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Educating the Citizen of Academia Online?

Mariann Solberg

Article abstract

The Arctic is a vast, sparsely populated area. The demographic situation points to online distance education as a solution to support lifelong learning and to build competence in the region. An overall aim of all university education is what Hans Georg Gadamer calls Bildung, what we in Norwegian call dannelse and what Richard Rorty has called edification. A first problem to be addressed here is that in online distance learning some teachers find that is harder to support the development of the student's voice. Being able to express oneself and to position oneself in a scientific community is vital for a well educated graduate. Another problem in online education has been the extensive use of writing as a means in the student's learning process. Writing is vital to academic education, but in online courses there is in general a danger of overuse. At the University of Tromsø we have tested the web conference tool Elluminate Live. This is a real-time application, integrated in the University's learning management system (LMS), Fronter. The application enables synchronous oral dialogue, simultaneous sharing of texts, and so forth. I present our main experience with the use of Elluminate Live and discuss the extent to which this application has turned out to be helpful in developing the quality of online courses.

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Educating the Citizen of Academia Online?

Mariann Solberg
University of Tromso, Norway

Abstract

The Arctic is a vast, sparsely populated area. The demographic situation points to online distance education as a solution to support lifelong learning and to build competence in the region. An overall aim of all university education is what Hans Georg Gadamer calls Bildung, what we in Norwegian call dannelse and what Richard Rorty has called edification. A first problem to be addressed here is that in online distance learning some teachers find that is harder to support the development of the student's voice. Being able to express and position oneself in a scientific community is vital for a well-educated graduate. Another problem in online education has been the extensive use of writing as a means in the student's learning process. Writing is vital to academic education, but in online courses there is in general a danger of overuse. At the University of Tromsø we have tested the web conference tool Elluminate Live. This is a real-time application, integrated in the University's learning management system (LMS), Fronter. The application enables synchronous oral dialogue, simultaneous sharing of texts, and so forth. I present our main experience with the use of Elluminate Live and discuss the extent to which this application has turned out to be helpful in developing the quality of online courses.

Keywords: Academic Bildung; web conference; Elluminate Live; synchronous dialogue; Immanuel Kant; sensus communis

Introduction

A first problem to be addressed here is that in online distance learning some teachers experience that it is harder to support the development of the student's own voice. Being able to express and position oneself in a scientific community is vital for a well-educated graduate. Another problem in online education has been the extensive use of writing as a means in the student's learning process. Writing is vital to academic education, but in online courses there is in general a danger of overuse. Use of synchronous web conference tools for oral discussions is being discussed as a means of overcoming these problems in online studies.

Two Premises for Choice of Models and Tools for Flexible Education in the High North

Web conference applications such as Elluminate Live are synchronous tools that are developed for use anywhere on the globe like so many other kinds of virtual learning tools or learning environments. Still, e-learning in the high North is a particularly relevant approach that has to do with demographics. Tromsø has the only university in the region of Northern Norway, a vast and sparsely populated area.[1] Northern Norway covers an area of 112, 946 km², and this constitutes more than a third of mainland Norway. The area is populated by about 460,000 inhabitants, which is only 10% of the Norwegian population. It is also an area where this sparse population is quite evenly scattered around and fewer inhabitants than usual live in cities. Thus, the people of Northern Norway are relatively few and live relatively far apart.

The demographic situation of Northern Norway is a very important premise for our choice of models and tools for flexible education or distance education. People will obviously have to travel many hours by car in order to come to Tromsø, 10 hours from Bodø – or Kirkenes. Many would also have to travel far in order to reach their nearest community centre. Still, as the only university in the region, Tromsø is responsible for offering ordinary education to the region, as well as supporting lifelong learning through further and continuous education at the university level. Other institutions provide courses that support the building of competence in the region, but so far there is only one university. The demographic situation leads to a preference for more or less pure online learning solutions for those who cannot come to campus.

The second premise for our choice of models and tools for flexible education is about pedagogy. A main concern in all education, but perhaps particularly in online education, is the question of *edification* of the students, or what one in Germany would call *Bildung*. The question is how can we make sure that our students have the possibility of developing their own voice, developing their skills in critical thinking, and becoming knowledgeable in their subjects? Part of our answer is that they have to be able to practice. They must have experience in expressing themselves.

