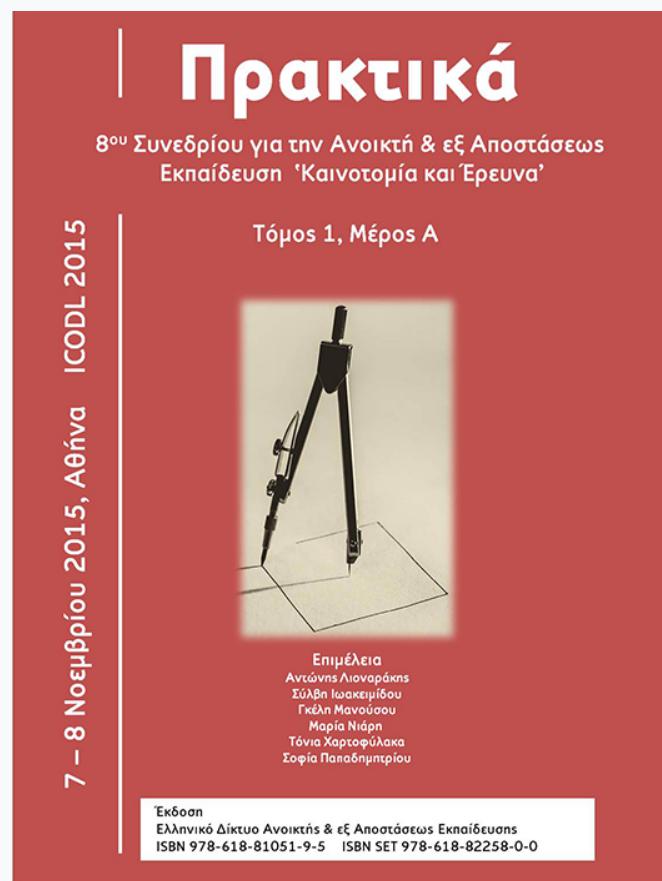


## Διεθνές Συνέδριο για την Ανοικτή & εξ Αποστάσεως Εκπαίδευση

Τόμ. 8, Αρ. 1A (2015)

Καινοτομία & Έρευνα στην Ανοικτή & εξ Αποστάσεως Εκπαίδευση & στις Τεχνολογίες Πληροφορίας & Επικοινωνίας



**Digital textuality: innovation in the narrative representations of local knowledge and the potential for secondary education**

*Maria Kokolaki, Michael D. Fischer, Maria Dogkogianni*

doi: [10.12681/icodl.24](https://doi.org/10.12681/icodl.24)

## Digital textuality: innovation in the narrative representations of local knowledge and the potential for secondary education

**Dr Maria Kokolaki**

Centre for Social Anthropology and Computing  
School of Anthropology and Conservation University of Kent  
External Associate & Institute of Educational Policy Greece  
Educator on secondment, PhD in Anthropology  
mkokolaki[at]iep.edu.gr

**Prof. Michael D. Fischer**

School of Anthropology and Conservation  
University of Kent (U.K.C.)  
Professor of Anthropological Sciences &  
Director in the Centre for Social Anthropology and Computing  
m.d.fischer[at]kent.ac.uk

**Maria Dogkogianni**

Secondary Public School,  
Greek Language Teacher  
mdogkogianni[at]gmail.com

### Abstract

This paper is based on a proposal connected with the effort to promote awareness and sensitivity towards the protection of local knowledge through school based education in Greece. It responds to the growing need of small communities facing digital globalization in the modern world to gain ownership, maintain and promote their local cultural distinctiveness. It is an intervention carried through in a Greek school, for testing the possibility of implementation of ICT enhanced pedagogy in promoting critical literacy about local knowledge.

The subject chosen was Local History Class of the third grade of the junior high school, in the context of changes in the national curriculum where local history becomes an independent subject. The intervention was based on teamwork, active participation and engagement of the students with various research activities. Students, apart from simply concentrating on compiling a collection of primary material which was stored in a digital form, made an effort to represent this body of knowledge in digital narratives. The activities were supported by Web 2.0 technology and were based on social constructivist principles. Our aim was to bring children into touch with their local culture, to instill a sense of ownership, increase awareness of the intrinsic value of local knowledge and enhance their ability to represent, preserve and also reproduce this type of knowledge.

