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A Historical Materialist Analysis of the Debate in Swedish Print Media on Mobile Phones in School Settings

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ABSTRACT

The use of mobile phones for teaching and learning in schools has been a controversial matter. In this paper the debate in two Swedish newspapers on the use of mobile phones in schools is analysed using a historical materialist framework. The results are discussed in relation to contemporary research on mobile learning. The analysis reveals that the debate has been a consequence of a conflict of control of the process of learning in schools. Statements from the stakeholders in the debate indicate that it primarily has been a conflict between those who rule school, the legislators, and those who are ruled, the school staff and the pupils. Knowledge of this could contribute to the understanding of difficulties occurring when implementing a mobile learning concept in the educational system.

Keywords: History, Mobile Learning, Mobile Phones, Newspapers, Policy, School

INTRODUCTION

Since the middle of the 1990s the use of mobile phones has penetrated every layer of society. In education, this process has been perceived both as a threat and as an opportunity and the debate has from time to time been intense. The use of mobile phones in schools can be dealt with as an extra-curricular problem, but it can also be put into the context of how a technology is taken up and adopted for pedagogical purposes, as a question of mobile learning (Sharples, 2002). Understanding how mobile phones are becoming tools in the traditional arena of education – the classroom – is an important research topic. This matter has many layers and can be regarded from different perspectives, e.g. educational, technological and political (Kukulska-Hulme, Sharples, Milrad, Arnedillo-Sánchez, & Vavoula, 2009; Traxler, 2007). As Kukulska-Hulme et al. (2009) pointed out, political approaches are important for implementation of mobile learning in the educational system. This paper focuses on the interaction between educational and political aspects, as it is revealed in the public debate in newspaper articles of the past. The approach is similar to Karlsohn´s (2009), who analysed the rhetoric surrounding the introduction of ICT in Swedish schools during mainly the 1990s. The

aim is to understand societal forces that are of importance for how mobile learning is dealt with in schools.

The overarching research question in the study presented in this paper is:

• What conflicts regarding the use of mobile phones in school can be traced in the public debate in the press?

Analytically a historical materialist perspective has been adopted.

HISTORICAL MATERIALISM

Historical materialism is based on a Marxist viewpoint on society. The structure of a society is regarded as being constituted in three levels. On the first level, the foundation, are the forces of production; tools, techniques, raw materials and labour power. On the second level are the relations of production; division of labour, cooperation and subordination to sustain the production. On the third level, the superstructure, are the legal and political institutions and their supporting ideologies (Tosh, 2002).

According to the perspective of historical materialism, the development of the human society is determined by the struggle for control of the forces of production. This implies a conflict between those who exercise control over the means of production (the superstructure) and those who carry out the production (the forces of production). The conflict is situated in the relations of production, through which the superstructure and foundational level influence each other.

With its affinity to Marxism, historical materialism is often interpreted as only being concerned with economy. Historical materialism is, however, not to be comprehended as only revealing a capitalist economical struggle. The relations of production do also constitute many aspects of culture, law, and other domains (Van Apeldoorn, 2004).

The traditional classroom is organized for optimizing surveillance and execution of control over the learning process in a mass educational setting. With its rows of benches, chalkboard and routines it is designed mostly for transmission of knowledge from the active teacher to the passive students (Cuban, 1986).

Using this comprehension, the classroom is a unit suitable to be placed on the foundational level of the historical materialism model since the classroom has a clear division between those who rule and those who are ruled.

In this analysis the model of historical materialism is applied with the educational system understood as the foundation (Figure 1). The forces of production encompass all parts of the educational system; ICTs, teachers and learners etc. What is produced is to be understood as learning.

Politically affiliated newspapers are parts of the superstructure as subordinates to the political institutions (Gramsci, 1999).

Historical materialism has been criticised for being deterministic. This analysis does not, however, measure societal development as whole. In this paper the theory is applied only to a small part of the society, during a short time. It is only the model that is applied in the analysis, not any other Marxist doctrine of the societal development.

Historical materialism is applied as a theory for analysing the historic process of interest since it provides a model for comprehension of the reciprocal relationship of structure and action (Tosh, 2002; Van Apeldoorn, 2004).

USING NEWSPAPERS AS HISTORICAL SOURCES

Historical sources contain assorted information. What questions the historical material is addressed with will decide what information the evidence will provide. This paper presents an analysis of sources originating from two Swedish newspapers, Aftonbladet (AB) and Dagens Nyheter (DN).

As sources, newspaper articles capture and reflect influential opinions in the debates of past times, political as well as public. They are principally written with a bias aimed to affect the opinion of their contemporary readers.

