

Using Autobiographical Digital Storytelling for the Integration of a Foreign Student in the School Environment. A Case Study

Emmanuel Fokides
University of the Aegean, Rhodes, Greece

Fokides@aegean.gr

Abstract

Immigrant students face a multitude of problems, among which are poor social adaptation and school integration. On the other hand, although digital narrations are widely used in education, they are rarely used for aiding students or for the resolution of complex problems. This study exploits the potential of digital narrations towards this end, by examining how the development and presentation of an autobiographical digital narration can assist immigrant students in overcoming their adaptation difficulties. For that matter, a female student presenting substantial problems was selected as the study's subject. Data was collected from all the participating parties (subject, teacher, classmates) using a variety of tools, before, during, and after the intervention. It was found that through the digital narration she was able to externalize her thoughts and feelings and this, in turn, helped her in achieving a smoother integration in the school environment. In addition, the attitudes and perceptions of the other students for their foreign classmate were positively influenced. The intervention was short in duration and it did not require special settings. Hence, it can be easily applied and educators can consider using similar interventions. On the other hand, further research is recommended to establish the generalizability of the study's findings.

Keywords: digital storytelling, autobiographical narration, school integration, immigrant student, intercultural education

Introduction

Immigration is a global socio-cultural phenomenon affecting the lives of millions of people. In recent months, Europe is witnessing an unprecedented surge of hundreds of thousands of refugees, coming from Syria, that add to the already increased flow of refugees and immigrants from Northern Africa and the Middle East. Eventually, the majority of these people will settle in various European countries and start anew. Given that, sooner or later, they will overcome their immediate problems, the next step is to integrate into the host societies. There lies a potential problem. Their habits, religion, and culture are quite different from that of the European people. It is questionable how well they will integrate, if they will want to integrate, and if the host societies will welcome them since there is already evidence of xenophobic reactions in some countries. In the light of the above, educational

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systems that are not capable of meeting the needs of multicultural societies, such as the Greek one (Skourtou, Vratsalis, & Govaris, 2004), are going to be put under pressure.

Various forms of storytelling have been used on several occasions in the educational process. Through storytelling, teachers are able to pleasantly transfer knowledge to students, using narratives, metaphors, and an enriched vocabulary, engaging listeners and stimulating their feelings and imagination. Nowadays, thanks to the rapid evolution of technology, storytelling has become digital. Digital storytelling is the blending of conventional storytelling together with multimedia elements and it is considered a valuable tool in both formal and informal education.

While extensive research has been conducted on the educational benefits when using digital storytelling, far less research has been conducted on examining the potential of this tool in other areas where the main objective is not some form of knowledge acquisition. Such areas are the resolution of complex problems and aiding or counseling students. The underlying philosophy of such uses is that digital storytelling can be a good method for documenting personal experiences, that it can be a form of narrative therapy, and that it can help students to discover parts of their personality (Sawyer & Willis, 2011).

Reasonably enough, one might consider using digital storytelling to achieve a smoother integration of immigrant students in the school environment. This is the scope of the study which focuses on the autobiographical digital narration of an immigrant student and how this technique contributed to (a) improving her self-image and achieving a smoother integration in the school environment and (b) changing the attitudes and perceptions of the other students for their foreign classmate.

The paper is organized as follows. First, a brief review of the literature and background information on the situation in Greece regarding the school integration of immigrant students is described, followed by a brief review of the literature regarding digital storytelling in education. Next, the research rationale and methodology are presented followed by results. Subsequently, results are discussed and the conclusion completes the work.

School Integration of Immigrants. A Brief Presentation of the Situation in Greece

The Greek society acquired multicultural characteristics during the '80s, through the repatriation of foreign citizens but of Greek origin and through a mass influx of economic immigrants that started around 1990. During the '90s, the economic immigrants were citizens from the neighboring countries, while during the last decade they mostly come from Asian and African countries. According to the Census of 2011 (Hellenic Statistical Authority, 2011), immigrant students in the first two levels of education were 132,490 out of 1,280,280 (10.35%).

Immigrant students face a variety of problems and school drop-out is common (Rouseas & Vretakou, 2007). Insufficient knowledge of the Greek language and, consequently, low performance in language lessons is a major problem (Retali, 2013). As for the rest of the courses, there is a mixed picture; some suggest that in all of them immigrants are having significantly lower performance compared to Greek students (e.g., Georgogiannis & Bobaridou, 2002), while others suggest that in mathematics and in science lessons the differences are less significant (e.g., Tzortzopoulou & Kotzamani, 2008).

