

## Integration of Education Technologies (Digital Storytelling) and Sociocultural Learning to Enhance Active Learning in Higher Education

Nino Bitskinashvili \*

### Abstract

The article studies technology integration method based on sociocultural learning approaches and examines their potential for developing active learning possibilities in higher education. As defined in Vygotsky's research, sociocultural learning theories are learner-centered and fit into collaborative approaches to student learning. The method also takes into account the social and cultural aspects of gaining knowledge. Facilitation of reflective practice involves students in thoughtful, active and personally meaningful learning process. Digital Storytelling (DST) creates a reliable and empowering environment for intercultural collaboration and learning. It presumes that the procedure of digital story-making and empowers and modifies students intellectually, creatively and culturally. Consequently, Digital Storytelling can be perceived as beneficial toolkit pedagogy for the new Humanities in the 21st century. An interview to find out what students' and lectures perceptions of digital storytelling as a tool for learning in different subjects are. Analysis of students' and lecturers' reflections revealed four themes: motivation, collaboration, reflective practice and identity development.

**Keywords:** sociocultural learning, Digital Storytelling, technology integration, cultural identity, collaborative learning

### 1. Introduction

Telling stories has always been a thing people do, it is inseparable from our lives. Sometimes there is nobody who wants to listen, while some stories have millions of listeners / readers. Besides the contents and the style of the story matter, but the availability of the story to listeners also deals with the ways it is broadcast – face to face in a small or huge room or via media – radio, television or internet. According to Couros et al. (2013, p. 546) Digital Storytelling (DST) unites “the use of digital tools and media to develop, create, enhance, and share stories.” DST is attractive for contemporary public, as it is easy to create a digital story as well as to perceive it. It does not require expensive technologies and software or a great artistic / literary talent to create a digital story, its simplicity makes it linguistically available for millions.

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\* MA, International Black Sea University, Georgia  
E-mail: ninibitsko@gmail.com

Sociocultural theories declare that "learning, thinking and knowing are relationships among people in action, with, and arising from the socially and culturally structured world" (Lave & Wenger, 1991, p. 51). Nuthall (1997) says that the words used to talk about mental processes commit to nothing more than the things we communicate with others when we are involved in 'thought-related' activities). Based on sociocultural learning theories (Rogoff, 1990, Vygotsky, 1978), starting with social and cultural aspects of obtaining knowledge and performing with technology integration enhances students' performance in higher education (HE) by using Digital Storytelling, which can become an effective instrument for education and learning. Collaborative learning is an effective means to increase students' achievement and cognitive development. The hypothesis of the paper is that integrating digital technology (Digital Storytelling) into higher education motivates students, develops their collaboration and reflective practice, empowers their personality development and thus enhances their active learning. Moreover, it increases students' self-conscious awareness of cultural identity. Technology integration promotes the ways to introduce the materials visually, which makes the learning process active in order to improve student learning. Collaborative learning, based on sociocultural learning theories, provides learners with more practical learning opportunities. Students learn in an atmosphere where they act as society members. They interact with the class activities, engage with others, solve problems or complete tasks; they think and share their ideas and explore answers to the problems or tasks. The teacher behaves as a motivator to encourage different purposes and promotes students' critical thinking. In this learning setting, students' independent, reflective thinking skills will enhance (Jennings, 1996).

## **2. Sociocultural Theories and Information Literacy in the Classroom**

Sociocultural learning theories offer us with an excellent frame to understand how students acquire knowledge. Apparently, the broad trend in information literacy teaching is to decrease the time for knowledge acquisition / skill formation and development. In traditional education individual work on exercises does not let students benefit from each other's background knowledge and cognitive strategies. Meanwhile, an active cooperative learning activity is crucial to encourage information literacy teaching, and it demands to be carefully shaped and prepared. Vygotsky (1978) argues that using efficient ways of teaching is fundamental not only because it helps students connect more adequately to their external environment, but also because the tool uses essential effects on internal and functional relationships within the human brain. Collaborative learning, based on sociocultural education methods, provides students with more active learning possibilities. Sociocultural learning theories and collaborative learning based on sociocultural learning theories are relevant and interrelated, and they are applied for developing information literacy in higher education. Vygotsky showed that social tools have significance for understanding how people classify and talk about their experiences.