Figure 1. The historical materialist model as used in this paper
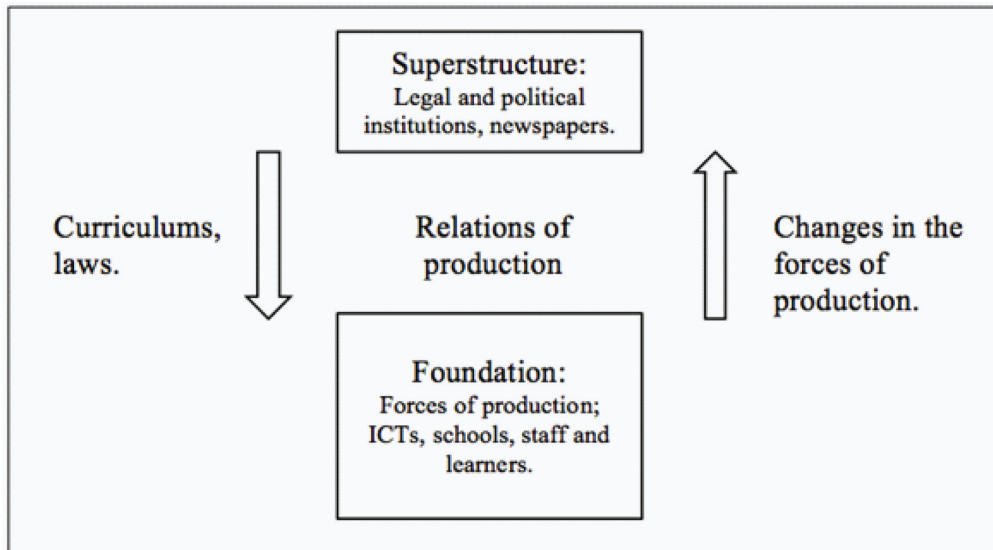
They do, however, stay within the boundaries of what is judged as suitable for public consumption (Tosh, 2011). Newspaper articles are not always valid in describing the past, but they are generally reliable (Franzosi, 1987; Tosh, 2011).

Newspaper articles do not give us the whole story, but if they are treated as remnants of the past they will provide a trustworthy insight into the nature of the debate. Using articles for judging public opinion might be uncertain, but the articles still reflect the opinions of the informants and the authors (Waller, 1961). The articles tell us about the ambitions of the politicians and about who is transmitting an opinion and when this is occurring. As mediators of news reports, debate and opinions newspapers can serve as documentations of actions taken in both the superstructure and the foundation. They do not, however, provide a complete depiction of the event.

Politics, federal laws and curriculums govern the educational system, and politicians are powerful actors in shaping these. In a democratic society politicians need voters. The press offer channels for transmitting messages and to shape public opinion. Gerber, Karlan, and Bergan (2006) point out that "even a short exposure to a daily newspaper influences voting behaviour as well as some public opinions" (p. 18,) but do not conclude whether it is the content of the articles or the political angle that is most influential.

Nevertheless, doubts could be raised about the impact of articles in newspapers on public opinion. In Sweden 80% of the press has been affiliated to the right wing while approximately 50% of the voters usually vote for the left (Wadbring, Weibull & Bergström, 2002). Even though newspapers are relevant for creating public opinion, they are not the unique contributing factor that matters.

The articles from the Swedish press, which are presented in this paper, mediate opinions on pupils' utilization of mobile phones in the Swedish school system. Many of these opinions derive from statements from politicians.

METHOD

The newspapers AB and DN were selected for several reasons. In order to avoid opinions of minorities, they are the two newspapers with the greatest circulation in Sweden; both of them

have their editorial offices in Stockholm, but they are covering the whole country; they also have different political affiliations.

The sources in the author's previous work (Ott, 2013) were collected in searches carried out in 2011. In this paper, the sources have been revised with the same method as was used in 2011 but the examination stretched further in time to the 31st of May 2013. Two searches were conducted in the online database Mediearkivet; one using the keywords "mobile phones" and "the school" and the other using the keywords "mobiles" and "the school". The result from the searches conducted in 2013 did not fully match the result from the searches in 2011. Some of the articles in the material presented in Ott (2013) did not reappear in the search made 2013. These articles did however exist, but in the searches conducted in 2013 the database did not respond to the same keywords in the articles. Since the articles were a part of the material in the earlier quantitative and qualitative examination they were also included in the revision. There was, however, not only a problem with articles lacking in the material, two more articles did additionally appear from the period 1996-2011 which the earlier searches did not provide. These have been included in the new material. The fact that articles did not reappear indicates that the reason for this has its origin in the programming of the database, rather than in a flaw in the research method. Together, the number of articles in the material adds up to 57 from AB and 56 from DN for the data reported in this paper.

The articles were selected out of a larger number of hits in the database on the basis of reporting directly about school or displaying content relevant to school, children and students. The articles were analysed regarding rhetoric and context: educational, pedagogical, political or other concepts addressing the utilization of mobile phones.

The articles were also chronologically quantified in order to identify any patterns in the dates of publication. Finally the explicit content and implicit messages in the articles were interpreted, analysed and regarded from the framework of historical materialism.

SOURCE CRITICISM

In a historical analysis the material must be validated with a method for source criticism. An evaluation of the sources from the perspectives of authenticity, dependence (whether the source is a remnant, a primary source or a secondary source), closeness in time and bias (Kjeldstadli, Persson, Åmark & Torhell, 1998) reveals the value of the sources.

The material under study was judged to be authentic on the basis that the articles often, but not always, were presented in two versions in the database, one text version and one depiction of the page from the newspaper. Those articles that were not found in the search of 2013 were located through reading the full newspaper from the specific date, which was known from the search of 2011.

Regarding dependence, the articles were remnants and parts of the debate. Distance in time between report and event was not a problem using the articles as remnants. As such they are parts of that past time in which they were created, and conclusions were possible to be made regarding that situation (Kjeldstadli, et al., 1998).

Since the aim was to identify opinions and ambitions, bias in the material is part of the result (Tosh, 2011). The newspapers providing the material under study were chosen on the basis of being affiliated to different political sides. AB is unaffiliated Social Democratic and DN is unaffiliated Liberal.

RESULTS

The results from the analysis of the sources are in this section organized and accounted for under several topics.

