

Peer teaching a way to enhance learning on 'Enterprising and Business Development'

Abstract

We will introduce peer teaching in the Enterprising and Business Development (EBD) Programme at Växjö University. Peer teaching increases the students learning at the same time as it fosters self-confidence and makes the students more active in and responsible for their education. Peer teaching also encourages co-operative learning, communication, problem-solving, and social actions. Since EBD-students are to become project-leaders these dimensions are very important.

Exactly what forms peer teaching will take in the EBD-programme will be developed in a project group where six EBD-students (two students from each programme-year) and six lecturers participate. There are, however, already some ideas that have been found in pedagogical literature that will be discussed and investigated closer. These ideas include students giving lectures for their peers and senior students leading reflection seminars with junior students. The reflection seminars will discuss subject that lecturers have brought up in lectures before. Senior students can also present papers for the juniors and the juniors will then discuss the papers with the seniors and the lecturers. Senior students can also co-supervise and discuss papers written by junior students.

To prepare the students for peer teaching there will be seminars where lecturers give them guidelines and inspiration for peer teaching. The project group will identify the guidelines. There will also be seminars where the students discuss their experience with the lecturers during the process. The peer teaching will become an active part of the EBD and therefore the students will get credits for their participation.

The project group will meet every second week during spring-term to discuss the project and since it is very important to evaluate the process an expert, a member of the Society of Living Pedagogues, will discuss and evaluate the project continually. The first step in the project, to create understanding for peer teaching and to discuss how it can be integrated in the EBD study-programme, will be finished by summer. Peer teaching will then be introduced in the programme in the fall of 2003. During the fall we will continually

evaluate peer teaching and start to write an article about the project. In February–March 2004 we anticipate to have a seminar about peer teaching.

The members of the project group

Christine Tidåsen, lecturer and project leader (marketing and entrepreneurship)
christine.tidasen@ehv.vxu.se

Martin Bertilsson, student (EBD3)

Linnea Forsberg, student (EBD2)

Dan Halvarsson, lecturer (organisation and entrepreneurship)

dan.halvarsson@ehv.vxu.se

Helgi Helgason, student (EBD3) hhese00@student.vxu.se

Christer Jonsson, lecturer (marketing) christer.jonsson@ehv.vxu.se

Eva Jönsson, lecturer (law) eva.jonsson@ehv.vxu.se

Lise-Lotte Kans, lecturer (accounting) lise-lotte.kans@ehv.vxu.se

Therese Mårtensson, student (EBD1) therese.martenson@telia.com

Pernilla Nilsson, lecturer (organisation and social psychology) pernilla.nilsson@ehv.vxu.se

Lena Olaison, student (EBD2)

Anders Tengstrand, 'living pedagogue' anders.tengstrand@msi.vxu.se

Elisa Truong, student (EBD1)

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PEER TEACHING

— A WAY TO ENHANCE LEARNING



**Author:
Christine Tidåsen
Växjö University
351 95 VÄXJÖ
SWEDEN
+46 470 70 84 07
christine.tidasen@ehv.vxu.se**

Abstract

In the fall of 2000 a new business administration program called Enterprising and Business Development (EBD) was started at the School of Business and Economics at Växjö University, Sweden. Before the education started, two years were spent on developing it in a project group consisting of teachers from different disciplines and representatives from regional businesses. The EBD program has been under constant development since it started and we are very open to new pedagogical ideas. In the year of 2002 the EBD program applied for funding from the Council of Higher Education. We received money to implement peer teaching during one year and this is our report about EBD and how we tried to enhance learning, for both junior and senior students, through peer teaching.

Keywords

peer teaching, co-operative learning, problem-based learning, entrepreneurial learning

EBD (Enterprising and Business Development) is a fairly newly started bachelor programme at the Business Administration department at Växjö University, Sweden. The EBD started in the year 2000 and is very different from other programs at Växjö University due to its pedagogical basis, which is characterised by the students being responsible for their own learning. Besides learning subjects the students will also gain some specific skills that seem to be important in their future roles as project leaders. To reach the overall aim a new pedagogical design was developed. The EBD has no overall standardisation of what the students should know. The basic principle is that we work in themes and not in subjects. Within the frames of each theme the students together with their practice firms (the firms where they do their internship) decide what projects to launch. Each learning process, the themes and the projects, is individual and is shaped by many different subjects. Therefore the EBD program is being run by a team of teachers. These teachers come from many different disciplines and the goal of the whole program is to help students become creative, critical, and self-confident project leaders who know how to create new business. In practice the design means that we work with themes where the different subjects are discussed together instead of working with one subject at a time. This also means that we work with a teacher team where eight teachers from different subject work together with the 30 students in each EBD class to boost learning. The students also co-operate weekly with companies in the area, and representatives from the companies are invited to participate in lectures and seminars at the university.