Children face an additional problem, apart from learning Greek. They have to familiarize themselves with the content of the courses, which is adapted to the natives' background and everyday life. Bilingualism, in the sense of another language at school and another at home, is experienced as a negative phenomenon and delays their integration (Damanakis, 2002). Relationships with the

teachers and the other students are mostly superficial, while cases of direct or indirect racial discrimination do exist (Tzortzopoulou & Kotzamani, 2008).

Social integration, among other things, is the process of forming good connections – individually and collectively – between immigrants and the population of the host country (Kassimi, 2005). To achieve that, schools, as part of the society, have to be based on justice and equality (Auernheimer, 2001). That being said, it is necessary to change them, if they treat foreign students as de facto poor school performers and a “burden” for teachers (Pantazis, 2005). To some extent, this is what is done by the Greek educational system, because it seems that it cannot assimilate immigrants well or respect and preserve their cultural diversity (Skourtou et al., 2004). Evidently, little has been done to rectify the situation (Kassimi, 2005). Although the state had time to organize and implement an intercultural school that takes into account the sociocultural differences and that promotes multilingualism, it largely retains its unilateral orientation, as it is structured to address only the needs of the Greek students (Georgogiannis & Bobaridou, 2002).

On the positive side, reception and tutoring classes were established, providing intense courses in the Greek language to newcomers. In addition, training seminars for teachers were held, since they feel insecure in terms of teaching students from other countries (Tzortzopoulou & Kotzamani, 2008). Finally, support from psychologists and social workers is provided, but it is not a generalized action.

Narration and Digital Storytelling in Education

Narration can be defined as the “communicative act in which a chain of happenings is meaningfully structured and transmitted in a particular medium and from a particular point of view” (Hühn & Sommer, 2012). More simply put, it is the art of telling a story to an audience in order to convey important messages. Stories have been used ad nauseam and throughout human existence, mainly because of their ability to create feelings and emotions in both the narrator and the listener. Through the composition and through the narration of a story, the narrator can externalize and communicate his feelings to the audience. Also, a story can create such a strong listener’s emotional participation that he (sometimes) identifies himself with a character of the story. So, through the narration, the listener also manages and communicates with his feelings (Papagiorgis, 1983). Information and communication technologies transformed traditional storytelling to digital. Digital narratives are a combination of conventional oral or written storytelling with multimedia and hypermedia elements and, through this process, the written or the oral text is enhanced (Lathem, 2005). Most digital stories are produced using cheap or free software (Lambert, 2002). They usually are personal narratives, because the autobiographical element is strong (Anderson, 2010).

Narrations, either digital or conventional, constitute a useful tool in the hands of the teacher. They cause the keen interest of students and, apparently, this helps them to easily consolidate and assimilate information (Coventry, 2008). Narrations also increase the oral and written skills, reinforce critical thinking and the ability to analyze and synthesize information (Ohler, 2006). Finally, they can contribute to the effectiveness of the educational process by formulating a friendly and pleasant educational environment (Gersie, 1992). When it comes to digital narratives, they are in line with modern educational settings that focus on providing learners with the skills to meet the needs of today’s media-rich environments (Riesland, 2005), providing students with a strong foundation in what is called the “21st century skills” (Trilling & Fadel, 2009). The impetus for students to obtain such literacy skills is facilitated by their active participation in the process of creating digital stories. As they do so, pupils develop improved communication skills, because they learn to ask questions, to organize ideas, to express their views, and to make meaningful narratives (Robin, 2006). Digital narratives also enhance the efficient visualization of thoughts (Regan, 2008). Students learn to voice criticism of their own work and of the work of others, facili-

tating social learning and emotional intelligence (Robin, 2008a). When the stories are posted on the Internet, readers, viewers, listeners, as well as the authors of the story, can form an active community, exchanging views and ideas, (McGee, 2014).

Digital narratives demonstrate interesting advantages in classes that have or consist of students from different racial and ethnic backgrounds because it is a social pedagogy which produces a safe and empowering foundation for intercultural cooperation and learning (Benmayor, 2008). On one hand, they can be used so that immigrant students can acquire literacy skills (e.g., Emert, 2013, 2014). On the other hand, they can be used so that immigrants (or refugees) can express their feelings, provide information about their personal lives, and record their experiences. These are all very useful information for educators, but also for any other professional who works with immigrants (Lenette, Cox, & Brough, 2013).

