On becoming good readers – points of view from young adolescents in the digital age

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1 Introduction
In recent years sociolinguists and applied linguists have shown a growing interest in language users and their conceptions of language and of language in use – (Niedzielski and Preston 2000, Laursen 1999). Since the 1970's the topic of metacognition – "learners' knowledge and use of their own cognitive resources" (Garner 1987:1) – has received attention in reading research. It is widely accepted that skilled readers have an awareness and control of cognitive activities, which can be of help while reading. These are characteristics which young readers and poor readers seem to lack (Baker and Brown 1984, Paris et al 1991). At college level well-developed metacognitive skills are considered a prerequisite for successful reading and study skills (Nist and Simpson 2000). Consequently it seems to be important to include the perspectives of metacognition when studying adolescents and their reading behaviour.

In Norwegian schools pupils meet written language in more and more subject areas. Following the last school reform (introduced in 1997), pupils at the lower secondary stage (grades 8 to 10) for example, are now supposed to have text books in art and crafts – a subject which used to be classified as practical. Textbooks are also available in physical education. The argument is that books are needed in the interdisciplinary project works, which at this stage are meant to fill at least 20% of the available time at school. Adolescents are, in other words, supposed to be good readers who are able to learn by reading. Not all of them are however. In 1990-91, Norway for the first time took part in the IEA study of reading together with 31 other countries (Elley 1992). The study involved two age levels. The Norwegian nine-year-olds performed rather well (Norway ranked as the 7th best country), but the fourteen-year-olds performed
below expectations (Norway ranked as the 17th best country). With such results one would have expected more public concern with the development of reading than what has actually been the case. What the Ministry of Education first and foremost has done, is to fund the design of national diagnostic tests – tests of a kind Norwegian teachers so far had lacked.

Disappointing results in comparative studies of reading are, however, not the only reason why we today should pay more attention to the development of reading skills above the elementary stages. The rapid introduction of information and communication technology (ICT) is also a great challenge – in Norway as in the rest of the world. The Internet represents a huge volume of (mostly) written information, which is quickly and easily accessed. Both researchers (e.g. Leu 2000) and politicians (e.g. Ministry of Trade and Industry 2000) have recently emphasised the importance of reading and writing skills in this new situation. Leu argues that an increasing amount of information communicated through the Internet makes strategic reading competence even more important. In my view part of building a strategic reading competence must be to develop awareness of what reading is and how reading is used in our multimedia society. In this article I will reflect upon this on the basis of a study of perceptions of reading among young adolescents from the HYPTUNG-project.

2 The HYPTUNG-project

In 1999 I joined a team of colleagues from different disciplines (linguistics, ICT, art and library science), in a one-year collaborative project together with a class of twenty-five young teenagers in lower secondary school (9th grade) and two of their teachers. Twenty-four of the pupils participated in the part of the project I will report on here. The project was called HYPTUNG (HYPerTekst på UNGdomstrinnet = Hypertext in lower secondary school) and aimed at developing the pupils as readers and writers of hypertext. The project also aimed at developing competence in compulsory school, and in teacher education concerning the teaching of hypertext and hypertext use. The project is reported in Kulbrandstad L.A. (2001) and Kulbrandstad L.I. (2000).

All the pupils lived in a middle class area in a small town in the eastern part of Norway. They were fourteen years old at the onset of the project, and turned fifteen during the year we worked together with them.1. The project was arranged as six workshops (1-3 days). In the first phase the pupils learned about hypertexts, and basic computer and information seeking skills. In the second phase they presented the results of an interdisciplinary project work as a hypertext. All pupils except one had computers at their disposal at home, and about half of these computers were connected to the Internet.

The data which I will present here were collected during the last workshop in the first phase. The pupils were learning about the principles of hypertext while they made their own home pages. They alternately worked on the computers and followed small courses in information seeking and screen aesthetics, or they took part in a session called reading on paper and on screen. In the reading session, we used a classroom with desks for individual work in addition to three computers connected to the Internet. The pupils followed this plan of work: They 1) read a printed text and answered questions about the text, 2) answered questions about reading on paper, 3) read in a hypertext on screen and wrote a summary of what they had read and 4) answered questions about reading on screen. It is the questionnaires I will concentrate upon in the following section.