**Key-words:** *Digital Storytelling, On-line learning communities, Local knowledge, Local history*

### 1. Introduction

In this paper we present an intervention/project in the subject of Local History carried through in a Greek Junior High School of a small changing community by employing pedagogically virtual online communities in combination with digital storytelling, to

respond to the need to preserve local knowledge. This project aimed to elicit and represent a specific aspect of local cultural heritage related to the religious rituals of the village.

The project took place in the last year of the implementation of Local History as a part of Third Grade's History Class. We kept in mind the scheduled change in the High school curricula concerning local history, which from the school-year 2015-2016 becomes an independent subject in the learning field of "Experiential Activities-Project."

The project was methodologically based on team work and experiential learning supported by a combination of digital tools and equipment, including the exploitation of Web 2.0 technology, general purpose software and digital equipment for recording sound and image (like sound recorders, cameras or even mobile phones) and producing multimedia narratives.

The pedagogical approach followed socio-constructivist principles and aimed to promote an interest in issues relating to specific locales and the strengthening of bonds with the local cultural legacy, especially of small communities. The socio-constructivist approach encourages the opening of school based education to the local community in many ways. In this sense, the transfer of local knowledge within the community that happens in an informal way on either an intergenerational or intragenerational basis, and mainly has the characteristics of orality, can be enhanced by means of school based or school fostered education.

Raising awareness about critical issues concerning students' close environment and immediate reality, such as the reported loss of local knowledge and the interruption of knowledge transfer processes within a community, led us to design and pilot activities for students, in order to explore their suitability and efficacy in the preservation of local knowledge. These activities were based on the hypothesis that the new media could be utilised in a pedagogical context in order to effectively address contemporary issues such as the preservation of local cultural heritage.

Moreover, the rationale behind the project touches upon new sense of time and place induced by new technologies that bridge global connectedness and local idiosyncrasy. Whilst small audiences in remote places feel that their particularities are endangered by global connectedness and homogenization, at the same time new technologies enhance the chances of promotion and diffusion of local particularities to more general audiences.

Accordingly, the project was orientated to describe certain aspects of local culture, mainly of intangible nature, transcribe and store them into more tangible and permanent forms using new technologies. At the same time, it aimed to enhance awareness in children concerning cultural landscapes, locate issues in the transmission of local knowledge, to promote an interest in the local cultural heritage and enhance their cultural agency for the benefit of the local community.

## **2. Local History as powerful knowledge in the Greek educational system**

Local History (LH) in the Greek educational system was introduced as a sub-field of History in the Third Grade of Junior High School and has been a part of the analytical curricula since 2003. In the pilot curricula of New School it was launched as a separate field of "study and research" and, as such, it was placed in the Zone of Experiential Activities. LH from the current school year (2015-2016) will be covered as a particular subject in the learning field of "Experiential Activities-Project" of the curriculum of the Third Grade of Junior High School.

Moreover, this subject is often included in the “Cultural programmes” that take place in Greek schools on a voluntary basis, as part of non formal education related activities which do not form part of the formal curriculum (Coombs et al. 1973). These are rather incorporated into other non-formal types of school fostered educational activities.

Additionally, LH is already incorporated into the philosophy of the interdisciplinarily designed programmes of study in many school subjects of the national curriculum. As a result, LH becomes often a part of interdisciplinary approaches, in combination with other subjects, such as Modern Greek Language and Literature.

At all circumstances, LH in the Greek educational system is approached experientially and becomes connected to project-based activities. So, it is mainly visualized in the sense of ethnography, as research and observation, aiming at producing a deep sense and knowledge of the students’ close environment. Furthermore, in the school context, it is a way of empowering students’ awareness of their local community and establishing relation and bonds with the particular locale and its’ past.