Experience of narratives (stories) supports literacy development, and this development takes place in several ways. First, the experience of narratives supports students in their knowledge or understanding, imagining orders of activities, which is crucial to reading and in understanding other subject areas (Schwartz & Heisner, 2006).

Second, experience helps students understand stories. It supports the development of literacy skills. Students' ability at following narratives helps them reasoning with the goals of characters of stories (Lynch & van de Broek, 2007). Collaborative or joint problem solving is fundamental to learning and development. Students can reply and cooperate with other people in the way of their achievement. Cultural knowledge is implicit in joint problem-solving (Goodnow, 1990). To sum up, the research on the development of attention, memory, and problem supports Vygotsky's (1978) idea that social and cultural experiences have an impact on higher-level cognitive processes. It also resonates with activity theory (Engstrom, 1987; 1993) by highlighting the practical and goal-directed nature of cognitive development.

### **3. Cultural-Historical Approach and Activity Theory**

Vygotsky is the most influential sociocultural theorist who had brought together systematically the notions of culture, development, and learning. Vygotsky (1978) defined learners' development as a method of participation that was historically and culturally determined and socially situated. Students' cooperation in cultural activities shapes these functions and provides the way for the development of higher psychological capacities. According to Vygotsky, the direction of learners' development through communication happens in the process of managing activities. They perform as the primary source of growth and open new ways to other experiences. In summary, Vygotsky presented a valuable method of the relationship between the culture and children's development.

Vygotsky's views have been extended in some ways; one such branch appeared as Activity Theory. Based on Leont'ev's (1981) notion of action and Engstrom's (1987; 1993) extensions of it, it is argued that the idea of the event is similar to the concept of method utilised in cultural psychology.

### **4. Identity in Higher Education**

Identity "is based, in part, on what we do, why, and our own and others' beliefs about what that means, both now and for the future" (McCaslin, 2009, p.139). Identity formation and development is an ongoing process that appears within the impact of various circumstances: individual, social, and cultural. Ryan and Deci (2003) confirm this idea, by stating: "individuals acquire identities over time, identities whose origins of meetings derived from people's interactions within the social groups and organisations that surround them" (p. 253). However, it is normal during the adolescence phase that the structure of one's identity becomes more predominant. Moreover, this phase is only considered over with the construction of one's identity. Thus, at a time of psychological transformations for many young adults, the shift to higher education can be tough due to the uncertainties they meet. Despite the obstacles, according to Erikson (1968), HE context gives students the possibility to explore life opportunities and try to form a constant and coherent sense of personal identity, crucial in the adult world. For, as psychologists

Berzonsky and Kuk (2005) argue, individuals who have a consistent and well-integrated personality structure possess a sense of direction and purpose that facilitates everyday decision-making and problem-solving.

## 5. Narratives and Identity

Narrative studies acknowledge the story as the primary form of human understanding. Authors such as Bruner (2004a) and Ricoeur (1984) argue that for an individual to entirely comprehend his/her experiences and the broader social world, it is necessary to recreate and contextualise them, both socially and culturally through stories. Thus, storytelling is essential to comprehend oneself and the world. Bruner (2004a) suggests that how a person creates and tells his/her narrative ultimately shapes their self-perception. It is through stories, Witherell and Noddings (1991) suggest that the self-development and finds meaning in the context of relationship - between self and other people, subject and object, individual and culture and between aspects of the self, both across and within the time dimension. Thus, identity is understood as "an open-ended, dialogical, and narrative engagement with the world, having multiple origins and trajectories" (Raggatt, 2006, p.32). Ochs and Capps (1996) conclude that the self is inseparable from the story, as it is a way to perceive personal experiences consciously, as well as a means to mediate experiences throughout a person's life. They consider that narrative practices are social practices, then the narrated self is constructed with and responsive to other people. The interaction between speakers allows the storyteller to develop a particular vision of self-concept and social identity, based on the listeners' reactions (Bruner, 2004a). Stories are a way to make sense of our lives, a way to put things into context. A person's identity is built and defined through interaction with others, and who we are, is, in part, a reflection of how those surroundings notice us. Thus, different identities can be assumed in various situations, as we shift within diverse social contexts. Therefore, to sum up, "character represents the aspect of the self that is accessible and salient in a particular context, and that interacts with the environment" (Valkenburg, Schouten, and Peter, 2005, p 384). Self-presentation is, in that case, how the self and the person's different identities interact with the images conveyed, within a particular social context.

