COST Action IS 1410

The digital literacy and multimodal practices of young children (DigiLitEY)

Scientific report of Short Term Scientific Mission (STSM)

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STSM Topic: Greek Kindergarten Schools and the "Digital Corner"

The purpose of the STSM

Young children in Greece are introduced to the digital world in a random and uncontrolled way at home, mainly by their older siblings or their parents. This, however, poses the risk of children coming across unsuitable or inappropriate content. Digital literacy is promoted very little, if at all, at kindergartens in Greece mostly due to lack of funds for equipment and prejudice against it. However, it seems that children will certainly need digital skills in the world that they are growing up in, and that the educational system should provide them with those skills from the very start of their school years. Prejudice against introducing the digital world to young children stems from ignorance or lack of training of the teachers. At present, in state kindergarten schools there are certain areas labeled as "corners" for a number of activities, namely "the corner of numbers", "the corner of reading and writing" but none for the digital world, except for the occasional school computer used mainly to give pupils a short break for fun time. It would seem imperative that the educational system should help promote digital literacy to kindergarten pupils, in a secure and controlled manner. One such idea for the implementation of this is the "Digital Corner". An area within the classroom, equipped with digital devices and appropriate software for education. There, children would develop valuable digital skills with the help and supervision of a trained teacher.

A description of the work carried out during the STSM

During my short term scientific mission at the University of Athens I carried out research in several fields. I did extensive on-line research regarding applications or any kind of available educational software for children aged 4-5 or 5-6. I visited the Ministry of Education and collected information on the recent curriculum for kindergartens and the directives from the Ministry regarding how kindergarten classrooms are to be set up. I visited the Secretariat of the School of Kindergarten Teachers inside the University of Athens for statistical data and other available information regarding digital literacy and teacher training courses. I collaborated with professor Kalemis on the questionnaire that I later used for my interviews. Finally, I interviewed kindergarten teachers and principals working in kindergartens in the greater Athens area. I also collected questionnaires (via e-mail) from teachers outside Athens; Patras; as well as other more provincial areas so that my research would cover the provinces apart from the capital.

A description of the main results obtained

Regarding materials used for educational purposes, i.e. on-line applications, CD-Roms, etc., there are very few in Greek. Mainly software of one or two publishers (namely SIEM) focusing on language and basic Greek grammar, basic maths, history and geography. Those, unfortunately, come at quite high prices, given the economic situation in Greece at the moment, about €30,00 per CD-Rom, or €3,00 per download. Most importantly though, available software seems to be targeting children 6 and above, so there is significant lack of educational materials for Greek children under that age.

At the Ministry of Education I was given the curriculum that all kindergarten teachers ought to cover (state and private), however very little is available in terms of statistical data regarding the digital equipment at kindergarten schools. Needless to say that the curriculum does not include any digital training for the pupils, simply the presentation/description of basic digital devices, such as the computer, the photo camera, etc. The use of the computer, if available, is at the discretion of the teacher. In terms of school connectivity to the Internet via the Greek School Network, interconnection is at 100% for Secondary schools, but as low as 2.8% for Kindergartens.

Teacher training courses on digital technology exist, and have done so for quite a few years, but have dramatically decreased in frequency due to the economic crisis in Greece over the last 5 years. Participants are now mostly teachers that have just graduated their studies and are in their 20s. Older teachers seem unwilling to take part, either due to lack of free time or a prejudice against acquiring technology at the age of 40+. It is worth noting here, that many of the teachers aged 40+ have been in agony since the implementation of the Greek School Network (in 2001), which requires all school documents, etc., via this system, and teachers have not been trained for its use.

Regarding the results of the survey: kindergartens have an average class size of 25-30 pupils. There are limited multicultural issues after the beginning of the economic crisis. Most teachers have participated in training programmes related with digital technology, in the past, but those only partially covered their needs. Most popular pieces of equipment in classrooms are radios, CD-players, TVs, and photo cameras. Video-cameras, PCs, video-players and slide-projectors exist in some schools but pupils are not given access to them; as a rule, the teacher operates those. Tablets, laptops and game consoles are do not exist in classrooms. Where computers exist and children are allowed to use them, they are given access to them 2 or3 times per week for about 20-60 min each time. Pupils usually used those in pairs. Drawing and language games are the most popular. All teachers interviewed believe that the use of digital technology in the class would add value to their teaching methods. They also believe that their classes would benefit from the introduction of digital technology because it would help pupils develop eye-hand coordination and fine motor skills, learn basic usage commands, acquire knowledge more efficiently, increase their attention span, develop reaction to stimulus, and develop cooperation with fellow pupils. Concerns against using digital technology in kindergarten classes focus on limited budget for equipment, absence of appropriate software, fear of pupils damaging the equipment, lack of knowledge in order to supervise such activities and possible addition of pupils to online gaming.

Planned future collaboration with the host institute

It seems imperative that further research should be carried out so that appropriate software materials be developped for Greek pupils aged 4-5. Prof. Kalemis has agreed to help me with futher investigation in the field. I will also be presenting a new audiolingual method of teaching English to children aged 4-6 in the upcoming National Pedagogical Congress (Athens, April16-17th). This course has the potential of being transformed into an interactive course of teaching English to young children.

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