3 Attitude to reading and judgement of own reading ability

Twenty-four pupils answered the questionnaires about reading on paper and on screen – fourteen girls and ten boys. In connection with the questions about reading on paper, the pupils were asked about their attitudes towards reading. Here the class was split into two equal halves: The pupils either liked reading or they did not. The gender division was typical: Only one boy liked to read. Furthermore, when the pupils were asked to explain their answer, it was obvious that they thought about reading as the reading of books. They wrote that they liked exciting, humorous or short books, or that they liked reading books as an escape. Those who did not like to read often mentioned the size of books, or that they found many books boring.

The pupils were also asked to judge their own reading ability. For this purpose I borrowed a question from the national diagnostic reading test for the 9th grade (Nasjonalt lerremiddelsenter 1997). The question was "How well do

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1 Twenty-four were first language users of Norwegian. One bilingual girl was considered fluent in Norwegian.
you think you read?" ("Hvor godt mener du selv at du leser?"). The pupils were supposed to choose one of five options:

<table>
<thead>
<tr>
<th>Original answers in Norwegian</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Det går greit å lese</td>
<td>Reading is OK with me / I read quite well / Reading is not a problem for me /</td>
</tr>
<tr>
<td>Jeg strever med lesin fordi jeg leser sent</td>
<td>I find reading difficult (I have some problems reading) because I read slowly</td>
</tr>
<tr>
<td>Jeg strever med lesin fordi det er vanskelig å forstå det jeg leser</td>
<td>I find reading difficult (I have some problems reading) because it is difficult to understand what I am reading</td>
</tr>
<tr>
<td>Jeg strever med lesin fordi det er vanskelig både å lese og forstå</td>
<td>I find reading difficult (I have some problems reading) because it is difficult to read and understand</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>I don’t know</td>
</tr>
</tbody>
</table>

Twenty-three pupils chose the first alternative indicating that they felt that they had no problems reading. One pupil answered "I don’t know". This nearly total consensus surprised the teacher as well as me. According to the teacher the class was "normal"—which means that some pupils were good readers, but that even more of them ought to develop their reading ability. The class scored, in fact, a bit lower than the national average on a test of decoding skills. According to the standard put forward in the diagnostic test and the teacher's judgement of the class as normal, one might have expected that at least four of the pupils would have admitted having some difficulties reading.

One obvious problem here is the scale used in the national test. It might be considered inappropriate because there is only one positive and three negative options. Furthermore the positive option is placed as number one. It is shorter than most of the other options, and it is formulated in a way that makes it easy to agree upon for those who do not score high in reading. You probably do not have to be a very good reader before you can confirm the statement "reading is OK with me".

To sum up: 23 of 24 pupils in the class I studied and 84% of the 9th graders in Solheim and Tønnesen’s study state that “reading is OK with me”. But what do the young adolescents really mean by the word reading? In a research survey of metacognition, Paris et al (1991:619) claim that reading remains "a mysterious activity for many students who receive daily instruction", and they continue: "It is clear that even 12-year-olds do not have well articulated concepts about reading, nor fully developed knowledge about effective strategies to enhance comprehension". The pupils in my study are two to three years older. How do they describe reading? And in the light of the data presented above: When they think about reading, do they primarily think about the process of decoding? It seems to be an interesting hypothesis that the process of understanding is not as explicit to the young adolescents as the process of decoding. Some of the other data from my study can shed light upon this.

4 Perceptions of reading

Four questions in the questionnaire about reading on paper were designed to try and elicit the pupils' perceptions of reading. The pupils were asked to describe what happens while we are reading, to explain what a good reader is and how to become one, and finally they were asked about oral and silent reading. The answers to the first three questions will be reported here.
To describe what happens while reading is of course the most important overall question, and probably also the greatest challenge in the cognitive approach to reading research. Thus, several theories and models have been presented in the effort to understand the process. But at the same time as there exists expert knowledge about the reading process, reading is also a common experience of our daily lives. These experiences are central to another approach to reading research – the studies of literacy as social practice. When Barton and Hamilton (1998:13) study the everyday reading and writing in a local community, they take as their starting point that people’s understanding of literacy is “an important aspect of their learning, and that people’s theories guide their actions”.