In our experience with blended learning, the worry about Bildung has not been prominent since the use of online resources is always in addition to the activities in the campus classroom. Now, there could of course be every bit as much reason to worry about Bildung in courses on campus, but in this case active participation on the part of the student is not *prevented.*

Bildung

Recently, the question of *dannelse* or Bildung in Norwegian higher education has been revitalized. In 2007 three Norwegian universities formed a standalone committee for examining

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[1] A population density of 4,1 per km² versus 14,6 per km² in all of mainland Norway.

the question of academic dannelse, and in 2009 they delivered a written summary of their work.[2] Bildung traditionally had two components, an educational dimension where the subjects of the formation make themselves familiar with a scholarly tradition, or a curriculum, and a more existential-ethical dimension that has to do with the *personal acquisition* of different forms of knowledge. The educational dimension has had various kinds of content, through the ancient educational programs of Paideia to the bourgeoisie "education" in 1800s Germany. Moreover, Bildung has been looked upon as a process where the activity of the subject towards something outside the subject (the world, nature, or culture) has been considered vital. And third, Bildung has been looked upon as relational, a process going on between the subject and other persons. A special category here is the relation between initiated and non-initiated.

Immanuel Kant's Sensus Communis

I have chosen to base my understanding of Bildung somewhat loosely on Kant's *sensus communis*. In Kant's *Critique of Judgment* from 1790 (1987) sensus communis is presented as a general faculty for judgment that all humans have, and where the point is that we relate our own thinking to the potential thinking of others:

> ...we must [here] take *sensus communis* to mean the idea of a sense *shared* [by all of us], i.e., a power to judge that in reflecting takes account (a priori), in our thought, of everyone else's way of presenting [something], in order *as it were* to compare our own judgment with human reason in general... Now we do this as follows: we compare our judgment not so much with the actual as rather with the merely possible judgments of others, and [thus] put ourselves in the position of everyone else... (p. 160)

This is similar to what Kant in his article "An Answer to the Question: What is Enlightenment?" calls public use of reason as opposed to private use of reason. And when we put ourselves in the position of everyone else this is for Kant connected to the categorical imperative. The most cited formulation of the categorical imperative is the claim to universality: "Act only according to that maxim whereby you can at the same time will that it should become a universal law." The categorical imperative is by Kant said to have the function of a moral law, situated in each and every human being. It is a law that is categorical; it demands that we follow it always. A maxim is a rule of action and, thus, for any rule of action that we are about to follow, we must see whether we could want others to always follow it. If we could, it is morally permissible that we do as the maxim prescribes. According to Kant humans are autonomous because we have the

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[2] Kunnskap og dannelse foran et nytt århundre – Innstilling fra Dannelsesutvalget for høyere utdanning. (Knowledge and *dannelse* - with a new century pending. Recommendation from the committee on *dannelse* in Norwegian higher education): http://www.uib.no/filearchive/innstilling-dannelsesutvalget.pdf . Their understanding of academic Bildung is, in short: "...critical reflection, insight into scientific mindsets and epistemologies, deepening of understanding, teachings on fairness and objectivity and ethical competence." (Author's translation)

power of reasoning and because we have the freedom to choose to follow the moral law. But it is only when we choose to follow the law that we express our freedom.

In Kant's *Anthropology from a Pragmatic Point of View* from 1798 (2000) sensus communis are formulated as three maxims for thinking. The maxims are put forward as guidelines for achieving wisdom:

> *Wisdom*, as the idea of a practical use of reason that conforms perfectly with the law, is no doubt too much to demand of human beings. But also, not even the slightest degree of wisdom can be poured into a man by others; rather he must bring it forth from himself. The precept for reaching it contains three leading maxims: (1) Think for oneself, (2) Think into the place of the other, (3) Always think consistently with oneself. (p. 307)

In focus for Kant here is first the claim of universality in thinking, that we should always judge our own thinking against a universal human standard. This means that when we think for ourselves, we will not only think from our own particular position. Second, the subject's active use of his or her own capacity for thinking is vital; we cannot let others think for us. If we think consistently with ourselves – and this involves both that each of us use his or her own faculty of reason and that each take in the universally human standard – we will be able to think maximally wise. Thus, sensus communis concerns both our theoretical (epistemological) as well as our practical (moral and political) use of reason.

Three Principles for Interacting with a Curriculum

My slogan for a student's interaction with a curriculum is the following: "Think with, think against and think for yourself." It is loosely inspired by Kant's sensus communis, and I will explain how I see different forms of interaction with a curriculum in these three forms of thinking.

- *Thinking with* means to get involved in the tradition and to acquire disciplinary knowledge. The student learns his or her ways in the subject matter such that he or she can see it from the inside (i.e., learns it in such a way as to be able to defend the theories, views, and procedures against criticism).
- *Thinking against* means being able to take an outside perspective on the tradition; one is able to find good arguments against the various theories and views and raise objections to the procedures that are dominating.
- *Think for yourself* involves having a distinct voice, in a tradition, and it means being able to formulate new insights.

