Student Activity in Seminars – Designing Multi-functional Assessment Events

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ABSTRACT
In this paper, we describe assessment in seminars where high student activity is encouraged. The aim of our work has been to design assessment events that result in deep learning and high student activity, but still provide the teacher with a reliable basis for justice in examinations. We will discuss a course in electronic commerce where we have been working with two progressive seminars. Experiences from this attempt are discussed and analysed in the paper.

Categories and Subject Descriptors
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1. INTRODUCTION
The importance of studying how we assess students was emphasised by Boud [2] who stated: “If, as teachers and educational developers, we want to exert maximum leverage over change in higher education we must confront the ways in which assessment tends to undermine learning.” As we see it, Boud’s line of thinking is still valid ten years on. There are yet many examples of poor assessment strategies in courses within the field of electronic commerce where we have been working with two progressive seminars. Experiences from this attempt are discussed and analysed in the paper.

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Encourages high activity among students, we wanted to design an assessment form that would result in an explicit occasion for learning, but still provide us with a reliable basis for justice when assigning marks. In this paper, we will describe and analyse what we did and draw some conclusions from our attempt. The purpose of the paper is to illustrate how we combined the assessment aims of learning and control, and to offer some advice about how this might be implemented in other courses.

The paper has the following disposition; after this introduction the central aims of student-centred learning and student activity are described in section two. We then introduce our seminar case in section three. In section four, the empirical experiences are discussed and related to previous research. Finally, in section five, we conclude our result with some advice for other teachers.

2. STUDENT-CENTRED LEARNING AND STUDENT ACTIVITY
The main idea in student-centred learning is stated by Gibbs [4] as learner activity. Students’ knowledge is not interesting alone, but students’ experiences on the course and prior to the course are emphasised. Process and competence, i.e. how students do things, are more important than just what content they have learned. Gibbs also states that the key decisions about learning should be made by the students or in negotiation with the teacher. (ibid.)

A widely recognised way of distinguishing between different levels of quality in learning is to refer to deep and surface learning. These concepts were introduced by Marton and Säljö [7] who studied different approaches to learning. Biggs [1] uses these concepts when discussing how good versus poor teaching differs in the outcome. In short, deep learning implies that the student has an intention to understand and in order to do so, the student maintains the structure of the task [9]. To encourage deep learning the teacher has to design learning situations which motivate the students, make the students active in their learning process, facilitate cooperation between students, and which have their origins in a well-structured knowledge base. Surface learning, on the other hand, implies that the student’s intention is only to complete the task requirements and, thus, the student distorts the structure of the task [9].

Student activity, as discussed by Gibbs [4], is a part of student-centred learning. By student-centred it is meant that courses have an emphasis on learner activity rather than passivity. The focus is
on what the student does in order to learn something rather than on what the teacher does in order to teach.

3. THE STUDENT ACTIVITY SEMINARS
The case we use as an empirical example in this paper is taken from a course in electronic commerce given to students in their last year of a Master in Systems Science Education. The course is given full-time during a five-week period and is taken by approximately 40 students each year. The main learning goals of the course are to acquire deeper knowledge about business interaction and electronic commerce. Both business-to-business and business-to-consumer perspectives are focused on. Knowledge about models and methods for interaction and development of network cooperation are also acquired. The course also focuses on the possibilities and constraints of IT in business interaction. Since it is a course at Master’s level, the students’ ability to discuss and critically analyse the course content as well as relate it to scientific literature that they find on their own, are all important learning goals for the course.

The examination is divided into three parts. The first part is an evaluation project, where 4 to 5 students together choose two electronic commerce websites, formulate theoretically grounded evaluation criteria and evaluate the electronic commerce settings from these criteria. This is documented in a project report and examined during a seminar with peer assessment. This paper does not focus on this part of the examination, but on the other two parts, which are described in more detail below.