## 6. Cultural Aspects of Learning Environment

Cultural awareness moves well beyond the facts about different cultures. In the late twentieth century, Hofstede (1991) stated that learning cross-cultural communication skills cover three essential steps: awareness, knowledge, and expertise. Awareness deals with having the acceptance of the different behaviours; knowledge with tackling with the distinct differences in various cultures and expertise with exercising specific skills for non-verbal communication. The student should understand how to learn strategy with its multiple and diverse linguistic and cultural contexts. Various authors (Fenner, 2016; Guo and Jamal, 2010; Ribeiro, 2016) recognise the need to compare others' norms, values, beliefs, assumptions, and behaviours critically. By shifting the focus on their culture, as well

as towards other cultures, adults can understand viewpoints within and across any culture, thus obtaining a deeper understanding of different cultures.

Fenner (2006) draws on Hofstede (1991); however, she claims that it is not just gaining knowledge and developing skills, but also a matter of attitude and interaction towards the foreign culture. The author emphasises the need for openness towards other cultures and acknowledges that the learning process should be based on self-reflection and self-understanding. Guo and Jamal (2010) corroborate that the exploration of otherness is essential for students to understand the worldviews of others. This may be either an internal process through self-reflection, or an external one while engaging in activities in which students are required to incorporate alternative viewpoints. To conclude, preparing students to live and work in plural societies as socially responsible and intercultural informed citizens implies tolerance and flexibility.

## **7. Higher Education and Technology**

Every sphere of contemporary society has been touched by technology, including higher education. For a long time, higher education was known for its delayed response to change and adoption of innovations, but the current computer technology revolution has significantly diminished that stereotype. The long-held view in higher education of technological and scientific innovation as the exclusive province of academic research has changed; it is now being used to support the business and administrative processes and operations of colleges and universities, to carry out research, and to improve teaching and learning. In their efforts to equip college graduates with the skills needed to compete with the emerging knowledge economy, academic institutions are using existing and emerging technologies, as employers are looking for 'technologically navy' alumni (Chisholm, Carey, & Hernandez, 2002).

The potential of the technology to improve the quality of learning and teaching is undeniable. Valdez (2004) observes that technology offers many opportunities to improve education and that it has the potential to provide people in their homes and work settings with access to knowledge and learning resources available until recently only to universities. Furthermore, he argues that technology can make everyone a producer of fundamental knowledge that can be shared with the world at small cost. On its effectiveness in classroom practices, Franklin (2005) observes that technology in education may promote new learning contexts in which inquiry and problem-solving increase student achievement. According to Barron et al. (2001), technology provides an excellent avenue for student motivation, exploration, and instruction in a multi-sensory diverse world. They further argue that technology deals with more aspects of our daily lives. They observe that the integration of technology into the school curriculum is no longer a luxury, rather "it will be a means of survival in the future that will be driven and supported by technology" (Barron et al., 2001, p. 17.) There is no doubt that integrating technology is precious in the process of learning and appeals to many aspects of students' learning. In short, technology integration in education provides students with broad opportunities to benefit from and guide their knowledge when it facilitates