The beginning of a reactionary debate: describes the first period of the debate and what turned out to be the beginning of a generally hostile discourse towards the use of mobile phones within the school system.

Politicization of the issue of mobile phones in school: describes how policymakers used the

issue of eliminating mobile phone from schools as a stylistic means in their rhetoric.

Ownership of the mobile technology: describes issues of property rights regarding mobile phones.

The symbolic question in the debate: describes the connection between political events and the presence of statements on mobile phones in schools.

The road towards legislation: describes the political debate on schools in general and the period when the law giving teachers a clearer authorization to confiscate disturbing and dangerous objects was put in to effect.

A school not build on scientific principles: describes the Swedish school law.

Conceptions of the classroom and mobile phones: describes the traditional conceptualization of the classroom in relation to mobile learning.

Divergent conceptions of use: describes different opinions reflected in the debate on possible uses of mobile phones within the school system.

Different cultures of learning: describes the difference between youths and adults in how they regard mobile phones in school.

THE BEGINNING OF A REACTIONARY DEBATE

The sources examined in this paper were predominantly from the time after the IT-boom. The sources did not reflect the same trust in the technology as the sources used by Karlsohn (2009) did. In general the reports on utilization of mobile phones in schooling have focused on negative effects of the technology and on how to handle the destabilization of the formal learning context that was caused by mobile phones.

AB published the first article that reported on the use mobile phones in school in 1996. The article however reflected a positive spirit and could be understood as an expression mirroring the ICT-friendly climate in the society as a whole at that time. The article described a school in Stockholm where pupils from first class used the mobile phone as a modem to connect to the Internet when they were not in the classroom.

Given that Sweden was not to lag behind in international competition, many municipalities made ambitious ICT investments in their schools (Karlsohn, 2009), but at the same time new ICT started to appear that did not derive from governmental investments. These ICTs were the mobile phones. An article from AB in January 1998 can serve as the first of many examples (not all of which will be accounted for in this paper) of how the new technology's impact on education was reflected in the newspapers. The article reported from a secondary school that had decided to ban scruff, caps and mobile phones in order to cope with problems regarding rude behaviour and bad language. The connection between the problems at hand and the counteractions they led to was not further explained in the newspaper. However the article provides an indication that a transformation in the forces of production had started. This was a transformation that was not in control of the legal and political institutions. However, since the transformation challenged the relations of production then the superstructure had to react.

POLITICIZATION OF THE ISSUE OF MOBILE PHONES IN SCHOOL

Within the mobile learning field difficulties of merging mobile IT with curricular learning have been recognized. Sharples (2013) states that the two most promising areas of research to pinpoint are the use of mobile IT to support curricular learning in the classroom and personal learning on the move. This means that as the forces of production are challenged, they must be allowed to have impact on the relations of production, in this case on the rules for teaching and learning.

In the public debate these aspects were an exception, the debate was rather about how to eliminate mobile phones from the production of knowledge. This became evident when studying the material prior to the election to

the parliament in 2002. At the time, questions concerning school and education were heavily debated and the number of articles published peaked for the first time. Profiling on school matters the Liberal Party's spokesmen Lars Leijonborg and Jan Björklund plead for order and discipline in the classrooms. The forces of production were not working as they should and disrupted the production of knowledge. On the 12th of January 2002 DN published a reportage from a school where the school administration had taken action. Mobile phones were supposed to be turned off or handed in to the school administration for the duration of the school day.

Soon, other politicians joined the debate. Bo Lundgren of the Moderate Party declared in DN on the 18th of August 2002 his support of the Liberal Party. He claimed that mobile phones implied a disturbance to the work environment in schools. In an interview in DN on the 1st of September 2002, Leijonborg stated the belief that people appreciated the Liberal Party's plain language on self-evident topics like not using mobile phones during class.

Different actors in the debate supported Leijonborg and sustained that the issue was self-evident. In fact no other points of view were found in the material prior to the election. The teachers active in the debate stated however that they could handle the problems with the use of mobile phones. They claimed that there were more serious problems to focus on regarding school. The staffs of the schools on the foundational level were, as these fragments of the debate reveal, affected by the turmoil in the superstructure. One head teacher opposed the Liberal Party in AB on the 8th of August 2002, when he claimed that the call for a ban was a disapproval of his professionalism.

The Social Democratic Secretary of Education Thomas Östros, in an opinion piece in AB two days prior to the election, partly joined with the Liberal Party's approach to the use of mobile phones in school and stated that it was not the self-evident questions like mobile phones being turned off in class that would determine the future of Sweden.

In the debate, both the left and right-wingers considered mobile phones as artefacts, which disrupted the production in school and grouped them together with what was often referred to as "other disturbing objects". What those objects were tended to vary, but a package of objects that caused disruption could be identified. The mobile phone was in the centre stage flanked by various objects of distortion, such as narcotics, sticks, videogames, fireworks, knives, mp3 players, caps, chewing gums etc.

The Social Democrats won the election. In Stockholm, Björklund was forced to resign from the municipal government as Commissioner of Schools, but in the whole of Sweden the Liberal Party did well, their share of voters increased from 4,6% to 13.3% (Valmyndigheten, n.d.). The historical evidence does not reveal which actual role the self-evident questions played in this inconsistent result of the election. An article in AB from the 4th of November 2003 analysed Leijonborg's accomplishment as Chairman of The Liberal Party. The effort to obtain a ban on mobile phones in schools was considered to have been an important ingredient in their package of political matters that concerned school and thus many people. However there were no arguments from politicians found in the examined material at that time opposing the Liberal Party's stand.

