

Challenges in analyses of interaction between development of literary and digital literacy

By

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Topic

The topic of this paper is the development of literary literacy using digital resources as media for writing, publishing, sharing and discussing books. We study how students' motivation for reading and their literary literacy may be enhanced by engaging the students in activities connected to digital literacy, more concretely, the activity of literary blogging.

Aim

The aim of the project is to single out methodological, theoretical and other challenges in studying the relation between the literary blog, the students motivation for reading and writing and their literary literacy.

The aim for the present paper presentation is but a part of the overall project aim. The aim for the present paper is to discuss some specific methodological and practical challenges connected to the development of digital and literary literacy by way of "blogging", more concretely, we discuss the following question:

What conditions must be met for a literary-digital literacy project to be successful?

Examples of such conditions are:

1. Teachers must be digitally competent, which presupposes a discussion of the question *what does it mean to be digitally competent in this context?*
2. Teachers must facilitate for better digital and literary literacy through the learning environment, *which presupposes a discussion of the question what kind of facilitation is necessary?*

Context

In the Norwegian national curriculum (2006) inclusion and "adapted teaching" are core values. The curriculum points out several "competence goals" that the students' are supposed to have reached after the 2nd, 5th and 7th grade in primary school. Basic skills in reading and writing and using digital tools are to be integrated in these goals (together with oral presentation and mathematics). It is in this context we place our blogging project, as a possible enhancement of the three basic skills reading, writing and using digital tools.

The research and development project of which the present paper is a part, is also situated in a broader research setting, a larger cross-professional collaboration project between two public primary schools, two teacher education institutions and a public library. The library is seen as an interesting place for a natural individual adaption for every student, in terms of teaching and learning in a multicultural school. Systematic cooperation between the teachers and the school librarian in planning, facilitating, implementing and evaluating literacy events and learning activities is a central part of the project. "Reading time",

“sharing time”, regular “reading- and book loan time” in the school library, visiting the main library in town, having lessons with a real author of children’s books, writing stories and books themselves, are various literacy events in class.

Our research and development project reported from here, is undertaken at the 5th level with all the 54 students on this level. It is a public primary school in the outskirts of a medium large Norwegian town. The project aims at developing the students’ literacy skills by exploring alternative ways of teaching and learning, visiting the library, reading a great amount of literature which appeals to the students, using digital tools and the internet as frames for the students’ literacy activities. In this particular project we are trying out an internet tool, the blog, to facilitate digital writing activities to enhance the students’ general literacy and, more specifically, their literary literacy.

Below we describe the blog more extensively, but first we will discuss the concept of literacy and describe our research based motivation for trying out a blog as a good method to improve students' literacy.

Theoretical context and relevant research Literacy is a common expression for reading and writing knowledge. Reading and writing are two of a kind. To be well-functioning in reading and writing today requires other skills and other types of knowledge than reading and writing did 100 years ago. Definitions that accept a standard approach to literacy today, we find, for example, in the description of the conference as Literacy World Making - NERA 2009:

Literacy is (...) understood as communicative practices that shape the world we live in, determine how we read and write the world, how we see, understand and shape the relationship between ourselves, nature and our communal life. Literacy thus means empowerment for the individual and is a precondition for a functioning democracy.

Our understanding of literacy is further based on Barton (1994/2007). According to Barton (2007), reading and writing are considered as practices that develop in broad and complex contexts. Writing and reading activities relies on both individual and collective history. In such a framework literacy can be described as the study of culture and society specific written practices, as embodied in the text, and text usage. It makes it necessary to take into account the effects of social and cultural situating (see also *Situated Literacies*, Barton et al. 2000). That means that one is aware that all writing and reading occurs at a time and in a place. Among other things, this means that one has to think about how cultural heritage, educational, linguistic and literary traditions support and encourage certain forms of reading and writing skills, but restricts others. In Norway Barton’s thoughts are well known among reading and writing researchers. For example the scholars at the Reading Center at the University of Stavanger use Barton (2007) as a framework for their understanding of literacy in their description of their doctoral program in reading science / literacy studies.