the teaching process. As argued by Roblyer and Doering (2012), "technology is everywhere and therefore in education" (p. 10). According to Bruess (2003), computer technology is permeating the educational arena and changing the way teachers teach and students learn. With technology, students can access different sources of knowledge by themselves. This trend diverges from the traditional approach to depending almost entirely on teachers or instructors. With this new direction, the process of education has taken on a new dimension that requires new approaches to the process of learning and teaching. Nevertheless, the concept of integration is not so straightforward. One thing is the recognition of the role of technology, another thing is finding effective ways to integrate it into the educational process. Whitehead, Jensen, and Boschee (2003) observe that for technology to be used in instruction or the process of education, its adoption and use should be carefully planned and implemented. Therefore, while the use of technology in education has appealed to many people in educational practices, its implementation has been clouded by challenges and scepticism about its effectiveness in application. Barron et al. (2001) report that to use technology in the classroom, one needs new methods and new patterns of professional growth. Some technology integration scholars (Bates and Poole, 2003; Bradshaw, 2002; Ertimer, 1999; & Levira, 1997) have presented the gaps or issues that occur when technology integration is not performed correctly or efficiently, for example, lack of technology-related-classroom management knowledge or unfamiliar with the pedagogy of using technology. Edyburn (1998) argues that without models, principles, and strategies, the challenge of integrating technology into the curriculum can be an overwhelming task with unpredictable results.

## **8. Digital Storytelling - a New Pedagogical Tool**

Throughout history, storytelling has been accepted to share knowledge, wisdom, and values. Stories have developed many patterns. Stories have been adjusted to each succeeding factor that has evolved, from the circle of the campfire to the television screen, and now to the computer screen. Digital stories are powerful, as they unite images (pictorial and video), music, and human voice. Being short, they correspond to the rhythm of contemporary society. The genre of short-short story is believed to be initiated by Ernest Hemingway who made up a 6-word story: "For sale baby shoes, never worn." The rest, according to his iceberg theory, would be thought of by the listeners / readers and everybody would make up their own stories. With the development of computer, everybody can create their digital stories, not as genius as Hemingway's, but emotional and/or informative enough (Sharaq, 2016).

Although storytelling is not new, the idea of Digital Storytelling is new (Meadows, 2003). When we deal with Digital Storytelling, it is vital to reflect the idea of a story. In everyday life, we are sharing our stories with each other through emails, messages, letters, and phone calls and so on. All these, in fact, are sort of digital stories.

The definitions of Digital Storytelling may vary from author to author. It depends on their (Barrett, 2004; Lambert, 2010; Robin, 2006) understanding and experiences. Normally it is a short story (2-5 minutes) which connects traditional forms of story narration with a wide variety of multimedia tools. These media tools are charts,

audio, videos, animations and online editions. One of its novel characteristics is that the author narrates the story with his / her voice (Barrett, 2004; Lambert, 2010; Robin, 2006).

There are various types of digital stories such as historical events, instructional videos or personal stories (Couldry, 2008). Digital stories help teachers to give students extra opportunities to increase their presentation skills and academic results with the support of Digital Storytelling. It is a simple but essential method to help students to make sense of the synthesis and unordered world of experience of planning storyline (Bruner, 2004b). Personal experiences and feelings are the cornerstones of many Digital Storytelling projects. Indeed, Combs and Beach (1994) define, "the stories that are part of the fabric of our lives are personal narratives. The human brain is essentially a narrative device. It runs on stories" (p. 464). In fact, the analysis (Chung, 2007; Ohler, 2008) supports that storytelling can be a method to promote learners in forming the understanding of the "complex and an unordered world of experience" (Sadik, 2008, p. 489). Moreover, storytelling can combine past, present, and future generations to form values and beliefs (Chung, 2007).

The interpretation of Digital Storytelling proposes immense possibilities for teachers and students to involve and interact with their experiences. By mixing visual pictures with written text, digital stories can be used to enhance and stimulate student awareness (Burmark, 2004; Robin, 2008).

## **9. The qualitative research methodology and results**

An empirical research has been conducted to have a complete picture concerning the central question of the article and to find out how universities in Georgia have coped with the technological changes and whether they use the digital storytelling in their practice.

