# **Bildung in the Digital Medium Environment**

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Jesper Tække
Associate Professor, PhD
Centre for Internet Research,
Aarhus University, Denmark : www.jespertaekke.dk
imvjet@dac.au.dk
Twitter: @taekke

Michael Paulsen
Associate Professor, PhD
Department for the study of culture
The University of Southern Denmark www.michaelpaulsen.dk
mpaulsen@sdu.dk
Twitter: @forskerMP

We are living in a period where new social structures arise in the communicative space and wake of digital media. This means that we must try to adapt to a changing social world within all social arenas like economy, work-life, love relations and last but not least *education*. The question of this paper is what Bildung should be or could be within this new medium environment. It draws on Luhmann (2006), Biesta (2006), Klafki (2014) and Kant (1784) describing what Bildung is seen from the view of the enlightenment tradition and try to discuss and analyze how ideas of Bildung could be used in education today and tomorrow. The paper draws on empirical findings from the Socio Media Education experiment, a Danish action research project in an upper secondary school from 2011-214 (Tække & Paulsen 2013a, 2015a, 2016a, 2016b).

## I. What is Bildung?

The concept of Bildung is German and literately means *imaging*. Like it is said that God created mankind in his own *image*, the concept hits at the question of what image we are to be formed in, what cultural capital do we want new generations of newcomers to get? The concept is worked through by thinkers like Kant, Herder, Humboldt, Hegel and Schleiermacher during the time of enlightenment (Klafki 2014). Following Luhmann (2006) Bildung is a paradoxical concept, which we see right from the beginning of the time of enlightenment where Kant is answering the question, what enlightenment is: "Enlightenment is man's emergence from his selfimposed immaturity. Immaturity is the inability to use one's understanding without guidance from another." (Kant 1784). The paradox is that Kant also is of the opinion that the ability to think freely and for himself is the product of education. He did not only say that: "Man is the only being who needs education" (Kant 1803, #1), but also that: "Discipline changes animal nature into human nature" (#3) and that: "Above all things, obedience is an essential feature in the character of a child, especially of a school boy or girl" (#80). All in all the paradox is that on the one hand we have to think for ourselves (Dare to Think for Yourself) on the other we must be educated, disciplined and learn obedience. We return later to this paradox about how students can be educate to become independently thinking beings, to be selfassured, and on the other hand to have eye for the common and others, providing us with the question of otherness in relation to the concept of Bildung.

Another important content in the concept of Bildung is that it must be brought about with the eye on a future that is better than the present. Again Kant were the first mower saying that: "children ought to be educated, not for the present, but for a possibly improved condition of man in the future; that is, in a manner which is adapted to the *idea of humanity* and the whole destiny of man. This principle is of great importance. Parents usually educate their children merely in such a manner

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<sup>&</sup>lt;sup>1</sup> In the December 1784 publication of the *Berlinische Monatsschrift (Berlin Monthly*), edited by Friedrich Gedike and Johann Erich Biester, Kant replied to the question posed a year earlier, see: http://www.artoftheory.com/what-is-enlightenment\_immanuel-kant/

that, however bad the world may be, they may adapt themselves to its present conditions" (Kant #15). And Kant's idea was that this better future only is possible because of this better Bildung: "But they ought to give them an education so much better than this, that a better condition of things may thereby be brought about in the future" (ibid.). This is also paradoxical because how can we form a better future by educating students in the present with only present thoughts and methods?

## II. Bildung as a Paradox

According to Luhmann (2006: 205) society reacts with the concept Bildung within the situation after the introduction of printed books, where external definitions of what man is or should be were lost. Luhmann put forward the function of the concept as the contingency formula of the function system of Education. When we do not know what man is or should be, we do not either know what the education system must achieve. We can ease this embarrassment by finding a concept, which on the one hand has such a scope that it does the embarrassment justice, and on the other hand has such a normative character that it can provide the education system with guidelines (ibid: 206-207). Luhmann observes Bildung as a paradox with two sides where the point is not to take side for one or the other, but to interpret the function of Bildung as a contingency formula. According to Luhmann, one can also in a different way distinguish between the two sides of Bildung; here the one side opts for a *normative* form á la canon-based curriculum and on the other side there is opt for a *reflective* form of Bildung, wherein the content of Bildung cannot be settled. Bildung has only the person who can put himself in the place of another, take the perspective of the other (others will always have a different Bildung than oneself and one can only observe oneself through the eyes of the other). We return to Bildung as a paradox later and try to use this angle as an analytical method.