3.1 Seminar 1: Formulating and Discussing Electronic Commerce Questions
The first assessment event takes place during the second week of the course. The exercise description is given to the students on the first day of the course. The content of the task is that students, in pairs, should formulate and discuss a relevant question within the field of electronic commerce. This could, for example, be an issue regarding challenges, trends, the lack of history, technology focus, risks, success factors, hindrances and possibilities, security, trust, strengths and weaknesses with different communication media, Internet-based business models, or likewise.

The main purpose in Seminar 1 is to stimulate and engage students early in the course, to encourage them to start reading the literature and discuss these issues. Another purpose is to spread the assessment efforts during the course period instead of saving most of the work (for both students and teachers) until the last week. Since this exercise is performed early in the course, before all lectures have been given, the main goal is not to assess whether the students “know” everything yet. That would be very unfair to students who had never read anything on the subject before compared to those students who might have been working with electronic commerce or taken other similar courses. Instead, the goal, as mentioned above, is to make the students start thinking about the issues, search for literature, read and discuss in their pairs. Consequently, the assessment focuses upon whether the student has done this or not. The degree of this assessment is, thus, only pass or fail (with a possibility to complement the work in order to pass).

The formulated question should be discussed and related to literature which the students are supposed to find on their own. The paper should be a maximum of five pages, in order to make the students practise limiting and sharpening their discussion. The discussion should be based upon scientific literature, but could also be inspired by debate in the media, interviews with practitioners and their own experiences. All written sources should be listed in a reference list.

The students bring their written report to the seminar. At the seminar they are divided into groups of five persons, by drawing lots. The lots are arranged so that each student pair is separated. Different lots are also used for men and women in order to get both genders represented in each group. At the beginning of the seminar the groups are told to select a person that will be representing the group at a final panel debate. Half of the groups are requested to choose a man and the other half a woman, in order to create a panel with both genders.

During the first hour of the seminar the groups are requested to present their papers for each other. The groups spend approximately ten minutes on each paper, focusing on the posed question and the discussion this resulted in. This is done in order to give the group a view of their common experiences and lines of thought so far. They can find that some persons have written about similar issues or that they have different perspectives and opinions in the discussion. During this time the teacher goes around and listens to the groups without interfering.

When everybody in the group has presented their work, the teacher hands out a paper with a single question written on it. The questions are distributed so that each question is given to two groups. The questions are what we call non-trivial discussion issues, e.g. “What are the most important hindrances for electronic commerce from customer and supplier perspectives and how can these be handled?”, “How would you develop an electronic commerce site that the customers trust, what aspects are important and what problems are there?”, “Can you sell any type of products on the Internet, what specific demands do different products have regarding the IT system and the business process?”.

These questions are of course not possible to give a short and correct answer to in one hour, but they trigger the discussion and stimulate further thinking from different perspectives. The group is supposed to take their more widely spread thoughts from the first hour and direct them into the discussion of one of these questions in the second hour. At the end of this hour the group should summarise their discussion on transparencies and prepare for the panel debate. The teacher circulates in the groups during this discussion and poses questions or gives examples when needed. The teacher listens more than he or she talks, but intervenes if the discussion does not succeed or if there are some uncertainties regarding how to interpret the question.

The last phase of the seminar is the panel debate. The selected representatives of the groups are seated in the front of the class room. Each discussion question is presented and the two students who represent the groups, that have been discussing this particular question, present what they have been reflecting on in the group discussion. The man and the woman are alternatively asked to start the presentation, in order to make both genders speak equally. When the two students have presented their results, the floor is open to reflections, questions, and objections from all the other students, both the ones who have discussed this question before and the ones who have not. The teacher’s role is to chair the debate, but also to make his or her own reflections in order to
further stimulate the discussion. When the question has been thoroughly explored, the next question is treated in the same way.