The introduction of LH in the school curriculum comes as a response to a methodological and epistemological relocation of interest of the historical studies, previously found in the Annales School, to the “micro-history” which rather involves local people’s consciousness, being a kind of ‘hidden’ history. This turn is depicted by Hobsbawm who talks about the “history seen from below or the history of common people” (1997: 266). In relation to the above Sutton (1998: 121) makes a distinction between “histories that infuse everyday life” and “History on the grand scale.”

Thus LH as a school subject mainly relates to oral history, tradition, ethnography and folklore studies that give prevalence to the experiential transmission of knowledge. At the same time it introduces and strengthens the interest in local knowledge and local cultural memory as “repositories of alternative choices that keep cultural and biological diversity flourishing” (Nazarea, 2006: 318).

Anthropologist use the terms “indigenous”, “local” or “traditional” knowledge to describe the collective knowledge of local people (Fischer, 2005: 738) which enables them to make sense of the world (Sillitoe, 1998). This knowledge is understood as a “culturally informed understanding inculcated into individuals from birth onwards, structuring how they interface with their environments” (Sillitoe, 2002: 9).

Accordingly, Local Knowledge (LK) in development contexts is perceived as dynamic (Bicker et al. 2004), fluid and changing (Sillitoe, 1998 & 2002), enabled as “powerful knowledge”; an interface between ideation and practice (Fischer, 2004). It is locally situated, transmitted orally and experientially, inter- or intra-generationally, while also learned informally through practice and repetition (Sillitoe 1998 & 2002; Ellen and Harris, 2000). As such, LK is reflexive being subject to a constant negotiation between people and their environments on local, regional or global level “being produced as well as reproduced, discovered as well as lost” (Ellen and Harris, 2000: 4). Thus, LK depends largely on individual agency and various socio-cultural factors and does not exist as a totality (Sillitoe 2002) or as “a unitary knowledge” (Briggs 2005).

However problematic a romanticized or an institutionalized view of a LK might become in the rapidly changing world of today, LK, by attaining a special value, serves to empower local communities. Additionally, in a globalised context, it helps us grasp the diversities and particularities of distinct places. As Sillitoe (2002: 12) points out, “Currently in different regions of the globe we find people with unique

cultural traditions and histories, which continue to condition in significant regards their view of the environment, life and so on.”

Thus, the theme of LK opens up a wide range of issues and gives the opportunity to reflect on how do people communicate and transmit this knowledge, how do people learn, what exactly is it that they know and how researchers approach and represent not only the related processes but also the body of knowledge itself.

Moreover, taking into account the nature of learning processes related to indigenous knowledge which involve “constant learning-by-doing, experimenting and knowledge-building” (Berkes, 2009: 154), it would be interesting to test the relevance and plausibility of the interweaving of school-based formal learning with local knowledge as a type of non formal learning.

### **3. Description of the Project**

In the above context, the main objectives of this project were to identify aspects of religious life of a place that underwent significant transformation in recent decades, locate and represent the transformation that occurred during the 20<sup>th</sup> century and picture the impact of these changes on local socio-cultural perceptions. The project was enacted by students in the framework of social constructivist pedagogy, experiential and collaborative learning.

We followed the perception of literacy as related to forms of representation (Kress 1994) and we utilised the framework of multiliteracies (Cope and Kalantzis 2009) insofar as it is related to modernity and globalization under the diffusion of new technology and new media forms. Literacy is pictured as “*unstable, dynamic and fluid*” (Kress, 1997: 2), in the context of the multiple changes that take place in the modern world and considering the potential of the new forms of communication that are diffused under the development of new information technologies. These changes in the global state of affairs necessitate new pedagogical approaches utilizing new technologies and orientated towards awareness raising and active engagement of the students in knowledge building. Literacy in this dynamic sense is understood as engaging, as a process of transformation and not as mere reproduction of meaning (cf. Cope and Kalantzis, 2009).

