educate ‘multi-literate’ (Räsänen, 2015) individuals, equipped with a creativity *toolbox* to remix and remediate knowledge and experience, to think *outside the box*, so as to meet the visual challenges of the postmodern world.

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