My division into different modes of thinking is primarily analytical, and the three different forms of thinking, of course, overlap in different ways in practice. It is difficult to imagine that anybody can deliver good counter-arguments (think against) if one does not know the discipline well

(think with), and also a good defense can be performed better if one is familiar with the objections. To think well on your own without knowing the tradition well, and thus in practice be able to think with and against, is probably not *impossible*. However, without the background of the tradition it will be difficult to judge whether or not one then really have been thinking well. Also, originality is assessed against a particular background.

The slogan "think with, think against and think for yourself" relates to both an educational dimension and an existential-ethical dimension. That which one is to think with and against is the tradition and subject-matter of the various disciplines. Thinking for yourself have the two other forms of thinking as a necessary basis, but self-thinking is all about settling oneself, as a subject, into the tradition. The development of a personal voice, which is part of the historical and the contemporary academic conversation, is also potentially a fulfillment of the existential-ethical dimension. Dialogue and reflection are two necessary ingredients in the existential-ethical dimension of Bildung at a university, but that which is to be spoken about, reflected upon, and transferred in conversations is primarily the subject-matters of the discipline, the content of the educational dimension.

The educational dimension is necessarily a part of Bildung because this is where our students meet the authoritative interpretation of tradition and history. This is where you meet your *masters*, meaning the ones you should learn from and be in conversation with, and this is where you first retrieve the contents of your subject. The existential-ethical dimension is likewise necessarily a part of Bildung. The insights supposed to be retrieved from the educational program can not be disclosed and converted unless the student personally acquires them, unless the insights potentially could make a difference in the personal development of the student and his or her self-realization as a citizen of academia. Much of the same applies not only in higher education, of course. The difference for a student at the university is that one is not only expected to be a citizen of the community, but also expected to be able to take full part in a community of scholars and students engaged in education and research.

Sensus Communis and the Curriculum

Now, Kant's claim to universality in thinking, that we should always include the possible judgment of others, will have a particular interpretation in relation to Bildung in higher education. Also Kant's claim to universality in thinking unifies the two dimensions that I here earlier singled out: the educational dimension and the existential-ethical dimension. The educational program, or the curriculum, will broaden the student's potential for thinking for oneself and it will broaden the potential for thinking into the place of the other. When we put ourselves in the position of others, when we compare our judgments with the possible judgments of others, and thus when it comes to actions let ourselves be guided by the categorical imperative, we adopt maxims for action that we can want others to follow. Self-formation in the existential-ethical dimension is in this sense made on basis of our relation to mankind.

The Enlightenment Ideal of Autonomy

If we set ourselves loose a bit from the sensus communis, the more general connection between a project of enlightenment and Bildung seems important. In his 1784 "What is Enlightenment?" (2006) Kant sets out his understanding of enlightenment thus:

> Enlightenment is the human being's emancipation from its self-incurred immaturity. Immaturity is the inability to make use of one's own intellect without the direction of another. This immaturity is self-incurred when its cause does not lie in a lack of intellect, but rather in a lack of resolve and courage to make use of one's intellect without the direction of another. "Sapere aude![3] Have the courage to make use of your own intellect!" is hence the motto of the enlightenment. (p. 17)

The active use of one's own reason is thus vital in this understanding of what it means to be enlightened. The movement of enlightenment directed itself towards all humans, and the request for independence did not go to any group in particular. However autonomy of thought is considered one of the core elements of the Bildung of students in higher education. Autonomy of thought, as well as being well versed in the curriculum, is what we expect from a student educated from a university. The question now is how we support the development of the student's own voice. How does a student learn to think for him- or herself?

Autonomy of Thought and Interacting with an Authority

Autonomy is both a presupposition and a goal for Bildung. This has often been coined the pedagogical paradox.[4] Kant thinks that although all humans are autonomous, just in virtue of being human, we have to learn to be free and self-determined. In the setting of higher education the point is that the students, in order to develop their own voice, need to learn from an expert, the teacher.

Also John Dewey (1902) has been concerned with the seeming opposition between freedom and authority. He notes,

> The fundamental factors in the educative process are an immature, undeveloped being; and certain social aims, meanings, values incarnate in the matured experience of the adult. The educative process is the due interaction of these forces. Such a conception of each in relation to the other as facilitates

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[3] "Sapere aude" means, more directly translated into English; "dare to know", and the phrase is said to stem from Horace.

