External examination based on student self-evaluation and evaluation by teachers

Abstract

The relationship between teaching and examination is a significant aspect of this project. Another main feature is student self-evaluation.

An underlying concept of the project is that examinations should be conducted by an external examiner, on the basis of teacher evaluations, student performances and self-evaluations.

Keeping the supporting and examining functions separate and getting the students involved in the evaluation of their own learning process, is supposed to increase the learning quality.

The project also aims to provide a fairer and more adequate evaluation of individual students, as well as contribute to a general improvement in educational quality.

A fundamental tenet of this project is that each student should have the right to know in any given situation whether he or she is being taught or graded. Such distinctions are difficult to maintain, and can probably only be fully achieved when the teachers are not the examiners. This project envisions teachers and examiners as different individuals.

The present project is an attempt to co-ordinate self-evaluation and external evaluation and it proposes that the examination focus on considerably larger sections of the syllabus than is usually the case. In this way, it would be possible to reap the educational benefits of student self-evaluation, while keeping teaching and examination as separate functions, something which ought to be of benefit to all those involved in the educational process, especially, the students.

The project has been implemented on a wide front within the Faculties of Liberal Arts (filosofiska fakulteten) of the Luleå University of Technology: up to now Pedagogy and Arranging and composing. Next semester (fall 2000) Political science, and Piano and Organ will be included.
We propose that the courses are on the undergraduate or masters level, and that an external examiner will be appointed for each course. The preliminary results show that keeping the supporting and examining functions separate and getting the students involved in the evaluation of their own learning process, tend to increase internal motivation.

Furthermore, the project seems to enhance the students' sense of responsibility and their ability to work concentrated and independently. In press is one book chapter (Forsknärverket för bedömning av kunskap) and a paper is accepted (International Society for Music Education).

**Final report**

The project group: Sture Brändström, Stefan Ekenberg, Gunilla Johansson

The relationship between teaching and examination is a significant aspect of this project. Another main feature is student self-evaluation. The project idea is that examination should be conducted by an external examiner on the basis of teachers' (internal examiners') evaluation, students' performances and self-evaluations. In addition, it proposes that the examination focuses on considerably larger sections of the syllabus than is usually the case (cf Högskoleverket, 1997). The project is funded by the Swedish Council for the Renewal of Higher Education.

Keeping the supporting and examining functions separate and getting the students involved in the evaluation of their own learning process, was expected to have a positive effect on their course results (Kvale, S. 1993; Lauvås, 1998). Furthermore, we expected the project to enhance the students' sense of responsibility and their ability to work independently. The project also aimed to provide a fair and adequate examination of individual students, to promote nation-wide uniformity, and contribute to a general improvement in educational quality.

The project was implemented 1999-2001 in three departments within the Faculties of Liberal Arts (Filosofiska fakulteten) of Luleå University of Technology (LTU). The steering committee, that is the present authors, represent the School of Music, the Department of Business Administration and Social Science, and the Department of Education and Teaching Methods. The members of the steering committee have each had the responsibility for a particular area of education: artistic training (Sture Brändström), social sciences and humanities (Stefan Ekenberg), and teacher training (Gunilla Johansson).

An international reference group have given their comments of this final report. It consisted of: Prof Johannella Tafuri, Conservatoire of Bologna, Italy; Dr Gordon Cox, Department of Arts and Humanities in Education, University of Reading, UK; and Prof Frede V. Nielsen, Institutionen for æstetiske fag og mediepædagogik, Danmarks Lærerhøjskole, Köpenhamn.
Initially, the crucial question of what happens if an internal and an external examiner do not agree about a grade was discussed by the steering committee. In the application the idea was to give the power to the external examiner, but during the first semester we decided to give the last word to the teacher, that is the internal examiner. Our strongest argument for this decision is the teachers' knowledge of the learning process of the student. How he or she has developed during the course. Regardless of how we decided, our intention was to support a constructive dialogue between the internal and the external examiner.

This report consists of three case studies representing three 20-credit courses at BA and MA level. The three courses are: Music (BA, MA), Political science (MA), and Pedagogy (BA). Each course is studied over one academic year, and includes an examination work worth 10 credits. The report ends with some general conclusions regarding this two-year project.