If they wish to, the EBD companies can sponsor the program, and the money helps to conduct, and to some degree develop, our pedagogical strategy even further. The money also finances seminars to which we invite leading national and international academics and practitioners. At these seminars, which takes place during four evenings every fall, students from all EBD classes participate. The seminars are also visited by practitioners and the discussions at the seminars tend to be very good.

From the seminars an idea to enhance the students' learning even more developed. We would like, on a more regular basis, to mix students from the different classes in groups since we understood that the seminars brought in a new interesting learning dimension in the program. We wanted to use this fact but did not know how until one of the teachers in the EBD team participated in a workshop organised by the Council for Higher Education in Sweden. There the subject of peer teaching came up and it was claimed that peer teaching increases the students' learning by 30%. When the notion of peer teaching was discussed with the EDB stakeholders it became clear that we wanted to introduce a system of peer teaching throughout the EDB education. We applied for funding from the council and as soon as we got a positive decision we started our journey towards making peer teaching a natural ingredient in the EBD-education. Actually the question that has followed us all along is how to make peer teaching a natural part of the EBD. We want peer teaching to become genuine part of the EBD. To do this we fairly early understood that it is important to motivate the students. We also gained insights from peer learning texts but we always based our way of conducting peer teaching in the EBD philosophy. Below we shortly summarize some of the written texts we have used as a basis for discussion.

According to Whitman (1988) peer teaching is nothing new. Aristotle used the concept and the method has been fairly common since then. Over the centuries older students have taught younger students outside of the schedule. This was a mean for the older, often not too wealthy, students to enlarge their budgets. It is important to separate peer teaching from tutoring that is being conducted on a one-to-one basis. According to Ender and Newton (2000) peer learning can take many forms and it takes place in seminars, classrooms, and in a variety of other collective ways. Gillespie and Lerer (2000) also discuss how peer-group tutoring can be used in writing centers. A danger to peer teaching is according to Briggs (1998) the industrial worlds' struggle to formalise education and teaching. Peer learning is a much more individualistic and basic model. Boud (2001:1) claims that peer learning is a very common way of learning in our society.

'in everyday life we continually learn from each other. For most of the things we need in our working and personal lives we find enough information and guidance from friends and colleagues. The advantage in learning from people we know is that they are or have been in a similar position to ourselves. ----- Sharing the experience between the participants.'

De Lisi and Golbeck (1999) agree with Boud and also claim that peer learning is a very fruitful way to prepare for working life. They further state that peer learning is a method that teaches students how to co-operate and create learning together. Boud (2001) argues however that learning from and with each other is not an easy thing to do and if a peer learning program can create this it would be a very nice outcome of a university education. Sampson and Cohen (2001) claim that this output is especially important since it is a skill that contributes to lifelong learning.

Peer learning is also very promising since it actually increases or at least maintains student learning with less input from teachers (Boud, 2001). It is an affordable mean to for example supplement large lectures with weekly discussion groups (Whitman, 1988). An argument that is heard quite often is that it is irresponsible to have older students teach younger ones. The basic claims are that they neither have the pedagogical training nor the deep knowledge of the subject that teachers have. But seniors have a lot of experience of being students. They know what has worked and what has not worked during their schooling. In other words they know who have been effective teachers and what has been useful to them. (Briggs, 1998). Seniors will not replace teachers but they will be an addition in the courses since they can use dimensions in their peer learning that a staff member can not. The overall aim of peer teaching is to enhance the quality of learning. According to Boud, Cohen and Sampson (2001:3)

'Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from peers.'

