Abstract
This study discusses the experiences of young storytellers who make and share digital stories on a social network for pedagogical purposes. In order to produce their work, these students from primary schools in Greece put effort, practice and apply techniques, and convey their messages through series of pedagogical actions. In this way they reveal the dimension of digital story as collage, not only in terms of the media used but also in terms of the sets of shared purposes and decisions needed in the act of storytelling. Also, the fact that digital stories open up the space for collaboration and require multiple implementation stages deepens the level of involvement and increases the degree of ‘authorship’ attributed to the young people. In this way, through purposeful and youth-initiated action the space opens up for creative and innovative pedagogies. Innovative pedagogies aim for discourses that, rather than the improvement of technologies, target the deepening of human reasoning toward critical over descriptive understandings of reality.

Keywords: young people, digital stories, pedagogical purposes

Introduction
Social network activity is a source for engagement for young people nowadays and, as a result, social networks seem to claim their own part in contemporary school pedagogy. This study discusses digital storytelling on a pedagogical social network where young people upload and share stories with peers across classrooms and countries. Social network sites are websites where participants construct a public or semi-public profile within the system and articulate their relationship to other users in a way that is visible to those who are granted permission to access the profile. Nowadays it seems that there is a shift regarding the focus of activity in social networks. No longer is personality the main pole of attraction of a profile; rather, it is the content that gathers the attention needed for interaction to occur among network members (boyd 2010, boyd & Marwick 2011, Marwick & boyd 2011a, 2011b). However, the ways content becomes visible has been disputed, while it is questionable to this point whether and to what degree social network members gain an insight into what is posted, shared and tagged online (Baym and boyd 2012).

Nevertheless, this shift in perspective raises a research interest as storytelling can offer an opportunity for knowledge building on the social media and open up the space for a bidirectional relation to come up. It is not only popular social media activity that feeds into school pedagogy but it is also possible that pedagogical storytelling can influence activity on social networks and lead into more meaningful discourses there in the future. It is therefore important to understand the kind of stories that young people make and share online and the purposes underlying this type of storytelling.
When young people share stories on social networks for pedagogy they publish textual or image-based content and participate in image or text-based discussions by posting and exchanging comments. As the young storytellers need to coordinate multiple technologies in order to address pedagogical purposes, the digital story serves similar purposes as well. It is therefore a pedagogical digital story (Vivitsou et al. 2014). This one, however, breaks away from what we consider as student work to date. Not only is the medium different (from paper and pencil to computers, mobile devices and software) now. The code of communication shifts from language to a spectrum of non-linguistic signs expressed, for instance, through angles of shooting, camera movements, facial expressions, gestures and so on. Student work, in this way, becomes, rather than one piece, a collage of text, technique and labor with technologies that perform in concert in order to convey the young people’s message. In this sense, digital stories as student work convey the young storytellers’ pedagogical purposes (Vivitsou et al. 2015).

Based on these, this study discusses the pedagogical story as collage, not only in terms of the media used but also through the lens of purposes and decisions underlying young people’s storytelling. Within this perspective, the fact that digital stories allow for collaboration and require multiple implementation stages deepens the degree of involvement and thus increases the degree of ‘authorship’ attributed to the young people. While teachers in the traditional school have so far provided the student with the tools (e.g., diagrams, formulas and so on) necessary for studying and planning, digital storytelling work allows the student to build upon the basics drawn from teacher-led purposefulness.

In this way, the possibility increases that the student comes up with her own purposefulness and thus become a more autonomous learner, working in collaboration with peers. At the same time, by being the representation of the young ‘author’s’ intentions, the digital story becomes more of an artifact (Thomasson 2007) rather than merely a piece of schoolwork.

For the sake of this paper, we place the focus of the analysis on young adolescent student interviews and digital stories shared on a web-based experimental platform (Mobile Video Experience, MoViE) where these pieces of work were uploaded. We will do so in order to seek responses to the research questions asking what digital stories are like and what student purposes underlie the stories.