There were, however, two articles which deviated from the general pattern of opinions. They were published in AB on the 14th of November 2002 and on the 25th of January 2003. They reflected that in the foundational level, mobile phones continued to gain ground against the traditional formal education. The articles reported of a head teacher who claimed that the mobile phones were becoming essential tools in the education process at the school.

In the years 2002 and 2003 these two articles were nevertheless exceptions. In the material studied, mobile phones were generally not regarded as artefacts that could be of any use within a pedagogical context. Even the news articles had a bias, which was noticeably negative towards use of mobile phones in schools.

OWNERSHIP OF THE MOBILE TECHNOLOGY

The question of ownership of the technology is important in the historical materialist analysis, and it is a key factor for mobile learning. Drawing on conference papers from mLearn conferences between 2002-2005, Naismith and Corlett (2006) identified five crucial factors for operating a successful mobile learning project: access to technology; institutional support; connectivity; integration (with the curriculum, the students' real life experiences or the combination of these) and ownership (the student must feel that the technological artefact is their own or can be treated as their own).

Norris and Soloway (2010) stated that the mobile phone is a technological artefact, which is in the possession of students and which they bring to school. Between 1996 and 2002 the possession of mobile phones among Swedish households had increased from 50% to 87% (NORDICOM, n.d.). As new models have been marketed, older ones have been discarded or passed on from parents to their children (Bjärvall, 2011). Hence the number of mobile

phones in possession of pupils in school gradually increased over the examined time interval, and so did the number of articles until the first peak in 2002 (Figure 2).

The question of ownership was also addressed in one letter to the editor in DN on the 7th of September 2002. Opposing the Liberal Party's quest for control of the forces of production, a reader raised the question whether Björklund had forgotten about property rights.

The debate also indicated that there were anxieties among students regarding their access to the technological artefacts in their possession. On the 27th of February 2005 four students were interviewed in AB. They expressed critical views towards a proposal for banning mobile phones and other beeping devices. They feared that the teachers would not be able to conduct an assessment of what was disturbing in a fair manner. Furthermore, in DN on March the 4th, Information Manager Suzanne Staaf of the Swedish student council said that confiscation of mobile phones could be performed, but it had to be executed by the police or a prosecutor and not by a teacher. It was obvious, two other students being interviewed said, that

Figure 2. Number of articles published per year
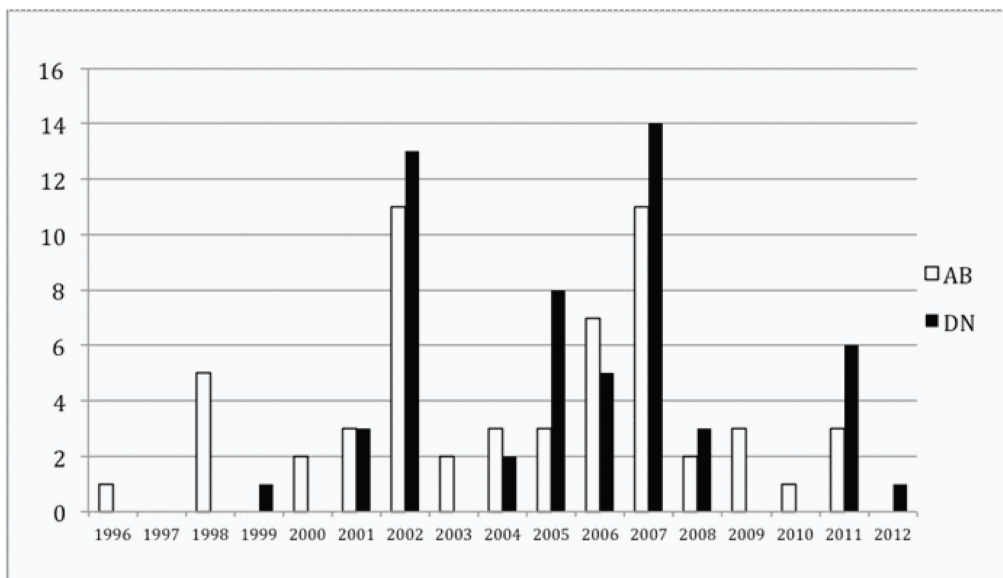
students should not talk on the mobile phone during class; it was rude. If you got a call, you told the teacher and left the classroom. It was not a big deal.

To the students, ownership of the productive forces was not to be an exclusive right belonging to the educational institutions and the legislators.

THE SYMBOLIC QUESTION IN THE DEBATE

On the 5th of July 2005, an AB editorial stated that it was not a hazardous proposal to ban mobile phones. What was dangerous was that the question dominated the debate about school. In a similar statement in AB on the 27th of February 2005, Eva-Lis Preisz, Chairman of the teachers' unions, stated that the banning of mobile phones had become a symbolic question of importance.

It is evident from the correlation between the dates of the political events and the published material in the quantitative examination that mobile phones in schools have been regarded as an urgent question for the newspapers to address. In 2002 the number of articles on mobile phones in schools was peaking and in 2006 there was also a large number of articles published on the topic. In 1998, 2002, 2006 and 2010 there were elections to the parliament but in 2010 the topic generated very few articles compared to the other election years (Figure 2.).