Matters of criteria are an important part of the project and our criteria used for judgement of the essays are:

- Treatment of form
- Ability to analyse
- Originality, creativity
- Independence, problem-solving ability
- Linguistic treatment
- Carefulness
- Defence, opposition (seminar)

Case 1. Music

In artistic training programmes, a teacher or instructor commonly works closely with the same students for a prolonged period of time - sometimes for the entire duration of the programme. Evaluations are continually made, throughout the programme, as part of the educational process, which will contribute to determining the student's final grade. The issue of examination becomes crucial in this kind of integrative study situation. A fundamental tenet of this project is that each student should have the right to know in any given situation whether he or she is being taught or graded.

The music courses selected for this study are somewhat special in one respect compared to other academic subjects. The examination work consists as in "normal" academic contexts of a written essay, but also an artistic work - an arrangement, composition or interpretation of other composers' work. Together, the essay and the music constitute the examination, and to pass in the examination, the two parts have to be well integrated. Criteria for the music courses are:

- Skills of craftsmanship
- Originality, creativity
- Independence, problem-solving ability
- Expressiveness
Implementation
The project ideas have been implemented in two courses at the School of Music in Piteå: Arranging and composing, BA-level (two students), Piano MA-level (one student). An external examiner has been appointed for each of the three students. Furthermore, the students had one supervisor for the essay and one musical tutor. Both also fulfilled the function of internal examiners. All of the examiners and the students were informed about the project and their expected roles.

For the judgement by teachers (internal examiners), external examiners, and the students’ self-judgement a special form was used. The form was adapted for the different categories, but to give an idea of what it looked like, the questions for the external examination are presented.

- Comment on how the student has succeeded with the piece(s), technically.
- Comment on how the student has succeeded with the piece(s), musically.
- Evaluate how the student has succeeded with the piece(s) as a whole.
- Evaluate how the student has succeeded with the essay.
- Comment on the self-evaluation of the student in relation to your own evaluation.
- Any other reflective comments?

For all of the three students the internal and external examinations coincided. There were only small differences in values, but the external examiners presented more elaborate versions of the results than their internal colleagues. The suggested final grades were always the same between the examiners, one pass and two high passes.

However, there was not the same consensus situation between the self-evaluations of the students and those of the examiners. All three music students received a comment from their external examiner that they looked too positively and uncritically at their music performances and essays. For example, one student wrote about his composition for a children's choir:

Originality and creativity are of a high level in this piece. I have never heard anything like it before, either in gospel or children's choir music. To mix these elements in the same piece, making it new and funny is a completely new concept. Creativity has been flowing. No restraint is the key word!

The external examiner considered the student in question to have made a little too high and a not always relevant self-evaluation.

It bears witness to missing knowledge regarding repertoire. Even if the piece per se has a praiseworthy ambition to integrate
children's choir with more traditional gospel music, originality is not what firstly comes up in my mind.

Another external examiner concludes his evaluation in the following way:

I have read the judgements of the two teachers/tutors, which to a high degree correspond to my own opinion. The self-evaluation on the other hand seems a little tiny and weak. In a few words the student legitimates the positive in his study process, rather than making an analysis and evaluation of the aspects asked for in the form. I think a few instructions could have resulted in a better self-evaluation.

The teachers and students involved in the project were also told to comment on musical independence and problem-solving ability. In one internal examination one could read:

Independence, critical thinking and creativity have characterised this student during his education. He has technical readiness to let the moment influence the interpretation. His reflecting is now combined with a safer artistic presence in his playing. This is the part of his master exam I have found most convincing.

Reflections
Taken as a whole, this case study with three music students must be considered promising. As project leaders, we dare to say that the students have received a fair and thorough examination - maybe, more time consuming and expensive than normal.

A problem, typical for artistic subjects, is to find external examiners who have the competence to evaluate both the music and the essay. Engaging two examiners must be considered a temporary solution, because of the difficulties of making a judgement of the exam as a whole and of evaluating the integration between the two parts. For two out of three students we managed to have one external examiner for both parts of the examination.

Self-evaluation is an important part, which has to be developed for the future. The students must be trained during the course to evaluate their own performances. In this project they received only a few instructions about how to evaluate themselves. The self-evaluation part of the project was also what caught the interest of the audience in a presentation at the International Society for Music Education in Edmonton 2000. Ability to evaluate oneself is probably one of the most important qualifications for success and for gaining expertise in one field or another (cf Eriksson, Krampe & Tesch-Römer, 1993).

