

The challenge of social media – between prohibition and indifference in the classroom

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Abstract

Like with the emergence of oral language and the invention of writing, printing, and electronic media, today digital media entail a revolution of society. In our present time we are living through the incunabula of a digital revolution. This means that many things in society find new forms, and we must find new ways of doing things, because our media milieu has changed. Also in schools many things are changing; the classroom is no longer a closed room where interaction is isolated from the external world. Thousands of parallel interaction systems are intermingling within the social situations in classrooms, and many problems arise because of missing adequate norms. Students can now access knowledge in the Internet's thousands of databases and wikis. The upshot is that the old teacher authority and traditional social norms for guiding teaching can no longer help outline efficient behavior in the classrooms. On this basis, we present the action research project Socio Media Education, which tries to develop new ways of teaching that feed to the new media environment. The aim of the paper is, on an early stage, to report about the challenge of the new social media and how the project tries to find solutions and the philosophy behind these solutions.

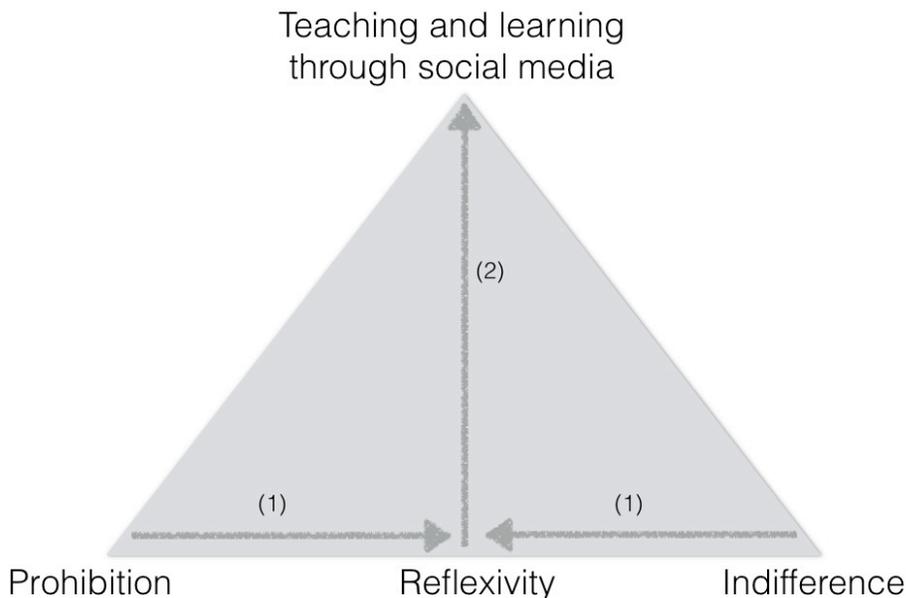
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The background of Socio Media Education

Socio Media Education (SME) is an action research project about how Danish upper secondary schools can improve their media culture. We have conducted research in a number of upper secondary schools in Denmark and written a series of articles about how digital media and wireless networks influence social relations in classroom teaching (Paulsen & Tække 2009, 2010a, 2010b). Our findings have showed that these media cause a series of problems: distraction, conflicts between students and teachers, and a high drop-out rate. They have also showed that teachers either react to the new media environment with *prohibition* (control and surveillance strategies) or *indifference* (laissez-faire strategies). Using medium theory (Meyrowitz 1985) and sociological systems theory (Luhmann 1995), we are able to explain and understand this theoretically. According to our analysis, information, communication, and action situations have changed with the new media environment. This has resulted in a situation where the norms formed in the former media environment do not efficiently guide social situations in the new digital and wireless network media environment. New forms of classroom management and classroom culture are needed.

In August 2011 teaching began in a new first-year upper secondary school class in Denmark, an experimentation class in the three-year SME project. This upper secondary school's background for being a part of the project fell in line with our results and experience from previous observations, interviews, and analyses (Paulsen & Tække 2009, 2010a, 2010b). The school representatives felt so frustrated with the situation that they fully agreed to be included in the project, even though this meant they had to participate in a so far unprecedented educational experiment. The core of this experiment is that the teachers can neither meet the students with prohibitions nor with indifference with regard to the use of media. In addition, they have to facilitate student reflexivity in relation to attention and media use, and they have to use two social media in their teaching, namely Twitter and a wiki.