**Pedagogical purposes in digital storytelling**

In this study we discuss the digital story as collage, not only in terms of the media used but also through the lens of purposes and decisions underlying young people’s storytelling. Within this perspective, the fact that stories allow for collaboration and require multiple implementation stages expands involvement and thus increases the degree of ‘authorship’ attributed to the young people (Vivitsou et al. 2015). While teachers in the traditional school have so far provided the student with the tools (e.g., diagrams, formulas and so on) necessary for studying and planning, digital storytelling work allows the student to build upon the basics drawn from teacher-led purposefulness. As the study draws insight from interventions applied in Greek primary schools where the young people make and share stories with peers on a Web-based environment, we view the latter as a pedagogical social network and the story as pedagogical digital story (Vivitsou et al. 2014).
Social media have created spaces where young people create, publish image-based content and participate in image or text-based discussions. The increasing appearances of video-sharing sites and photo-sharing sites on the Web and the fact that popular social networks nowadays support and encourage moving and still image transmission and sharing indicates a fundamental shift for human social communication. No longer is the perception of the world exclusively ‘word-ly’. This focus on visuals gives way to communication with semiotic systems that bring movement and change forward, and convey messages that are not language-based, either exclusively or mainly. What is displayed on the screen is more than a piece of mechanism that moves and speaks in sounds or silences. It is a performance, a representation of an event that speaks in signs and progresses in relation to a certain plot so that it can finally, when released, or uploaded, claim visibility and, thus, interpretation. It is, therefore, stories that participants in video and photo-sharing sites broadcast and communicate. And it is the action of storytellers that these stories communicate.

New perspectives of storytelling through social media emerge nowadays. Among others, these include shifts in the way the stories are structured, the location of the speaker and the audience in time and space and the way the stories are distributed and accessed. This is due to the fact that storytelling is intertwined with factors such as form (that can range from, for instance, confessional disclosures to documentaries), multimodal practice, movement (i.e., moving away for the professional privilege to amateur/user-generated artifacts), and a textual system (i.e., in terms of format and distribution) (Hartley and McWilliam 2009, p. 5). Nowadays, therefore, the act of storytelling with digital technologies ties the storyteller with the world.

It seems natural therefore that social networking and telling stories on video-sharing sites claim their own part in school pedagogy. As a result, digital storytelling can be a form of pedagogical action. Can however any kind of social network activity serve the purposes of pedagogy? Being tied with profile updates (Baym & boyd 2012, boyd 2008), discourse on social networks is bound to the here and now of the post and bears the characteristic of spoken interaction. Although it makes sense, it is limited by the narrowness of reference that characterizes the spoken interaction. Therefore, the communicative act on social networks is basically situational and, as such, lacks the practice and elaboration necessary for the production of an artifact or work of discourse. Pedagogical action, in addition to situational discourse, targets the kind of knowledge building that allows the young person to transcend into more mature levels of consciousness by investing time and effort in the production of work that enables a deeper insight into the world and reality (Sokolowski 2000). Such pedagogy opens up the space for the young person to take initiative and act (Vivitsou & Viitanen 2015).

In this scenario the young person tells the story, gives and keeps promises, argues and negotiates, and thus co-constructs the narrative in the pedagogical action. This narrative takes the shape of a piece of work, be it an assignment, a mathematical formula, a chemical experiment or a painting. In all cases, the young person applies techniques and labors toward the production of meaningful work that is the expression of the intentions of its maker. In this sense, the production also tells the story of the purposes of its maker. As these manifest in a space of formal learning, it goes without saying that these are pedagogical purposes.