The advantages of self-evaluation could be explained in terms of increased internal motivation. To combine external examination with self-evaluation seems to enhance the students' sense of responsibility and their ability to
concentrate on their work and be independent. This case study therefore has contributed to a higher educational quality.

**Case 2. Political Science**

The interest shown by colleges and students was primarily focused on the part of the project that involved external examination. They all agreed that an involvement of an external examiner would make examination fairer. However, we soon realised that this part of the project would only be of international interest if there is a close connection to the other part of the project - the students' self-judgement. During the empirical work we therefore focused on issues like: what role will self-judgement play in terms of examination? Will it affect the internal and the external examination?

**Implementation**

The project involved eight MA-exams in political science, four during the autumn 2000 and four during spring 2001. The involved students where instructed to have in mind the fact that at the end of the course they would have to write a short story about their work in which they were supposed to judge it. They were told that these self-judgements would be part of the material that lay ground for their final grade.

When a student finished his/her essay and defended it at a seminar, one week was given for correction before the final essay. The internal examiner's report and the self-judgement were sent to an external examiner. The external examiner read the material and graded the essays. Unfortunately, this part of the examination was very time consuming. The question was raised how long a student had to wait before being given his/her final grade. Finally, the student's essay, the self-judgement and the internal and external examiner's reports were parts of the concluding judgement of the student's exam.

In two cases the internal and the external examiners disagreed about grades. In both cases the external examiner failed the essays while the internal examiner passed them. In both cases the internal examiner changed her mind and downgraded her earlier grade. The internal examiner explained that she had struggled with these essays and finally got a confirmation of their missing qualities. Even if the examiners had different opinions at first, the internal examiner was given support to change her mind and fail the essays. This is an example of how a dialogue could result in a good and fair decision.

**Reflections**

The experiment with external examination as a complement to the usual examination must be considered successful. Even with the time flaw all involved were satisfied with the project. The internal examiner experienced her situation as less isolated. She felt that she had something to relate to in her judgement. In the two situations in which the external and the internal examiners disagreed, the internal examiners reconsidered and changed their judgement. There seems to be much to gain with a permanent system of external examiners.
Experiences of the students' self-judgement showed that their work became more systematised because of their reflections of their own work. Academic work needs critical thought. However, in education students often are trained how to evaluate other people's work but not their own. This examination project showed the importance of self-judgement since the students felt that it actually helped them improve their exam results.

The university has a normative ambition to teach students the significance of democratic values. Without discussing what that could signify, we would argue that critical thinking always has to be a part of it. Critical thinking involves at least two parts - evaluate other people's work and question my own. Universities are usually exceptional at teaching the first part, while the other part often is neglected. Thus, self-judgement could be an important contribution to the normative democratic ambition of universities.

Students' self-judgements do affect the examination, but not in a direct manner in terms of the examiners' judgements. However, it seems as though external examination and self-judgement made the essays better. If that is true, much has been achieved.

Case 3. Pedagogy
Assessment in terms of improving teaching and learning in education was of interest in this third study. There is substantial research evidence that student performance can be significantly improved by enhancing formative assessment (Black, 2001). Compared to the two other case studies, this one is more process-orientated. In addition to the original examination project, we tried to make use of a portfolio model inspired by Shavelsson (1999). The students were asked to be declarative in terms of knowing that, to be procedural (knowing how), to be schematic (how come), and to be strategic (when and where) in their comments.

I need to read more about what pupils think of mathematics and science, in order to understand their comments. I ought to get more knowledge about research methods.

Before I start interviewing I have to study more research methods. What are the problems in this kind of study? Perhaps I should go to the library and try to find other work done in this area.

Students' self-judgements as mentioned above, were of good help when deciding what content would be the most appropriate for the following seminars. In the beginning of the course the students had to decide their degree project and they also were informed about the criteria used for judgement of the essays. The theoretical and methodological studies were continually connected to their degree projects. Even the teachers were asked to follow the Shavelsson model and the fore-mentioned criteria for evaluation of the degree projects.
Implementation
Nine students and four teachers in a BA-course in pedagogy were included in the study. The external examiner received the essays, teachers' evaluations, and students' self-evaluations as a base for judgement. He also took part in the examination seminar, where the students defended their degree projects.