Research has shown that senior students can be just as effective or even more effective than staff. The reason for this is among other things that the seniors have taken the course themselves and since they are 'closer' to the juniors they can relate to their own experience and focus on the aspects that they found hard to understand.(Ender & Newton, 2000 and Whitman, 1988). The seniors also talk the same language as the juniors (Briggs, 1998). Ender and Newton (2000) use the research of Feldman and Newcomb (1970) where it has become clear that the peer group is the most significant source of influence during the university period. During childhood we know that when children discuss with their pals they are much more constructive and reflective compared to when they are talking to a person with authority (De Lisi & Goldbeck, 1999). The same could be the case for university students' i.e. they do not question what the teacher says in the same way as another student. This means that peer learning should enhance critical thinking. Sampson and Cohen (2001) claim that another reasons why peer learning work is that the students learn from and take advantage of differences in experience and knowledge. During peer learning students have to learn to receive but also to give constructive feedback and evaluate their own learning (Boud, Cohen & Sampson, 2001).

Although younger students learn a lot many writers argue that it is actually older students that gain most from peer learning. Webb (1989 in King, 1999) consistently found that it was the students who do the explanations that benefit most. To elaborate knowledge and explain it in a group appeared to be a very strong predictor of achievement. To teach is to learn twice and Whitman (1988) suggests that the reason why teaching is a very good learning mechanism is because of the repetition and the gained deeper understanding. For the university peer teaching also means that seniors get some experience in teaching and maybe a glance of what it is like to work as a teacher. Hopefully at least some of them find it enough interesting to head for a career in the university. (Whitman, 1988)

Senior students further gain experience about leadership at the same time as they are exposed to shortfalls in their own knowledge (Sampson & Cohen, 2001). The seniors enter a position that means helping others to change. In a way they act as catalysts. To do this three elements are needed: knowledge, skills, and personal qualities. Of course the peer educators have to be well acquainted with the subject. But they will also need skills regarding for example listening and leadership. Personal qualities include confidence, motivation, accurate self-concept, self-awareness and warmth. (Ender & Newton, 2000) If used in an open manner peer teaching could also foster creativity. (Sampson & Cohen, 2001) For peer teaching to work Ender and Newton (2000) also claim that the seniors have to become aware of and work with their personal weaknesses and strengths. According to Ender and Newton (2000:5):

'Needed attributes include empathy, respect, specificity, genuineness, and warmth – qualities ---- that could be enhanced through systematic training.'

The senior's goal is to enhance the junior students learning. They will have to become aware of techniques that boost learning. The seniors will also have to learn to become good listeners (if they are not that already!) and to do that they will have to understand, and use, both verbal and non-verbal communication strategies. According to Sampson and Cohen (2001) peer learning works at its best if it besides the learning focus also creates a social arena. Peer learning will then go beyond the classroom (Boud, Cohen & Sampson, 2001). The seniors should also be aware of the fact that they are role-models for the juniors and therefore need to take the peer learning seriously (Ender & Newton, 2000). According to Cohen and Sampson (2001) students who are not taking their tasks seriously are one reason why peer learning can fail. Other explanations can be power play, freeloaders, and group problems. Teachers' commitment to and their understandings of peer learning are examples of important success factors. So are also the teachers' main ideas about learning.

The change from a teacher-directed approach to a more student-centred approach will for some teachers need supportive strategies. The potential loss of control may affect staff self-image. Staff sometimes finds it hard to resist the temptation to intervene too often in the students' activities. ---- students are ultimately responsible for their own learning. (Cohen & Sampson, 2001: 64-65)

The above citation is very true for the EBD program. Among EBD's basic guidelines is that we have to create and live in a culture where the students really see themselves as responsible for their own learning. One way of enhancing this perspective is to form a setting where it is the students, not the teachers, who raise questions. We do not believe that the teacher's role is to deliver the knowledge and that the students have to adjust or respond to the teacher's view. Instead we firmly state that the students form their own knowledge in relations with co-students, teachers, and their partners in the business community. EBD students should spend two days a week in their companies and the students come up with questions in regards to practical and theoretical issues. Since every learning process is unique the students come up with different question which the team of teachers must be willing to discuss. However the teachers never answer the questions straight away. Instead we try to give fuel to a discussion that hopefully continues even outside the classrooms. This means that we view learning as both a process and an outcome (Ramsden, 1992) and the students have to be aware themselves of the results in both. The students should learn to learn or as Jonsson and Jonsson (2002:5) put it

'what is being learned is inseparable from how students and teachers (and the practice firms; my remark) understand knowledge, its epistemology and connection to different meaning systems, or frames of references. Learning is in this view constructive, cumulative, self-regulated, goal oriented, situated, contextual, and collaborative. Learning is also everyday living and conscious experience. It is the continuing interaction, communicating, and cognitive processes of making sense of everyday experience, at the intersection of a hopefully conscious human life in time, space, society, relationships, business, etc. The learning process therefore also involves the whole person. A successful learning in an academic environment is as we regard it a conscious combination of

theory, practice, and personal experience put in a context and expressed in interaction with others through different forms of communication.'