At the end of Seminar 1 the transparencies and the reference lists of all the students are gathered. The teacher makes copies of these and distributes them to all students. By doing so, each student has a documentation of the discussions which will serve as lesson notes to be used during the rest of the course. The student will not only bring his or her own thoughts about the field but will also be able to read and reflect upon others’ ideas. This is done to increase the learning outcome from the seminar. The reference lists are distributed in order to give all students the same conditions for the further exercises. The idea is that each student finds some literature but gets access to a much wider range of references.

After the seminar, written feedback is given by the teacher to the student pairs on their written papers. Feedback on the discussion is not given individually, but the teacher evaluates how active the students were by talking about this and what learning goals that have been achieved at the end of the seminar. If a student seems to have misunderstood something during the seminar this is discussed immediately at the seminar. Since the learning goal of this exercise is not to test knowledge but to encourage reflection and discussion it seems unjustified to assess that someone’s reflections were not good enough. On the other hand, it is not acceptable to be inactive at this kind of seminar. Such behaviour is observed by the teacher, who explicitly asks quiet or passive persons about their opinions during the group discussion.

3.2 Seminar 2: Analysing the New Economy

The second assessment event takes place at the end of the course, close to the evaluation project not focused in this paper. The exercise is to individually analyse “the new economy”, i.e. how IT has been used in order to create new ways of making business and its implications for economical company valuation. This phenomenon should be analysed and discussed regarding its preconditions, possibilities, limitations, and consequences for business interaction and electronic commerce. In order to do this the students read a book [3] that consists of a case description of a typical dotcom company and its success and decline during the dotcom era. In the book different persons involved in the company give their reflections on the process and what happened during the short history of the company. The students use the book as their empirical data. They are supposed to start the analysis by looking at the entire business process and then choose an aspect of the case that they find interesting to analyse further. The analysis must be related to scientific literature and grounded in proper argumentation.

The main purpose of this exercise is that the students should use what they have learned during the course when formulating and discussing a special issue within the case. The assessment of the written paper is based on the level of analysis, well-motivated choice of literature and critical reviews of these sources, reflections upon both process and product of the exercise, theory application on the case and stringent argumentation. There are three levels of degrees in this examination: pass, pass with honours or fail.

The students bring their written papers to the seminar, which starts very much in the same way as the first seminar. The students are divided into groups and report their work in these groups during the first hour of the seminar. The teacher has the role of a passive listener during this phase. During the second hour the students are asked to formulate a discussion question that abstracts some of the issues they have been talking about during the first hour. At a certain time these questions are to be exchanged between the groups. Each group receives another group’s question and is supposed to discuss this for an hour. They get transparencies so they can summarise their discussion at the end of this hour. The teacher circulates between the groups, gives help when needed and ensures that everyone is active in the groups.

During the last hour of the seminar each group presents the question and the outcome of their discussion for the class. They have to explain how they have been reasoning, what interpretations they have made and so on. The group that formulated the question has a certain responsibility to ask follow-up questions and ensure that different aspects of the question have been covered. The teacher is also able to ask further questions and challenge the students’ way of thinking when necessary, but in this phase of the seminar most classes are very engaged in the discussion and seldom need much extra encouragement.

After the seminar, written feedback from the teacher is given directly on the papers. If the student wants, this is followed by an individual feedback meeting where the teacher explains what the assessment is based on amongst other things. The student’s activity at the seminar influences the grading, but the written paper has a higher impact on what grade the student receives.

4. SEMINAR AS BASIS FOR LEARNING AND KNOWLEDGE CONTROL

In this paper we have articulated a positive and constructive-minded attitude towards the seminar, which we think can be an excellent arena for student activity and further learning from peer students. That is, if the seminar is designed to be such an arena. Otherwise, it is very likely that Biggs [1] is right when he argues that seminars might become a surface approach to teaching and/or learning, where the audience has to listen to yet another lecture given by a student with minor lecturing skills than the teacher. The main point in order to avoid this is to design the seminar in a careful and conscious way. The teacher explicitly has to address the purpose of the assessment event as well as if and how the seminar would be an appropriate form for achieving this purpose.