The election in 2006 resulted in a shift of government. The Social Democratic government was replaced by the right wing coalition "The Alliance"[1]. After the second peak in 2007 the number of articles published per year was declining.

From the stakeholders' societal position and from their expressed opinions it is obvious that the superstructure was affected by the changes in the foundational level. Regardless of whether these changes were a threat to productivity or not, in the debate most politicians choose to confront them as if they were. However the transformations were not possible to be held back. Mobile phones were becoming more and more widespread.

THE ROAD TOWARDS LEGISLATION

Liedman (2011) discussed the school system from two perspectives, an inner and an outer appearance. Most people notice only the outer. In the public debate over the school system, it has been visualized as a chronic problem with youngsters terrorizing each other and their environment. In the Swedish policy debate this aspect has been combined with the story of declining results, foremost in mathematics and science. The governing policymakers have reached the conclusion that when students do not manage to comprehend the courses they will turn to disruptive behaviour. They start to talk in class and also use their mobile phones. This behaviour disturbs the more industrious students.

In the examined material this perspective was noticeable from the focus on the learning environment of the classroom, and how that environment was ruined by lack of order and discipline. Mobile phones were described as being used for calling, gaming, filming and loud speaking etc.

According to Liedman (2011) Björklund, Minister of Education (2007-present), has been at the centre stage of the debate. The other strong political power regarding school in Sweden, the Social Democratic party, initially opposed Björklund. Over time though they, with some differences, joined with Björklund on criticizing certain aspects of the educational system. The initiative in the debate is however with Björklund, and every opponent is an anomaly (ibid). The material studied did not contradict these views, as expressed by Liedman. In this study it turned out that in more than 50% of the times a policymaker was mentioned it was Björklund.

In the parliamentary election of 2006 the right wing coalition prevailed and Leijonborg was appointed Minister of Education and Björklund was appointed Minister of Schools. On the 27th of October 2006 AB reported on the implementation of a new law, which would give teachers clearer authorization to confiscate disturbing objects. A teacher who

was interviewed pointed out that the new law made him feel mistrusted as a professional. In a letter to the editorial in DN on the same day, another teacher, who claimed to have 30 years of experience, however expressed gratitude towards the Liberal Party and also appreciation of the new law. On the 31st of October 2006 Björklund was attacked in an article in AB, which claimed that banning mobile phones had been labelled as a drastic solution to an urgent problem, which was not the case.

On June 2nd 2007 AB reported on the new law, which provided teachers with the authorization to confiscate objects that caused a disturbance or a threat to the safety of the education. Those objects were such things as mobile phones and fireworks. The main body of articles from 2007 in the material studied were published prior to the 1st of July when the law took effect. There is however a noticeable change in the theme of the articles over the year. With the new law in waiting, most articles were portraying chaotic schools and claimed that disturbances depended on the use of mobile phones. After the law took effect, the focus shifted to the portraying of successful school environments, where local regulations had for a long time been banning the use of mobile phones in class.

In spite of the measures taken both by the government and by the newspapers the changes in the productive forces continued to put pressure on the superstructure. Soon even a slight change in the superstructure's attitude toward mobile phones in school could be noticed.

A SCHOOL NOT BUILD ON SCIENTIFIC PRINCIPLES

In addition to the abovementioned law from 2007 the Swedish government has since 2006 also passed a new school law and new curricula for preschool, school centres, elementary school, upper secondary school and adult education. In the Swedish school law from 2010 the Ministry of Education and Research states that: "The education shall rely upon scientific principles and proven experience" (Ubildnings-departementet, 2010).

In 2011 a new curriculum was introduced for the Swedish school system. The Swedish national curriculum for elementary school, school centres and preschools states that the school is supposed to work together with the homes of the pupils, and to prepare them to live and act as citizens in the society. The pupils are supposed to be able to orient themselves in a complex reality with a high flow of information and change. Hence methods and strategies for learning and using new knowledge are important. For qualitative development of every school, the pedagogical leadership and the teachers must employ their professional responsibility. Every school must evaluate and try to develop new methods, and this should be done in interaction with the homes and the surrounding society (Skolverket, 2011). This could be an opportunity for the implementation of mobile phones into the forces of production.

According to the sources, eliminating mobile phones from education was, however, one of the Liberal Party's main questions during 2002. From the examined material no changes in their policy towards mobile phones were to be found. The Social Democrats did not oppose this stand. Banning mobile phones in the classroom are by most opinions regarded as a truism.

Prior to the parliamentary elections in 2006 and 2010 there was not as much focus as in 2002 on the issue about mobile phones in school. What differed between the pundits in the debate at the beginning of the period examined was that the Social Democrats plead for further investigation to be done by the National Board of Education. Björklund on the other hand stated that it was no longer time to investigate; it was time for action.

The passing of the law, which gave teachers a clearer mandate to confiscate disturbing and dangerous objects, was reflected in the historical material by an increasing number of articles on the topic during 2007. Confiscating disturbing objects has probably always been allowed, but

the articles in this study prove that the rules for this have not been perceived as clear enough.

The Department of Education and the Swedish School law, passed by Björklund and the right wing government, clearly state that education in the school system should rely on scientific principles and proven experience. There were however no references in the newspaper articles to results from scientific studies regarding use of mobile phones in school. Articles where politicians were either writing the texts or being the subject of the texts, often described a school where mobile phones were regarded as an outstanding problem. Björklund claimed that this was a comprehension deriving from the teachers, but when teachers were interviewed they stressed the importance of other problems. Teachers were not asking for a ban on mobile phones in school, but not for use of them either. The use of mobile phones was not the big issue; pupils knew when they should turn them off. This is worth noting since those who have the proven experience expressed in the school law must be the teachers. Consequently the message carried out did not, as the school law demands, rely upon scientific principles or proven experience. It has been something else that caused them to take action on mobile phones.