Our project - the linking of digital literacy (blog writing) and literary literacy - can find its place in the curriculum for primary school (2006) mentioned above. Interestingly, with

regard to the background for writing and reading as basic skills, the Parliament decided in June 2004 to join the parts of the White Paper 30, *Culture for learning. Knowledge, diversity and equality*. In the parliamentary decision it was expressed that the capacity to understand, learn and practice a subject cannot be seen independently from that of creating meaning with language. A subject is defined, therefore, also as something that we must exercise for ourselves and together with others and articulate through language. It was a consensus that the basic skills mentioned above, i.e. writing, oral skills, reading, arithmetic and digital skills, constitute the key to achieving this (see Berge (2005) for additional overview and review of the preparations for the Norwegian plan of the National Curriculum for Knowledge Promotion). As mentioned, our project includes the interaction of three of these five basic skills: writing, reading and digital skills, as the description of the blog program below shows. In particular we are interested in this context to highlight the special responsibility of the school to seek to even out the differences in digital skills and digital literacy that exists in the student population and which is often connected to differences in the students' socio-economic status. Our project provides insight into one way schools and teachers can contribute to such a task, while all students are given the opportunity to work with academic literacy and with stimulating tasks.

Also, as a backdrop for our project, it is interesting to note that the Quality Committee's recommendation, *I første rekke*, in one sense makes all teachers mother language teachers: "In a way, one can say that the proposal means that, for example, all teachers are teachers of Norwegian, in the sense that the basic competences are to be described in the curricula for all subjects." (NOU 2003: 16, our translation) All the teachers of the various subjects are forced to clarify for themselves and others in what way they use and enhance writing, reading and oral competences in their professional activity. Various writing methods are different ways to believe in - to argue, tell, explain, describe. And we can add: different ways of learning. The National Curriculum for Knowledge Promotion can thus be seen as a literacy-reform.

In the article "Writing to learn in elementary class rooms" (2005), Armbruster, McCarthy and Cummins explicate what they mean by writing to learn and why writing is important for every profession.

Interest in writing to learn is based on the assumption that the act of composing promotes thinking and learning. Writing has been advocated as a "mode of learning" and a powerful tool for the enhancement of thinking and learning. Claims have been made that students can use writing as a tool to develop concepts and generalizations, promote critical thinking and problem solving, analyze and reflect on their thinking and understanding, gain new insights, and contribute to learning and remembering content information.

Armbruster et al. thus expect that the input processing of ideas and lessons promote learning. Various tasks involving writing provides good chances of developing both academic knowledge, reasoning and literacy skills. To support this important way of viewing writing and reading, Armbruster et al. particularly refer to a survey done by Morrow, Pressley, Smith and Smith (1997). Morrow et al. investigated the effect of a literature-based program integrated into science teaching on achievement, attitudes and use of literature. In one year

they studied six 3rd grade classes. Group 1 included an experimental scheme that involved regular science teaching, but the literature that was used was diverse. They therefore complemented the reading of the text book with the reading of other books on the subject. Group 2 included an experimental scheme that integrated the literature in the science class, so that the students could read a wide selection of literature, and they would write about what they had read. Other classes, here referred to as Group 3, constituted a control group who had normal, traditionally schemes, with both traditional teaching and the traditional textbook. Group 2 scored significantly higher statistically in two of the three content objectives in science. In addition they scored higher in the writing skills and in the other literacy skills.

When the group 2-students wrote as an activity connected to their extensive reading, they seemed to better process the information from their reading. In other words, writing as part of the work with academic subjects is a win-win situation; the acquisition of academic knowledge and literacy skills will all prosper by the aforementioned approach, since students learn subject matter better than they otherwise would have done, and because they exercise to read and write in meaningful situations. In the introduction to the book *Å skrive i alle fag ('To write in all subjects')*, the editors Trøite Lorentzen and Smidt also emphasize precisely this, i.e. that the reason that students should write in all subjects is that it makes their writing meaningful. Students write to learn, which enables them to achieve the academic goals in school (Trøite Lorentzen and Smidt 2008: p. 9).