# III. A brief medium history of Bildung

Society has always formed it self within the communicative space provided by the media it has had available. The prototypical form of Bildung came about with Alphabet writing in the Ancient Greece under the term of *paideia* and in Rom under

the term of *humanitas*. Both concepts were about an autonomous striving for knowledge and insight in a way that was free of business terms and thinking (Larsen 2013). In the dark ages and up to the printing press and the renaissance reading and writing belonged only to the few, and their knowledge almost only consisted in learning the books that were canonized by the church (beside the seven liberal arts). After the invention of the printing press native language became also written languages giving birth to nationalistic (romantic) thinking (Eisenstein 1983) and in the end also to Herder's concept of Bildung. This concept was about learning and preservation of nations special history, culture and language. Even though many famous humanists have worked through the concept it still have a nationalistic bias. In the wake of the printing press general (algemeine) school systems slowly developed all over Europe trying to provide young people Bildung. This was a topdown managed educational system with authoritative pedagogical forms with the teacher in power interpreting texts selected by the central state government. Only the few would advance to the upper secondary school, in 1950 only 5% would do that in Denmark (Larsen 2013). With the analogue electronic media the authority of the teacher was diminished because of the new information situation brought through especially by television (Meyrowitz 1985). Now the students knew almost every thing which before were secrets because they did not need to be able to get hand on and read difficult books - but to be educated and get Bildung they still had to be able to read and write (ibid). Also now the teacher could select more texts because of the copy machine. The pedagogy was changed; now there was more dialog and a more equal relation between the students and the teachers. The praxis of Bildung was brought much closer to the idea of Bildung. Following Luhmann (2006: 212) the contingency formula of Bildung in the twentieth century is adjusted to the loss of founded canon based certainty. This is the form of life long learning and the reflexive formula now is to learn to learn. The idea goes back to Humboldt: "The young man (...) is engage in a doublet manner, first with the learning itself, and then with learning to learn" (here quoted from Luhmann 2006: 213). According to Luhmann: "We now reversely have to select the stuff (there is too much of it), and one possibility is – instead of its *inner* value – to ask which opportunity it provide to

practice to learn to learn and to reconcile oneself to a future where one all the time has to learn something new" (Luhmann 2006: 213).

## IV. The problem

Things are moving fast in society where all parts, sectors and levels are altering and changing in accordance with new digital communication media. Not at least the production forms are changing from the form developed in the epoch of industrialisation with a sharp distinction between production, distribution and consummation. Now we see a contraction called *produsage* (Bruns 2008). We also se new forms of networking, intercreativity (ibid), spreading of content and forms of convergence and participation cultures characterised by shaping, sharing, reframing, remixing and appropriation (Jenkins 2013, 2008, 2006). We are living in a new society or in a society which are on its way to becoming a next society (Baecker 2007).

In his book *No Sense of Place* Meyrowitz shows how analogue media changed the spatial conditions of society mixing situations, which before were differentiated, creating new information situations. Now everybody could go to the Vatican, the White House or to a school class through the new communication media. Now with digital media we can do more that see and listen – we can also *intervene*; we can do things and say things on places where we are not physically seen.

The school has for centuries been based as a social system that processes in a closed room: "The interaction takes place in a closed room that are not public, so that distraction from the outside world can be minimized" (Luhmann 2006: 131). For centuries the four walls have protected what was going on in class: "Especially ensures the spatial secretion of education that the education system can control its own thematics, and decide for itself when to begin, alternating or quit themes" (Luhmann 2006: 132). With analogue electronic media many things changed in education because of the new information situations (Meyrowitz 1985, Tække & Paulsen 2013a). But with the digital media not only the information situations change again, but also the *interaction situations* changes (ibid).

