"I've never had so much fun at school": Using Tablets in the Language Learning Classroom

Bård Ketil Engen, Tonje H. Giæver, Louise Mifsud

Oslo and Akershus University College, Faculty of Teacher Education Norway

bard-ketil.engen@hioa.no, tonje.h.giaever@hioa.no, Louise.Mifsud@hioa.no

Abstract

In this paper we present findings from an on-going study of the use of tablets (iPads) in a third grade primary classroom, focusing on storytelling, in particular fairy tales. We raise the issue of how and why tablets support language learning with regards to grammar, spelling, understanding of genre and text development. We analyse this from a socio-cultural approach (Vygotsky 1978; Wertsch 1995, 1997, 1999; Säljö 2006), focusing on tool-mediated language learning.

In this study, pupils were equipped with iPads, and had been using iPads since their first grade. In working on their fairy tales, pupils worked in groups of five. Prior to starting to work on their story the pupils had read several classical fairy tales, both Norwegian and other, looking for typical fairy tale characteristics. Pupils first created characters using wooden spoons in their creative art lessons. In their Norwegian language lessons, the students discussed the characteristics of the character they had created, such as an evil prince, or a good witch. Teacher put the groups together according to characters in the story as well as based on pupils' abilities. The pupils created fairy tales using the app Book Creator. The pupils were to write within the fairy tale genre, making use of phrases such as "Once upon a time" and "they lived happily ever after".

We observed and recorded the whole trajectory of the story development, which lasted a week, using video as well as field notes. There were two to three researchers in the classroom. The observations were followed up by recording the pupils' presentations of their story and interviewing the teacher as well as in-situ interviews with the pupils.

In order to analyse our findings we use interaction analysis (Jordan & Henderson 1995). We observed pupils discussing to how the text should develop as well as spelling and grammar. Our findings indicate that the learning activities were characterised by reciprocal as well as complementary interaction between pupils, technology and text development.

1. Introduction

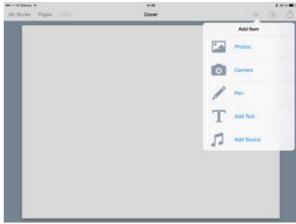
In this paper we present findings from an on-going study of the use of mobile technology for language learning in a third-grade primary classroom, focusing on storytelling, in particular fairy-tales. We analyse our findings from a socio-cultural approach (Vygotsky, 1978; Wertsch, 1998) focusing on tool-mediated language learning. From a sociocultural perspective, understanding the mediating role of tools is a prerequisite for understanding learning (Vygotsky, 1978). Mediation refers to the relationship between humans and their objects of activity, which is always supported by tools (Wertsch, 1998). In this paper we raise the issue of the role of the tablets in the language learning classroom:

- How and why do tablets (iPads) support language learning with regards to grammar, spelling, understanding of genre and text development.
- Do tablets used in the primary school classroom support the competence aims in Norwegian language learning, and in which ways?

The Norwegian Curriculum (2006) includes five basic skills that should be integrated into every subject area: the ability to read, write, numeracy, oral skills and digital skills. Furthermore, every subject defines competence aims to be attained at different stages in their education. This means that teaching in Norwegian also implies teaching digital skills.

In this paper we report from an observational period of over a week where third-graders worked on a fairy-tale project using "Book Creator" in their Norwegian Language lessons. Prior to the fairy-tale creation task, the pupils created characters using wooden spoons in their creative art lessons. The pupils were given the task to construct a multi-modal fairy-tale in groups. The pupils were specifically asked to focus on their character's characteristics, such as "evil witch", "kind dragon" or "good prince". These characters steered the group set-up (a group could not have two princesses, for example). Everyone's wooden spoon character was to appear in the story. The pupils were also to write a minimum of one page each, and record themselves reading it.

The project started with a short teacher-driven introduction to genres, focusing on the specific characteristics of the fairy-tale, such as "once upon a time", "they lived happily ever after" and what kind of characters that usually appear within the fairy-tale genre. During the previous week the pupils had read different fairy-tales from different parts of the world. After the general introduction to fairy-tale as a genre, the teacher went around each group explaining the characteristics of a traditional book, such as a front page, text and illustrations and introducing the iPad application "Book Creator". Besides tools for writing text and inserting images, Book Creator supports sound-recording, drawing, and videos. In the teacher's



introduction her main focus was on the potential to write text, add images and record sound. Other possibilities like video were not mentioned by the teacher. At the end of the project, the pupils presented their books to the whole class, focusing on what they found difficult, and what they experienced as a success. In talking to the pupils at the end of the project, the pupils were unanimous in that they had never had "so much fun at school".