Also in other contexts we find evidence that a treatment of the subject matter through an interaction of writing and reading provides an additional positive effect on literacy-related skills. *PIRLS 2006 - the main conclusion for Norway*, shows for example that teachers in 4th grade in 2006 more often facilitate work with the texts after reading - tasks that often involve writing- than in 2001. The more they do this, the better the students' literacy (Begnum et al. 2007, p. 86, the PIRLS report). Moreover, it has been seen that the text types used in reading education affects reading comprehension. The greater the variety, i.e. the more short stories, fictional books, poems, plays and other texts that were used, the better the students read. Tightly connected to this was the observation that teachers who reported that they engaged students in more activities after reading, had students with better reading skills (especially with regard to factual texts), and students who said that they often participate in these activities, generally had better reading skills. Begnum et al. (2007) also found that the use of the PC has a greater positive effect in 2006 than in 2001.

A successful collaboration between school and library in Rinkeby in Sweden (Alleklev et.al. 1998) has shown that the facilitation of a comprehensive work with literature from the children are young gives very good results when it comes to reading skills.

The Rinkeby project included good access to books of high quality, structured reading education, and it was pointed out that the children should be allowed to choose the books they wanted to read. In addition, structured work after reading was emphasized, for example by way of answering questions, writing summaries, doing artistic work and undertaking conversations about the reading, among other things.

This way of working in the particular project in Rinkeby resulted in the astounding accomplishment that the nine year old minority-language students in the project performed better on reading tests in their second language (Swedish) than average students in Stockholm, including the students with Swedish as first language (Taube and Fredriksson 1995). One of the explanations for this is that spending time reading and working with activities related to reading in *school*, was of vital importance, particularly for children from homes with less culture for reading.

Summing up, international studies have shown that giving minority students access to a large amount of interesting and illustrated children's literature, makes them learn the second language faster than students who receive more traditional language education. But also majority language students increase their literacy skills and increase their ability to learn other school subjects in settings with great access to literature and with activities connected to their reading (e.g. Morrow, Pressley, Smith and Smith (1997)).

In this picture we present our blog as a contribution to working with literary texts. The literary texts are in our context the "subject matter" alluded to in the description of the research presented above.

The blog

A blog (weblog) is an updated web site where one or more authors can publish posts. Posts are often dated in reverse chronological order, where the last post automatically will be added at the top of the blog's front page. The front page contains a certain number of posts. Previous posts are archived and can be found again by clicking on a headline in the left or right field. There are different publishing tools for blogging, and one of these is blogspot.com, which our literary blog makes use of.

A significant factor in the research we have referred to above is the discovery that schools succeeding in enhancing students' reading and writing skills, have teachers who facilitates and leads both oral and written work in connection with the reading of texts in different genres. Teachers in the referenced studies also motivate students to read through presenting books. Teachers, librarians or students presenting and talking about the books play a major role for the students' motivation.

Some of the benefits of using a blogging tool to publish book reviews and literary conversations we find in the availability, usability and the nicety of the design, which is a motivating factor for students. The fact that the students' texts are published as soon as they have written it may be an additional motivating factor.

At the blog, the students can edit their posts immediately or later, also from a home computer connected to the internet. As a result of this opportunity, the threshold to publish their own written work may be lower. In David Bartons (2007) terminology, writing about a book you have read is characterized in what he refers to as various "literacy practices". It is a "literary event", among several "literary events" students participate in at school.

Overview of the work in the 5th grade class at the project school

In this project, there is a close cooperation between the teachers, the school librarian and the public library. A librarian from the public library introduces new books for the students from time to time. Each time she has been there, there is great demand for the books she has presented and read from or told the students about.