We have observed that the schoolrooms are opened up, meaning that the students now can *access* content, conversations, computer games, friends etc. from all over the world (through the Internet). The schools themselves invest huge sums of money in equipment like wireless networks and digital blackboards. Yet, the teachers have difficulties in using the new media for educational purposes and tend towards either to prohibit or to ignore the use of digital media (Tække & Paulsen 2013a). Both strategies – prohibition and ignorance generally fails for several reasons, but first of all because the new problems with Internet-related distractions in the class room come from a lack of norm-building adequate with the new situations provided by the new communication space of digital media (ibid., Meyrowitz 1985). At the same time the new possibilities for teaching provided are not actualised or invented.

All in all, this means that we see a Bildung of students belonging to yesterday's medium environment. A Bildung where students are treated like we still lived in the epoch of industrialization, and communicatively seen before digital media. Framing the two presented main ideas of Bildung: How do we educate students to have the ability to think freely and for himself within the new society? And how do we provide a Bildung by which students can co-create a better future in this new medium environment? Maybe we first now in this new medium environment have the possibility to providing such a Bildung!

But what we see temporary are either the before mentioned prohibition/ignorancestrategy, or a narrow-minded focus on competencies, like how to use this or that application, which does not provide anybody with Bildung, even though basic competencies is a requirement for participating in a higher taxonomy social level.

# V. Biesta's contemporary ideas of Bildung

Drawing on Heidegger, Biesta (2006: 6) claims that the humanism and there by the tradition of Bildung has failed in the respect that we cannot (and should not) pinpoint the essence of man. Therefor education cannot be to place individuals in an already fixed order, education involve a responsibility for each individual's possibility to unfold in a unique way what it means to be a (good) human being in

the world today.. The role of the teacher must be understood as the responsibility for unique individual's "coming into the world" and a responsibility for the world as a world of plurality and difference (Biesta 2006: 10). The main educational question for Biesta is how we in peace and tolerance can live together with others different from ourselves (Biesta 2006: 15). Biesta finds a major shift from education to learning, where education has been redefined to only supporting and facilitating learning. This change provides a business like pattern where students are seen as customers who shall have "value for money". But it is problematic because customers in principal know their needs, which is not the case with the newcomers we take the responsibility to educate (Biesta 2006: 21). Another problem with the learning-logic is that it makes it very difficult to raise questions about the content and purpose of education. When the content are only observed from the angle of the consumer or the marked, we face problems with the pedagogical knowledge and the democratically aim (Biesta 2006: 24). Following Biesta these are the main problems in relation to Bildung: the lack of human essence, the learning discourse and especially the plurality question. Biesta (2006: 102) makes a distinction between diversity and difference, where diversity is an angle to plurality as a couple of variations against an identical background; we are all equal and like each other because of an universal human nature. In contrast difference means that we really are different and that there is no common essence why the all-encompassing framework does not encompass everything or all of us. We are as different as we experience. This is the most important question for Biesta and his answer is that pedagogy must imply openness: "an openness toward new and different ways of being human" (Biesta 2006: 106). The problems and challenges of today call for education to focus on the becoming unique individuals (in modes compatible with everybody else also acting in unique ways forming a shared space of plurality). The strategy to achieve this is a paradoxical deconstructive combination of education and its undoing. The goal for the teacher is the moment where the student finds his or her own unique responsive and responsible voice. The teacher's responsibility therefor is a responsibility for something unknown (Biesta 2006: 116). To teach democracy schools have to be democratic (Biesta 2006: 124). Through the works of

Hanna Arendt Biesta (2006: 133) comes to a concept of *action*, which is only possible in a life-world where others also are able to *act*. To become subjects we are in need of others who can respond to our beginnings: "If I would begin something, but no one would respond, nothing would follow from my initiative, and, as a result, my beginnings would not come into the world and I would not *be* a subject" (Biesta 2006: 133). The (positive) problem is that others react in unpredictable ways, because we always act in relation to others who can act them selves<sup>2</sup>. It is the impossibility in staying in control over one's own actions, which at the same time is the condition for one's beginnings can become something in the world (Biesta 2006: 133). If we try to control the responses of others or deprive others of the opportunity to begin, we cannot come into the world together as subjects, hence subjectivity is not a possibility (Biesta 2006: 135). On this background to make democratic subjectivity possible in schools we must create an educational environment in which students have a real opportunity to begin to take initiative (Biesta 2006: 138).