CONCEPTIONS OF THE CLASSROOM AND MOBILE PHONES

Liedman (2011) asked what the aim of the educational system really is. Should school be a counterforce to society, or should it provide a model of the society in which the children eventually will live and act?

This is a conflict which also is acknowledged internationally: "It is an increasingly accepted truth that education systems must evolve to meet the needs of the students and societies they serve, changing their mission from knowledge transmission to preparation for future learning" (Shear, Gallagher, & Patel, 2011, p. 11).

There is a gap between what the students experience and learn inside the classroom and what they need in life. What Shear, Gallagher & Patel point out is the necessity for education systems to aim at the process of learning, rather than at a product of learning.

New technologies may help learners in the process of learning, thus opening up the classroom and enabling new ways of communication and cooperation (Säljö, Jakobsson, Lilja, Mäkitalo, & Åberg, 2011). Reaching out from the formal classroom has been regarded as one of the major benefits of mobile learning. Learning can take place whenever a person has to find a solution to a problem. The learner can make use of all available resources; teachers, affordances in the environment, technologies etc. The context is dynamically constructed when the learner is interacting with the environment (Kukulska-Hulme et al., 2009; Sharples, Taylor, & Vavoula, 2005).

Using mobile technologies for learning in the intricate mixture of informal and formal learning (Malcolm, Hodkinson, & Colley, 2003) opens up the classroom. The interrelationships between formal and informal learning are important to examine in a wider context. This is particularly important, considering empowerment and oppression (Malcolm et al., 2003). Kukulska-Hulme (2006) stressed the importance of how to appreciate the technology; does it only denote amusement or insinuate something else? In addition Sharples (2006) stated that schools have failed to recognize the informal networked learning processes that are mediated by pupils' own mobile phones or computers.

Mobile technology, when in personal ownership of students, can however be both motivating and disruptive (Sharples, 2013). This could nevertheless result in learning that is more relevant to the students and at the same time can be economically justified (Norris & Soloway, 2010).

If the classroom is considered as the situated locality where learning is supposed to take place, then mobile learning could be somewhat of an evasive matter. Mobility is spatial, but also temporal and contextual (Kakihara &

Sørensen, 2002). A school fixed in time, relying on place and context (lessons, classrooms and subject curriculums) will encounter conflicts with learning grounded in mobility.

The material in this study reflected these conflicts. Even though the politicians or other voices occurring in the debate did not mention it, the debate on mobile phones in the examined sources has been a kind of behaviouristic striving to eliminate utilization of a technology that is regarded as creating a disturbing behaviour in the traditional classroom setting as described by Cuban (1986).

This is, however, not a recently discovered conflict. Mobile phones might just be the latest technology in a long line to put pressure for change on the educational system. Cuban's analysis from 1986 described how film, radio and TV, even though highly promoted by enthusiasts outside of school, failed to transform the habits of teaching and learning in schools. Technologies did not solve the problems teachers experienced (Cuban, 1986). This time, however, the challenge of the school system did not come from the superstructure, but from the foundational level, and as the technology developed and became equipped with more functions, multiple new malfunctions in the forces of production were reported in the newspapers.

DIVERGENT CONCEPTIONS OF USE

If mobile phones are predominantly regarded as mediators of disruption, and if educational institutions do not support the use of them, appropriate applications will be difficult to develop. Similar opinions were expressed by some voices in the debate that argued that the disturbances were being caused more by misuses than caused by the technology itself. DN published an example of this on March the 31st, 2001. A head teacher was quoted to have stated that prohibition would be the wrong way to go. He pointed out that school should rather teach students how to use their mobile phones.

In two articles from 2008, again possible uses of mobile phones in school were proposed. In relation to the mobile learning research the suggested uses in the newspapers reveal a difference in the acknowledged potential of the technology. An article in DN published on the 20th of February gave an account from a school where pupils were being allowed to use their mobile phones for calculating and listening to music as long as it did not disrupt the work environment of the classroom. On the 24th of September AB reported of a possible disciplinary use of the mobile phones in a school context. Parents could receive a text message from the school when their child was found to be skipping class. The suggested uses are in these articles focused on learning within the context of the traditional classroom.

In AB on the 5th of December 2009 a noteworthy anomaly in the debate occurred. Member of Parliament for the Moderate Party Oskar Öholm, was reported stating that as being parts of our society, mobile phones should be used in school too. This article indicates that in the superstructure it had become more difficult to resist the pressure from the foundational level. On the contrary the other articles in the material originating from this year were reporting about radiation from mobile phones causing brain tumours and also about how the successful law for confiscating mobile phones had been generating peace and a good environment for learning in school. In 2011 there was a noticeable divide in the attitudes within the superstructure regarding the question about how to deal with the changes in the forces of production. Should action be taken for reformation or confrontation?