The core design model of the SME Project



As the figure illustrates, the SME project has two action research moves: (1) facilitation of *reflexivity* through intervention in students' media use without prohibition or indifference and (2) establishment of a sustained use of social media (initially Twitter, in particular, and later also wiki) in all school subjects in order to exploit the new possibilities of communication. The combination of 1 and 2 must make both ends meet, so new standards (norms), adequate for the new media environment, are created, and develop a form of teaching that both exploits the learning opportunities of the new media and teaches students to use social media as learning media. Methodologically, we held two workshops for the teachers before the beginning of the school year, where we introduced the basic design philosophy, parameters of reflexivity, and how Twitter and wiki work and can be used in teaching. On the students' first day of school, the teachers introduced them to Twitter, both technically and educationally. The teachers were then given the task of using Twitter in a meaningful way in as many lessons as possible – preferably

experimenting – and share their knowledge from the experiments on a shared Google site. Similarly, the teachers committed themselves to trying to take on a reflection-facilitating teacher role. In relation to wiki, the teachers argued that they wanted to wait a little, until the use of Twitter had got off to a good start, which is why we concentrate on Twitter in this article. Our role in the first four months has been to observe class lessons, make interviews with students, and hold redesign meetings with teachers on the basis of these empirical data, supplied with analysis of the class's Twitter activity. The interviews have had the students' relation to media in education as a thematic focal point. At the redesign meetings (so far we have held three meetings) the teachers received feedback on how they appear to meet the challenge of the project.

The theory

The reasoning or hypothesis behind the project design is that the societal norms that regulate social interaction and the semantics we use to understand and describe the social with become inadequate, when a new basic communication medium alters the “social space of opportunities,” including the information situation and the possibilities for communication and action. This led us to formulate the hypothesis that the construction of new norms that are adequate to the new media environment could be developed on a micro-sociological level and only gradually be distributed globally (Paulsen & Tække 2010a). It is inspired by Meyrowitz' theory of *effect loops*, where the new terms of the social, initiated by the new media by being the new content in the very same media, give rise to a social behavior that is more congruent with the new information situation (Meyrowitz 1985). Gradually, over a period of time, new social standards are developed, which are adequate to the new social situations, so that the social again comes into equilibrium with the new media environment. This theory of equilibrium is nevertheless too simple, both theoretically and empirically. In a dynamical world there will always be conflicts and developments and not only a form of universal consensus. Explaining what happens then, we use Luhmann's communication sociology with its emphasis on linkage and acceptance or negation of meaning

proposals, and the concept of double contingency. Using this theory, we can explain how situations that are characterized by mutual uncertainty (double contingency) trigger experimental behavior that is either accepted or negated. The history of accepted and negated communication and behavior forms social expectations for the future – which is exactly how we understand standards (social norms) sociologically, since such experiences subsequently form expectations about future behavior (Luhmann 1995).

The problem

The actual situation in upper secondary schools in Denmark is that every student in a class has a laptop connected to the Internet in front of him or her. Many students are distracted by their own and other students' screen activities. They spend time on computer games, amusing newspaper articles, and social media – especially Facebook. If teachers simply ban use of the new social media, student will lose trust in their teachers and start to deceive them, and subsequently they will fail to learn how to use the new media for educational purposes and to self-regulate their use in a reflected and responsible manner. If the teachers, on the other hand, react with indifference, many students will spend too much time on other things than the educational interaction. Furthermore, the students tend to segregate into closed 'in' and 'out' groups through different kinds of media use. They also meet many of the problems mentioned in relation to the situation with prohibition, e.g. not developing the skills for using the new media for educational purposes.

To help the situation we have developed a dual strategy to bridge the gap between prohibition (control and surveillance strategies) and indifference (laissez-faire strategies) consisting of (1) an intervention philosophy where the teachers try to facilitate and help the students reflect on their media use and (2) a practical requirement using a new interaction medium (Twitter) for educational purposes.