Method

The EBD program attracts students from all over Sweden. The number of students enrolled on the program has differed somewhat. The first year, 2000, 34 students were enrolled and the numbers for the following years are 29, 35, 26 and 36. The EBD students' ages vary and over the years we have had 24 students that were born before 1976 (of these eleven students were born in the 50s and 60s). Approximately four students have come directly from high school to the program every year. Over the years 62.8% of the students have been male and 37.2% have been female. Interesting to notice is that every year we have two to five students who have or are running own companies. Quite many of the students are also interested in becoming entrepreneurs in the future (55%). The students who participated in the project group were those who enrolled the program in 2000, 2001 and 2002, while those who are active seniors in PAL joined the program in 2002 and 2003. Those who have been juniors in the projects started in 2003 and 2004.

How to use peer learning on the EBD was a fairly open question when we started the project. One thing that was clear was that we wanted to form a project group consisting of students, teachers and a pedagogical expert. We presented the thought about peer teaching in the EBD classes and asked if two students in every class would be interested in participating in the project group. We also informed the students that the group would meet every second week during a whole semester, approximately 3-4 hours each time. There would also be work in between. The students were further told that they would not be paid for participation, but that they would receive a diploma by the end of the project year. At the end of class we asked for their interest in participating and the large number of interested students made us ask them to write us a letter and there argue why they wanted to join the group. Finally we received almost 20 letters and we chose 6 students among them. The reason why we would like for six students to join the group was simply that six teachers would join it. The group also included a living pedagogue whose aim was to enhance the pedagogical reflections. We would like to argue that the presence of a pedagogical consultant made our group function much better.

The aim of the first meeting was simply to get the group going, to create a very open atmosphere, and to get an idea of the members' pictures of what peer teaching is. A lot of ideas came up during this first meeting and what became clear was that we wanted every single student to participate in peer teaching both as a junior and a senior. We recognised that this would mean some problems regarding organisation but we decided that we would discuss them later. Other possibilities that were discussed during this first meeting included peer teaching being organised in the following way:

- 1) Senior students (in their 3rd and 2nd year) will lead reflection seminars with junior students. The reflection seminars will discuss subjects that teachers have brought up in lectures before. That is, each new subject will be introduced by teachers but discussed by students. The senior students will have a chance to develop their knowledge more in the process of preparing for and conducting the seminars.
- 2) Senior students will present papers for the juniors. These papers will then be discussed by the junior students and also by the teachers. This will lead the junior students to get a glimpse of how senior students work and how the quality of papers increase as the students follow the programme.
- 3) Senior students will co-supervise and discuss papers written by junior students.

All the above dimensions were actually later PALed in one way or another, and especially the last dimension has been used most. The group also decided that we wanted to use peer teaching at critical, or difficult, assignments at the EBD. Therefore we chose to focus on one semester at each meeting in

the project group. We discussed every semester both in a holistic and a detailed way. We also discussed how the semesters together built up the EBD program and where and how we would use peer teaching, or PAL as we ended up calling the project. Besides discussing the semesters we also got assignments between the meetings. It could be to search for universities where peer teaching is being used or to read some texts about peer teaching, or peer counsellors, mentors, peer educators, student assistants, tutors, orientation leaders, student educators, resident assistants as PAL also can be called (Ender & Newton, 2000). At the next meeting the assignments were discussed and we got a deeper understanding of both the theory concerning peer teaching (mostly from the US) and of practical examples. During all the meetings, notes were taken and beamed up on a wall where everybody could see them. The notes were also e-mailed to the members for further comments.

We found some European sites on the web about peer teaching but when we contacted these universities, or virtual organisations, they responded that they really did not have that much for us to come and learn from. Actually, some of them asked if they could visit us and see how we worked with PAL. Finally we identified a form of peer teaching that has spread around the world from Missouri University, Kansas City. The form is called Supplemental Instruction (SI) and although it differs somewhat from our view of peer teaching we decided to visit them to enhance our understanding of peer teaching. Two students and two teachers went to Kansas City to gain a better understanding of the method that they use there. First we wanted to test our PAL ideas on people who have worked with the concept for a long time and second we wanted to creatively imitate the good ideas of their program and make them fit into our way of conducting PAL.