Fourteen-year-olds engage in many different reading activities every day. What I wanted to do, was to ask them to reflect upon this experience for the purpose of trying to reveal their understanding of what reading is. I was of course prepared that the questions would be considered difficult, especially because reading is mostly an internal process. I tried to make it easier by introducing a situation. The question, therefore, was formed like this:

Imagine you sit reading a book and a person who has never learned to read approaches you and asks what you are doing. How would you, as detailed as possible, explain what you are doing while you are reading?

As expected some of the pupils commented that they found this exercise difficult and a bit strange, but everybody wrote an answer. Only three gave tautological explanations like “I read a book”. The majority of the others tried to explain what happens, by using a bottom-up-approach. Reading is, in their answers, described as a process which starts with the letters and ends with words or sentences as in these examples:

1. [I] look at the letters and put them together to form words.
2. [I] look at the letters, put them together to form syllables and words, and then put them together to form sentences.
3. First I would have tried to teach him the alphabet and how to pronounce the different letters and how you put the letters together to form words and words to form sentences.
4. You look at the letters and pronounce the sounds in a word in sequence. When there is a large space between the letters, it is a new word. , [a comma] means a pause in the sentence and . [a period] means a new sentence.
5. Each sign is a letter. Each letter has a sound, and when one puts these sounds together, they become words. Words become sentences, just like when we are talking.

A few pupils did not end the bottom-up description until they had reached the level of the book:

6. I look at the letters, read the words, which turn into sentences, which turn into chapters, which turn into a whole book.

In all these six examples we notice that letters are the starting point. In three of them (examples 3-5), letters also are explicitly connected with sounds. The pupils here, in their own words, describe the core of the alphabetical principle – the phoneme-grapheme-relationship. Their experiences from the time they learned to read seem to be important. In example 3, the perspective is in fact pedagogical (“First I would have tried to teach him ...”). It is also typical that in none of these answers is there a focus upon reading as a process in which meaning is created. As already mentioned, the six examples represent the most common answers. We can, therefore, state that the majority of the pupils describe what they do while reading by concentrating on decoding. In fact in less than a third of the answers (7 out of 24) reading as a meaning-seeking process is mentioned in one way or another. These answers do mention “meaning” or “stories”, but they are not more detailed than the answers which concentrated on decoding. One girl writes:

7. [I] put the letters in order so that they become a meaning. That is to read.

A boy is even less detailed:

8. I explain that I try to understand the text.
Most of the answers in this category are also formed as bottom-up descriptions starting with letters. The difference is that the pupils writing these answers explicitly mention meaning, as we saw in example 7, and as here in example 9:

9. I read. There you see words we can say. We write them with symbols. Then you look at the symbols and know what it means and then there are many signs in order. They form a sentence and then it turns into a story.

The purpose of using an open-ended question was to see whether the pupils concentrated on the more technical parts of the reading process or on the process of meaning construction. The analysis shows that the majority of the pupils described reading as a bottom-up-process without mentioning the aspects of meaning at all. In other words, it seems to be more typical to associate reading with decoding than with understanding.

We observe the same tendency in the next question, also open-ended, which was formed the following way: When we say that a young teenager reads well, what do we really mean? The most common answer here also concentrated on decoding. Precisely half of the class wrote that he or she must read correctly and/or at an adequate speed. One quarter of the pupils (6 of 24) included understanding. The most explicit answer of this last kind was the following: "that you read fast, correctly and precisely, and that you understand what you are reading". Five of the six answers in this category were from girls with a positive attitude towards reading. The last quarter of the pupils either answered that they did not know, or they gave other answers like "he or she reads well for his or her age level".