The project aimed at making students experience local culture, explore the ways in which cultural knowledge is transmitted and how this is possible in the new emerging situations as people grow up and face new challenges in their lives. Furthermore, we also focused on inciting young people’s interest in their own local culture and strengthening their bonds with their local cultural heritage.

So, students, in the aforementioned context of multiliteracies and socio-constructivist perceptions, were motivated to develop informed and responsible attitudes towards important issues of their locale. Initially they were given active roles as researchers and authors, for collecting data and representing knowledge. This possibility of sharing was broadened by using a Wiki, opening the classroom to the school and the local community. So, we created an online learning community, considering that it would prove useful in dynamically reproducing and sustaining local knowledge. This web community was composed by students/peers that attended the same class and further they inhabited in the same natural and cultural environment.

Wikis are often used in the educational praxis since they promote student-led communication by utilizing aspects of student networking and manage to turn teacher-centric pedagogy to student-participatory (Rosen & Nelson, 2008). At the same time they allow teachers to interact with their class, provide feedback, watch and assess the work of their students.

Social Web 2.0 tools in general help learners to reiterate, consolidate and apply their prior knowledge, while in parallel these provide a web environment that allows for information to be exchanged, feedback to be diffused and for the newly gained knowledge to be built, shared, and reflected on. They also enable students to take initiatives, set and achieve objectives, collaborate and learn in a playful and constructive manner. This active construction of knowledge is consistent with constructivist and mainly social constructivist pedagogy which is promoted in Web 2.0 collaborative environments (Wang, 2009; Rosen & Nelson, 2008).

Moreover, introducing a flexible virtual spatiotemporal framework which encourages joint effort and active participation of students in authentic situations, online learning communities introduce a new type of embeddedness in time and in space, which further seems to transform placement and synchronicity of cognitive processes (Kokolaki et al. 2013) in the Vygotskian sense of situated cognition (Hung & Der-Thanq, 2001).

In general the Wiki environment supported the students' project by encouraging teamwork, collaboration and reflexivity. So, the students were given the opportunity to work in small groups of five and express views, reflections as well as collective conclusions and evaluations in the 'comments' section.

Students' ethnographic research focused on the religious rituals of the village, especially of major feasts and fasts. Initially they searched in existing sources on the history of the village and utilized web information in order to locate and describe aspects of religious life of the local community. Then, they initiated field research which included mainly individual interviewing, taking photos and keeping diaries and notes. In this process they used mainly their mobile phones and, where possible, digital cameras and voice recorders. They also collected and scanned old photographs. Then students transcribed their notes both from the primary and the secondary sources, they produced texts and compiled multimedia essays in the form of digital narratives which were inspired by their field experience and their gained insights into local culture. In their digital essays, they utilised general purpose software like Word, Powerpoint and Moviemaker. Moreover, those digital stories were uploaded to the wiki, where all students could navigate, watch all the digital stories, reflect and write down their thoughts and observations.

Digital storytelling (DST) is largely presented as a modern form of narration or rather as an alternative to traditional storytelling, since it is based on the integration of orality and conventional tropes with new technologies (Page, 2009; Brian 2011; Ryan, 2002). DST combines a number of conventional techniques and multimedia tools, relying on a fusion of signifying tropes, such as photography, audio, voice, animation and written text.

When utilised in pedagogical contexts, DST may actively engage students in the learning process as it combines the immediacy and interactive nature of traditional storytelling and the representational power of the new media. In this way students become fully engaged in the educational process and are turned from simple participants to meaning-makers and even meaning-transformers (Cope and Kalantzis, 2009). Designing and authoring such an essay in the class is a very demanding procedure and needs the collaboration of the students under the guidance of the teachers. The digital narrative in our case had to be based on the initial research (carried out in the archives and the field) and the data collected. Then students had to produce the text/script, select images and photographs, parts of the sound/voice archives to match with the script.

The authoring of digital stories, although it was very demanding, proved very educative as it enabled students to get more familiar with new technologies and at the same time to create useful outcomes in an enjoyable way. So, they learned how to use a variety of multimedia tools like sounds and pictures and combine them with multiple narrative techniques for the authoring of multimodal texts.