The students at the project school have a fixed time every week at the school library, and the school librarian presents new books they have provided for the school library. This includes books that are appropriate for their age and books that are appropriate in connection with different issues that the students are working with. Time for reading and conversation about books is scheduled regularly in school. Students present books they have read for their peers.

Writing in 5th grade

One of the genres that they are to work with in their own writing in 5th grade is book reviews. Students have a template in the school book in the subject Norwegian, and the students have written book reviews by hand themselves. They are familiar with the use of pc, and the step to publishing on the blog is not a big one, neither with regard to the content nor to the technical issues, although there are relatively great differences within the student group in terms of both the Norwegian academic and the technical skills.

Organizing the blog

The librarian at the public library has created the blog for 5th grade. An important principle has been that it should be easy to use. Everybody logs in with the same password and username. Students, teachers and librarians can read the blog, create posts, write comments, edit and change the texts.

Some questions that should be discussed further regarding the organizing of the blog:

- How can one customize the different users' access to different functions (today, in practice, anyone who has a password and user name can edit their own and other's posts, change the structure of the blog and delete everything)?
- Should there be a primary editor?
- What kinds of publications are desirable to use the literary blog for? Only book reviews, or other genres, pupils' own stories, poems, discussion postings, etc.?
- What kinds of categories are desirable?
- How "public" should the blog be?
- Who should have the rights to publish?
- What about password protection?
- What about privacy?

Content and structure of the texts

After the children have read one or more books, they write one or more book reviews which they publish on the blog. Others (peers, teachers, librarians) can comment the book reviews.

Some questions concerning content and structure of the published texts:

- Should there be a common structure for book reviews? Reasons for it?
- Should the teachers add model texts? Reasons for it?
- Should it be written rules for how to write the comments?
- Should students sign with their own (first) name or should they use pseudonyms?
- How much time must be used on the blog at school to keep the blog "live"?

Collaboration

The librarian from the public library presents new books in the classroom and on the blog. She is a person who the students know and relate to in a personal manner ("the significant other"). In the fall semester she has been present at the school library two hours a week after school to keep the library open for students who want to read, borrow books and write on the blog. The librarian has supervised students in choosing books and publishing on the blog.

Some practical questions regarding cooperation:

- How often can the public librarian come to the school to present the books?
- How much of the library's working hours can be used by the students to write their own book reviews and comment the posts written by the students?

The school librarian

The school librarian does many of the same tasks as the librarian from the public library in the collaboration with the teachers in 5th grade. In addition she has authored a manual for the blog, and she accepts students once a week in the school library during the school hours, and she is then often prepared for reading sessions and book conversations with the students.

Practical questions related to the school librarian:

- Time to do the work? School librarians have a job for 10 hours a week to cover all the tasks in the library; manage book collections and facilities, create exhibitions, reading aloud for the children, read the new children's books and introduce them to students and teachers, write on (and manage?) the blog etc.

Working with the blog in class

The teachers in the classes in 5th grade (three in total) integrate the literary blog as "ordinary" Norwegian academic work on reading, writing, listening and conversation. They ensure that work with the blog is related to the goals of the national and local curriculum, and they find time to work on the blog at school. Teachers provide training and guidance of students.

Some questions regarding working with the blog in class:

- In what way is the work with the blog included in the annual plans for 5th grade?
- What Norwegian academic areas can be covered in the work of the blog?
- How should the work on the blog be assessed?

- How can teachers guide students to produce the best they can out of their own assumptions?

Other issues to be considered

The work can be difficult in the beginning, both for teacher and students. Possible problem areas:

- Access to computers and the Internet
- The teachers' digital competence
- Students' potential performance anxiety, especially when it comes to publishing for a potentially large audience or "only" to the other students in class.
- Structuring of student responses (e.g. to avoid unwanted comments, it should be clear what they are supposed to comment on when they are responding to each other).

An ongoing and continuing process

The literary blog project started in October 2008. In cooperation with the teachers and the librarians, we are now trying to develop the blog into a tool that both teachers and students will find useful and motivating in their work. We look at the benefits of interaction, seeing neither literary literacy nor digital literacy as primary in relation to the other. Both are important parts of the education. The blog project can turn out to be a win-win situation where enhanced literary and digital literacy may be the result.