The main problem of the empirical research is: whether / how the lecturers are using the digital storytelling in their classroom to enhance their students' active learning. To have a full answer to the questions mentioned above as well as to envision the lecturers and students' perception concerning the usage of Digital Storytelling the following detailed problems have been enquired.

The following research question guided the study: What are students' and lectures perceptions of digital storytelling as a tool for learning in different subjects? Analysis of students' and lecturers' reflections revealed four themes: motivation, collaboration, reflective practice and identity development.

The conducted research has given the researcher the opportunity to collect and interpret information from students and lecturers and to find out their opinions about the Digital Storytelling used in the higher education system. It has also contributed to defining the role of the digital storytelling as an empowering tool and method in the technology-enhanced classroom.

As known, in-depth interview is one of the most efficient methods of data collection in the qualitative research. As Seidman states, "At the root of in-depth interviewing is an interest in understanding the lived experience of other people and the meaning they make of that experience" (p.9).

The interview used has turned out to be valuable because of two main factors:

- It has shown the opinion of the students, teachers, lecturers from Georgia;
- It has vividly shown the differences between the students' and lecturers' expectations while they are using digital storytelling.

Participants are from Georgian Universities: Seven lecturers and twenty-two students from the International Black Sea University (IBSU), Ilia State University, and Georgian National University.

The conducted interviews found out some coincidences as well as differences in students' and lecturers' expectations as well as in their university learning experience.

To integrate digital storytelling into learning, lecturers and students must see it emphatically, be satisfied with it and use it productively (Casey and Rakes, 2002). Therefore, the need is emphasised to determine what lecturers and students are thinking about when they are using digital storytelling and what they are concerned about at the end of the integration process.

To gain a thorough understanding of the synthesis of digital storytelling into learning and contribute more vigorous detail and insights into lecturers' experiences, a set of interview questions for individual interviews, as qualitative method, were asked of students and lecturers to provide reliable data. These questions are framed to prepare the thoughts of the lecturers and students around the effects of digital storytelling integration into learning.

Individual interviews were conducted in person by the researcher, and the answers were analysed to identify exemplars, views, preferences and customs, as related to the lecturers and students' digital storytelling integration.

Questions that were asked of participants included:

- How much time is devoted to integrating technology at your lectures? Do you think that technology has changed the ways teachers teach and students learn? If so, how?
- What are the benefits and the challenges of collaborative learning in information and digital literacy education?
- In what ways do you think motivation has changed?
- Does Digital Storytelling create a safe and empowering environment for intercultural collaboration and learning?
- How do you think, might you use digital storytelling in your workplace more often?

## 10. Interview analysis - Results of the study

The results are organized to address the research questions.

1. *How much time is devoted to integrating technology at your lectures? Do you think that technology has changed the ways teachers teach and students learn? If so, how?*

Six lecturers out of seven declared that they are using technologies during their classes and the way of teaching is changed. Before it was teacher-centered and 80 % of time the teacher was speaking, and interaction between students was less than 20 %. However, now it is half-to-half. Students are more actively involved. Technology has the prominent role in it. As they stated, all the topics need to have visual materials and need research, that is why technology and internet play the significant role in it.

60% of the students want to have more technology applied in their learning process because they can recognise the leading position of learning.

2. *What are the benefits and challenges of collaborative learning in information and digital literacy education?*

Lecturers mentioned that digital literacy education is essential in the 21st century, it develops collaboration and engagement, but they see the following challenges in it: students need facilitation during the collaboration and need to be checked carefully to ensure that all students are actively involved in the process. Teachers cannot completely control what the group members are doing (which is easy in individual activities). Fifteen students out of twenty-two enjoyed collaborative tasks and spoke of benefits of working with group members (sharing their knowledge and strategies, mutual support, increased self-confidence, etc.).

3. *In what ways do you think motivation has changed?*

Not only external, but also internal motivation increased. Both lecturers and students emphasized that DST was enjoyable for the majority of the students.