# VI. Analysis - Bildung and the new medium society

Digital competences are very important and what politicians ask for and what the schools who at least do something in relation to the new medium society that the students are going to live in, can manage to provide more or les. But competences are not enough. Students need Bildung in relation to the social, which now has become enriched and much more complex by the eternal number of new possibilities for formation. The problem is that nobody knows what Bildung means in the new medium environment. In the following we will bring forward a synthesis of the over here presented theory about Bildung and the theory of the three waves which we have developed in the Socio Media Education Experiment mentioned in the introduction (see Tække & Paulsen 2012a, 2012b, 2013a 2013b, 2014, 2015b, 2015a, 2016a, 2016b). This means that we now put forward three empirical

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<sup>&</sup>lt;sup>2</sup> Here Biesta comes close to Luhmman's (1995) theory of communication and the concept of *double contingency*, which is the basic and necessary situation of mutual uncertainty, from which communication takes of and are made possible.

supported and theoretically enlighted aspects of Bildung, which together forms the first contours of *Digital Bildung*. First we briefly present the theory of the three waves.

## A. SME experiment and the theory of the three waves

Let us first sketch out our theory about how class teaching seems to change in the new medium environment (Takkke & Paulsen 2015a, 2016a, 2016b). The theory is based on empirical findings from a three-year action research project, The SMEexperiment from 2011-2014 (Tække & Paulsen 2012a, 2012b, 2013a 2013b, 2014, 2015a, 2015b, 2016a, 2016b). The research question is what consequences digital media and wireless networks means for classroom-based teaching. Our thesis is that the old school system reacts to the new conditions for teaching and learning shaped by the digital media. We propose that what is happening is a *deconstruction* of the old *closed* classroom in favour of an *open* community between students, teachers and third parts. Yet, the deconstruction does not happen at once. Rather we suggest that it arises through three waves (Taekke & Paulsen 2015a, 2016b, 2016a, 2016b). In the first wave the old classroom is opened up. Students are distracted and teachers do not know what to do. Internet becomes a challenge to teaching and learning in this phase. In the second wave attention is drawn back to the educational interaction between teachers and students through the use of social media. In this phase social media are used to re-stabilise the learning situation and intensify it. In the third wave teachers and students go a step further and succeed in establishing educational relevant interaction with third parts (authors, researchers, foreigners etc.) through the Internet. Only in this final phase the Internet becomes a mean of new perspectives that alter the old educational setting thoroughly. In the following we are going to give examples from the era of the third wave to discuss Bildung in the medium environment of today and tomorrow.

## B. A product of education and freely thinking

If we look before the teachers began experimenting with the third wave (contact in and out of the classroom) one of the most important elements in the SME-

experiment was the work with reflexivity (here attention to attention). The teachers had to help students to develop a reflected use of media and they also themselves had to develop a reflected and understanding way of being concerned with the students' use of media. This included helping the students to be attentive in relation to their attention. In all probability, this double task can only be maintained adequately through the interaction between the students and the teacher. Neither the students nor the teacher have a priori knowledge of the right way to handle this new complexity. The communicatively achieved attention to attention (and the problems of attention in the new medium milieu) can be seen as a way of reducing and controlling the new complexity arising from the infinite possibilities of interaction in (and out of) the classroom. Yet, one guiding tagline here is that it is not possible to multitask (König 2005, Lee et al. 2012, O'Brien 2011, Pashler 1994, Taekke & Paulsen 2013). Naturally if one of two activities is automated like when you are driving a car while you are chatting it is possible, but if the traffic situation turns complex you must shut up. Taking social media as an example, a student can see that there is an update on Facebook while listening to the teacher, learning something new, but not read or write an update – and still simultaneously follow the new argument the teacher puts forward. On the other hand one has an ability to switch between different activities, depending on how well one's short-term memory is and how strong one's will and situational involvement is in the leaning activity. Also one's reading, writing and IT-skills has a strong effect on how good the single student is at switching forth and back between the teaching interaction and other interactions and doings, like gaming or surfing on the net reading news or other stuff. The single student must know his own attention scope, his good skills and shortcomings, and the teacher must help him understand and take action on the basis of a reflected point of view. One's standard in the different school subjects also has influence on what you can afford of averted attention. This means that it can be different not only from student to student, but also from subject to subject, e.g. from English to Math what the student can afford of averted attention (Taekke & Paulsen 2012b). The work with attention and self-reflection in the first year of the SMEexperiment was an important step for the students on their journey towards the