The biggest difference between our programs is that they chose a few students to become SI instructors and that the SI meetings were scheduled 'outside' the course schedule. Believing that PAL benefits all students, we decided that all students will be PAL instructors and that all junior students will be affected by PAL since we present the PAL sessions in the schedule. The project group decided however that no third-year students would participate in PAL. The reason for this is that it would be troublesome to organise because the majority of third-year students spend their fifth semester abroad. Therefore PAL was to take place among 1st and 2nd year students. Another difference is that SI instructors are being paid. It seems as though many of the peer teaching programs are paying the older students (see for example Briggs, 1998). We decided that instead of paying the seniors we made PAL a part of their studies in social psychology. The seniors have to write a paper concerning PAL. In the paper they reflect about for example group dynamics, leadership and body language.

When the project group discussed how PAL would be used at the EBD it very soon became clear that we wanted to use it for difficult tasks. Despite the arguments in the literature that peer teaching should take place several times, or at least once, a week and very often for workshops during a whole day (Sampson & Cohen, 2001), we decided to identify five difficult tasks during the fall semester. Three of these sessions mainly concerned business administration and two focused on law. We also discussed the different assignments closely. The first session on business administration concerned discussions about what a business process is. It also involved techniques for studying, what EBD is, and what an aim is. The second was devoted to discussing flows and more specifically concentrating on how to connect theory and practice. It also discussed how we can identify questions and how we formulate them in the 'real' world in their practice firms. The third session was about what a project is and what it is like to be a facilitator during the juniors' first project conducted in their firms. It was especially focused on what is theory and what is empirical material and how we work with them critically. The seniors and juniors also discussed project plans and how to set up and work with goals during projects. The second semester the senior students PALed different projects that were run by either junior EBD students or students at a high school near by.

The data concerning how PAL went was collected through discussions during the first semester. The second semester the seniors also had to write a paper concerning PAL. After the seniors had completed their PAL sessions the first semester, a meeting group-wise with a teacher was arranged. The teacher took notes during the meeting and worked them through right after the meeting. When all the meetings had been carried out the teacher categorised the feedback into themes. The EBD also has oral feedback meetings after every theme and during these sessions PAL was discussed. Three to four teachers and all students are present at the feedback meetings and the teachers take notes. These notes are later discussed at teachers' meetings. The following semester seniors were to write a paper concerning PAL and especially discuss group dimensions. PAL was also evaluated during the ordinary feedback seminars.

The first year students' feedback concerning PAL was created during their supervision with 'their' supervisor. That is different teachers discussed PAL with the students. During these meetings notes were taken. Students and teachers also talked about PAL at the regular feedback seminars after the theme sessions. The feedback meetings took place approximately three times a semester. What we was especially interested in was if the students felt that they had been able to conduct better projects and then also hopefully reach better learning during their projects with the help of PAL. Interestingly both the juniors and the seniors claimed that the projects gained from the PAL projects.

Results and discussion

The first year, the PAL project started with a seminar and a presentation of PAL. During this meeting we did some group discussions about the concept. Cohen and Sampson (2001) claim that two hours is enough for this introduction but we chose to use four hours. During the introduction both classes were attending at the same time. That was a mistake. Since the juniors were new students, both the seniors and the juniors used the time to 'check each other out' much more than take an active part in the seminar. After class students told us that people did not talk that much about PAL: instead they socialised. We did want the students to get to know each other, actually that was an aim, but it seemed as though it took over. The following year we instead introduced PAL first to the first-year students and then to the seniors (the seniors have now experience of being PALed as juniors and the we have already experienced that it is an advantage). The students also arranged a social meeting where the two classes met. During this they talked EBD and partied!

The second year we also stressed the importance for the students to attend the introduction (only four could not participate) since our experience the first year was that those students that did not participate on the introduction never really understood the meaning of PAL. When we evaluated PAL it also became clear that the students who did not attend the introduction did not understand the project and they did not work as well with PAL as students who did attend. The first years, students were also much more pleased with the PALing of those seniors who had attended the introduction and the follow-up meetings.