Rationale and Research Methodology

Though there is a noteworthy scientific interest in the uses of digital stories in education, the focus is on the learning results they yield or on the skills they foster. Disproportionally few are the studies examining the contribution of this tool for better intercultural understanding or for the integration and adaptation of immigrants. Most of them have been conducted on secondary and higher education (e.g., Benick, 2012; Benmayor, 2008) or in a non-educational frame (e.g., Lenette et al., 2013; Sawhney, 2009). Studies conducted in primary education are even more sparse (e.g., Bautista Garcia-Vera, 2012).

Furthermore, digital stories are commonly used just as narrative inquiries or for narrative analyses. Less often immigrants' stories are told unfiltered in order to start an intercultural dialogue (e.g., Harvey & Robinson, 2012). On the other hand, it is known that the discussion of a narrative promotes mutual understanding between students (Caine, 2010). In the context of an intercultural dialogue through digital storytelling, viewers/listeners are benefiting by having a better understanding of the author's experiences (Lenette et al., 2013).

Narratives present an even more interesting potential. Psychotherapy recognized the power of stories as therapeutic means decades ago (White & Epston, 1990). It can be argued that an autobiographical narrative is a form of psychological intervention (Rosenthal, 2003). When it comes to digital narratives created by immigrants, a number of negative elements emerge: cultural differences, loneliness, nostalgia for the homeland, the feeling of being a stranger, and isolation (Benick, 2012). However, positive elements, such as the opportunity of a better life or starting new relationships, are also noted. What is of interest is that by sharing their stories, the authors feel satisfaction and confidence, as well as the sense of recognition among the people of their immediate surroundings (Sawhney, 2009).

From the above, three key points become evident with regard to digital storytelling: (a) it is still in its infant stage as a tool for achieving a smoother integration of primary school immigrant students in the school environment, (b) it has the potential to initiate an intercultural dialogue and to help others in having a better understanding of the author's experiences, and (c) it can act as a form of psychotherapy and immigrants can benefit by externalizing their thoughts and feelings. These points were the spur for the present study and the following research questions were set:

- How can autobiographical digital storytelling help primary school immigrant students overcome their adaptation problems?
- How can the above tool help in changing the attitudes and perceptions of other students for their foreigner classmates?

For examining the above, an intervention was designed. The central idea was to ask immigrant students to develop and present to their classmates an autobiographical digital narrative, high-

lighting their thoughts and feelings on their past (before immigrating) and present situation (after settling in to a new country).

The research was to take place in Rhodes, Greece. Rhodes is a relatively small city (population around eighty thousand), but a very popular tourist destination. Also, the number of economic immigrants is relatively small compared to other Greek cities, but still considerable. Most of them are from the neighboring countries, permanent residents of Rhodes for over a decade, and working in the tourism industry (Hellenic Statistical Authority, 2011). An increasing number of immigrants from Asian and African countries is also present. Due to the above, locals are familiarized with the presence of foreigners and thereof one might assert that Rhodes is a multicultural society.

The subject(s) of the study had to be a primary school student(s), of recent migration to Greece, having significant adaptation problems. For that matter, there was an initial round of contacts with the city's primary school headmasters and a list of potential study's subjects was produced. This was followed by a round of interviews with the teachers of the candidate subjects. At the end of this procedure, a female student was selected that suited the research's needs. All the other candidates had to be excluded because they did not present significant adaptation problems and/or their most significant problem was just poor school performance. On the other hand, the subject presented a number of interesting characteristics:

- Her family came to Rhodes in late 2013, from the Dominican Republic. There are no other immigrants from this country or from the neighboring countries. Contrary to other ethnic groups that have a strong presence in the city (e.g., Albanians), her family could not seek support from relatives, friends, or any other compatriot during their first months of settlement in Greece.
- The student's age by that time was twelve. The school board decided that she had to attend the primary school's last grade. It was also decided that she had to attend the reception class, for the first two school hours each day, so as to learn Greek. Later on, it was decided that she had to attend the tutoring class too because she faced learning difficulties. As a result, most of her time at school was spent not in the regular classroom, but in another one, either by herself and the tutor or with very few other students with learning difficulties (but not of her age). Due to the above, she had the chance to socialize with her classmates only during breaks. Even though her teachers proclaimed that she was encouraged to socialize with others, she avoided doing so.
- The attitude of her classmates toward her could be characterized as "indifferent".
- At the end of the school year, the school board did not approve her transition to high school and decided that she had to repeat the last grade because of her poor performance. At the beginning of the following school year her school performance had improved. This was expected because she was repeating the same grade and she was, to some extent, familiar with the courses. On the other hand, her adaptation problems had worsened. This was attributed to the fact that she was already thirteen years old and should be attending high school. Whatever acquaintance she made during the previous year, were now attending high school, but she was left behind, having to start all over again, with new classmates and a new teacher.