From a pedagogical perspective, digital storytelling creates the space for young people to
activate capacities for communication by making use of digital technologies in concert in order to make, upload and share on the network the story of a science experiment, the solution to a math problem, what lies between two historical events or the cruelty of animal testing. In their discussion Niemi et al. (2014) view these capacities comprehensively and stress out the pedagogical significance of digital storytelling in teaching 21st century skills. Beyond practical considerations emerging out of the need to design practice and relevant tasks and activities, studies on storytelling (e.g., Hull et al 2006) also discuss its contribution to identity development and personality shaping. Others (e.g. Robin 2008) indicate the usefulness of telling stories as an expansion of teachers' methodological toolkit. Findings of studies where digital storytelling is the background teaching method indicate that it can cater for the representation of the agentive self (Hull and Katz, 2006); the construction of narratives of self, family and community (Hull, Kenney, Marple, & Forsman-Schneider 2006); and for self-presentation (Nelson, Hull & Roche-Smith 2008) and making meaning through symbolic means and subject matters. Other studies discuss storytelling as a narrative literacy that can convey the emotional states of characters and authors by shifting modes of expression (Yang 2012), and as means for marginalized teens (Snell 2012) or adults (Vivienne & Burgess 2012) to manage difference in online discussions about the self and others.

Based on insights from the literature, this study discusses storytelling as a possible opportunity to open up ways toward innovative pedagogical genres by generating discourses that allow young people articulate own perspectives. A genre is a device that incorporates sets of actions (Fairclough 2014, p. 380) to generate socio-historically defined communication (Maingueneau 2014, p. 149). Given that all action is purposeful (Ricoeur 1991), in addition to pedagogical methodology, storytelling is a way of acting with purpose. Being a collaborative experience, storytelling is the story of who 'we' are and, thus, requires sets of shared purposes. As the latter are not observable (Swayles 2014), our purposes become externalizable through our actions. In order to create meaningful stories then, the young storytellers need to put effort, apply certain techniques and work toward the production of artifacts as works of discourse that combine spoken and written interaction and are inscribed digitally through cinematographic codes. To do so, the youth need to act in such ways that allow them to put the story together by working through the syntax of the story and position themselves toward the peers by making judgments with regard to, for instance, the content, while, at the same time, they display an awareness of the audience on the social network.

It is these dimensions of storytelling with digital technologies that this study departs to examine. To this end, we will look into the types of stories that emerge out of student work and the purposes underlying the digital storytelling experience.

The study: aims, methods and participants
This qualitative study draws from a broader research project (Finnable 2020-Boundless Classroom) that ran in 2012 by CICERO Learning Network, research unit of the University of Helsinki, with the aim to investigate the integration of mobile and connective technologies into pedagogical practices with digital storytelling as background methodology. To this end, project design and activities interconnected teachers and students from diverse educational environments in primary and secondary education in Finland, Greece and California. The stories were shared with connected peers across countries and classrooms on a Web-based experimental connective
platform (Mobile Video Experience, MoViE) hosted on the server of the University of Helsinki. Overall, the implementation of project activities ended in December 2012.

In this study we discuss and analyze the storytelling experiences of young adolescent students (8 & 12 year-olds) from four primary schools (one 3rd Grade and three 6th Grades) in Greece. Overall, 80 students (School 1= 19, School 2= 21, School 3= 18, School 4= 22) from urban areas in Athens and Thessaloniki participated in the Boundless classroom experience. Of them, 32 sat interviews where they discussed their views and what the pedagogical experience meant to them in eight groups of four.

Through the analysis of the content of student work and interviews, in this paper we depart to seek responses to the research questions asking what digital stories are like and what purposes underlie student storytelling actions. In order to meet the study aims and get a deeper insight into the digital storytelling experience, we look into how the content of stories shapes up in relation to young people’s views of aspects of the storytelling work. To this end, the focus of discussion and analysis is placed on four student stories that draw from history and mythology.

**Findings**

*Context and content in digital storytelling*

During the storytelling experience the students work collaboratively in pairs or small groups in order to plan and coordinate the activities. As the project kicks off early in the school year (October 2012), there are differences in terms of, for instance, establishing a collaborative culture, as methodological orientations vary from one situation to the other. Insights from classroom observations reveal that more teacher-centered, less collaboration-based methodologies harden the digital storytelling integration. In our case, the progress and rate of storytelling production seems to be associated with this variance. Also, the age of students seems to play a role. Thus, as is the case of School 3, the 8-year-olds come up with a smaller number of stories than their 12-year old peers.