Educational use of Twitter

The choice of Twitter as the primary social medium in the experiment is inspired by an American semester-long experimental study investigating the effect of the introduction of Twitter in teaching (Junco et al. 2010). The study group included 70 individual and the control group 55. The experiment showed increased commitment and improved grades in the Twitter group than in the control group. According to the article, the researchers succeeded in improving the contact between faculty and students in a way that was in agreement with digital lifestyle (ibid., 10). The use of Twitter also proved to encourage students' cooperation with each other, both professionally and socially. Twitter homework gave more active learning, and both students and teachers experienced improved feedback opportunities. It is not clear from the article how or how much teachers were instructed by the researchers, or how much contact the researchers had with the students. The researchers write that they cannot say with certainty whether the significant improvement in engagement and grades stems from the use of Twitter or from a "possible teacher orientation." Referring to Crook (2008) they note that the integration of social media depends on creative teacher involvement. Since the exact involvement is not explicit in the experiment, it provides no method for the implementation of Twitter in the classroom; it simply points out that it can be done, if the proper (but unknown) teacher-made frames and involvement are established.

Facilitating reflexivity

In continuation of the above-mentioned problems, it is a goal of SME that the teachers truly encourage the students to reflect on how they perform in relation to concentration and distraction. Students must go through a process, where they accept that it is not possible to multitask, but that they have an ability to switch between different activities, depending on how well their short-term memory is (O'Brien 2011) and how strong their will and situational involvement are (Markowitz 198?). It is possible to move on such a continuum, but it is individual how competent one is in making the switch, e.g. between reading updates on Facebook and listening to the teacher.

Several conditions are relevant with regard to how much “multiple” attention one can afford. One’s standard in the different school subjects has an influence on what you can afford in terms of averted attention, if you also want to keep up with the school subject. IT skills also help determine the degree to which a person can successfully shift his or her attention from one object to another. Socially speaking, one must learn to participate (through Twitter and other social media) in the partly virtual class community and learn not to disturb others with regard to their individual limitation of distraction. Furthermore, particularly young people need to work hard to maintain their relationships in the social – also outside the class. In digital media people must write themselves into existence on a daily basis, if they want to maintain their social identity in groups and networks where they are recognized (Tække 2011). In addition, interaction with lovers, parents, and siblings could have an urgent character. This raises the question of how good or bad you are at saying no and evaluating the situation; that is, reflecting on how important it is to react, when you are addressed. The teacher's role is to help the individual (and the class) reflect upon his or her attention in relation to both the academic and the social level.

Many students, however, believe they can multitask, i.e. perform totally different tasks simultaneously, and thus split their attention synchronously. This is hardly possible. If students write an update on Facebook, their attention moves away from the educational content. Only if a task is automated, i.e. becomes a habit that demands a minimum of attention, is it possible to multitask. Students who use Facebook every day may manage to see that the screen picture is changing, meaning that there is a new update, but they cannot read it and definitely not write a comment without losing attention to the school subject. The phenomenology of man seems to be that when we fix our attention on something cognitively demanding, we push other issues into the background (Pietersma 2000).

However, one can learn to *multiplex*, which means that you direct your attention to the same topic through multiple media. This happens, for instance, if you learn to listen to the teacher, look at his writing on the blackboard and, at the same time, write your own notes. If Twitter is used to communicate in parallel the topic that is the focus of the oral teaching interaction, the students' teaching-oriented attention is multiplied further. Common to both multiplexing and multitasking is the fact that you cannot focus your attention on two different activities at once; however, in multiplexing, when you focus your attention on one and only one "intellectual item," you may lose something, but you are likely to gain more than you lose (Fahey & Meaney 2011). This requires reflection on what you are aware of. To teach students to multiplex, therefore, goes hand in hand with teaching them to reflect on their individual and collective "attention economy" – and both are therefore goals of the SME design.

The initial results

We will highlight two results from the project's first four months (August-November 2011). One result is the establishment of self-reflexivity; the second is concerned with how the class is currently working with Twitter.

Results about reflection

The most significant challenge of reflexivity has been to get the teachers to act with neither prohibition nor indifference to students' use of new media. Roughly speaking, the participating teachers fell in one of three categories: (1) teachers who found it difficult not to resort to prohibition; (2) teachers who did not resort to prohibition, but failed to manage to facilitate reflection; and (3) teachers who actually began to successfully bridge the gap between prohibition and indifference with reflection and teaching that was in accordance with the new media environment. All three categories appeared in observations and interviews.

