

Information Technology or History Textbooks - the survival of the fittest?

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Let me start with a kind of definition. IT or Information Technology is a definition or code word for all kinds of information processing equipment especially within telecommunication and networks (internet, world wide web, intranet). There is a convergence in this technology; telephones, television, and networks are becoming more and more integrated.

Within education, networks such as internet could be used in what is called the virtual university, where distance is not a factor and where the students and the teachers hardly ever or never meet. The teacher could be in California and the student in China using internet solutions to provide pictures, sounds, texts as well as a degree of interaction.

Thus internet solutions are used to provide information to and between pupils, to and between students, to and between research fellows, to and between teachers. In other words - the globalisation is there.

In this context important didactic questions arise, not the least the question of the textbooks. One is "*Which in this new didactic world is the role of the ordinary textbooks?*". Another important question is "*Which is the role of the teachers?*"

My aim today is to try to give some aspects on the relation between IT and the textbooks especially in history, *Is there today a struggle of the survival of the fittest between the two?*

I am not giving, of course, any definite answers - only stressing some aspects of this question.

In Sweden today IT has a very high status and IT at the schools is almost hysterically popular. A colleague of mine looked in the Swedish press during the last 2 - 3 years about what was written concerning educational material. At least 3/4 of all the press cuttings was about IT. Most of the articles dealt with lectures with the IT. There was a standard illustration to the articles: a proud teacher with pupils in front of a screen.

The following quotation comes from a journal edited by the Swedish Skolverket, that is what could be called the National Board of the Swedish schools:

"...at the same breath as the old teaching material begins to be felt outdated as soon as it leaves the printing press a new media emerges, completely free from the most obvious restraints of its predecessors. Internet is a minute media. If anything of decisive importance happens anywhere in the world, you can be sure that within a few minutes

there are ten websides that illustrate what has happened. ... Every time maybe has the teaching material it deserves. If so we live in the best of all times."

The Swedish school has got a new comparison number that is the number of pupils per computer. The nearer 1,00 the better.

This is the case in Sweden and it is also very much the case in all Scandinavia. I went for instance a month ago to a seminar in Finland where prime minister Lipponen was the main speaker. The seminar was about European politics but the prime minister stressed at the beginning of his speech the high density of internet in Finland and was, he pointed out, proud of this fact.

In Europe the situation is somewhat different. One example: a group of Swedish teachers visited a "gymnasium", high school, in München and found to their astonishment that the Munich school with 900 pupils had only one room for computer programs with 15 computers and another 15 old ones so to speak in reserve.

Another example: the Swedish gymnasium at the city of Arboga in the middle of Sweden has an exchange program with Münster in Nordrhein-Westfalen. When the German pupils come to Arboga there are always according to their wishes two special points on their program, one is a walk in the woods to demonstrate the Swedish so called right of common ("Recht zum Gemeindebrauch") and the other is a crash course in Information Technology.

These two examples taken from Germany are in no ways unique. Most countries in Europe go compared to Sweden easy or very easy in computerizing their schools. The question is whether they are so conservative that they have not grasped the idea or whether they are smart having understood that the school has more important things to do?

I leave of course the answers to my audience.

Let me instead try to give some positive and some negative aspects of the IT and of the textbooks.

First some technical aspects. The textbook is printed in the ordinary way on paper and paper is an unsurpassed way of giving information and will remain so for the future. Whether it concerns fiction or nonfiction or not, reading is easier and more attractive in a printed book than on a computer screen.

But the book has as such its restrictions. One is for instance the possibility to find or localize a certain book that you or your students need for an exam. I guess all of us are familiar with the nervous student who complains that he or she can't find a book that is on the study list, the book is not available at the university library or is not to be found there and so on.

In this case internet has created a revolution. Through internet it is possible to have

access to a large university library in the classroom itself. Not only the big university libraries such as Library of Congress in America but a lot of private bookshops such as Dillons and Blackwells in the UK are to be found on the internet. And now so-called internet-bookshops like Amazon-Books in the US with no own stores are appearing, too.

The question could very well arise if teacher and pupils should have one textbook or if they should study history ad hoc going on internet from one subject to another skipping textbooks altogether?

But going back to the wellknown nervous student. He or she will find the book in question on internet - but what then? He can of course order the book if that is possible. But if the book is available in London and the student is studying in Göteborg and the exam is within a couple of days?

There is now a project to create an international online library, the so called "Project Gutenberg" that has as its goal to place 10 000 books on the internet, meaning that the books in question could be read on the datascreen before the year 2000. 10 000 books are not a great number. Reading a book from the library directly on the screen is thus far away in the future and the big libraries will remain in the ordinary way and far away in the future be the great and the main source of information for mankind.

Most texts on internet and in the information technology as a whole are in English. Roughly speaking 90 percent of the communication on internet are in English and 5 percent in French. On the third place is Spanish with 2 percent.