In this way, students managed to store, demarcate and re-construct a part of their local traditional knowledge. They also reflected on issues of LK, gained an insight on how LK maybe transformed, diffused and reapplied. Finally they tried to address in their own way the important challenge that small communities face in the advent of modernization. Accordingly, metacognition was achieved through reflexivity and feedback, as the wiki allows students to produce and assess experience and knowledge, while also to embed this knowledge and experience into actual communicative instances.

We observed that this way of constructing knowledge enhanced students' awareness of ownership regarding local heritage, inspired values about the protection of the local culture and instigated their participation in various activities which further help strengthen bonds between the school and the community and enhance the community's own cultural awareness.

#### **4. Final Thoughts and Suggestions**

Local communities in Greece are increasingly faced with problems of globalization and homogeneity, while at the same time they try to maintain their cultural distinctiveness. This modern paradox is expressed in the words of Sahlins (1999: 410): "localization develops apace with globalization, differentiation with integration; that just when the forms of life around the world are becoming homogeneous, the peoples are asserting their cultural distinctiveness." Connection of people to places is changing mainly as an outcome of the digital globalization. In this respect, the topics of cultural memory and the preservation of LK are very important, especially because modernity seems to be linked with "cultural amnesia" (Connerton, 2009: 1). The reproduction of local knowledge is in a sense a mnemonic process, as a local community shares its collective knowledge either vertically from the older to the younger generation or horizontally in between generations.

We based the project in the aforementioned threat of cultural amnesia and the need for creating a kind of locus of collective memory for local communities, where shared cultural knowledge can be collected, preserved and diffused. In this sense, online learning communities could be utilised as repositories of collective memory, as virtual spatio-temporal entities that can encapsulate local knowledge and can be also introduced in the educational process.

This project aimed at developing effective learning in school based education about issues related to local history in the sense of local cultural knowledge and local cultural memory, by testing and evaluating the impact of a pilot approach for facilitating local knowledge transmission through the aid of web-based dynamic environments and digital storytelling. Through the use of new technologies in the classroom (creating a Wiki and authoring multimedia essays) we attempted to connect the socio-cultural experiences of students to their surrounding world and instigate them to shape values and positive attitudes towards contemporary issues such as the preservation of local cultural knowledge in the changing modern contexts. The action also introduced to the students the ethnographic methods of participant observation, documentation and interviewing. Accordingly, we gave students the chance to discover and represent local views and stories taking into account that orality and

experience - either in the form of narrative or as imitation and demonstration (Ellen and Harris, 2000: 4) – is a characteristic of LK.

In this way school-based formal learning opens up to the local community and harmonizes with informal learning processes, producing a new form of knowledge elicitation and construction. Finally all the activities, in a critical context, aimed not only at enhancing an understanding of local collective constructions of knowledge on the part of the students, but also at increasing their capacity of acknowledging their position in this process, since LK is not stable and fixed, but in flux, being continually negotiated and transformed. This could also be an alternative way of assisting local integration, especially in communities experiencing multiple or abrupt and wide range changes for a number of reasons.

This project in the framework of a socio-constructivist approach was an initial step in an effort to further explore how transformation of LK takes place and how this change can be perceived and instantiated mainly by students in a transitional and unsettled period, where culture, knowledge and behavior are fluid but also the media employed, representations of knowledge and the potential outcomes are also changing. It further addressed the need for a promoting awareness and sensitivity about local knowledge as an alternative, experiential and locally situated way of knowing. Moreover, the use of new technologies in the educational intervention provided an innovative insight and enhanced the awareness and sense of ownership in students and the local community.

## References

Anteweiler, C. (2004). Local Knowledge, Theory and Methods: An Urban Model from Indonesia. In Bicker, A., Sillitoe, P., & Pottier, J. (Eds), *Investigating Local Knowledge: New Directions, New Approaches*, (pp. 1-34). Aldershot: Ashgate Publishing.

Berkes, F. (2009). Indigenous ways of knowing and the study of environmental change. *Journal of the Royal Society of New Zealand*, 39 ( 4), 151-156.