An example of the prohibition category appears in a lesson where a student uses her cell phone and the teacher subsequently bans its use. Around the student in

question other students use Facebook, and therefore the prohibition appears from the students' perspective to be an arbitrary attack, both technologically and personally: *why me?*, the student thinks, *it must be because she (the teacher) does not like me*. It appears in the interview that both the "attacked" and several other students react with opposition to the teacher and lose faith in her. The intervention did not make the students reflect on when it is useful to use different media in education: on the contrary, they begin to develop techniques to hide their media use. Another example is a failed attempt to initiate student reflection: the teacher asks questions about the improper use of a specific medium, because the teacher unambiguously wanted the student to *admit* that her use was improper.

There are also situations where the teachers neither ban the use of digital media nor make the students feel ashamed, but unwillingly end up in an indifferent position, as they do not know how to initiate reflection or fail to realize how they can change and develop their teaching practices in congruence with the new media environment. They lack concrete tools for constructive intervention and feel powerless and caught in a double bind that prevents them from being the kind of teacher that is "natural" to them. An example is a teacher who displays an information-saturated film, but defeatist and passive she watches the students from the back row do anything – on their computers – but pay attention to the film.

Finally, some teachers take on a reflection-enabling position and even say that it is a new teacher role for them and that they cannot imagine returning to the way they used to act (with either *prohibition* or *indifference*). These teachers seem to have gone past a "point of no return," although they are concerned that they will in fact end up very close to the position of indifference. However, they also report that they enter into dialog with the students in new and fruitful ways. Thus, confidence and trust between students and teachers grow in connection with this position, as was also the theoretical expectation (Tække 2011b).

In summary, we conclude that it is difficult, but possible, for teachers to take a reflection-enabling position and that this position seems to work, but relies on the development of concrete reflection-initiating forms of intervention. In addition, our repeated discussions with teachers about the reflection position have made it clear that prohibition and indifference cannot be avoided in teaching altogether. There will always be a degree of latent prohibition in upper secondary schools: if the students continually ruin their chances of learning, teachers may have to resort to prohibition. However, there will also always be a degree of indifference: a teacher cannot react to everything, but must ignore this and that. On this basis, it can be clarified that to fulfill the reflection position one should avoid the *general* prohibition and indifference positions, just as one should avoid "attacks" on individual students who are distracted by the new media, as students perceive such interventions as mistrust and unjust and, therefore, do not reflect on the situation, which was the purpose.

If we turn our attention to the students, they do not seem to experience the problems we have observed in other upper secondary schools. They do not feel distracted by their own or others' use of new media. The interviews indicate that students in the course of the autumn semester developed a degree of self-reflection, enabling them to differentiate between different school subjects in relation to their degrees of attention. Some still seem to believe that they can multitask, but again they distinguish between different school subjects and believe they can multitask in some subjects and not in others. This might have something to do with conceptual issues, as it is easier to 'jump on and off' subjects that you are on top of or among the best at. Here the good result is that students do differentiate. As in all other upper secondary schools the students use Facebook and computer games in ways that have nothing to do with school subjects. *But* they do it less, when teachers include Twitter in the teaching. We are also able to see that the students in our experiment consciously plan when they can afford a break from teaching. Finally, we note that students relate fairly autonomously. For example, the class has created a Facebook group that excludes the teachers and where students, according to interviews, help

each other with their homework, exchange answers to assignments, and coordinate class parties and the like. Another example is a group of boys who in three months created a LAN network, which they use to play a game where they, with great enthusiasm, race against each other during school time in a way that is distracting.



Results about Twitter

The introduction of Twitter as a permanent teaching and learning medium has been a success – both academically speaking and in relation to learning purposes.

Students were introduced to the medium on their first day of school. Since then they have sent thousands of tweets, mostly on school days. During the first interviews we conducted, the students revealed that they were skeptical about the medium.

Among other things, several students said that they would rather use Facebook, as they were accustomed to that medium. We could also observe that some students were reluctant to send tweets. In the course of the autumn semester, the students became more positive toward the medium, and the general experience is that they

feel more involved and learn more through the use of Twitter. However, most of the students only use Twitter on the teachers' request. Students perceive the medium as a pure teacher and educational media.¹

Specifically, we have seen four kinds of Twitter use develop in class. Firstly, we have seen teaching sequences based solely on Twitter. One example is that the teacher asks a question on Twitter and students subsequently come up with answers. Usually, this is supplemented with verbal interaction in class. The advantage is that all (or at least *more*) students participate, practice writing concisely, and acknowledge by having to express themselves in writing (in the oral medium only one person can speak at a same time). Classes have also used student reports from company visits, sharing and discussion of academic links in a variety of subjects, and exercises in languages and mathematics. We have also seen few sequences outside school hours, where students discuss school relevant topics, help each other, and discuss how the teaching can be improved.