The pupils were also asked to give advice to a young adolescent about what he or she must do to become a good reader. The typical answer was the advice: read a lot! Twenty-two of the twenty-four pupils gave answers like these: "read what you want, read magazines! Read! Then you will become better!" and "read, read, read and read. Reading books helps". One of the two pupils, who did not mention the amount of reading, gave advice about how to read better aloud, and the other pupil in the class concentrated his advice on understanding. He wrote: "read slowly at first, to understand the text".

As we have seen, the majority of the 9th graders in this project tended to consider reading equal with decoding. The most typical opinion of what it is to be considered a good reader was that he or she is able to read fast and also to read correctly when reading aloud. When twenty-three of the twenty-four pupils answered "reading is OK with me", this result can be interpreted as they think they are having no problems with the more technical aspects of reading.

5 Reading on screen

The pupils in the project class were more positive towards reading on screen than towards reading in general. Seventeen out of the twenty-four stated that they liked reading on screen. The project effect of course is one central explanation here, but this result also is in accordance with the spirit of our time. Adolescents are in general more positive towards new media (i.e. computers) than towards the old media (i.e. books).

Twelve pupils (one half of the class) did not see reading on screen as more difficult or more easy than reading print. Seven, however, found reading on screen easier. When they were asked why, they either explained their point of view by the material qualities of the texts (you may vary the size of the fonts, the colours may be made brighter), by the physical aspects of the reading situation (you may scroll the text, you can keep your head in a more upright position and you don’t get pains in your neck) or by personal interest ("I am more interested in computers"). The arguments from the pupils who did not find differences in the two reading situations or thought about reading on screen as more difficult, fit into almost the same categories. The most common argument in favour of reading on paper is what can be described as the physical aspects of the reading situation. The pupils, for example, wrote that it is easier to follow the lines in a book with your finger, that when you read a book you can change your position and that you even can lie down. A lot of pupils also stressed physical uneasiness while reading on the screen. They said that they more easily got pains in their eyes, and that their heads also hurt more easily. The pupils were also asked to explain the differences between reading on paper and reading on screen as well. The question was formed like this:

Imagine that you still are speaking with the person who cannot read. How would you explain the differences between reading on paper and reading on screen to him or her?
This question is not directed towards the reading process like the former question of this kind. One could think that this would make the question easier, but there are in fact eight incomplete answers here (compared to two in the earlier question). The pupils either found it difficult to find differences, or they found it difficult to explain these differences. Those who gave an answer were either concerned with the text or with the situation. The most detailed answer about texts was the following:

10. The differences are not very great. But on the computer there is something called links. You click on them and then something new appears. The new, which appears, is something about the word you clicked on. Apart from this it is the same.

This girl focuses upon the principles of the hypertext, and she draws in fact attention to the links - which in hypertext theory is considered to be the core of the hypertext definition. Landow (1994:6) for example writes; "linking is the most important fact about hypertexts, particularly as it contrasts to the world of print technology". Also some of the pupils, who explain differences by referring to the reading situation, point to characteristics of the computer or the software. In the excerpts of answers below, we see for example, the use of words like "click", "arrow" and "mouse".

11. The same as with a book, but you don't have to turn the pages. You just click to read on and to change the pages.

12. You don’t have to turn the pages. You only have to push an arrow with the mouse.

When the pupils were asked to give advice to a 9th grader who wanted to become better at reading on screen, the most common answer once again was to practice more (answer given by 16 of 24). One girl for example wrote: "Practice! It is not difficult, you can just read as usual". Among the other answers we find many practical recommendations (e.g. "move your eyes instead of the body"). Only one boy mentioned the need for special knowledge about the new media. He wrote: "You have to get used to the arrow on the page. You have to get an overview and you have to learn about links".

6 Discussion

What I have presented here, are results from a study of twenty-four Norwegian 9th graders attending the same class. None of these pupils themselves indicated that they had any problems reading. The study of their perceptions of reading showed that the majority tended to see reading as decoding. Only one quarter of the class mentioned understanding as a quality of a good reader. When they were asked to give advice about how a young adolescent can become a better reader, almost everybody meant that the best thing to do was to read more or to practice more (on screen).