On January the 25th 2011, Erik Bengtzboe of the Moderate Party's Youth argued in an opinion piece in AB that the debate should not be about seizure of mobile phones, but rather about how to learn with the help of them and what to learn from them. He stated that school must be better at using the modern technologies,

Furthermore DN on the 26th of April 2011 published a report with the headline: "What

is important is what the teacher does with the technology" (Dagens Nyheter, 2011). It reported from a school in Lesotho. The teacher Moliehi Sekese was quoted saying that as a teacher you must have a plan for the creative usage of the technological tools in education. The mobile phone was one of the technological artefacts that Sekese was described using.

On the other side of the gap of opinions there were five other articles from 2011 that were clearly hostile towards usage of mobile phones in school. The Minister of Health and Social Affairs and Chairman of the right wing party the Christian Democrats Göran Hägglund, on the 4th of November 2011 in an opinion piece in DN, called for more authoritarian teachers seizing mobile phones in class.

Of the two new articles trawled up in the 2013 search one was published by AB on the 29th of December 2011. It was a letter to the editor from a twelve year old girl. She expressed her beliefs that you do learn better not wearing a hat. It was rude to text or surf the Internet using the mobile phone during class, but it was also a useful tool for searching the Internet in education, for example when working on projects. For her, the mobile phone was an accepted force of production.

DIFFERENT CULTURES FOR LEARNING

In resemblance to the historical materialistic model, Sharples (2006) identified two systems in school; one stands for the youth culture with mobile technology and social networking. This culture is more or less impenetrable to adults. The other represents the formal school with its curriculum and teachers. They are deciding the acceptable discourse, and technology. Mobile IT, including the possibilities it creates with social networking and collaboration, is part of the youths' culture. Maybe the tensions which spring into existence in the classroom could be more easily moderated if interpreted as the consequences of two clashing systems rather than individual confrontations.

There were examples of these clashing systems reflected in the debate. A questionnaire was published in AB on January the 23rd 2004. Five people were asked whether they supported a ban on mobile phones in schools. Three of them (the youngest of them was 39 years old) were affirmative. One older man did not support a ban, but stated that the mobile phone should be turned off during class. The fifth person, a nineteen year old adolescent said no, a ban would not help. Students were too accustomed to using mobile phones. AB published an almost similar note, interviewing five people on the 28th of October 2006. This time the youngest respondent was thirty years old. The respondents were all in support of banning mobile phones in school. The questionnaires were not representative statistically, but are worth noticing since they indicate what was judged as being suitable to publish.

From 2010 there were no articles in the search conducted in 2011. However in the search of 2013 an opinion piece turned up from AB from the 5th of September. Bert Stålhammar, Professor Emeritus in pedagogy, stated that there were obvious problems with bad manners in schools. Caps, jackets, chewing gum and mobile phones were part of these. However these artefacts are also part of the youth culture.

As members of the younger cohort heard in the debate, Öholm (born 1980) and Bengtzboe (born 1987), expressed an urge for a more appropriate understanding of the potential of the technology.

Kukulska-Hulme (2006) and Thomas and Brown (2011) envisioned possibilities for a new culture of learning, where students are connected and learn together and from each other in various networks, communities and collectives. This new culture and the traditional formal classroom education may coexist and complement each other. This is also what Sharples (2013) concluded.

One of the technologies to be mastered by teachers and students has, though, come in conflict with the formal education and the established opinion of what learning and school will aim at, the teacher's agenda and the cur-

riculum (Sharples et al., 2005; Traxler, 2007). That technology has at its centre stage one specific artefact, the mobile phone.

CONCLUSION

From a historical materialist perspective, the debate over mobile phones in the two newspapers has been a consequence of a struggle for control of the knowledge production in the school system. This conclusion could be drawn from the stakeholders' societal positions and from their statements. One of the things that made mobile phones in school settings controversial was that they were not in the possession of the learning institution, nor in the control of the legislators.

Little regards has been taken in the debate of the opinions of teachers and pupils. Neither has any regard in the debate been taken to mobile learning research. In the debate most politicians have regarded eliminating mobile phones from schools as a common will.

When mobile phones began to appear in the school system a change of the forces of production started. However, instead of using their governing power to integrate the mobile phones into the forces of production, the reaction from the political and legal institutions and from the newspapers has been a struggle to eliminate them. That has been an unsuccessful quest; mobile phones in school are addressed in almost a similar manner throughout the examined period.

REFERENCES

Aftonbladet. (1996-2011). *Aftonbladet*. Stockholm, Sweden.

Bjärvall, K. (2011). *Var är du? Människan och mobilen*. Stockholm, Sweden: Ordfront.

Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. New York, NY: Teachers College Press.

Franzosi, R. (1987). The press as a source of socio-historical data: Issues in the methodology of data collection from newspapers. *Historical Methods*, *20*(1), 5–16. doi:10.1080/01615440.1987.10594173

Gerber, A., & Karlan, D. S. & Bergan, D. (2006). Does the media matter? A field experiment measuring the effect of newspapers on voting behavior and political opinions (February 15, 2006). *Yale Economic Applications and Policy Discussion Paper* (12).

Gramsci, A. (1999). *Selections from the prison notebooks*. London, UK: Electric Book Company Ltd. Retrieved January 16, 2014, from http://courses.justice.eku.edu/PLS330_Louis/docs/gramsci-prison-notebooks-vol1.pdf

Kakihara, M., & Sørensen, C. (2002). Mobility: An extended perspective. In *Proceedings of the 35th Annual Hawaii International Conference on System Sciences (HICSS-35)* (pp. 1756-1766). doi:10.1109/HICSS.2002.994088

Karlsohn, T. (2009). *Teknik - retorik - kritik: om IT-bubblan och datoriseringen av den svenska skolan*. Stockholm, Sweden: Carlsson.