capacity to think for them selves and develop social responsibility. Together with educational interaction using the social media of Twitter it provided them with the skills needed for their later contact in and out of the class. But here we are mostly on the level of competencies: competencies helping the student not to try to multitask, competencies to use, for instance, Twitter for educational interaction. Thus, it is mainly through the shift to third wave education that the student learns to take informed decisions – to think for him-self – in a proper Bildung-sense. This happens when it is not the teacher who tells what the text is about or what the meaning of it is, or how to write a text or sell a product. Instead it is "real practitioners from the surrounding world" who present their texts, methods, experiences and meanings. The teacher becomes a guide who helps make the connections, provide relevant material to prepare the meeting and help reflect how the student has preformed in the meetings. Over time the students learn how to interact within the new media environment and to take full responsibility for the whole arrangement and situation and its organization. They learn to think for themselves and make decisions in new social situations in a professional context. In the beginning guided by the teacher and in groups, but over time the students happens to be alone in such situations only guided by themselves. In the third wave it is new and real situations instead of the surrogate learning situations developed under the former medium societies that motivates and provide the students with Bildung (Bildung in a sense that matches the contemporary media society). This means that the students are not only performing the language games developed in class between the teachers and students with almost no other consequences than the marks and reactions from other students familiar with this form of surrogate learning situations. In the third wave the students are in real situations with real consequences with real persons having a situation, a meaning, or profession that the students must try to understand and relate to. On the one hand we have little empirical findings regarding the third wave, on the other hand, all the third wave experiments are telling examples. There were, for instance, two cases where other school classes were contacted – one in Denmark and one in Germany. In both cases the students were very engaged and motivated by communicating with others outside the class,

here with other students of the same age (Taekke & Paulsen 2015b, 2016a, 2016b). The interactions were formed so the students were alone or in small groups when they meet up with the students from the other schools. According to the teachers more students were drawn into the schoolwork than usually. It felt more important to the students to contribute and also the quality were higher than normal, because of a feeling of being observed by others at the same age, and because of a feeling of being representing their own class. The students had to perform in a meeting with a stranger in a situation that because of the arrangement forced them to make decisions on the spot, to think and at the same time do this within an educational framework. In relation to both classes they also got new perspectives and information transcending the information given by their own teacher. In relation to the German class it also became important to write correctly and the students felt that the language written by the German students were a more real German than in the books and spoken by the teacher.

**Student**: I feel that I learn better by communication instead of reading a book. Also the lingual not just the grammatically. If you communicate with one from Germany then you learn better German than if you sit in the class and talk German. That's the way it is.

#### Student interview 13 14/3 2013

As seen in the quote the student comes to the self-made conclusion that she learned more from such a meeting than in the old-fashioned way of educational organisation. Moreover the students also felt that they themselves had something to contribute with for the other classes, which also pinpoints a growing self-confidence and self-awareness (Tække & Paulsen 2015b).

Looking at the problem from the view of the paradox we will not select either education like discipline, humility and obedience or a kind of letting the students be for themselves undisturbed by education. We will view the problem in a way where education and teachers help students to become self-assured in the new media environment. Education must provide students with the ability to think and be capable to adapt to the social in the contemporary media society. Bildung in the contemporary media society means that students can understand, participate, alter and exceed the new social situations enabled by the digital media.