This distorted language-communication has evidently created problems. In France for instance with its language-laws created in 1994 by the minister of culture Jacques Toubon, there are today rather heated discussions about the language of the so-called homesides produced in France. Thus there is even a lawsuit between the French branch in Metz of the American Georgia Institute of Technologies and two French institutes for the preservation of terminology and usage in language. The French institutes are demanding that the homepage of the American institute should be in French not English.

Leaving this problem to the French and the Americans, I think it is enough to say when it concerns the language on internet that a pupil or student that has not a fairly good knowledge of English will be at a great disadvantage. On the other hand internet could create a good motivation, a kind of bonus effect to study English.

There are especially two matters that I want to discuss concerning the internet confrontation with the textbook. Those are first ethics and second source criticism or reliability.

The textbooks in history are open for everyone before they are used. You may have unethical information and bizarre values and beliefs in the textbook you have written but

without any difficulty anyone could read what you have written and judge it. Before the textbook is printed there are also what we can call gates: the author asks sometimes a specialist to give a scrutinizing look at the facts he or she has written and the editors of the book do not want a bizarre textbook - they want to sell it to the schools. Finally before a textbook is used in the classroom there are teachers' conferences about which textbook they, the teachers, are going to use. And so on.

The question of responsibility concerning the content of the textbooks could be answered without any difficulty. The names of the author and the publishing house are clearly printed.

With internet there is another thing. Nobody and I say nobody has today any kind of control or even a survey of what is to be found on internet. Many texts are anonymous or signed with names like Joe Smith and many of these anonymous texts belong to a literary garbage dump including pornography of the worst kind, racism of the worst kind and bizarre historical texts from for example the so-called revisionists from different parts of the world.

Many pedagogues today advocate a pedagogy aiming at - very briefly concluded - that the pupils should themselves search for knowledge and that the teacher's role is to help them in their search. The so-called problem orientated studies could very well belong to this kind of pedagogy - the pupils work for themselves and the teacher is only a resource person.

Searching knowledge on the internet could, however, very well lead the pupils astray. The question of responsibility for the content the pupils, or anyone for that matter, will find on internet is not solved, and not much discussed. The discussion so far has mostly dealt with copyright legislative matters.

As I said the question of responsibility has not been in focus. In Sweden the Skolverket, the National Board of the Swedish Schools, has, however, made a try. I quote their homesides about ethics: *"The responsibility how the instrument of internet is used is always in the hands of the one who uses it. Nobody is able to or have time to control which information the pupils get or which information they give away."* Skolverket then points out that it is up to the school to give technical and ethical rules for utilizing internet.

The responsibility is thus turned over to the teacher. The question is if he or she can manage the internet situation with a class of i.e. thirty pupils all with one data carrier and all of them searching the knowledge they themselves feel is important for them? I think we stand ahead of a new didactic situation which so far we know very little about.

The new didactic situation could very well include a generation gap and a problem could be that the pupils know more about information technology than the teachers. Let me for instance quote the German newspaper "Süddeutsche Zeitung" of 20/21 September 1997. Under the headline "Das surfende Klassenzimmer" you can read the following:

"In vielen deutschen Schulen ist jedoch gerade die Einbindung des Computers in den Unterricht das Hauptproblem: Lehrer kennen sich nicht genug aus, Berührungsängste verhindern einen unbefangenen Umgang mit neuer Technik. Jörg Lammer (von der Deutschen Telekom) hat festgestellt: "Die Schüler können noch so fit sein, wenn die Lehrer nicht mitziehen, geschieht auch nichts". Deswegen bietet "Schulen ans Netz" auch Lehrerfortbildung im Bereich der neuen Medien an. Aber ganz neue Methoden müssen her. Schüler sollen auch mal die Lehrer unterrichten. In der Schule von Michael Apitz (ein 20 Jahre alter Schüler in München) hat man bereits umgedacht: Die zehn Schüler, die selbst die gesamte EDV-Anlage betreuen, geben ihren Lehrern Nachhilfe und erklären, wie's funktioniert. Der Gymnasiast Apitz hat damit gute Erfahrungen gemacht: "Das war ein ganz normales Schüler-Lehrer-Verhältnis - nur umgedreht".

In this connection the internet chatting has to be mentioned. Over internet pupils could easily get into contact with other pupils all over the world.

This chatting could go in two directions. One is a controlled contact with other schools often from different countries some of them far away. The key-word here is globalisation. Let me take one example from Sweden.

A Swedish teacher at the Teachers Training College at Göteborg refers in a book of a project of one of the primary school (Grundschule) in the city. He is very enthusiastic and writes:

"Pupils at the Önnared primary school in Göteborg have friends all over the world. This is because the school computer is coupled to CAMPUS, a computer database in England and can make contact with over 7000 schools in over 40 different countries. CAMPUS has facilities for electronic mail, sending messages, data search and for participating in computer conferences. Messages can be sent in English, French and Swedish (he does not mention German). Foreign language teaching now has new horizons for pupils and can actively become part of a motivated activities curriculum - and for teaching about international relations."