4. *Does Digital Storytelling create a safe and empowering environment for intercultural collaboration and learning?*

Although some lecturers did not have the experience of Digital Storytelling, after being explained what it is, they saw its advantages. Moreover, they mentioned that it will be a great motivator for the students.

The lecturers who have already used digital storytelling pointed that DST projects could increase the students' understanding of the given topic and improved their technological and collaboration skills as well as the engagement in the projects. One lecturer mentioned that he found out that students they were helping each other out when they were trying to develop their stories or solve the technical problems. Overall five out of seven lecturers noted that they are willing to transform their pedagogy and curriculum and include digital storytelling in their teaching and learning process.

As for students, they told with great enthusiasm how they created their stories. Moreover, they mentioned that it was an entertaining and engaging moment for them. The process was engaging; the successful students

helped others to finish their projects on time. Some of the students expressed an idea that they would be happy if the lecturers applied more DST.

5. *Does Digital Storytelling create an empowering environment for intercultural collaboration and learning?*

One interviewee was so excited with the question because he mentioned the question itself gave the idea to create the stories connected to intercultural collaboration and learning. Others liked the idea as well and stated that sharing cultural differences in the process of DST will empower students' cultural sense and identity.

80% of the students did see the intercultural collaboration perspective in DST (the groups where they study are monocultural), but they mentioned that it should have many benefits if the group is multicultural. 20% of the students mentioned that they had a chance of applying DST in a multicultural environment and admitted that it worked well; they even remembered the stories they made up.

6. *How do you think, might you use digital storytelling in your workplace more often?*

The majority of the students mentioned that they could see the potential for developing more learning possibilities efficiently if the lecturers gave them more technology-related tasks. Also, the lecturers liked the idea to use digital storytelling in their classrooms, and they think that their students' technological skills quite sufficient for applying DST. They can see many benefits, it can be used as collaborative learning, and it will help the students who have different cultural background to work together. "This process will enhance the knowledge and experience in cultural aspects" - one lecturer mentioned during the interview. They also pointed out the reflective practice and its effectiveness in the teaching and learning process. Four lecturers out of seven believe the technology integration and in particular DST will help lecturers to develop students intellectually, creatively and culturally.

One lecturer particularly underlined the sentence during the interview, such as "DST is an effective way. It helps students to collaborate. It increases the students' cognitive development and the sense of identity. Moreover, we need to remember also that DST will increase students' motivation to learn." One participant emphasised the benefit of DST for visual learners and mentioned that pictures and videos help his visual learner to reflect the information in a more effective way. As for the interaction, lecturers think that DST gives the students an extra opportunity to be more motivated, which consequently causes the improvement of students' learning.

## 11. Conclusion

Sociocultural approaches have made significant augmentations to the study of learning and development in higher education. It has to provide a student-centred approach (take students' learning style, their culture into consideration), student motivation and to develop not only the course-related skills, but also transferable ones – creativity, higher-order cognitive skills, self-confidence, ability to cooperate in reaching the goals, etc. All these can be developed through the application of DST.

As the conducted interview showed, the new way of technology integration into the learning process – DST - is not so common for the lecturers. They are not creating videos themselves, but they declared that they are using

videos for their courses. Students admitted that they have had few video projects during their university life, only some of them have already benefitted from Digital Storytelling in different subjects.

It is necessary to persuade lecturers to incorporate social interaction in their classrooms, which is effectively done through DST. It is essential to train them how to do it. It is important that they get acquainted with students' opinion that the latter need to be actively involved in the process of learning and not just listen to lecturers. Contemporary students are "netizens" and want to see technology applied effectively in their learning process. DST, as this research confirmed, is an effective way to motivate students, develop their collaboration and reflective practice, empower their personality development and thus enhance their active learning.