## C. The old curriculum in a new and interactive way

In the third wave students work with the same subjects and topics as before, but within a new framework and in a new way where students interact, for instance, with an author or with students from other schools. Because of the introduction and confrontation with others from the surrounding society the students meets the topics in the way they are performed and/or interpreted by others than their own teacher. Before the educational interaction were performed in what we have defined as an echo room – a room where interpretations were not radically challenged by other interpretators than the teacher, the textbook and the students, thus the closed class-room-community (Taekke & Paulsen 2014, 2016a). In the third wave the interaction with others outside class provide a synchronization with how things happens and are performed outside school, for instance, in relation to new forms of production (e.g. produsage). Curriculum is actualized and becomes more relevant and motivating for the students (Taekke & Paulsen 2015a, 2016a, 2016b). In the old days the curriculum consisted in leaning classical texts in Latin and ancient Greek, later translated ancient texts. Also mathematic and foreign languages, world and national history and literature were among the subjects that a man with Bildung had had to been educated in. After the introduction of analogue electronic media, especially television and the youth revolt in the late 1960s many contemporary topics became part of curriculum. Simultaneously also pedagogic changed into forms of a more equal relationship between teachers and students and group-work and project oriented teaching began. But even when, for instance, films and articles from newspapers were used, the teaching materials were selected and presented by the teacher and interpreted within his/her framework. The texts were mostly old books that mediated for instance, poems and descriptions of authors, or copies often taken from old books. All in all this meant that education, its social forms and knowledge were developed in accordance with the medium matrix of that time. Not that there were consensus between different schools, but the tendency is clear enough. In this society Luhmann points out that the curriculum way of Bildung changes to the form of learning to learn – because the complexity had increased

over the level where it is possible to figure out what knowledge will help students to manage after their education. Of course students of today must also learn how to learn, but as the school used the new media like film after the introduction of electronic media the school of today must also use digital media. Looking at the problem from the view of "the Bildung-paradox" we will not select either pure classic curriculum or pure learning to learn, but both at the same time. Hereto we will also put forward a bran new form of pedagogy where digital media are used to find, observe, interact with, store and retrieve teaching content.

From the second year in the SME-class the teachers had to work on cultivating the contact between the class and its surrounding world to establish dialogue with network resources. The partly re-stabilized educational community of the class should in this way achieve that the otherwise disturbing contact with the surrounding world, would be harnessed for the educational wagon, and hereby turnaround the situation for the better, so the contact instead of drawing attention away form the educational interaction would intensify it. Moreover our thesis was that this contact would enrich and inspire the information situation with angles and perspectives going beyond what the teacher could give. Generally seen this move would provide the class competencies in working in a modus adequate with convergence culture, intercreativity and produsage.

One example was that the literature teacher initiated contact to the Danish poet Kasper Anthoni. The class red one of his poem collections and through two sessions they asked him questions on Twitter. According to the teacher the students usually have no or only little interest in poems but this contact really got them interested. Also according to the students the experience was motivating and mind blowing.

**Student 1**: I think it was a totally different way to analyze poems. A much better way I think. **Student 2**: Yes when we have the Author [on Twitter] we can question him if there is something we cannot understand in the poem and ask him what he did mean and then he can come with a tweet about it.

#### **Group interview1 31/10 2012**

**Student 1**: It helps with the interpretation. If I ask him how he got the idea, then he tells that he had a feeling, and then it is essayer to interpret the poem. I think it was good.

**Group interview 5 31/10 2012** 

The interaction with the poet is exemplary for the concept of the third wave where the class definitively succeeds to draw in resources from outside class and to perform new and adequate educational forms. The teacher falls a little back but still take the *responsibility*, he let the students get to the resource and let it be the centre for their attention and reflection. The teacher have made the connection to and appointment with the poet, helped the students to read the book, with good questions and with their organisation in groups to the sessions. These efforts are good investments because of the students' motivation and engagement triggered by the direct contact with a real author through Twitter.