Having selected a single subject, provisions had to be taken in order to ensure the robustness of the study's design and the reliability of its results. The case study method was appropriate since the type of the research questions to be answered were "why" and "how" and the phenomenon to be studied was a contemporary one in a real-life context (Yin, 1994). Also, from the presentation of subject's profile, it can be argued that she constituted a critical case (Flyvbjerg, 2006). This means that she was suitable for either confirming or irrefutably falsifying the study's propositions

since she clearly reflected characteristics and problems arising from the fact that she was an immigrant (Yin, 1994). Multiple sources of evidence were to be used as suggested by Yin, (1994); interviews, questionnaires, direct observations, drawings, and the subject's digital story. This is a form of triangulation (research that refers to the simultaneous use of more than one research methods), which allows the verification of interviews while interviews allow the researcher to explore the internal aspects of the underlying behavior (Patton, 1990).

Finally, the phases of the study were established. These were (a) confirmation of the subject's profile, recording of her teacher's and her classmates' opinions, (b) development of the digital story, (c) presentation of the digital story, and (d) follow-up procedure.

Confirmation of the Subject's Profile, Recording of Her Teacher's and Her Classmates' Opinion

This phase took place in late October 2014 and lasted for a week. A researcher was present in the subject's classroom for the whole duration of lessons, making observations on her behavior and the behavior of the other students toward her.

Apart from the subject, her fellow classmates and her new teacher were interviewed. The interview with the teacher covered the following topics: (a) the subject's learning difficulties and school performance, and (b) her difficulties in social interaction. The interviews with the rest of the students were structured around the following areas: (a) how they view their foreign classmates, and (b) collaboration and social interaction with them. The interview with the subject covered the following topics: (a) the view of her identity, (b) the difficulties she was facing, and (c) her opinion about her classmates and the level of social interaction with them. All interviews were recorded.

Two questionnaires were administered to the subject. The first evaluated the perception of her ethnic identity. The ethnic identity reflects the degree that a person identifies herself with the values and traditions of a particular ethnic group (Phinney, 1996). For this matter, the questionnaire "Ethnic/Cultural Identity" was used, as adapted and translated into Greek by Kouli and Papaioanou (2009). This questionnaire consists of twenty-four Likert scale questions assessing two dimensions of ethnic identity (Ethnic Belonging and Fringe) and two dimensions of cultural identity (Assimilation and Lack of Interaction). Ethnic belonging reflects the degree to which an individual is attached to his own ethnic group, fringe is the degree of confusion one has for his own ethnicity, assimilation is the degree to which one identifies himself with the dominant culture and lack of interaction refers to his tendency to avoid communication with members of the host country.

For the investigation of the self-image of the subject, the Self-Concept Scale for Children (Lipsitt, 1958), adapted in Greek by Tsamparli, Tsibidaki, and Roussos (2010) was used. The scale consists of twenty-two descriptive adjectives-statements which extract the feelings that children have for themselves. This is done through the process of assessing whether the statement suits the child, based on a Likert-type scale, ranging from 1 (not at all) to 5 (most of the time).

Development of the Digital Story

This phase lasted for a month (mid-November to mid-December 2014), with a total of nine one-to-two hours sessions (sessions were not held every day). During the first three sessions the subject learned how to use the software for the development of the digital story, while on the rest, the story was developed using the elements proposed by Brooks (2011):

- *Concept.* The idea around which the story evolves. Through the subject's interview, emerged her need to express the stress she felt during her transition from one country to another. The

feelings of anxiety and fear for the unknown and the thoughts that go with them were the backbone around which the story was developed.

- *Character.* The protagonist of the story was the subject since the narration was autobiographical. Key figures were friends and relatives in her home country. None of her classmates were represented as active characters in her story.
- *Theme.* What the story is illuminating about real life: immigration and emotions.
- *Story architecture.* The story's sequence of events was designed on paper (Figure 1). The subject refused to write the dialogues on paper because she was afraid of making mistakes and she preferred writing them using the developing software. Her story consisted of twelve scenes divided into three parts: "Before leaving" (seven scenes), "The trip" (two scenes), and "In Rhodes" (two scenes). In the first part, her thoughts, feelings, and conversations with relatives and friends were depicted. In the second, her first impressions of her new home were illustrated. In the third part, her situation at school was portrayed. There was also one final scene, in which she wanted to convey a message to her classmates.
- *Scene construction.* Each scene was a slide/page in the application (Figures 2-8). The researcher was instructed to offer minimal help and only on technical issues. There was no guidance whatsoever on how and what to write, what characters to use, how to construct a scene and what to include. Also, interaction with the subject was kept minimal and formal. This was done because guidance regarding the content of the digital story might have resulted in the alteration of the results.
- *Writing voice.* In the first part, the story was accompanied by her favorite song when she was living in her homeland, while in the other two parts she used her favorite Greek song. For all the dialogues she recorded her own voice, slightly changing it when someone else was "speaking". Even though all dialogues and thoughts were written in Greek, they were "spoken" in Spanish with the exception of her message to her classmates in the last scene.