## References

- Barrett, H.C. (2004). Tutorials for Digital Storytelling. Retrieved February 17, 2018 from: <http://electronicportfolios.org/digistory/index.html>
- Barron, A.E., Orwig, G.W., Ivers, K.S., & Lilavois, N. (2001). *Technologies for Education* (4th Ed.). Greenwood Village, CO: Libraries Unlimited-Greenwood Publishing Groups, Inc.
- Bates, A.W. & Poole, G. (2003). *Effective Teaching with Technology in Higher Education: Foundations for success*. San Francisco, CA: Jossey-Bass.
- Berzonsky, M.D., & Kuk, L. (2005). Identity style, psychosocial maturity, and academic performance. *Personality and Individual Differences*, 39, 235–247.
- Bradshaw, L. K. (2002). Technology for teaching and learning: Strategies for staff development and follow up support. *Journal of Technology and Teacher Education*, 10(1), 131-150.
- Bruess, L. (2003). *University ESL Instructors' Perception and Use of Computer Technology in Teaching*. Unpublished doctoral dissertation. University of New Orleans, New Orleans, LA.
- Bruner, J. (2004a). Life as narrative. *Social Research: An International Quarterly*, 71(3), 691–710.
- Bruner, J. (2004b). A short history of psychological theories of learning. *Daedalus*, 133(1), 13-20.
- Burmark, L. (2004). Visual presentations that prompt, flash & transform. *Media and Methods*, 40(6), 4–5.
- Casey, H., & Rakes, G. (2002). An analysis of the influence of technology training on teacher stages of concern regarding the use of instructional technology in schools. *Journal of Computing in Teacher Education*, 18(4), 124-132.
- Chisholm, I.M., Carey, J., Hernandez, A. (2002). Information Technology Skills for a Pluralistic Society: Is the Playing Field Level? *Journal of Research on Technology in Education*, 35, 1, 58-79.
- Chung, S. K. (2007). Art education technology: Digital Storytelling. *Art Education*, 60 (2), p. 17-22.

- Combs, M. & Beach, J. D. (1994). Stories and storytelling: Personalizing the social studies. *The Reading Teacher*, 47 (6), p. 464-471.
- Couldry, N. (2008). Digital Storytelling, media research and democracy: Conceptual choices and alternative futures", in Lundby, K. (ed.) *Digital Storytelling, Mediatized Stories. Self-Representations in New Media*. New York: Peter Lang, 41-60.
- Edyburn, D. (1998). A map of technology integration process. *Closing the Gap*, 16, 6, p. 1,6,40.
- Engstrom, Y. (1 87). *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*. Helsinki, Finland: Orienta Konsultit.
- Engstrom, Y. (1993). Developmental studies of work as a testbench of activity theory: *The case of primary care medical practice*. In Chaiklin, S. & Lave, J. (Eds.). *Understanding Practice: Perspectives on Activity and Context* (p. 64 – 103). Cambridge, UK. Cambridge University Press.
- Erikson, E.H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Ertimer, P. (1999). Addressing first and second order barriers to change: strategies for technology integration. *Educational Technology Research Development*, 47(4), 47-61.
- Fenner, A. B. (2006). *Intercultural awareness as an integral part of foreign language learning*. In *Coherence of Principles, Cohesion of Competences*. Strasburg: Council of Europe Publishing, 40–58.
- Franklin, T. (2005). Seeking the perfect electronic portfolio solution: A case study. *Proceedings of Society for Information Technology & Teacher Education International Conference 2005* (pp. 84-87). Chesapeake, VA: AACE.
- Goodnow, J.J. (1990). The socialization of cognition: What's involved? In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural Psychology: Essays on Comparative Human Development* (p. 259-286). Cambridge, England: Cambridge University Press.
- Guo, S. & Jamal, Z. (2010). Nurturing cultural diversity in higher education: A critical review of selected models. *Canadian Journal of Higher Education*, 37(3), 27–49.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the mind*. London: McGraw-Hill.
- Jennings, W. J. (1996). He became truly human: Incarnation, emancipation, and authentic humanity. *Modern theology*, 12: 239–255.
- Lambert, J. (2010). *Digital Storytelling Cookbook*. Berkeley, CA: Digital Diner Press.
- Lave, J. & Wenger, E. (1991). *Situated Learning. Legitimate Peripheral Participation*. Cambridge, England: Cambridge University Press
- Leont'ev, A. N. (1981). *Problems of the Development of Mind*. Moscow: Progress Publishers.