According to my own experience from teaching at this level and my experience from teacher education these results are, in general, not very surprising. I see them first and foremost as an illustration of one central challenge – the need to put the teaching of reading on the agenda of the lower secondary school. The pupils' advice of increasing time spent on reading, is of course not bad advice. The problem is that it is not enough if they are to develop skilled strategic reading. The general agreement on this advice might be an echo of the methods they have met in school. In this case it might even come from the textbook they used the previous school year. This book states that if you read a quarter of an hour each day you will make great progress in a month's time (Jensen and Lien 1997:10). According to cognitive theories of information processing the amount of reading is considered especially important for those who work on automation of their decoding skills. When pupils have passed a certain threshold, the positive relationship between the amount of reading and reading achievement, however, no longer seems to be easily predicted. The IEA study from 1990-91 showed for example positive correlations regarding this aspect for the Norwegian nine-years-olds but not for the fourteen-year-olds (Tønnessen 1995).

From the study of the young adolescents' perceptions of reading we already have concluded that the process of understanding is not as explicit to the young adolescents as the process of decoding. This of course is a challenge for the educational system. Until recently the study of further development of reading has not been part of teacher education in Norway. Today it is required in one of the two different study programs leading to teacher certification at lower secondary stage (KUF 1999a), but not in the other (KUF 1999b). Only 40% of the teachers of the about 10 000 9th graders in the study by Solheim and
Tønnesen (1999) reported that they had worked systematically with the understanding of reading. A few more (56 %) had worked on study aid. Unfortunately the new curriculum guidelines (L97) are of little help here. At the lower secondary stage reading is, for the most part, mentioned in connection with the reading of literature. Often reading is a presupposed activity, but is invisible in the guidelines. For example, the pupils should: "work with a selection of poetry" (9th grade) or "become acquainted with a selection of Norwegian newspapers" (10th grade). Only one main subject element (of 69) focuses on reading as an activity on its own. In 8th grade, the pupils should have the opportunity to "read in depth over long periods of time, for instance in reading projects". In other words, reading as a process, the understanding of reading, reading strategies, the multifaceted situations of reading, the pupils' perception of reading and their evaluation of their own reading skills are not mentioned in the curriculum guidelines at all. The way reading is dealt with is in sharp contrast with the way writing is handled. When it comes to writing, the objectives for example state that: "Pupils should be able to work actively to develop a text from the idea to the finished product, and to give and receive feedback during the writing process. They should be able to evaluate their own work and their own development as writers" (L97: 135).

Growing up in the digital age pupils are confronted with what has been called an information overload. Therefore, it is of special importance to learn strategies to handle all this written text — whether it is presented electronically or in print. The pupils have to be aware of different purposes of reading, different ways of reading, how to adjust their reading to different situations, and how to judge what information is important to them. Preparing pupils for becoming good readers in the digital age also includes challenging them on their perceptions of reading and making them aware of the multifacets of reading situations. The perceptions of reading in the Norwegian curriculum guidelines need to be challenged as well. When the guidelines, for example, state that "reading and writing are slow activities which promote reflection" (L97:124), this is of course one truth about reading. But reading in the digital age at the same time is much more. The educational system should, therefore, focus on the different forms of reading.

References
Jensen, Marit & Per Lien. 1999. Fra saga til CD. 8B. Oslo: Fag og kultur
See: http://www.hihm.no/publikasjon/rapport/2000/12.htm
Appendix
Examples used in the text. Pupils’ answers in Norwegian (in their own spelling)

1. Ser på bokstavene og setter de sammen til ord.
2. Ser på bokstavene, setter de sammen til stavelser, og ord, så setter de sammen til setninger.
7. Setter bokstavene i en rekkefølge så blir de til en mening, det er å lese.
8. Jeg forklarer at jeg prøver og forstå en tekst
12. Du slipper og blad, du trenger bare trykke på en pil med hjelp av musa.