Digital literacy at a turning point: New solutions for emerging issues

Chairpersons: Jeroen Clemens and Fabio Nascimbeni

At a time when social media are influencing mass opinion and where our data are becoming our most precious assets, being able to act and communicate meaningfully and responsibly in digital settings is more than ever a requirement. Digital literacy, as advocated by the ELINET Network back in 2016, should be connected with issues such as new literacies, media literacy, artificial intelligence and others, with the aim of providing every citizen with the skills needed to thrive in the digital learning environment, in digital workplaces, and in digital entertainment spaces, among others.

The symposium aims to present a number of views and experiences that are contributing to this vision of digital literacy from a policy, research and practice point of view, and to discuss how these approaches could be scaled up and mainstreamed in Europe and globally.

Presentation 1: Metacognitively-oriented digital literacy intervention for high school learners.

Byeong-Young Cho, Scott Fraundorf, Kole Norberg, Hyeju Han, University of Pittsburgh, USA.

Students often struggle in online reading due to their lack of metacognitive knowledge about what, how, and why literacy strategies work in a digital context. However, no study exists to develop a digital literacy intervention for the improvement of metacognitive knowledge and thereby to examine how the intervention can facilitate students’ learning of such important online reading strategies in classroom settings. We have designed an instructional approach to help high school students acquire metacognitive knowledge about online reading strategies, in collaboration with teachers of English language arts at a local high school. The purpose of the study was to examine whether students can benefit from the week-long intervention both in terms of strategic knowledge and of performance for digital reading. Data sources includes pre and posttests of 265 high school participants’ awareness of online reading strategies, their opinions about digital source evaluation, and their performance in a critical online reading task. In this presentation, we discuss: (a) our design of the
instructional materials and activities that support high school learners’ understanding of strategic online reading, (b) major findings from the intervention study with regard to students’ improved knowledge and performance for strategic online reading, and (c) pedagogical implications of our intervention approach for educational researchers and practitioners who are interested in digital literacy education. We hope that our talk contributes to ongoing conversations about scientifically-based practices in the teaching and learning of digital literacy skills.

Presentation 2: Personal digital inquiry: Connecting learners in ways that matter.
Julie Coiro, University of Rhode Island, USA.

Designing interest-driven digital learning opportunities in an age of accountability can be challenging. A personal digital inquiry (PDI) framework helps in planning for students to actively inquire, collaborate, participate, and reflect while staying actively engaged and motivated in your learning community. View examples of what PDI teaching and learning can look like in grades 1-12 and learn how to make purposeful choices about levels of support and digital tool use as part of project-based student inquiry.

Inquiry is the essence of twenty-first century teaching and learning. Offering learners opportunities to generate their own wonderings about real-world problems helps them connect their own interests to real-life issues in ways that can lead to real change (Alberta Learning, 2004). In turn, opportunities for purposeful, self-directed inquiry become personally fulfilling learning experiences (Pink, 2009).

Students engaged in technology embedded inquiry practices have begun to demonstrate many of the twenty-first century skills called for by international thought leaders, business leaders, and educational researchers alike (see Schleicher, 2016; Saavedra & Opfer, 2012). Studies have also documented dramatic increases in elementary student performance in literacy and numeracy as well as in high school graduation rates (Clarke, Gill, Sim, Patry, & Ginsler, 2014) as a result of these inquiry practices. This presentation reviews four core sets of practices and related activities that have been incorporated into a model of Personal Digital Inquiry (Coiro, Dobler, & Pelekis, in press) that engages students in flexible opportunities to wonder and discover, to collaborate and discuss, to create and take action, and to analyse and reflect.
**Presentation 3: Digital Literacy: Curriculum reform in the Netherlands and the role of language teachers.**

Jeroen Clemens, Independent Researcher and Consultant; University of Applied Sciences Windesheim, Netherlands.

In the Netherlands, there are rapid changes in the thinking about plans for a new curriculum. In this, digital literacy plays an important role. In 2015, the State Secretary of Education, Culture and Science appointed an advisory commission, Platform Onderwijs2032, to conduct a thorough public consultation examining the form and content of primary and secondary education in the Netherlands. The objective was to identify the knowledge and skills that young people must acquire if they are to function effectively in a rapidly changing society. In January 2016, the commission published its report Ons onderwijs2032 Advisory Report. In this report, the Platform calls for a fixed basis of knowledge and skills and (digital) literacy was mentioned two domains: (1) Language skills: Dutch and English, and (2) Digital Literacy. In 2018, teams were created with 125 teachers, 18 principals and 80 schools to work on developing plans for new attainment goals and a new curriculum for primary and secondary education. This project is called curriculum.nu (https://curriculum.nu/). In this project, there are three separate development teams related to literacy: (1) Language domains Dutch and English, and (2) the new domain Digital Literacy. How do we integrate digital literacy in the curriculum? What are the pros and cons of this way of curriculum development and why and how we can integrate digital literacy and language teaching?

**Presentation 4: Focus on reading comprehension**

Anneke Smits, University of Applied Sciences Windesheim, Netherlands

In the Netherlands, we typically use course books and online materials from educational publishers to teach children reading comprehension. Research has shown that these books and materials are not effective in combatting reading comprehension problems. Our course books typically target strategy instruction and practice of the strategies in many different texts. For us, the challenge was to develop a new program that focuses on teacher behavior and skills and that takes a very different and evidence-informed approach to problems in reading comprehension. The program was designed on the basis of an extensive literature study. The program is content-oriented (as opposed to strategy-oriented) and aims to extend the language and knowledge base of students by giving
them thematically and conceptually related books to read. The themes are related to different school subjects. Currently, we are working with schools to further develop the program. In the presentation, we will explain the contents of the program and the rationale behind it. We will share experiences from the schools and developments in the program. We hope for a discussion about different orientations in reading comprehension programs in Europe.

**Presentation 5: Digital children’s literature: A narrative hybrid between print books for children and computer games.**

Uta Woiwod, Universität zu Köln, Germany.

This contribution deals with possibilities of using digital literature for supporting the literacy development of boys and girls aged 7 -14 who have poor reading skills. Young readers’ usage of digital devices, rather than their readings of narrative texts, presents itself as a sustained practice. My comparative analysis of works of digital and print literature results in the realisation that properties like nonlinearity, pictures, or a playful handling of the author/reader positions are by no means properties of digital media but of narrative texts. This makes digital literature an ideal starting point for a combination of teaching literacy and digital literacy in unison. As an example, we will consider a digital version of Lewis Carroll’s Alice’s Adventures in Wonderland.

**Presentation 6: Meaningful literature education with ICT.**

Anneke Smits, Roland Bruijn and Henk la Roij, University of Applied Sciences Windesheim, Netherlands

Although not immediately obvious, ICT and literature can be a good combination. Research has shown that literature education can significantly benefit from integration with technology. In this presentation we will show how technology can motivate students to read and how the integration of technology in literature will also enhance students’ digital literacy.