[4] See e.g., Lars Løvlie in his "Dannelse og profesjon", p. 33 in *Kunnskap og dannelse foran et nytt århundre - Innstilling fra Dannelsesutvalget for høyere utdanning.*

> completest and freest interaction is the essence of educational theory. (p. 2)

This picture seems to presuppose that there are some values incarnated in the mature being which we want the immature to develop, values that may be developed only through free interaction. This also means that the teacher and the student necessarily have to interact in order for there to be an educative process according to Dewey.

Bildung and Interaction in Online Courses at the University of Tromsø

What we want developed in the students is the ability for critical thinking, but not just any critical thinking, we want *informed* critical thinking. This kind of thinking aims at what we with Plato, especially as we find it in the dialogue Gorgias, could call convictions in the students as opposed to persuasions. We want the students to be autonomous, to freely place themselves within a tradition, and we want them to freely place themselves in relation to other students and to their teachers. In order to do this they will need to formulate their own understanding, and they will obviously need to practice. However, in order to gain from being in a community with other students and scholars, one needs to interact. Actual interaction with other people is thus vital; interaction with only the curriculum (and thus the tradition) will in general not be sufficient for developing your own voice. Now, the question is how well we can take care of this in online education.

At the University of Tromsø a number of purely online courses have been developed since 2005. Earlier our model for distance education was based on gatherings in the region, combined with some work online. An advantage of a model with purely online courses is that these are potentially more flexible than other models and better adjusted to the life situation of people who also work while studying; thus, we have to a large extent run online courses asynchronously. However, several teachers, me included, have noted that online students more readily than on-campus students seem to fall into the reproduction-trap; they reproduce the curriculum rather than rethink it. This means that their written hand-ins more often will be lacking in terms of independence when it comes to the demand of thinking for themselves and when it comes to having the courage to use their own reason. As a first hypothesis as to why, I have guessed that this is so due to fewer comments from others, be it confirmations or corrections of one's own understanding. Scarcity of confirmation and correction means abundance of insecurity.

Lately, we have tested a synchronous tool for web conferences, Elluminate Live. It is a tool integrated in our asynchronous LMS, Fronter. Elluminate Live is a collaborative web conference environment allowing synchronous communication and sharing: the tool allows audio and video broadcast and desktop and document sharing, and it has an interactive whiteboard and a channel for chat. It is possible to transfer the control of the environment to participants and recording of sessions is optional.

Elluminate Live allows real-time classroom teaching online from the teacher's computer to the students on their computers. A teacher can meet up with (in principle) an unlimited number of

speakers in the Live room, but ordinarily one person (or a few) will speak at a time. A maximum of six people can have their video windows open simultaneously. As the application is integrated in Fronter, anybody in the Fronter-room can start up a Live room and invite others from the same room to join in.

A clear advantage in Elluminate as compared to some of the other web conference systems is that it is possible to see who of the students is speaking in the participant list, who has their camera on, who is drawing on the whiteboard. This information is useful to the teacher, especially in the beginning of a course when one is not yet familiar with the students or if one has a very big class.

Synchronous web conferences are being used in many different ways at the University of Tromsø, but it is in particular a well-functioning tool for seminars, where spontaneous reflection is important. The opportunity to switch between gatherings in plenary (with all the students and the teacher in the same room) and gatherings with a few of the students in separate rooms, in order to work together in smaller groups, is especially useful. Web conferencing enables oral dialogue between teacher and student, directly between the personal computers of those involved. Students can also meet outside of the agreed time for class for working on assignments together, and so on. Web conferencing is used for lectures as well as for seminars, and it is also used for ordinary meetings. The convenience of a live meeting with others is available for anybody who owns a PC or a Mac and a headset with microphones as well as a web camera.

Written discussions in a discussion forum give some specific and very interesting possibilities for development of the student's abilities for critical thinking. The challenge here lies in the teacher's preparations and the kinds of demands that are made to the students concerning form and content, and in order for something of importance to happen, discussion in forums has to be mandatory. The point of using written discussions in online teaching is that the student will get used to seeing his or her own words on the screen, as part of a discussion. Seeing the arguments one has put forward helps in terms of seeing the need for correction and the changes in one's beliefs and opinions. Thus one will have the opportunity to experience any deficiency of the points raised and possibly realize that one has been wrong.

The student's assignments that are being commented upon by the teacher are surely valuable for the student's learning process and his or her development of a personal voice. However, the possibility for oral discussion has always held a special position when it comes to development of abilities for critical thinking and reflection, or at least this is so in the humanities and the social sciences. One of the ideals here has of course been the Socratic dialogue.