If the purpose is to make the assessment a learning event in itself and to encourage high student activity, then the seminar has to be designed with such features. This is in accordance with the student-centred learning approach; see e.g. Gibbs [4] who claims that assessment events should be designed so that they support the student-centred learning that the course is supposed to produce. Biggs [1] uses the term “constructive alignment” when the teaching and the examination are coordinated to the learning goals in this way.

As we mentioned in the beginning of the paper, one main learning goal with this course is to improve the students’ ability to analytically discuss and critically reflect upon issues within the field of electronic commerce. As in all student-centred learning situations, the focus is not so much on what content the student has learned but on what the student does with these elements [4]. There is a progression in acquired knowledge between the two seminars that we claim facilitates this goal. In the first seminar
students discuss a question that the teacher formulated. These discussions are often rather naïve and do not always show excellent analytical strengths. Related to the purpose of this event (to get the student started) this is acceptable. We do not expect any brilliant reasoning at this point, but try to encourage the students to express their thoughts and discuss them with peer students. In the second seminar the students are supposed to have learned much more about the topic. They have read more literature, listened to lectures, discussed the issues, written two papers and, thus, gained a deeper understanding of the field. This deeper knowledge makes it possible for the students to formulate a non-trivial question in the second seminar. As we see it, it takes much more insight to formulate an initiated question than just to discuss an already posed one.

It is interesting to observe how the teacher’s role changes [8] during different phases of the seminar. Even though the teacher seems to be rather passive and avoids interfering in the first presentation phase, this does not mean that the teacher is not participating in the seminar. The teacher has to be “invisible” so that the discussions are not impeded by the teacher’s presence. At the same time, the teacher has to observe what happens in every group in order to make sure that everyone has the opportunity to talk, that the groups are discussing the right thing and not talking about other things and that the discussion climate is sound. The teacher also has to explain uncertainties and answer questions about the exercise. During the last phase of the two seminars (the panel debate and the group presentations) the teacher has to divide the time between different speakers and be a chair for the discussion, but also be prepared to ask questions and challenge the discussion if needed. This is obviously a more active role, but it is at the same time important that the teacher is not more active than the situation demands. If the seminar is going to be a student activity event it cannot at the same time be the teacher’s own show. Thus, the teacher has to be able to decide when he or she should act and when it is better to be silent and let the students steer the proceedings.

If we look at the two progressive seminars from an examination perspective, they have elements of both formative and summative assessment. In short, formative assessment is the basis for feedback during the learning and summative assessment is the basis for grading at the end of the course [1]. Thus, the first seminar does not influence the grading in any other way. As we stated earlier in the paper, the seminars as assessment events have at least two purposes; both to be a learning event and to be a basis for grading. The activity during the seminar is particularly designed to facilitate further learning, but there are also elements of knowledge control during the seminars. It is, for example, possible to ask clarifying questions to students that seem to lack understanding in a certain matter. The written papers, on the other hand, have a more distinct role of knowledge control, but the teacher’s feedback on the contribution is of course important for the student’s final learning. Ramsden [9] talks about assessment as a servant rather than a master of the educational process. This view implies that assessment is an integrated part of the teaching, not just something that occurs at the end of the course. This means that there has to be both formal and informal assessment continually during the course. This is much in line with the way we perceive the two seminars as arenas for both formative and summative assessment. Obviously, our assessment events have a multi-functional purpose that we as teachers, are responsible for managing.