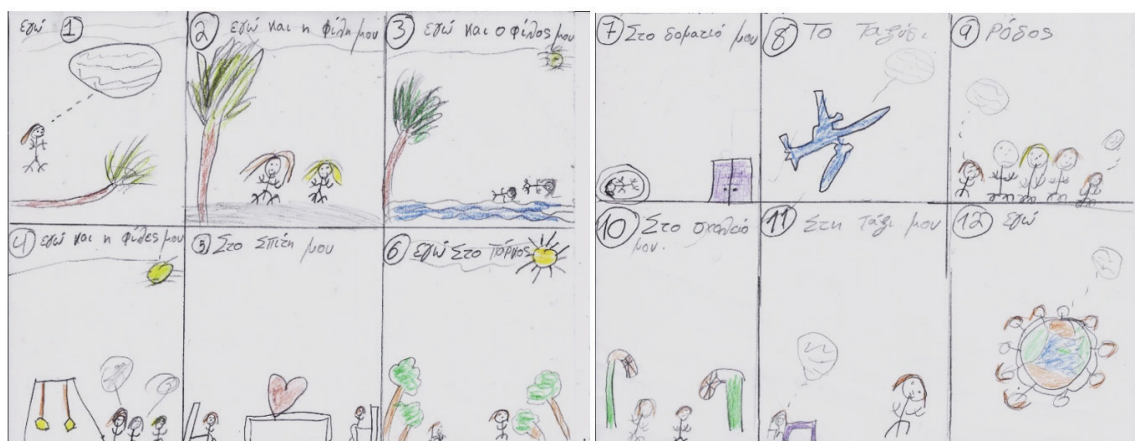


Figure 1: The story's architecture

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Figures 2-3: 1st scene of the digital story (red circle: the character representing the subject)



Figures 4-5: 2nd scene of the digital story



Figures 6-7: 3rd scene of the digital story



Figure 8: Last scene

Presentation of the Digital Story

The initial planning was the presentation to be done by the subject. She was reluctant to do so, hence, the teacher made a short introduction and used the story's auto play feature. Immediately following the presentation of the story, students were asked to fill a short questionnaire (open format questions), which recorded their views and feelings on what they just saw. They were also asked to draw themselves as immigrants. These drawings were later categorized according to the feelings that were depicted. The whole process lasted for two school hours and took place in early February 2015.

Follow-Up Procedure

Approximately a month after the presentation of the digital story (mid-March 2015), the researcher revisited the subject's class and observed, for a week, both the subject and her classmates. The subject was interviewed and she was asked to fill, once again, the two questionnaires of the first phase. Her teacher was also interviewed. The purpose of this phase was to investigate what changes occurred during this period of time.

Results Analysis

The survey involved twenty students (including the subject) attending the last grade of a primary school in the city of Rhodes. Eight were boys and twelve girls. All but four of them (including the subject) were Greeks. The three other students were second generation immigrants (born and raised in Greece) with no significant learning difficulties or integration problems.

Analysis of the Digital Story

Some interesting observations can be made by analyzing the subject's digital story. She insisted on using, as background, in all scenes, actual photos of her house, her room and the countryside of her homeland. She even took pictures, and later used them in the story, of the schoolyard and the classroom. Her intention, as she later explained, was to be as accurate as possible and to give a comprehensive illustration of her life, especially on the part of the story that concerned her birthplace.

Very interesting is the fact that the story is, in some sense, bilingual. Texts are in Greek; the narration is in Spanish (except in the last scene). One can hypothesize for the underlying reasons (difficulties in language but also willingness to learn, fear, difficulties in communicating ideas), but the fact is that this “bilingualism” had an impact on the other students. They had the chance to hear her speaking in her language, but, at the same time, “understand” what she was saying. Also, interesting was the choice of music that accompanied the story. A popular song in Spanish for the first part and a popular Greek song for the second and third, showing the transition from one country to the other. This had an impact too because students had the chance to listen to folk music from the subject’s homeland. Photos, language, and music, combined together, helped students in having a better understanding of the subject’s culture.