Eight of the students were awarded a pass and one a high pass by the external examiner. As a matter of fact, this was also the judgement from the internal examiner. Involvement in the evaluation of their own learning processes seemed to have positive effects on the results of the students, according to the internal examiner. She also claimed that it was a general improvement in educational quality, when taking into account the whole course. The students seemed to take more responsibility for the studies, and were also trained to work more independently.

The external examiner was asked to express his general impressions of the course. He found this peer-review procedure commendable. The remarks were above all about the methods used in the studies. In his opinion, the students' knowledge of a chosen method (often qualitative) tends to be superficial and it is often hard to evaluate acquired results. A piece of advice from the external examiner was: methodological issues ought to be more in focus during a course like that.

The form of the essay and above all where the purpose ought to be placed, was also under consideration. He recommended the purpose to be, at least formulated in common terms, in the beginning of the text. Furthermore, the external examiner wrote that many questions and issues were formulated too vaguely and imprecisely. The essays would be improved by more clearly defined research questions. Finally, he considered the procedure of opposition and defence to be too kind and polite. It is important to look at the opposition as a dialogue, and the students have to be trained both to deliver and receive constructive criticism. More time should be given to develop the students' ability to argue and make their opinions clear.

Reflections
This case study was implemented during the first year of the project. The critical comments from the external examiner have been considered and changes have been made in the disposition of the second project year. The methodological training has been strengthened and more emphasis was placed on formulating good research questions. Even the final seminar has been treated in a more conscious way and taken as a whole, the external examination and the peer review procedure have resulted in concrete improvements.

In this study a portfolio model has been used in order to mirror and evaluate the learning process of the students. An advantage with this has been the students' involvement in the planning of the course. A problem we met was to connect the portfolio model to the examination. Portfolio is of great value for
improvement and democratisation of the teaching and learning processes and for obtaining a picture of student development. But, in our opinion, portfolio is more problematic as a form of examination. Therefore, the final examination was focused on the essays and the defence. It seems that the external examination made improvements not only on the essays but also in the course as a whole.

**General conclusions**

This project with student self-evaluation and external examination must be considered successful. Self-evaluation seems to affect the involved students' results in a positive manner. It raised the students' critical awareness on their own work. This obviously improved their work in all three disciplines.

The self-evaluation also raised the students' sense of responsibility and independency, which in turn increased their confidence in their own ability. Their "new found" confidence also had positive effects on the quality of the final seminars.

Taken as a whole the three case studies show an improvement in the examination system. After the project one of the members of the international reference group writes.

> I have read the report with the greatest interest. It is an important problem field and I expect both national and international researchers to be engaged in this important area.

It seems as if the presence of an external examiner made the examination fairer and more adequate. At the same time, the education quality has been improved and the students have been trained to take responsibility and reflect on their own learning process. Totally 20 students were involved in the study and a crucial question is how to continue. What parts of the project have the potential to be developed further and/or be implemented on a regular basis?

The most obvious problem with this way of examining students is, as is often the case, money. It is more time consuming than usual for the teachers and involving external people is of course not free of charge. If the project ideas are to have a future, it is necessary to minimize the additional costs. One possibility is to make the external examination by way of using e-mail and distance-learning technology as video etc.

After the two project years we have a strong feeling that the model is most suitable for essays or other forms of examination work. The degree projects ought to be presented at the beginning of the courses and the teaching and learning process more focused on methodological issues connected to the different projects. Furthermore, the students must be trained during the course to give and take constructive criticism and not least to judge their own performances in a realistic and adequate manner.
Our suggestion is to try the examination model in the new Swedish teacher education system. A 10-credit degree project at BA-level will conclude the teacher training for all kinds of teachers. The examination procedure could follow the model we have tried in this study. An internal examiner is appointed and he or she will decide the final grade. The supervisors are also appointed and the examiner should not be one of these. The external examiner is contacted and contracted in good time before the examination. The term external could mean a person from another university or someone from another department in the same university. The latter could be tempting from a practical and economical point of view, but the purpose to contribute to nation-wide uniformity and a general improvement in education quality, will be at risk.

To sum up, the "internal" examination procedure consists of the following parts: essay, other kind of performance (for the artistic field), supervisors' judgement, and student's self-judgement. This material is sent to the external examiner. It is perhaps more relevant to use the term co-examiner. On the basis of this material he or she makes individual judgements of the students and a short evaluation of the results as a whole. The co-examiner delivers the report to the internal examiner, who makes the final grading. If possible, the time lapse between finished examination work and grading will not exceed for example two weeks.

References