The basic orientation, however, aims for an authentic experience and, thus, the overall research design seeks to enable an as unobtrusive investigation as possible by respecting the growth pace and development of the students and the singularity of each classroom. The research, therefore, is more of a pedagogical intervention than an experiment. Despite differences, all cases go through a pre-production, a main production and a post-production stage. At pre-production it is usually the teacher who sets the scene, introduces technologies and establishes a collaborative pattern. Main production is where student activity is more visible when designing, shooting and editing the story. At post-production the story is uploaded, shared with connected peers and possibly remixed. Although the characteristics of the stages are not discussed in detail here, the insights in this study mainly draw from the main production phase.

Taken together, the students in the study shared 21 stories in online groups of connected peers from Finland and California. All schools contribute to groups with Finnish and Californian peers but School 4 where the students interact with Californians only. Out of the total number, 12 stories attracted the connected peers’ attention and received comments mainly acknowledging storyline choices and content delivery. Online interaction seems to have re-directed the initial teacher-set storytelling planning. In addition to stories that aim to enable alternative versions of,
for instance, the myth of Europe (School 1 & 2), students put forward own ideas and film digital stories that aim to introduce themselves to peers, present traditions and so on.

As table 1 below shows, the stories present instances of the young people's lives in the school and the home city (e.g., Sch-3, daily activities & Sch-4, daily life), introduce the peers to cultural elements and traditions (e.g., Christmas carols and cookies from Greece) and deal with the enactment of two ancient myths (Sch-1, 2 & 3, the myth of Persephone and the myth of Europe). Some of the topics draw directly from the official curriculum of studies (e.g., the myth of Persephone aims to build upon the phenomenon of season alternation around the year); some others are designed along the lines of flexible curricula issued for primary schools (e.g., the local museum). Finally, where underlying purposefulness does not become clear possibly due to the fact that they were meant to be part of a thematic series or remixes that, for some reason, did not happen, stories are labeled as ‘Uncategorized’.

<table>
<thead>
<tr>
<th></th>
<th>Self-presentation</th>
<th>Life and culture</th>
<th>History &amp; mythology</th>
<th>Uncategorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sch-1</td>
<td>Introducing ST1- 6th grade of X school [changed for anonymity] We introduce ourselves A few things about us</td>
<td>Christmas carols and cookies from Greece!</td>
<td>Europe, the birth of Euro</td>
<td>Geography competition Testing A board game after Christmas</td>
</tr>
<tr>
<td>Sch-2</td>
<td>Welcome to Movie &quot;Me lene...&quot; = &quot;My name is.... &quot; in Greek</td>
<td>Wishes from St2 Thessaloniki</td>
<td>The myth of Europe</td>
<td>Svourozalistiri</td>
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<tr>
<td>Sch-3</td>
<td>Greek Christmas Carols Daily activities</td>
<td></td>
<td>The myth of Persephone</td>
<td></td>
</tr>
<tr>
<td>Sch-4</td>
<td>Just saying hello</td>
<td>Daily life!!! Programs and books On the way to school</td>
<td></td>
<td>Local museum</td>
</tr>
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Types of digital stories
Overall, it seems that two major categories emerge out of student effort to portray themes from life and studies. Stories that deal with self-representations fall within a descriptive genre with videos and clips that use a static camera (e.g., Welcome to Movie) and mainly long shots (e.g., Me lene...), while they serve as pedagogical icebreakers. Teacher presence is marked here in shooting scenes (e.g., Just saying hello-school 4) or acting (e.g., Me lene...-school 2). However, in the story telling A few things about us (school 1) filmic practice shifts the focus of presentation of students from classroom, as displayed in the Introducing ST1 (school 1), to the group level, in a series of remixed clips aiming to present an English version of the latter. Students publish this version to address the international audience one month following the version in Greek. In the former, while the audience broadens, close-ups reveal less and less context with the camera focus placed on the ‘actors’.

Another category involves stories that draw from history and mythology. Although the local museum was produced as part of flexible zone activities, thematic and filmic practices allow for a longer, more complex narrative to shape up. The museum (school 4) contrasts the fictional character of the myths (school 1, 2 and 3); however, we view the stories as part of one category, as student effort to construct a plot to hold the narrative together is visible in all four of them. In addition, the stories in this category are kin to, for instance, Christmas carols and cookies displaying aspects of life and culture in Greece. However, while the life and culture stories focus
on ‘how’ things are done that attributes a descriptive character to them, the *history and mythology* stories depart to respond to the question asking ‘what (e.g., the myth, the museum etc. is) about’.