The story’s structure is also thought-provoking. Its three parts are not evenly distributed. More than half of the story’s scenes are dedicated to the discussions she had with relatives and friends, before leaving (see Figures 2-3). In all of them, she expresses fear, anxiety, and reluctance to leave. Arrival at Rhodes takes only two scenes (see Figures 4-5) while events during the first few months in a foreign country are totally absent. Instead, the subject chose to move straight to the point, problems at school (see Figures 6-7). Even though there are only two scenes in this part, her detachment and loneliness are strongly portrayed (e.g., all students are playing in the schoolyard, but she sits alone thinking: “I want to talk with someone but I can’t...”). This imbalance in scenes’ distribution indicates her strong ethnic belonging. Also, while the first part is full of dialogues, in the third part there are only the subject’s thoughts, no one is talking to her. This contrast reveals the extent of the lack of interaction and communication.

The most powerful part of the subject’s story is probably the last scene, where she sends a message to her classmates (see Figure 8). The speech bubble reads: “I feel frightened and worried. I’m having trouble in learning your language and so I can’t talk with you. Help me. I’m not different from you. You could be in my place.” There is a strongly personal tone in this message. She used the word “you” in singular form (in Greek “you” in singular form and “you” in plural are different words) making her message as being addressed to each and every student. Also, one might notice that all children are holding hands, except her.

Teacher’s Interviews

The subject’s teacher, in his first interview (before the intervention), confirmed her profile as a person facing many adaptation problems. His focus was on her school performance. He had the feeling that she was a “bright student, especially in science lessons, but her reluctance to participate gives the impression that she doesn’t know anything”. He believed that because of her incompetence in the Greek language, all her problems were largely magnified. In his second interview (after the intervention), he stated that there was a noticeable improvement in both her performance and her participation in class’s activities.

Students’ Interviews, Questionnaires, and Drawings

In the first phase of the study and during their interviews, the majority of students (16) expressed the view that they have no dissimilarities with foreigners, with the exception of language and homeland, which, however, are meaningless and unimportant, giving statements like: “... I have no problem with the country from which they came, I care about their character.” Similar were the answers regarding their collaboration and socialization with their immigrant classmates. In addition, two students stated that they feel joy because they have foreign friends and thus they do have the chance to know their language and culture: “... I feel happy that I hung out with her because I learn the language and she tells me things about her country and I like it a lot”, “... I feel very good having a friend from another country because he tells me what’s going on in his country.” Two students even expressed their admiration for their foreign classmates: “... I think she’s

smarter than I am because she knows two languages”, “... I admire them for learning the language so quickly.”

Two students expressed their indifference towards the language and culture of foreign students: “... I’m not interested in them”, “... I don’t know and I don’t care what they do.” Finally, three students reported that some of their classmates are racists and avoid playing and socializing with foreign students: “... Some are racists and not playing with others because they are from another country”, “... Some students have trouble with them.” Nevertheless, none of them admitted having such a behavior. Finally, a student reported a fact, related to the subject: “The student that came two years ago didn’t ask to play with us when we were playing. But, we also didn’t invite her to join us. I don’t know why, but no one asked her to join.”

The analysis of the students’ questionnaires, after viewing the digital story, revealed that it helped them to better understand the problems that immigrant students face (17 cases). There were statements like: “... I understood how hard it is for them and how stressed they feel when they are forced to learn a new language”, “... I understood the inconvenience and stress that they have when they leave their country and go to another, where they don’t know the language and have no friends.” At the same time, their views changed to the better (16 cases), regarding their foreign classmates: “... I love and admire them even more”, “... I didn’t know how nice their language and songs are.” On the negative side, the attitude of the two students, that were indifferent in the first interview, did not change.

Most students (12) chose to draw themselves with a speech bubble manifesting stress, sorrow, and fear. Two students chose to express their thoughts when saying farewell to their friends, also communicating the same feelings. Finally, some students (4) imagined themselves in the school or in the crowd, highlighting the problem of communication due to the different language. All drawings were inspired from similar slides in the digital story.