Bicker, A., Sillitoe, P., & Pottier, J. (2004). Preface. In A. Bicker, P. Sillitoe, & J. Pottier (Eds), *Investigating Local Knowledge: New Directions, New Approaches*, (pp. xi-xii). Aldershot: Ashgate Publishing.

Brian, A. (2011). *The New Digital Storytelling: Creating Narratives with New Media*. Denver: Praeger.

Briggs, J. (2005). The use of indigenous knowledge in development: problems and challenges. *Progress in Development Studies* 5 (2), 99–114.

Connerton, P. (2009). *How Modernity Forgets*, Cambridge: Cambridge University Press.

Cope B., & Kalantzis M. (2009). Multiliteracies: New Literacies, New Learning. *Pedagogies: An International Journal*, 4, 3, 164-195.

Coombs, P., Prosser, R & Ahmed, M (1973). *New Paths to Learning*, New York: International Council for Educational Development.

Ellen, R. and Harris, H. (2000). Introduction. In R.F. Ellen, P. Parkes, A. Bicker (eds) *Indigenous environmental knowledge and its transformations. Critical Anthropological Perspectives*, (p. 1-32). Amsterdam: Harwood Academic Publishers.

Fischer, M. D. (2005). Culture and Indigenous Knowledge Systems: Emergent Order and the Internal Regulation of Shared Symbolic Systems. *Cybernetics and Systems*, 36, 735-752.

Giaccardi E. & Palen L. (2008). The Social Production of Heritage through Cross-media Interaction: Making Place for Place-making. *International Journal of Heritage Studies*, 14(3), 281-297.

Harness H. & Drossman H. (2011). The environmental education through filmmaking project. *Environmental Education Research*, 17(6), 829-849.

Hobsbawm, E. J. (1997). *On History*. London: Abacus.

Hung, D. W. L. & Der-Thanq, C. (2001). Situated cognition, Vygotskian thought and learning from the communities of practice perspective: Implications for the design of web-based e-learning. *Educational Media International*, 38, 3-12.

Kokolaki, M., Fischer, M. D., Dogkogianni, M. (2013). Representations of local environmental knowledge: instantiating cultural landscapes in a virtual classroom, *The 7th International Conference in Open and Distance Learning, Conference Proceedings*, 6, pp. 103-110. Athens. [Online access: <http://icodl.openet.gr/index.php/icodl/2013/paper/view/273/117>, consulted 30/1/2014].

Kress, G. (1994). *Learning to write*. London: Routledge.

Kress, G. (1997). *Before Writing: Rethinking the Paths to Literacy*, London: Routledge.

Nazarea, V.D. (2006). Local Knowledge and Memory in Biodiversity Conservation. *Annual Review of Anthropology*, 35, 317-335.

Page, R. (2009). *New Perspectives on Narrative and Multimodality*. London: Routledge.

Ryan, M.L., 2002, “Beyond Myth and Metaphor: Narrative in Digital Media”, *Poetics Today*, 23, 4, pp. 581-609.

Rosen D. & Nelson Ch. (2008). Web 2.0: A New Generation of Learners and Education. *Computers in the Schools*, 25(3-4), 211-225.

Sahlins, M. (1999). Two or Three Things that I Know about Culture, *Journal of the Royal Anthropological Institute* (n.s.) 5(3), 399–421.

Sillitoe, P., (1998). The Development of Indigenous Knowledge: A New Applied Anthropology. *Current Anthropology*, 39 (2), 223-252.

Sillitoe, P. (2002). Participatory observation to participatory development: making anthropology work. In A. Bicker, J. Pottier, P. Sillitoe (eds) *Participating in Development: Approaches to Indigenous Knowledge*, (pp. 1-23). London: Routledge.

Sutton, D. E. (1998). *Memories Cast in Stone: the relevance of the past in everyday life*. Oxford: Berg.

Wang Q. (2009). Designing a web-based constructivist learning environment. *Interactive Learning Environments*, 17(1), 1-13.