Kjeldstadli, K., Persson, B., Åmark, K., & Torhell, S.-E. (1998). *Det förflutna är inte vad det en gång var*. Lund, Sweden: Studentlitteratur.

Kukulska-Hulme, A. (2006). Mobile language learning now and in the future. In P. Svensson (Ed.), Från vision till praktik: Språkutbildning och Informationsteknik (From vision to practice: lanuage learning and IT) (pp. 295-310). Swedish Net University (Nätuniversitetet).

Kukulska-Hulme, A., Sharples, M., Milrad, M., Arnedillo-Sánchez, I., & Vavoula, G. (2009). Innovation in mobile learning: A European perspective. *International Journal of Mobile and Blended Learning*, *1*(1), 13–35. doi:10.4018/jmbl.2009010102

Liedman, S. E. (2011). *Hets!: En bok om skolan*. Stockholm, Sweden: Bonnier.

Malcolm, J., Hodkinson, P., & Colley, H. (2003). The interrelationships between informal and formal learning. *Journal of Workplace Learning*, *15*(7/8), 313–318. doi:10.1108/13665620310504783

Naismith, L., & Corlett, D. (2006). Reflections on success: A retrospective of the mLearn conference series 2002-2005. In *Proceedings from mLearn 2006: Across Generations and Cultures*. Retrieved October 1, 2013, from http://telearn.archives-ouvertes.fr/docs/00/19/73/66/PDF/Naismith-Corlett-2006.pdf

NORDICOM. (n.d.). *Tillgång till medier i hemmet 1995–2012 (procent)*. Retrieved January 15, 2013, from http://www.nordicom.gu.se/common/stat_xls/2537_10420_Tillgang_till_medier_i_hemmet_1995-2012.xlsx

Norris, C., & Soloway, E. (2010). *Why is mobile technology different from other technology? Among many other reasons, students will be using their own devices*. Retrieved June 5, 2013, from http://www3.districtadminitration.com/viewarticle.aspx?articleid=2419

Nyheter, D. (1999-2012). *Dagens nyheter*. Stockholm, Sweden.

Ott, T. (2013). Mobile phones and other disturbing objects..." In *Proceedings of IADIS International Conference on Mobile Learning 2013*.

Säljö, R., Jakobsson, A., Lilja, P., Mäkitalo, Å., & Åberg, M. (2011). *Att förädla information till kunskap: Lärande och klassrumsarbete i mediesamhället*. Stockholm, Sweden: Norstedts.

Sharples, M. (2002). Disruptive devices: Mobile technology for conversational learning. *International Journal of Continuing Engineering Education and Lifelong Learning*, *12*(5), 504–520. doi:10.1504/IJCEELL.2002.002148

Sharples, M. (2006). How can we adress the conflicts between personal informal learning and traditional classroom education? In: M. Sharples (Ed.), Big issues in mobile learning (pp. 21-24). University of Nottingham, Kaleidioscope.

Sharples, M. (2013). Mobile learning: research, practice and challenges. *Distance Education in China*, *3*(5), 5–11.

Sharples, M., Taylor, J., & Vavoula, G. (2005). Towards a theory of mobile learning. *Proceedings of mLearn 2005, 1*(1), 1-9.

Shear, L., Gallagher, L., & Patel, D. (2011). *ITL research 2011 findings: Evolving educational ecosystems*. Menlo Park, CA: SRI International.

Skolverket (2011). *Läroplan för grundskolan, förskoleklassen och fritidshemmet 2011*. Stockholm, Sweden: Skolverket.

Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating the imagination for a world of constant change*. Lexington, MA: CreateSpace.

Tosh, J. (2002). *The pursuit of history: Aims, methods, and new directions in the study of modern history*. Essex, UK: Pearson Education.

Tosh, J. (2011). *Historisk teori och metod*. Lund, Sweden: Studentlitteratur AB.

Traxler, J. (2007). Defining, discussing and evaluating mobile learning: The moving finger writes and having writ. *The International Review of Research in Open and Distance Learning, 8*(2). Retrieved October 8, 2012, from http://www.irrodl.org/index.php/irrodl/article/viewArticle/346

Ubildningsdepartementet (2010). *SFS 2010:800. Skollag*. Retrieved June 21, 2012, from http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Skollag-2010800_sfs-2010-800/.

Valmyndigheten. (n.d.). *Slutligt resultat*. Retrieved January 4, 2012, from http://www.val.se/val/val_02/slutresultat/00R/00.html

Van Apeldoorn, B. (2004). Theorizing the transnational: A historical materialist approach. *Journal of International Relations and Development*, *7*(2), 142–176. doi:10.1057/palgrave.jird.1800010

Wadbring, I., Weibull, L., & Bergström, A. (2002). *Efter Arbetet. Synen på nedläggningen och dess konsekvenser*. Gothenburg, Sweden: University of Gothenburg, Dagspresskollegiet JMG Institutionen för Joulnalistisk och masskommunikation.

Waller, S. M. (1961). Historisk Opinionsundersökning och Tidningsforskning. *Historisk Tidsskrift*, *81*, 249–288.

ENDNOTES

[1]   The Alliance (Alliansen) is the name of the political coalition consisting of the Centre Party (Centerpartiet), the Christian Democrats (Kristdemokraterna), the Liberal Party (Folkpartiet) and the Moderate Party (Moderata samlingspartiet).

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