To this end, the *local museum* kicks off from natural surroundings to introduce the students-authors’ and the object of study. The video is subtitled and storytelling includes moving and static remixed clips, being the chosen representatives of authorial work. The camera here pays attention to draw a comprehensive picture of the museum location and its exhibits. As there is no evidence of human presence, it looks like the sole inhabitants of the museum are the relics of the past. These are, at the same time, the significant heritage to the present.

An alternative approach to respond to the ‘what’ question is taken in the *Euro, the birth of Europe* (school 1). Here, two narrators support action with scripts communicating the message to the international network of peers using English subtitles, in addition to the Greek-speaking audience. Dramatization techniques, such as facial expressions and body movements are also efforts to free the communication of meaning from language barriers. The storyline is built on three main characters: Zeus, Europe and the people. Instead of transforming into a bull, the modern version requires that the god becomes angel and falls in love with the heartless princess Europe. The angel flees with his beloved to a far off place where Europe’s consciousness matures enough to show compassion to the poor. In this process, the euro is born out of Europe’s tears. The *myth of Europe* (school 2) follows similar patterns in terms of filmic practices (e.g., shooting indoors, moving camera) and narrative action (e.g., narrator, actors, the use of a map for location reference) but the fact that subtitles are lacking and the ending is abrupt signals that the story remains incomplete.

The *myth of Persephone* (school 3) tells the story of an ever falling in love Zeus, this time with Persephone, the daughter of goddess Demetra. In this way the topic of round the year alternating seasons comes up and an explanation of the natural phenomenon as dependent on the whims of the divine. To overcome language issues arising from the fact that the eight-year-old students have just been introduced into the learning of English as L2, the filmic practice of alternating text slides with action shots, thus mimicking silent movie logic, is used. As with *the birth of Euro*, both dramatization and text play an important part in message communication. As do cultural objects, such as Demetra’s black clothes signaling the goddess is mourning for the loss of her daughter.

**Student purposes in digital storytelling**

The obvious reason underlying student action is to tell stories about history and mythology. However, student talk reveals that the more the experience unfolds, the more varied young storytellers’ purposefulness becomes. Thus, while the collaborative storytelling experience kick-off happens mainly due to teacher initiative, the students take action in order to find the way around in the new situation and work together toward meaningful productions. The female students telling the museum story stress out how working with digital stories opens up the opportunity for friendship and bonds with one another grow deeper. As one of them (School 4) argues,

*We discovered our ideas and way of thinking, S1-12f (= Student 1, 12 years old, female)*
What the student actually speaks is to the complexity of the multimodal experience in terms of both digital skills and the structure of content. By elaborating on content, the young storytellers not only need to attribute syntax to the story. They also need to add coherence to it by looking into scenes as wholes, not just as units that they put together in order to practice, for instance, a grammatical phenomenon in isolation. To achieve this end, they need to make how they think about the making of the scene explicit.

Collaboration, however, is not unproblematic. As this 3rd grader from School 3 admits,

*I had similar problems..., some students couldn’t stop talking and that did not really help with the filming. S2-8m*

It is a different thing to work out ways to reach your goals from having to rely on the teacher as mediating figure, to ease things out. A joint code of ethics has to be set. One important aspect of collaboration seems for young people to be the development of ways that enable them to position themselves toward their peers and create the spaces where the externalization of shared purposes is possible. Acting to satisfy the needs of building up the story offers this space. In order to put the parts of the work together, the students gradually discover the rules that govern the construction of the story. For instance, they need a scenario, digital devices to shoot scenes, upload and share with peers. It turns out that the script is not always good enough, that the angle or zoom does not speak to the situation, that they need to put ideas together and make joint decisions for improvement. To do so, they need to revise again and again. As this 6th grader from School 1 argues,