There was one major organisation problem for PAL during the first semester. The seniors were many more than the juniors! This was due to an error when it came to letting people in to the EBD programme. Initially we wanted one senior to PAL three juniors. That became impossible and therefore we had to cut down the program and let every senior PAL, together with two other senior students, one business administration and two law assignments. That is the seniors attended only three, instead of five, PAL-sessions.

To prepare the seniors for peer teaching written guidelines were handed out the first year. The seniors also had a meeting, in their group, with a teacher where PAL was discussed. After the PAL sessions another meeting was arranged and the feedback concerning the first semester of PAL from the senior students was mainly;

- * PAL needs to be done more regularly!
- * The teachers should not attend the meetings!
- * There have to be more juniors than seniors in a group!
- * Clearer guidelines about what PAL is!
- * Some students did not take it seriously! Just another thing that has to be done....
- * A very good concept! Develop it further!

The junior students said that PAL had been very helpful but some of them said that they were 'unhappy' with their senior students since they simply did not care. Others were extremely pleased with the seniors. Nearly all the students wanted to have more PAL sessions and they also stressed the importance of having the same PAL seniors during the whole time since

'the social thing is important and it takes some time to create.'

Regarding the following spring semester we tried to meet the suggestions from the students. We decided that no teachers would attend PAL and that we would invite students, especially those who did not attend last semester, to come to a session about PAL. However no students came. A high-school in

our town also heard about our project and we started to co-operate with them, that is some of our senior students PALed their students. Everything went extremely fast and the reason why we went ahead was that we saw a possibility to change the organisation so that the seniors would become fewer in relation to the juniors. Looking back we did not plan the co-operation well enough. We simply identified a project for the high-school students to do, where they would be PALed by EBD seniors. Who was responsible for the track at the high-school was not clear and the students got confused. We also had a quite a few problems with dates, times, and lecture halls that caused a lot of irritation. We have now learned that the dates and times have to be set at the beginning and are not be changed on short notice since two schools are involved.

During the spring semester PAL was focused around the project the students were doing regarding business intelligence for their practice firms. There were more meetings then the semester before and no teachers attended. This seemed to work well in some groups and horribly in others. When the teachers did not attend some students did not take it seriously. Other students met outside the schedule and discussed the project. Interesting to notice is however that the juniors' projects concerning business intelligence overall was better than last year's reports. This could of course be due to the students themselves or other dimensions than the PAL-project. But the only things we changed (except the students of course) were a guest lecture that was replaced by an in-house teacher and the introduction of PAL. Also the high-school teachers say that the projects were better when PAL was used compared to the years before. However there are many insecure variables that could affect the results. One interesting aspect is however that although PAL had many 'child-hood' problems, students and teachers agree that PAL is something very powerful and that we will continue with it in the future.

The juniors' comments about PAL varied from excellent to horrible, but they all said that they believed PAL would work much better next year since they would have experience of it. This is something the seniors lacked in the first year. The seniors were to write a paper concerning PAL and especially discuss group dimensions. Overall they were pleased with the concept and said that it could be a very good thing for EBD. They especially stressed that they had learned how to give constructive feedback and how to get a discussion going. The also felt 'good' about the fact that they actually understood that they had learned a great deal during their first year at the EBD. However PAL has to be planned much better and we have to make sure that the students know what they are supposed to do. Some of them also wanted to conduct PAL on a non-compulsory basis since they claimed that the students who did not care destroyed the concept also for the other students.

Some seniors approached the teachers during the semester since they wanted the teachers to participate in the seminars. They felt the seminars were deteriorating since people did not take them seriously enough. We however chose not to interfere but let the semester finish and then evaluated it. This was probably not a very good thing to do since it sent the signal that it was acceptable to take it easy. But we wanted PAL to be 'owned' by the students and only make an input when the semester started and then give feedback on a paper concerning PAL and group dynamics when it ended. Our experience says that it is not enough. Therefore we will participate in some PAL meetings, but not on a regular basis, since many students claimed that the discussions went much better without teachers. When teachers were present the seminars tended to be focused around them even if they did not speak. Students were careful about what they said. The climate became more open when no teachers were in the room.