It would also be possible to do the same with classical literature, thus a contemporary author or literature researcher could take the role and interact with the students – or even students from other schools, as mentioned in last section. Even before electronic media new texts were taken up and became part of the curriculum, but this tendency has increased over the period of electronic media and is still the case in the cotemporary medium environment. Maybe therefor we in Denmark see a revival of different educational canons driven forth by politicians. This is not a disaster, but provide us with history, as long as we also have new texts and as long the teaching method is up to day. In other subjects like business the teacher gave the SME-class assignments where they should contact local companies using predefined types of media that the teacher knew that the companies used, like Twitter and Facebook. This gave a very positive result in regard to motivation, engagement and the information situation. The students, also some of them not usually motivated, explained in interviews that it was relevant and authentic to communicate with local businessmen and that it helped them to apply theory to their cases. In this example the theory were not new, but the students found it meaningful to work with because of the application to real businesses. Our conclusion is that it is possible to use such interactive methods with great success: The students learn what is intended, the curriculum, but in a way that motivate them and in the same time this way provide them with the learning and working methods of today, of the present medium environment. Also they learn unexpected

things and more profoundly and importantly become *educated* by the teacher-mediated contact with others from the surrounding world. This is Bildung in a doublet sense since both methodology and content is in play, as well as both the teacher and the world of plurality comes into play.

## D. Meeting up with the others

In the third wave students are confronted with *others* who are either other students, professionals working within the fields relevant for the topics that the students are facing, or they are exponents for the kind of people that the teaching is about. Also there is a social aspect because these meetings often are in the context of groups and networks. What Biesta asks for is exactly what is broad about by the new pedagogy of the third wave: Students meets with a plurality of others. The perspective is huge; it will be possible for students to meet all kinds of people that they before could only read about, or as an exception meet with in the physical world. It would, for instance, be possible to meet with refugees, real refugees in real situations when working with the topic in social studies. Students will not only get a description, but meet a real human being and through the interaction experience other's unpredictable ways of reacting. The teacher thereby fulfills the responsibility for unique individual's "coming into the world", which happens here when the students meet others. By doing this the teachers help the students on their ways to be able to take contact to other people, take initiatives, listen to other peoples view, react, ask questions, reflect and make things together with others. The students maybe do not know that it will bring them needed Bildung to meet other students from other countries, or a pregnant woman or a refugee. The teacher must let these meetings happen with an unprejudiced attitude, which make the students open for difference so they experience that there is no common essence (Tække & Paulsen 2016c). In this setup students find their own unique responsive and responsible voice and through dialogues with others learns not only to respect, but to relate, understand, and take the attitude of real different others. The students will try, over and over again, to begin a conversation and experience that nothing follows from such initiatives if it were not for the responses from others. They will

try and thereby practice that others will answer in unpredictable ways and get used to take part in and responsibility for such communications. Following Biesta this will mature them and makes them into subjects, moving from infantile ways of reacting to grown up ways of reacting to others and otherness (Biesta 2016). From a Luhmannit point of view, they will have the chance to build up internal complexity that will help them reduce the complexity of doublet contingent social situations. Which means that the third wave pedagogy is providing the students with a form of Bildung that suits them to take part in the contemporary society, which is hypercomplex and with no anthropocentric center but must be characterized as polycentric.

## E. Why digital Bildung?

The network culture of the Internet, just like the transparency of the television, now penetrates all of society. The forms developed for observation, net-work, producing etc. is now expected everywhere and very often, almost always, underpinned and made possible directly by digital media.

A well-known difference between mass media and digital media is that mass media tend to present topics or persons seen from different angles, while digital media, or our use of digital media tent to give us what we expect, want and like. In this relation it is a responsibility for education and teachers to provide students with a Bildung that animate them to – what is impossible in mass media – meet directly with the persons they are forming their meanings about. Refugees, for instance, are they antagonists, protagonists or what are they? Hereto education and teachers must provide students with a form of Bildung animating them to feel responsibility for searching topics from more than one angle and to provide them with a knowledge enabling them for it and also provide them with the needed competences for it.

Meeting with others were the through-going and essential idea of the third wave experiments of the SME-project. Not to take the already mentioned cases, lets look at another (also mentioned in Taekke & Paulsen 2015a), one where some of the

students and teachers from the SME-class after appointment an evening sat at each their home and watched a TV documentary about the financial crisis and used Twitter to interact about it. After some time one of the students observed that the rest of Danes who watched the documentary and were on Twitter used a global hashtag to interact about it.

**Researcher**: So you were discussing the documentary with the others from the class and then it were extended. What do you think of that?