Videoconferencing has been and still is an option, and many local communities in the region are equipped with studios. In an educational model relying on videoconferences the students still have to travel, even if the distances are short. The teacher, however, can stay in Tromsø. This model requires somebody to run the studio, to unlock and lock the doors, and so on. And more often, one would want there to be more than one or two students in order to keep the service intact. Now, in the new model with pure online courses, no videoconference is involved. Our question was how can we secure the quality of these courses? And, even more demanding, how

can we make sure that the students graduating in our online courses are as properly equipped as our students on campus? Critics would say, and in fact often have said, that students in online courses are lacking in the form of Bildung that we typically cheer at the university. It is feared that they will not have gone through the same kind of process of socialization, Bildung, or edification as those on campus.

In philosophy, my subject matter, it has been commonplace to think that one has to get used to hearing one's own voice as one of the voices in an ongoing academic discussion. We like to believe that only the experience and realization of lacunas and errors in one's own belief, arguments, and overall thinking can bring about the kind of reflective and self-reflective abilities that we want in a well-equipped university student. One has to equip oneself with a form and one has to learn how to take a stand on the academically informed and meaningful content that the tradition and the others bring about.

Our Experiences with Elluminate Live

From our experiences to date, we have to admit that there are some challenges to overcome: There is a high threshold for usage, and technical updates and proper technical testing in advance is required – as well as technical assistance in the beginning. It is important to set up strict requirements for users as concerns the sound equipment (headset with microphones) and camera. And not least, it is important to clear away technical problems concerning connections, connection speed, and various kinds of updates of programs. Elluminate is not easy to use – the user interface is complicated in the beginning. The environment is a bit messy, and users tend to experience the organization of the different tools within the application non-intuitive.

Nonetheless, when all initial problems have been overcome, Elluminate has turned out to be a very useful tool for synchronous tutoring and dialogue, for sharing text and illustrations, and for cooperative learning. Experienced users are enthusiastic about the variety of ways of working and learning with others.

We will continue to extend our use of Elluminate as integrated in Fronter. It is a very useful tool for cooperative learning and in general for real time interaction, on top of a basic "knowledge package," consisting of a well-structured plan for the semester, streamed lectures, reading of textbooks and other kinds of literature, written assignments, discussions in forums, self-tests, and so on, which the students find in their digital classroom. This means that we think one should supply an array of approaches for learning.

We believe that the introduction of Elluminate into several of our online courses will mark a difference in teaching and learning quality as one of the most problematic traits of our purely online courses until now has been too little spontaneous feedback from the teacher and too little interaction between the students. Too little participation on the side of the students has in online courses in general been threatening the student's development of edification, or Bildung. This problem can now – at least to some extent – be overcome.

Power, Democracy, Internet, and Academia

There might be certain aspects concerning the social interplay in the academic community that any online student will miss. The power relations between the professors, the body language, and other information that tells about who and what merits attention, information that otherwise would be vital for understanding the values of the community, will not reach the online student. Thus, some information that can be vital for your interpretation of others and for your own behavior in such communities will be missing. This means that the online student lacks parts of the socialization process. As many online teachers report, online students are often less submissive in their communication with the teacher than campus students are. They also seem to be more demanding when it comes to practical concerns, such as requesting delays in handing in assignments. On the one hand, this might suggest that we in online education come closer to an ideal communication with less strict power structures than we see in campus studies. On the other hand, as we have been discussing here, the process of self-formation for the students often seems to be less supported in these courses than is desirable.

For the general citizen the Internet has radically expanded the possibilities for taking part in the public sphere. This means that Kant's idea of the global citizen, the cosmopolitan, could be closer to realization than ever before. Due to online learning more people than before can now also take part in the process of academic Bildung.

Summary

On the basis of our experiences one might wonder what to think of the future when it comes to virtual learning environments. How can educational technology support the kind of learning and development that we wish for in our online students? What kinds of tools are important? While it is important to note that we need a diversity of approaches and that many virtual environments can support the students in their processes of learning, it is also obvious that not all can support the process of Bildung equally well. We thus will continue to use asynchronous as well as synchronous technologies, but the point is first and foremost that we have to ensure academically based interaction between the students and the teacher as a group, and also between the students, and between the teacher and the individual student. The student must have several opportunities to try out his or her own voice, as a voice among other voices, where some are equal and at least one is an expert. This is how we can reach the kind of Bildung – as well as knowledge, competence, and skills – that we take to be an essential feature for the educated students of higher education.

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Athabasca University