Secondly, we have seen teaching sequences with teacher-initiated multiplexing in which Twitter is used simultaneously with other media. For example, the class watched a film and used Twitter simultaneously. During the viewing of the film the teacher asked analytical questions on Twitter and thus launched an analytic dialog about the film during the viewing. A dozen students were writing on Twitter, while virtually all of the students read the tweets. In the interviews with the students, they revealed that they had learned a lot via this method, even though it is more relaxing to just watch movies without having to analyze them at the same time. According to the teacher, the subsequent analytical discussion (after the film-viewing-and-tweeting session) was better than what is standard in other classes. The point is presumably that the students' film reception was *framed* analytically already while watching the film – consequently, even the academically weakest students seemed to embark on an analytical understanding of the film. Another example is tweeting

¹ None of them had been on Twitter before they began in the class.

during student presentations, which also provides a series of benefits. Normally, many students go on Facebook, but we can see that this number is reduced, when the teacher tweets with the students about the content of a given presentation, giving a critical discourse rather than passive listening or participation in other online activities. In addition, Twitter was used in this way with success during teacher presentations, where some students asked the others about the content of the presentation.

Thirdly, we have experienced student-initiated multiplexing, where Twitter is used in and outside school time as a backchannel. An example is a discussion in class where students communicate together "behind" the teacher using Twitter. However, this has only happened to a limited extent, and preliminary results suggest that students only take sporadic initiatives to do so. Especially in mathematics, now and then students use Twitter to ask each other or the teacher for help, but, again, this is used to a limited extent and mostly if and when the teacher initiates it.

Fourthly, teachers have begun to develop media chains, where they plan activities prior and subsequent to a particular use of Twitter. One example, which we have seen in different variations, is that the teachers make an assignment that the students subsequently work with; consequently, the students write answers on Twitter, and their responses are then displayed on a digital whiteboard and discussed and used for further group processing, which is uploaded onto the class wiki and later presented and perhaps evaluated and adjusted based on feedback and assessments.

According to our interviews, the students find it annoying and difficult to multiplex, but as the year progresses, we have seen a greater satisfaction with tweeting during class hours. There are many nuances of which only a few are mentioned. The students are comfortable with hearing the teacher ask a question and one of the usual three or four voices of the dominant students answer it. In contrast, they are insecure when the teacher asks a twitter question and the classroom is completely

quiet, while everyone writes a reply on Twitter. It also shows that there is no absolute conjunction between the students who are traditionally silent and the students who are silent when it comes to writing on Twitter. This means that more students, even when it is voluntary, join the teaching interaction when Twitter is used.

Discussion – further questions and unsolved problems

The initial results show aspects of an explicit method for the inclusion of Twitter in the classroom; this is lacking in the American experiment that we are originally inspired by (Junco et al. 2010). Yet, so far our study also has its unknowns. One thing is that the relationship between the establishment of self-reflexivity and the use of Twitter is not yet fully elucidated. Unlike the American study, we can see that the construction of the teacher subject is crucial for reflexivity in the classroom. In the American study there is no teacher subject, merely the assumption that if you introduce Twitter enthusiasm, it generates better student engagement and improved grades – regardless of how teachers otherwise relate to students' media use. This is an unrealistic scenario, as you cannot expect researchers to *always* be able to assist upper secondary school teachers. Here we have a clear result: the teacher is crucial. If we move beyond comparison with the American study, which neither dealt with the problem of reflexivity, we have observed that even *prohibition teachers* can use Twitter successfully. This indicates that the relation between the use of social media in education and the facilitation of reflexivity has not been explained in its entirety. Similarly, it becomes clear that the possibilities of Twitter are not the same in different classes (school subjects), if the medium is used exclusively in ask-and-answer activities. Here a hermeneutic subject such as English with its many interpretation and discussion opportunities is a more likely candidate for the inclusion of Twitter than, say, mathematics, where there is often only *one* answer. Twitter may well be used in mathematics, though; the point is that media work differently in relation to different school subjects. Our Twitter logs include a number of empirical examples of how students in mathematics help each other and ask the teacher for help via Twitter.