Another change we have made is that the introduction of PAL every semester is compulsory. The students who did not attend these meeting had trouble understanding what PAL is all about. Many juniors said, and the majority of the seniors wrote in their papers, that they believe that PAL will work much better next year since the students then will have experience of it. During the seminars we also

stressed the importance of the participation and the motivation of the senior students to participate in PAL and then also create learning. How to motivate students has actually become the number one topic that we discuss in the team of EBD teachers. The reason is that we feel that it is motivation that is the most important dimension in learning. If we can increase, or at least maintain, the students' motivation we believe learning will increase. We also do believe that if PAL works the project itself will increase student motivation. However if it does not work it can destroy the motivation.

This year we have changed the organisation of PAL in such a way that one senior PALs three juniors or high-school students during the whole year. In this way, a relation will be formed during a longer time. The fact that every single senior is responsible for their own group will also make the PAL sessions 'sharp' since it is almost impossible to let someone else do the job. You simply can not be lazy. We have made this very clear to the seniors by telling them that since some of them were very disappointed last year due to seniors who did not care, we have told the juniors to contact us immediately if they feel that 'their' senior is not acting in a proper way. This may sound as a tough thing to do but we checked it with some senior students prior to the lecture.

The two factors above are the reasons why we will try once more to let all senior EBD students PAL the juniors. If some students still do not take the project seriously we will make the project non-compulsory and the junior students who participate will instead of credit points receive payment and a letter of acknowledgement. The reason is that we want to continue PAL because we believe and have seen that it increases the quality of learning (when it works). However the first feedback we have received from the juniors points in the direction that PAL works this year. The seniors claim that the project works much better this year than last year.

Another interesting dimension is that due to the PAL project at EBD other courses and programs are using peer learning in one form or another. For example, at the marketing programme the SI model is being used and in a master course peer learning is consciously used as a strategy to boost learning through difference in experience among students. Seminars regarding peer learning have also been arranged at Växjö University and the project itself has triggered the pedagogical dialogue even further among the EBD teachers.

Conclusions

- * It is very important that students and teachers understand the peer learning concept for it to work. The concept also has to work with the overall aim of the education. The teachers have to trust the senior students to do a good job.
- * Let the students 'own' the project. This is however very difficult in the beginning since it takes time for the concept to become a natural part of an education. It is very important that the introduction of the concept is being done in an intriguing way and that there is an ongoing dialogue between students and teachers besides the peer learning. When teachers become too involved in the peer learning the learning will deteriorate since the dialogue becomes more strict.
- * Work constantly with motivation. The only problem is that we only have vague tools for doing this. A project stressing how to increase, or at least maintain, student motivation is very much wanted from our point of view, since we believe that at the heart of running a successful peer learning project is the juniors', but especially the seniors', motivation.

What has happened since the text was written? The oral and written feedback, and the seniors' papers, told us that PAL worked much better year two than year one. The third year with PAL on EBD has just started. We have had our first oral feedback meeting and a written feedback concerning the programme with the juniors. The students are positive to the programme as a whole and they are very positive to PAL. Many of the students wrote that PAL was the best element of the programme and a student wrote as an extra comment that PAL was the best thing she had come across during her schooling!

We have reached an overall conclusion after two and a half years of PAL on EBD that we would like to put forward:

- Make sure to support the senior students in the first year of a PAL-project. They set an example for the juniors. The good one works as a role model and the bad ones as a 'I will not conduct PAL like she'. This suggests that juniors want to do better than the senior who was his/hers PAL. PAL then becomes better and better over the years and once PAL is running smoothly it will enhance and develop learning in a fantastic way.

Appendix: The members of the project group

Christine Tidåsen, lecturer and project leader (marketing and entrepreneurship)

Martin Bertilsson, student (EBD3) tingbacka@hotmail.com

Linnea Forsberg, student (EBD2) linneaforsberg78@hotmail.com

Dan Halvarsson, lecturer (organisation and entrepreneurship) dan.halvarsson@vxu.se

Helgi Helgason, student (EBD3)

Christer Jonsson, lecturer (marketing) christer.jonsson@vxu.se

Eva Jönsson, lecturer (law) eva.jonsson@vxu.se

Lise-Lotte Kans, lecturer (accounting) lise-lotte.kans@vxu.se

Therese Mårtensson, student (EBD1) therese.martenson@telia.com

Lena Olaison, student (EBD2) ananase@hotmail.com

Anders Tengstrand, 'living pedagogue' anders.tengstrand@msi.vxu.se

Elisa Truong, student (EBD1) elisatruong@hotmail.com

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