*First we rehearsed 5 or 6 times and checked for flaws, so that we could direct our focus. Then we shot the scenes and we made joint decisions if we thought that more changes were needed. An idea was put on the table and if we did not agree, then we did not use it. We voted for or against. S3-12m*

In order to make sense, the story should have some kind of structure and a degree of emplotment. However, although structured stories do come up, student talk seems to calibrate upon the technical part of meaning making rather than the sense making itself. Thus, students from the four schools stress the need to, among others, manage software, download, edit and convert videos, add subtitles, transfer from camera to computer and so on. But the talk becomes less marked when it comes to the discussion of plot enrichment. At this point, language issues come up when the museum storytellers explain how vocabulary in English gets broader in the effort to translate subtitles. This is one way to bring forward the awareness of addressing an international network within a space of dynamic exchange where performers and audience alternate roles. Watching the peers’ stories is another. As these students (School 4) talking about connected peers point out,

*They had faith in what they were doing S4-12f
Children there [i.e., in California] are so lively! I mean their acting was so realistic! They really enjoyed making the films! S1-12f*
Evidently, social and network interaction are essential aspects of the experience with language and digital skill being positively associated with telling stories online for learning. As the authors of the *birth of euro* add, thus corroborating the *museum* storytellers’ view, dramatization is an upcoming attribute. This, however, can be taken as overstatement (e.g., when *Persephone’s* storytellers argue that it was too much for Demetra to cry out for losing her daughter). While student talk is overwhelmed with technology learning and use, it is not exhausted there. There are also instances where students present their views of content as information retrievable from the Internet (e.g., the *museum* storytellers), as information with several aspects being revealed through a variety of resources (e.g., the *myth of Persephone* storytellers) and as basis where they can build their own version of the story (e.g., the *birth of euro* storytellers).

Overall, the start point seems to have been based on the willingness of the young people to use digital technologies for communication and learning. It turns out later that it takes responsibility to get there and produce a meaningful story. Certainly, the medium is a strong driver for involvement; and yet, it is clear that effort and labor are necessary for initial excitement to transform into deeper, purposeful involvement.

**Discussion & conclusions**

The discussion and analysis of storytelling on a social network for pedagogy reveals the complex nature of student work when the target is to produce meaningful outcomes through action. This entails not only the application of skills and techniques but also the creative practice of reasoning at multiple levels. This complexity allows the story makers’ intentions to come up, promotes autonomy in learning and elevates schoolwork as artifact. Most importantly, the stories, being the expressions of the young storytellers' purposes, challenge the established view of the student as recipient of knowledge. At the same time, the view of the student as architect of her own learning seems to emerge. In this sense, the stories are manifestations of the young people's initiative to act for change (Vivitsou & Viitanen 2015) and speak to what creative pedagogies in the school should be like.

Creative pedagogies should allow students to articulate their thinking by developing discourses that place reality in context rather than paint a neutral picture of the world (Freire 2005). In such settings the young people take the role of actants who build knowledge by setting codes of ethics that make working in togetherness feasible. The findings of this research experience provide evidence that young people take the opportunity and work for meaningful discourses when the space opens up in the school everydayness. The digital storytelling experience, however, also reflects the situation that generates it. Thus, young students mainly come up with descriptive genres that project a rather utilitarian view of reality, such as manuals or brochures bring forward. The story of a museum, for example, entails more than the display of its exhibits or surroundings. Museums enliven the world's’ history and understanding history is a lot more profound goal than showing excavation findings advertising culture. These findings played a role and carried certain meanings for the people and the lives they lived at that time. It is the task of public education and the school to bring these meanings into light rather than act as marketer of cultural heritage.

Other stories (i.e., the *birth of euro*) go bolder and adopt a more critical stance when students discuss, for example, the effects of the current financial crisis and austerity in the enactment of the myth. It takes, however, systematic effort to establish innovative pedagogies as current
educational reality rather than appearing as sporadic, circumstantial events. Such innovative pedagogies aim, rather than toward the advancement of technology, for the betterness of the individual, the school and the society overall.

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In memory of the dear friend and colleague S. T.

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