If we turn to the students, the American survey focused on the average student engagement and grade levels, but in connection with the experimental class the SME project clarified that some students are silent on Twitter, as they find it difficult to take the medium to heart, despite the fact that their peers are able to use Twitter to improve their educational participation opportunities. The medium can thus serve to reinforce or create asymmetry in the classroom culture, which is a significant problem in Danish upper secondary schools, where teaching is bound up in class teaching (not in teams and course teaching like in the American study). This poses the additional question of how teachers in a Danish upper secondary school context are able to include all the students in classroom communication through an interaction medium like Twitter. On their own initiative, the students created the Facebook group where they help each other, but since neither the teachers nor the researchers have access to this group, it is difficult to say whether similar asymmetries also are formed there. All this raises a fundamental question of whether and how teachers can and must intervene in students' media use. The project has been designed to urge teachers to interfere constructively and in a way that facilitates reflection, but how can they do so efficiently, when the specific content of large parts of the students' media use remain unknown to the teachers? Can the teachers by neither prohibiting nor reacting with indifference to new digital media gain the students' trust to such an extent that the latter address issues, which thereby help them reflect on their use of media?

However, a good IT culture seems to have been created in the experimental class. Students are fairly reflective with regard to what they are doing. There is no strong formation of cliques in the class via the media. Apparently, all the students are members of the aforementioned Facebook group. Help is given and received via Twitter and Facebook. No students report that they find themselves disturbed by other students' media behavior. After four months, most of the students have taken Twitter to heart and learned to use it as a useful tool for teaching and learning, although some students – rightly, perhaps – regret the fact that on Twitter they do

not have as many 'friends' as they do on Facebook, they cannot see who is online, and some struggle with data which cannot be saved on Twitter, which is not as well-organized as Facebook. To what extent and why the IT culture in the class seems less problematic, than we have seen in previous studies conducted in other upper secondary school classes, cannot be answered unequivocally. This requires, not least, that we continue to work with the project.

Conclusion

In this article we have presented a historically rooted media understanding of the challenges and perspectives that the new digital media environment – and especially the presence of social media – provides for teaching and learning in Danish upper secondary schools. We have shown how upper secondary schools initially reacted defensively to the changing educational premises through prohibition and indifference strategies and by the lack of inclusion of social media in education. Secondly, I reported on the action research project SME, which aims to identify ways to avoid prohibition and indifference strategies and, instead, facilitate self-reflexivity among students and incorporate social media in education, enabling upper secondary schools to stay abreast of the current media environment. We have reported results from the first four months of the project, where the experiment class and its teachers in particular have worked with introducing the social medium Twitter, complemented by attempts to cultivate a reflection-initiating teacher role.

The result of the four-month experiment is that the teachers involved – in varying degrees – are working on developing new teaching interaction forms that exploit the opportunities in the digital media environment and reduce the difficulties. With the use of Twitter, student participation seems to increase, and with the increased focus on facilitating self-reflexivity it seems that an inclusive and reflexive IT culture has emerged in which students consciously and reflectively predispose their attention under consideration for themselves and each other. Therefore, the project's hypothesis seems overall to be confirmed.

However, we have faced considerable difficulties – some of which remain unresolved – in connection with the establishment of a reflection-initiating teacher role in the experimental class; and it is worth mentioning that these difficulties are *typical* among Danish school teachers, since we in our earlier studies in the field found that the prohibition and indifference strategies, respectively – both of which inhibit self-reflexivity – are prevalent. A significant bias in the study is therefore that viewing the positive results one must also take into account the significant amount of pressure and support from the researchers. Similarly, it proves that a comprehensive and sustained use of Twitter is required before students take the medium to heart. It has probably been crucial that all class teachers have used the medium, although here too we have found that some teachers have used the medium in almost every lesson, while other teachers used it rarely or left it to the students to use it, which meant that the students did not use it, as the medium seems to require – in order to become an effective teaching and learning tool – that teachers initiate the use. Some unknowns and unanswered questions remain to be answered, until further data and results have been compiled from the project which runs until 2014.

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