It is a known fact that there is not only one superior way for students to learn a topic. Kolb [5] distinguishes between four learning styles; they are based on concrete experience, reflective observation, abstract conceptualisation, and active experimentation. This implies that students differ regarding how they learn a thing and, thus, the learning situation should be designed in a way that facilitates different learning styles. Our seminars consist of several moments which make the student train several abilities. They have to both write (before the seminar) and discuss their findings at the seminar; they work individually, in pairs, and in groups; they present their own work, formulate questions, discuss questions, present the group discussions, and learn to review and argue during the debate; and they receive documentation from the seminar afterwards. All these elements constitute a wide range of challenges for students with different learning styles. It is the ambition that the seminar events along with the written papers should give each student the opportunity to learn as much as possible. Obviously, we cannot guarantee that all students apply a deep learning approach [7] during the seminar, but our intention is to design the seminars in a manner that facilitates such performance. We arrange the event in a way that encourages student activity, which is a necessity in order to achieve deep learning [4].

Our seminars can also be viewed from a gender perspective. We have tried to emphasise a conscious attitude towards differences between men and women in learning situations. One such aspect of these differences is how the speech space is divided between male and female students in the class room [6]. During the first seminar we divided the groups so that each group consisted of both genders and we also asked half of the groups to select a woman as their representative for the panel debate. At the podium, half of the presentations were started by a female student and half of them by a male student. This was done in order to give both genders the same opportunity to express their opinions, instead of letting the presentations start with a male presenter and, thus, end with the female presenter that might only have marginal aspects to add to the discussion. This choice of action worked out parts and vice versa. This is in accordance with Biggs [1] who states that a carefully designed seminar could offer good opportunities for formative discussions and formative and summative peer assessment.
very well, without any particular attention drawn to the fact that “we must let the women speak as much as the men” – which could be counter-productive.

If we return to the definition of student-centred learning, we have identified several similarities compared to the design of our seminars, for instance, the emphasis of process and competence rather than just learning a particular content. There is an important difference, however, in that we do not let the students make key decisions about what to learn, how to learn it, what criteria to assess the outcome with, the grading, etc. Gibbs [4] points this out as the most important aspect of student-centred learning. In our approach to high-quality teaching, these are instead important questions that the teacher has to consider in order to design successful assessment events. Our opinion is that this is the teacher’s responsibility and should not be handed over to the students. Instead, the teacher has to consider the learning goal and design a course that suits these goals and give the students greater opportunities to take active responsibility for their active learning.

5. CONCLUSIONS AND FURTHER STUDIES

In this paper we have highlighted the multi-functional purpose of the assessment event. We do not assess our students with only one purpose – to control their knowledge in order to grade them – but we assess with several purposes. We want to give students the opportunity to express what they have learned, to learn further from others, stimulate an active and permissible discussion climate in the class room, and get a good and fair picture of whether each of the students have reached the learning goals of the particular course. In order to reach all these goals we have to design the assessment event carefully.

The main lesson learned from this study is that we as teachers must arrange the student interaction in a conscious way. In this paper we have illustrated that two progressive seminars consisting of several phases is one way to achieve this. It is a challenge to design the seminar in a way that both acknowledges the written papers that the students bring to the seminar and takes the students understanding of the topic further. Without a distinct connection to the written exercise, the student might find it meaningless to perform at the seminar. On the other hand, if the seminar does not go beyond the written exercise it will be repetition and not a true learning event.

Finally, we have formulated our findings into some advice for teachers who want to design assessment events which facilitate deep learning and encourage high student activity, but still give the teacher a sound basis for grading:

- Be clear about the objectives of each activity, summarise what you have done during the seminar, what you as a teacher intended that the students would gain from the seminar, etc. Answer questions during the seminar and give proper feedback on written and oral contributions.

- Be aware of the differing roles the teacher has during each phase of the seminar. Student activity does not imply teacher passivity!

This advice can be interpreted as rather abstract. Thus, there are many other decisions to make when designing multi-functional assessment events. Silberman [10] mentions for example, time-allocation, instructions, and setting as important aspects. More studies are needed in order to take our findings further. It would be interesting to compare assessment events in different courses to find several ways to reach high student activity and fulfil the multi-functional purpose of assessment. Another interesting study would of course be to evaluate the students’ opinions about these events.

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7. REFERENCES