2. Mobile technologies in language learning

Recent research on the use of mobile technologies for learning purposes has been concerned with whether these elicit new forms of learning, teachers' attitudes to mobile technologies and the teacher's role (Mifsud, 2014; Ng & Nicholas, 2009; Tondeur, Harmans, van Braak, & Valcke, 2008). Mobile assisted language learning (MALL) appears to be a new area within the field of computer assisted language learning (Chen, 2013; Chinnery, 2006; Kukulska-Hulme & Shield, 2008). Using participant feedback, Chen (2013) reports positive perceptions of the use of tablets for language learning. Hutchison, Beschorner & Schmidt-Crawford's (2012) study focuses on reading and new literacy skills, where reading goals where achieved together with learning to communicate digitally. An issue that can be raised is whether tablets stimulate language learning, and the role that they play.

3. Data collection

In addressing the above issues, our study has followed the teachers and the pupils at Fields Primary School, Oslo, Norway for a three-year period. The pupils had been using the tablets (iPads) since their first grade. This paper reports from a six-day observational period where the pupils worked specifically on the creation of multimodal fairy tales using the app "Book Creator". Data were collected by means of observation (video supplemented by field notes), by the three authors. Field notes were compared and discussed at the end of each observational session. Data corpus reported from in this paper totals over 20 hours of video material. Each researcher followed one group of pupils during the six days, as well as the introductory teacher-led sessions. The project has spanned over two years (Engen, Giæver, & Mifsud, 2014a; 2014b). Excerpts were transcribed and translated by the authors. Our analysis is inspired by and draws upon elements of Interaction Analysis (Jordan & Henderson, 1995), an interdisciplinary method for the empirical investigation of interaction of humans with each other and with objects in their environment.

4. Findings

In order to organise our findings, we have defined categories from the curriculum, such as conversation, multimodal texts and story development. In going through the competence aims for Norwegian language learning after the 4th year, our findings indicate that in creating a multimodal book, eighteen out of a total of twenty-five of the outcomes described in the competence aims for Norwegian were covered. Our interpretation of the situation is that the iPad's role was as the pivot, linking together the competence aims of Norwegian with digital skills, functioning as a scaffold (Bruner, 1963) in the development of the fairy tale.

4.1 Subject conversations and negotiations

Development of pupils' skills in conversations and negotiations are covered in several competence aims for this age group. For example in relation to oral competences, the curriculum (2006) specifies that by the fourth grade pupils should be able to: "follow up on input from others in disciplinary conversations and ask clarifying and probing questions". Furthermore, when it comes to language,

literature and cultural competences, the curriculum specifies that pupils should be able to: "talk about songs, rhymes, poetry, stories and fairy tales from the past and present in Norwegian and other languages" and "talk about the content and form in multi modal texts". We observed intensive discussions among the pupils about what kind of incidents that belonged in a fairy tale and what did not, particularly during the first days of the project. A suggestion from one pupil often resulted in comments from the others that lead to a discussion among the pupils about the characteristics of a fairy tale. Alex, for example, insisted that not all fairy tales end with "happy ever after", whereby in order to prove his point Alex looked up a particular story. Similar discussions were observed in all the groups, indicating an on-going practice in developing pupil's subject-conversations and negotiation skills in general. Equally important, in these discussions explicitly the pupils were practicing talking about genres within literature and language, and implicitly a frame for an understanding of multi-modal texts as a genre in the context for digital story telling.

4.2 Developing the story

The pupils were given a document that was to help them develop the plot. While all the pupils filled out the form that the teacher gave them, the fairy-tale developed according to the sets and the setting around the school. The pupils discovered early on that the technology they used was mobile. Instead of just using the classroom as a work place, they took the iPad, and their story, outside to the schoolyard. They took photos of their wooden spoon characters placed in either the grass, leaning against a tree, placed on a rock, and thereby made scenes that was a contribution to shape and enrich the story. A large tree-root was transformed into a cave where the wicked witch held the princess captive for "a long time", or where the creation of a hat that was too big for the wooden-spoon character became the character's home.