- Levira, M. A. (1997). Instructional technology in developing countries at crossroad: Should the countries go electronic? *International Journal of Instructional Media*, 24(2), 99-111.
- Lynch, J. S., & van den Broek, P. (2007). Understanding the glue of narrative structure: Children's on- and off-line inferences about characters' goals. *Cognitive Development*, 22, 323-340.
- McCaslin, M. (2009). Co-regulation of student motivation and emergent identity. *Educational Psychologist*, 44(2), 137-146.
- Meadows, D. (2003). Digital Storytelling: *Research-based practice in new media*. *Visual Communication*, 2(2), 189–193.
- Nuthall, G. (1997). Understanding student thinking and learning in the classroom. In Biddle, B.J., Good, T.C. and Goodson, I. (Eds.). *The International Handbook of Teachers and Teaching*. Dordrecht: Kluwer Academic publishers, 731-732.
- Ochs, E. & Capps, L. (1996). Narrating the self. *Annual Review of Anthropology*, 25 (1), 19-43.
- Ohler, J. (2008). *Digital Storytelling in the Classroom: New Media Pathways to Literacy, Learning, and Creativity*. Thousand Oaks, CA: Corwin Press.
- Raggatt, P.T.F. (2006). Multiplicity and conflict in the dialogical self: a life-narrative approach. In: McAdams, D.P., Josselson, R., and Lieblich, A., (eds.) *Identity and Story: Creating Self in Narrative*. American Psychological Association, Washington, DC, USA, p. 15-35.
- Ribeiro, P.M.S. (2016). Developing intercultural awareness using digital storytelling. *Language and Intercultural Communication*, 16, 69-82.
- Ricoeur, P. (1984). *Time and Narrative*. Chicago, IL: University of Chicago Press. River, New Jersey: Merrill Prentice Hall.
- Robin, B. (2006). The educational uses of Digital Storytelling. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference*, p. 709-716. Chesapeake, VA: ACE.
- Robin, B. (2008). *Digital Storytelling: A powerful technology tool for the 21st century classroom. Theory into Practice*, 47(3), 220–228.
- Roblyer, M.D. & Doering, A.H. (2012). *Integrating Educational Technology into Teaching*. (6th Ed.) Boston, MA: Allyn & Bacon.
- Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in Social Context*. New York: Oxford University Press.



- Ryan, R.M. & Deci, E.L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In Leary, M.R. & Tangney, J.P. (Eds.), *Handbook of Self and Identity* (p. 253-272). New York, NY, US: Guilford Press.
- Sadik, A. (2008). Digital Storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development*, 56, 487-506.
- Seidman, I. (2006). *Interviewing as Qualitative Research*. New York: Teachers College Press.
- Schwartz, D. L., & Heiser, J. (2006). Spatial representations and imagery in learning. In Sawyer, R.K. (Ed.). *The Cambridge Handbook of the Learning Sciences* (p. 283-298). New York: Cambridge University Press.
- Sharaq, L. (2016). Twitter fiction: A new creative literary landscape. *Advances in Language and Literary Studies*, 7, 4, p. 16-19.
- Valdez, G. (2004). *Critical Issue: Technology Leadership: Enhancing Positive Educational Change*. Naperville, IL: North Central Regional Educational Laboratory.
- Valkenburg, P., Schouten, A., & Peter, J. (2005). Adolescents' identity experiments on the Internet. *New Media & Society*, 7(3), 383-402.
- Vygotsky, L.S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Whitehead, B. M., Jensen, D.F., & Boschee, F. (2003). *Planning for Technology: A Guide for School Administrators, Technology Coordinators and Curriculum Leaders*. Thousand Oaks, CA: Corwin Press Inc.
- Wetherell C., Noddings N. (1991). Prologue: An Invitation to our readers. In Wetherell C. & Noddings N. (Eds.). *Stories lives tell: Narrative and dialogue in education* (p. 1–12). New York: Teachers College Press.