This is about a class in the primary school where the pupils are below sixteen. Many questions could of course arise, for instance which is the role of the teacher in this connection? An important question for me is whether all this could be done without background studies in a textbook? Is it not a danger that the proud plans of globalisation through the computer turns out to be just chatting between younger teenagers, boys and girls if they are not prepared by solid textbook studies controlled by the teachers?

I have mentioned that chatting could go in two directions. The one I have just talked about is more or less organized mostly by the teacher.

There is, however, another kind of chatting that is quite unorganized. You could for instance start chatting right into the air by internet. This means that you send something in the hope that somebody anywhere will read it and answer it. Then there could be some kind of reciprocity or it could not.

Sometimes in this kind of chatting there is an address like "soppy joe" or "pretty woman" and the like. When there is an answer there is a contact and both the sender and the receiver define their aims if they have any. A certain language or newspeak if you remember that word from George Orwell - a language in a kind of English - is developing among the chatters.

The rules of the game as well as of the language differ from the communicative norms of the classroom or a union meeting. Anyone could enter into the internet chatting discussion in the way they like. Somebody could for instance start with the expression "I am best in Quake" meaning that he is very good in a data game called "Quakemaster". The language is full of specific terms and words but could very well sometimes be interlarded with sexual words and expressions.

Some of the chatting contacts could be serious and part of the learning of history or another school subject. But there must be a temptation for the pupil to skip learning of history and to skip the serious contacts and instead get caught in a chatting-pattern. Information Technology could in other words legitimize an unqualified game at the schools.

And it could be very difficult for the teacher to be aware of the difference between pupils using their computers to search for the knowledge they think is important for them in the school-situation or those using the computer for games and other things. For instance in a group study situation the temptation to chat might be overwhelming.

An important but somewhat disregarded matter in history studies through internet is the source criticism. This is, of course, also an important matter in studying history with the textbooks. But it is an easier problem. The textbooks are or at least should be based on scientific works by professional historians. Also the names of the author and the publishing firm are clearly printed and it is easier to form an idea of what kind of product you are holding in your hand.

A lot of the texts that can be found on internet are anonymous or signed with insignificant names. Anyone could lay out texts on internet and so it is done. I have already given some examples of bizarre matters that could be found there, pornography and the like. These bizarre matters could very well concern history. Let me only once again mention the so-called holocaust revisionists.

The searching of historical facts on internet must be like searching historical facts in the archives, the libraries and so on. The pupils or the students must know what kind of text they are dealing with. They must know who has written the text and to what purpose.

A vital importance for the historical studies on internet is source-criticism, an old honest source-criticism where you ask questions about the dependence, the tendency and the contemporaneousness of the texts. The teacher must bring home to the pupils the elementary questions of source-criticism.

A lot could be said about this but let me just give some aspects.

The internet supply of facts is enormous. At the same time the amount of supply changes very rapidly and nobody and I mean nobody has control or even a general view of it. What was there yesterday could tomorrow change its place or disappear. Even if the text is there it could have changed overnight, facts could have been added or been taken away the whole link could have been moved and so on. In other words the text you referred to a month ago is no longer there. How does an historian use sources of this kind?

One other matter is that an avalanche of information is to be found on internet. Some of the homepage's constructors are full of enthusiasm and try to give as many pages as they possibly can in order to give the user as much information as possible. That is one thing. But one must remember that the coin has two sides. There is quite often not *enough* information on internet. The texts are sometimes presented in a very compressed form that could give the user an unsatisfactory or even incorrect information.

In the present debate about the school of today and of tomorrow enthusiastic school politicians and school administrators and also some of the teachers often talk about "the new role of the teacher" meaning that the teacher should be more of a tutor and that the pupils themselves should search the knowledge important to them. Here internet and information technology, they say, have the most important part.

The danger with such a policy is, however, that some of these enthusiasts confuse knowledge and information. To avoid that the pupils are being swamped with information of different kinds and values a teacher as well as a textbook are needed. I do not see how it could function without them.

When all this is said, however, the importance of the new technology must be stressed.

Internet and the information technology is here to stay and the teachers as well as the pupils must for tomorrow's society teach and learn something about it. The globalisation simply urges a certain amount of knowledge.

You could as well say: *no globalisation without internet*

Notes:

1. I wish to thank Hans Almgren, Master of Arts, Arboga Sweden and Martin Behre, Master of Science (Business Administration), Göteborg for their kind help when I prepared this paper.
2. In "Die Zeit" Nr. 39, 19 September 1997 there is an article about internet in German schools. The title is: "Bundesbildungsminister Jürgen Rüttgers und der Pädagoge H. v. Hentig streiten über das Lernen in der Medienwelt".