The Subject’s Interviews and Questionnaires

From the analysis of the subject’s interview, before the intervention, the strong attachment to her country and the identification with her homeland’s culture became clear: “... I was born there, I come from there”, “I was raised differently, I learned a different way of life.” She claimed that she feels uncomfortable with the Greek culture and faces many difficulties with the language. Loneliness, unhappiness, anxiety and fear about whether she will be accepted as she is, were her strongest feelings: “... I don’t know if I am accepted by others because I come from another country”, “... In school, I cannot talk to anyone and I feel lonely.” She also pointed out that she feels very uncomfortable when associating with Greek students, because they are unaware that, by not knowing the language, she cannot understand anything. After the intervention, the really important changes were that she felt more accepted and that, finally, she had started socializing with other students and she was quite happy about it: “... Many that weren’t talking to me, now they do”, “... I feel nice at school because there I can meet my new friends.”

As expected, the results in the questionnaire Ethnic/Cultural Identity showed the subject’s strong attachment to her own ethnic group (dimension Ethnic Belonging) and the low level of identification with the dominant culture (dimension Assimilation). There were no changes after the intervention, but that was also expected because such changes do not occur in a short period of time.

Her initial score at the Self-Concept Scale for Children was seventy-one out of one hundred and ten (71/110). The statements with the lowest scores (one’s and two’s) were: “I’m happy”, “Others love me”, “Others can count on me”, “I’m cheerful”, “I’m popular”. Her score after the intervention was eighty-nine out of one hundred and ten (89/110). Substantial upward shifts were observed in the following phrases: “I’m happy”, “I’m brave”, “Others love me”, “Others can count

on me”, “I am able”, “I’m cheerful”, “I’m popular”. Also, there was a downward shift in the statements: “I’m shy” and “I’m lazy”.

The Researcher’s Observations

There was a wealth of observations made by the researcher, but detailed presentation of them is beyond the scope of the present study. In any case, they confirm a positive change in the subject’s school performance, behavior, and socialization. A positive change to the other students’ behavior was also observed. Some characteristic examples are the following:

Before the intervention: The subject is sitting in the last row, with her hands folded, usually on the chest. She is asked to read a small paragraph; she refuses. She has not done her math’s homework (solve some problems). When asked why, she replies that she does not know what to do. It turns out that she can solve at least one of the problems when the teacher asked her to do so. Her partner, in an activity, requests to team up with someone else, complaining that he cannot communicate with her.

After the intervention: Still sitting in the back row, but she seems more relaxed. She came to school with a particularly elegant appearance, wearing bracelets and flowers in her hair, something that she has not done before. Raised her hand a couple of times, indicating her willingness to solve some math problems. She is invited to join a team during a physics experiment. During the break she joined three other female classmates; they play and laugh.

Discussion

Though digital storytelling is widely used in education and in various settings (e.g., Robin, 2008a, 2008b), it seems that there is a lot more that can be done, especially in the field of intercultural education. Intercultural education is a response to the need for redefining the relationship between education and multicultural societies and can function as a bridge, allowing the interaction of two or more cultures. Key principles are exchange of information and experience, facilitation of communication, empathy and intercultural respect (Essinger, 1988). Intercultural education and digital storytelling are highly compatible. The former needs a tool for implementing its principles, which mainly have to do with communicating ideas and values (Benick, 2012; Lenette et al., 2013), while the latter is an excellent tool for communicating values, emotions and knowledge (Coventry, 2008; Robin, 2006), thus providing the foundation for intercultural cooperation and learning (Benmayor, 2008). This was one of the study’s two basic concepts.

The majority of the native students had a vague idea regarding the real problems that immigrants face. Based on their responses in the interviews, it is evident that students focused more on the superficial difficulties (lack of communication, different language) and not on the feelings that accompany these problems. By viewing the digital story, they became communicants of someone else’s thoughts, feelings, and problems. Evidence in support of the above assertion can be found in both students’ drawings and questionnaires that followed the presentation of the digital story. As a result, they formed a more comprehensive understanding of the subject’s situation, as Lanette et al. (2013) also noted.

More importantly, students acted. Observations during the follow-up procedure indicate that the communication barrier was lifted by both sides. Not only was the subject more open in joining groups of students, but also, they were more open in asking her to join them in various activities, inside and outside the classroom. Caine (2010) offers a possible explanation for this dual effect. She holds the view that the process of discussing a narrative promotes mutual understanding between students. She also emphasizes the importance of using images because a visualized narrative “holds the possibility to engage children in meaningful and relevant self-expression and exploration, which holds the potential to advance social agendas” (2010, p. 495). Though images

seem to play an important role, in the present study the music that accompanied the story as well as the subject's narration also seemed to have an impact on the other students. So, it can be asserted that the multimedia elements that distinguish digital storytelling from the conventional one, have a cumulative positive effect.