4.3 Grammar and spelling

Teaching and developing pupils' spelling and grammar competences is a crucial element within Norwegian language learning. The use of iPads combined with specific tasks given within the project framework appeared to contribute to increasing the pupils' awareness of spelling and grammar rules. At the end of the week when the groups were about to finish their story, they had to use the inbuilt voice-recording functionality and read aloud their own text. On several occasions we observed that the pupils discovered their own spelling and grammar errors through reading their own text and listening to their own recording afterwards. Pupils for example commented "I read through the whole book when we were done looking for spelling mistakes". We also observed pupils discussing the use of "to" and "and", which in Norwegian are homonyms (sound of "/o:/"). In this context, the iPad acted in establishing an ICT-mediated learning situation where it was more important for the pupils not to have grammar and spelling mistakes, since the whole class would be viewing the book

4.4 Multimodal texts

One of the competence aims within topic of "written communication" is to create multimodal texts that



combine text, sound and image, with and without digital tools (National Curriculum 2006). The tasks within the fairy-tale project covered these competence aims. But throughout the week the pupils on their own initiative took it further. The pupils started relative quickly to take photos of drawings and inserting photos into the book. After a few days some of the pupils discovered more possibilities of enriching the fairy-tale, creating a more advanced multimodal text. One of the pupils in one of the groups discovered possibility of embedding video-recording in their book. After a quick discussion of division of labour, the pupils organised a role-play for their characters. While some of the pupils were

responsible for dramatization, others became responsible for recording the scenes on video. Then the iPad was brought back to the classroom and the video was edited and inserted into the digital fairy-tale. Some of the other pupils came to watch the group editing the video, but not all the pupils agreed

that videos enriched the book, and one girl in particular was adamant that "videos don't belong in books" (Sophie).

5. Conclusions and Directions for Further Work

In this paper we have discussed how the iPad acted as a scaffold for strengthening the interplay between the competence aims in Norwegian language learning in primary education. Our findings indicate that the learning activities were characterised by reciprocal as well as complementary interaction between pupils, technology and text development. In addition, in developing a (digital) fairy-tale with an iPad represented a fun and motivating learning context for the children.

6. References

- [1] Bruner, J. S. (1963). The process of education. New York: Vintage.
- [2] Chen, X.-B. (2013). Tablets for informal language leaerning: student usage and attitudes *Language*, *Learning and Technology*, *17*(1), 20-36.
- [3] Chinnery, G. M. (2006). Emerging technologies. Going to the mall: mobile assisted language learning. *Language learning & technology*, *10*(1), 9.16.
- [4] Engen, B.K; Giæver, T.H; Mifsud, L. 2014. "iPads in Context: Interaction Design for Schools." Society For Information Technology & Teacher Education. 25th International Conference. AACE Journals
- [5] Engen, B.K; Giæver, T.H; Mifsud, L. 2014. "Out of the WILD and into the Schools: iPads from a Domestication Perspective". Society For Information Technology & Teacher Education. 25th International Conference. AACE Journals
- [6] Hutchison, A., Beschorner, B., & Schmidt-Crawford, D. (2012). Exploring the Use of the iPad for Literacy Learning. *The Reading Teacher*, *66*(1), 15-23.
- [7] Jordan, B., & Henderson, A. (1995). Interaction analysis: foundations and practice. *The Journal of the Learning Sciences*, *4*(1), 72.
- [8] Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, *20*(03), 271-289.
- [9] Kunnskapsdepartementet. (2006). *Kunnskapsløftet [National Curriculum of Norway]*. Oslo: Dept. of Education Retrieved from http://www.udir.no/Lareplaner/.
- [10] Mifsud, L. (2014). Mobile Learning and the Socio-Materiality of Classroom Practices *Learning, Media and Technology, 39*(1), 142-149.
- [11] Ng, W., & Nicholas, H. (2009). Introduction of pocket PC in schools: attitudes and beliefs in the first year. *Computers and Education*, *52*(2), 470-480.
- [12] Tondeur, J., Harmans, R., van Braak, J., & Valcke, M. (2008). Exploring the link between teachers' educational belief profiles and different types of computer use in the classroom. *Computers in Human Behavior*, *24*, 2541-2553.
- [13] Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Cambridge, Mass.: Harvard University Press.
- [14] Wertsch, J. V. (1998). Mind as Action. Oxford: Oxford University Press.