**Student**: you also got other peoples opinion [...] and there were really many opinions and tweets and it was going on log after the program ended. It was really exciding. **Researcher**: as it good for the discussion that it was not just the class and your teachers? **Student**: Yes I believe so. Because we maybe have a little bit the same opinion in the class, because we have the same teacher, and it is the same things we do. And then there were other peoples opinions, people that is another place in their life, and have another perspective on society.

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There is knocked an educationally relevant hole in the class' echo room, and perspectives arrive from the outside representing an otherness. The typical situation in the echo room where the teacher *decides* what is good and what is bad and true and false fades away. As we saw with the poet the cultivated opening undermines this position and the teacher must find a new role. Not necessary weakened but more adequate with the new medium environment as a moderator and organiser that helps the students understand the different opinions in society. We asked the student what it would be like if the SME-class had not had the contact to the external world:

**Student**: Yes then I believe it would be biased; the teachers' opinion would shine very much through. Now we get other's opinions, other's view on the things. This means that what the teacher says is not just the right, but that you then also can find information about: can this really be true? Why does she say that? And such things. So it makes us think in another way

## Student interview 9 9/1-2013

This opening is archetypical for the third wave education method and shows how other persons with other perspectives provide the students and teachers with views from the real world of society meaning a difference to what would have been possible in the class seen as a closed system. Now resources from the outside is

actually there and it would have been possible for the students not only to take account of the views form others, but also to interact with them and in this way to have investigated further what the meanings consisted in, who the others were etc. As it was the example like most from the SME-project only opened for the perspectives and possibilities of what the pedagogy of the third wave could and can mean for the Bildung in the contemporary society.

The paradox that Biesta provide us with is that the becoming unique individuals runs through a paradoxical deconstructive combination of education and its undoing. The responsibility of the teacher becomes a responsibility for something unknown, why the teacher cannot come into class with a fixed idea of what the students must learn in a substantial meaning, but only with the idea that a special topic or problematic or arrangement has to be worked with. In our framework this means that the teacher becomes the mediator that not only represent difference and otherness through old books and his or her own knowledge about otherness. The responsibility becomes to actually letting the students meet the otherness, meet the actual otherness presented by real persons, real human beings.

## VII. Concluding remarks

Our conclusion is that the ideas and cultivation of enlightenment and thus Bildung must find a new form in the contemporary media environment. The *image* we want the new generation to be formed in came about after the alphabetic writing and has been changed each time a new basic media of communication has been introduced changing the conditions for the social. From our viewpoint in history it seams like we now more radically than ever before are having the possibility to get really close to the concept of Bildung developed in the time of enlightenment. Seen through one of the paradoxes of Bildung we now see a possible way to educate students to become independently thinking beings, to be self-assured, and at the same time to have eye for the common and others, as real otherness. Through the introduction of analogue electronic media, especially television, we saw the introduction of a more dialogically and equally relationship between teachers and students and the beginning of group and project work. In this period we also saw examples of

different kind of visitors in classes as exponents of otherness and classes taking on trips out in the surrounding society to meet otherness. But first now in a situation with digital media the meeting with third persons can be a logical part of everyday education. This is logical because in the new media environment everybody (at least in the first world) has access to digital media and resource persons and networks therefor only is a click away. Both teachers and students are becoming familiar with this modus of the contemporary communication environment from their private life and also from their interactions with the officially community, the municipalities, their shopping and from what they see in television and in movies etc. Like people in yesterday's society would have written a letter to ask a person for something, or board a book to learn about something, it now becomes logical to write an e-mail or a tweet to ask for something and to search the web for knowledge. Time and space have altered when talking communication, we now expect communication with people living on a distance now and here, and this logic means both possibilities and risks. In the paper we have written a little about the risks of distraction, but we can also mention risks of finding bad resources or dangerous persons. Obviously it is necessary to provide students with a Bildung that can match both the risks and possibilities of digital media. We suggest a digital Bildung where the students are formed to reflect on their attention, choosing the right medium to their tasks, etc. in teacher guided sessions with real people representing real otherness in all relevant areas, like we have given examples on and discussed in this paper.

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