The study's second notion was that digital storytelling, besides being a good method for documenting personal experiences, can also be a form of a narrative therapy by helping students to discover parts of their personality (Sawyer & Willis, 2011). In general, the power of stories and their potential for information retrieval and therapy is already recognized by psychotherapy. For example, White and Epston (1990) developed narrative therapy as a form of psychotherapy using narratives. When it comes to digital narrations, stories have to be told directly and unfiltered in order to act as a narrative therapy but also to start an intercultural dialogue, as noted by Harvey and Robinson (2012). The above were considered and utilized in the present study.

It has to be noted that the study's subject was selected because she was a critical case due to certain characteristics she presented. She did not belong to an ethnic group common in Greece. She and her family could not seek help or at least comfort in fellow citizens. Her age was also a problem. Younger children might have adapted more easily, but since she was a teenager, she had an established way of life. Also, she already had well-developed relationships with relatives, friends, and acquaintances in her home country. For that matter, a strong attachment with her ethnicity, a low level of acclimatization with the host culture and adaptation problems were expected and confirmed. By having to repeat the primary's school last grade, all her problems were magnified and she felt even more isolated and disadvantaged. All the above had a significantly negative impact on her behavior, attitudes, and views.

As it was mentioned in a previous section, the researcher avoided intervening in the digital story's development process as much as possible. This was done for purely research reasons and it does not apply in real life circumstances. If guidance (of any kind) was given, the subject might have chosen not to express her actual thoughts and feelings, but ones that were "filtered" through someone else. Instead, the subject was totally free to choose what, when, and how to construct her story. It was the process of creating her life's digital story that gave her the chance to reflect on her problems and to voice them.

Reflection on her problems, through the process of developing the digital story, seems to be a key element. As Rosenthal (2003) pointed out, reflection paves the way for the view that an autobiographical narrative is already a kind of psychological intervention. The externalization of her inner thoughts and feelings was the turning point in changing her previous behavior and enough to stop being an "invisible" person. Henceforth, changes to the better were noticeable and confirmed by the interviews, observations, and questionnaires that followed.

Contrary to the study's settings, the class's teacher would be the one that would work closely with immigrant students. The affiliation between a teacher and his students is far less formal and far more intimate than that of a researcher and a subject. Due to this students-teacher relationship, which is fundamental for immigrant students' success in school (Hamre & Pianta, 2006), they will feel more comfortable in expressing themselves. For that matter, results of such interventions are expected to be even better.

Conclusion

The study deviates from the mainstream uses of digital narratives, that is, for knowledge acquisition or for the improvement of literacy skills, by exploring their potential to ease the adaptation problems that immigrant students face.

Though it is certain that long term interventions yield good results, time is a crucial factor. Short term innovative interventions are needed because results can be produced right away and problems can be dealt on the spot. The duration of the study's two main phases (development of the digital story and its presentation) was ten, one-to-two-hours sessions. It was a short-term intervention, no special preparations and settings were needed, and because of the short duration, in total and per session, it was carried out without altering the school's timetable. Whatever results were attained, were achieved fast, easing the way to follow up, longer term conventional interventions, which can take advantage of these results.

On the other hand, there are limitations that need to be acknowledged. Even though all necessary precautions were taken, one can never be certain whether students expressed their actual thoughts and feelings in their interviews. Since this was a case study with a small number of participants (the subject and her classmates), its findings cannot be generalized. Further studies are needed with a larger sample of students and with different cases of immigrants in order to identify differences or similarities to the findings of the present study and to obtain more reliable results.

In conclusion, under the limitations described above, the study's findings are in support of the notion that the use of autobiographical digital storytelling can lay the foundations for an effective intercultural dialogue among primary school students, which, in turn, can help, to some extent, (a) immigrant students, by giving them the chance to reflect on their problems, to express their thoughts and feelings and thus ease their adaptation problems and (b) native students to better understand the problems their foreigner classmates face and thus change their attitudes towards them. The intervention produced interesting results quickly and, therefore, teachers, as well as policy makers, can consider using the findings of the present study when designing educational interventions for immigrant students.

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Biography



Dr. Emmanuel Fokides is a lecturer in the Department of Primary School Education, University of the Aegean, Greece. His courses focus on the educational uses of Virtual Reality, digital storytelling, and Serious Games. Since 1994, he is involved in a number of research projects regarding the educational uses of the Internet, distance and life-long learning and the educational uses of Virtual and Augmented Reality.