Hypothesis

In addition to the strengthening of the overall reading skills that increased focus on reading can lead to, the blog can help to increase students' literary competence, writing competence, and digital competence.

Arguments

1) Reading skills and literary skills

Students read more or they read as much as before. They gain knowledge of far more books than before, through their classmates', teachers' and librarian's written book reviews on the blog. Through the book reviews on the blog the students may be motivated to read more, also in their spare time. Through the categorization of the blog, they become aware of and get knowledge of the different (fiction) literary genres, and they must consider how to categorize the book they have read and written about (with the help of peers and / or teacher / librarian).

2) Writing Skills

To be good at writing, you have to read much and write often. It is also important to have good models. There are various ways to compose a book review, but for students in 5th grade, it may be advantageous to have a template (see for example the text book: *Agora Språkbok*). The requirement to produce a text from the template must be adapted to the individual students, it means that teachers must tell them what they *must* and what they *may* include (different degrees of goal achievement).

3) Digital competence

In the subject curricula the five basic skills are integrated in a way that is adapted to each subject. These skills are: Being able to read, being able to express oneself orally, being able to express oneself in writing, being able to develop numeracy and being able to use digital tools. In the subject Norwegian this implies (as shown in the goals for 5th grade) that students should be able to use digital tools in writing processes, in the search for information, and in the production of interactive and complex texts. In addition to their own writing about books they have read, students can comment on each other's book reviews on the blog, and they can discuss the books further. This is one of many ways to integrate the development of digital competence in academic work: Digital media - literary content. To become a competent user of digital tools, instruction and training is necessary, and schools must ensure that students regularly use digital tools under supervision at school.

Wikispaces – our future tool?

While we have been working with this blog project, we have become aware of another digital tool that may be better suited to our purposes than the blog, namely Wikispaces. This is a tool based on Wiki technology. Wikispaces is a "social software" that enables users to cooperate, publish, update and share information on the Internet. Wikispaces are related to the encyclopedia *Wikipedia*, which is an encyclopedia that is written and updated by users. Wiki Space is a tool where the users cooperate to publish and develop the content.

Like in a blog, in Wikispaces you have the ability to create multimodal texts. Again, all users can edit, and thus also delete the published material. However, all published material is saved so that it can be picked up again. In this respect Wikispaces has an advantage compared to the blog.

Anyone can create "rooms" in the Wikispace, and students can have their own folders / rooms/portfolios. You can give reading and writing access to users as you like, and the whole class can work in the same "room". Some learning management systems (LMS) have also integrated wiki solutions. The school in our project has just received such an integrated wiki system in their learning management system (Microsoft Learning Gateway), and it is a goal for the school to start using this system. Maybe it will therefore be more appropriate for us to use the Wikispaces than the blog. Then we also will protect privacy, because the space is a protected area on the internet. Lastly, we make use of the digital tools that are used for the entire school. The project with integrating the literary and digital literacy may therefore be more integrated in the ordinary school work by using Wikispaces.

In the further development of the project, trying out, evaluating, reflecting and discussing will take place in a continuous process. An important question for us as researchers in the team is *if and in what way* we can "measure" and document students' increased reading and writing skills and digital literacy. How can we tell if the increased competence is related with the blog/wiki writing?

It is hard to discern the potential literacy development of the children We have access to the results of the project students' official reading tests in the 2nd, the 3rd and the 5th grade. In addition, we have audio files of the students reading from 4th grade. We conducted a survey on reading in 4th grade in the spring of 2008, and we collected and analyzed student texts. Through the blog, we will have access to parts of the student's text production in 5th grade, and in addition we are planning a new survey on reading in the spring of 2009. The collected material can be used to compare students' achievements with their own previous achievements and the achievements of other students in similar level at the same school. The project will run until the students finish 7th grade.

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