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The “P2P” Educational Model Providing Innovative Learning by Linking Technology, Business and Research

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Abstract This paper evaluates the effect and potential of a new educational learning model called Peer to Peer (P2P). The study was focused on Laurea, Hyvinkää’s Finland campus and its response to bridging the gap between traditional educational methods and working reality, where modern technology plays an important role. The study describes and evaluates an undergraduate business management programme. A qualitative methodological approach was used in assessing the students’ experience of projects with businesses and their theoretical learning without formal lectures. Student feedback via in-depth interviews forms the basis which provides empirical findings from students from different countries. Specific projects involving real businesses within this unique P2P programme are described and assessed within the overall objective. The study concludes that although it requires a different role from both teachers and students the relevance for European education is that both academically and practically this type of model delivers a more employable graduate with more transferable business skills.

Keywords Peer to Peer Projects, Competences, Learning by Development

1. Introduction

Ever increasing globalisation means that modern universities have to respond more quickly and appropriately to the needs of the learning and business communities. Laurea

University of Applied Sciences in Finland (LUAS), a modern multidisciplinary institution, is an example of a flexible, innovative university that has made such a response. Since 2006 LUAS has shifted its focus from traditional teaching methods to a student centred approach, within its learning processes. The pedagogical framework for learning at LUAS is called ‘Learning by Development’

(LbD), which is the systematic development of an interaction between training and the reality of working life (1). The objective of this paper is to describe and assess the reality of this LbD development as a learning framework, through one model called Peer to Peer (P2P).

The LbD framework is based around 5 competences to be acquired by the learner, ethical, global, networking, innovative and reflective (2). This P2P model was introduced in business studies in August 2008, at the Hyvinkää unit of LUAS, and it is a model where student’s learning is linked to development projects that are rooted in the business world. The reality of its development includes an academic description and assessment of each of the (LbD) competences. There is then a description of 4 real life P2P projects and an assessment of the reality of the acquisition of these competences by the learner. This is achieved by quantitative empirical research through an anonymous questionnaire which was given to all participants.

The development projects are built on the concept of partnership, which implies cooperation between lecturers, experts from the labour market and students. The cooperation between students, lecturers and business people is based on responsible commitment, mutual respect, equality and appreciation for diverse competences. The competences are founded on research-based knowledge, the understanding of professional contexts, skills in completing the necessary tasks and managing various workplace situations. Students use projects to learn for example the basics of networking, social skills and communication with experts in the field. This project work enhances individuality in learning, and whilst working as partners, students build their own study plans according to their own objectives. They recognise the competence requirements of participating in the development project, as well as the competence they can acquire through the project, and this increases the students’ self-directiveness. Figure 1 below summarises visually those competences which are then discussed in more detail.

LbD model and its competence

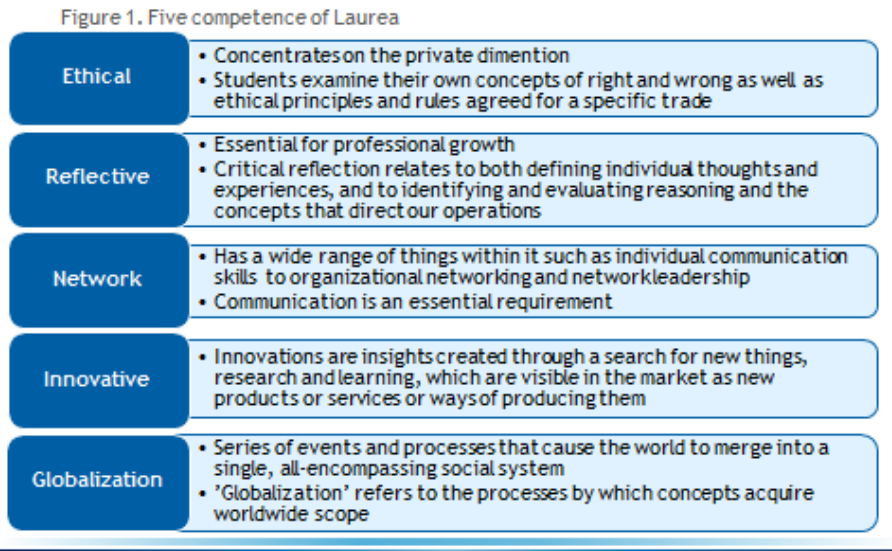


Figure 1. Five competence of Laurea

Of Laurea's five competences, *the ethical competence* concentrates on the private dimension which is embodied in the student's self-reflection. In this process, students examine their own concepts of right and wrong. Professional ethics refers to a professional code, i.e. a number of ethical principles and rules agreed for a specific trade, which direct individual professionals' actions. They include considerations of what is ethically acceptable and advisable when carrying out the trade (3).

The reflective competence describes how a growing expert's competence includes recognising one's own abilities, understanding earlier developments, having the courage to participate, and leading innovative development. The growth of an expert involves rethinking one's own reasoning and actions, evaluating, and re-searching and developing the area of expertise. Delayed interaction, text-based communication and new ways of thinking about oneself, reflecting on society, communities and circumstances, create some of the necessary conditions for growth. Reflection is an essential aspect of professional growth and competence (4).

Critical reflection relates to both defining individual operators' thoughts and experiences, and to identifying and evaluating our reasoning, the concepts that direct our operations, psychological reactions, and the social and cultural processes that affect them.

The Concept of Network Competence encompasses a broad range of phenomena, ranging from individual communication skills to organisational networking and strategic network leadership. Communication is an essential requirement of social activity (5).

This requirement for good communication skills does not apply just to communication professionals operating in a work community or any other social network it calls for

good interaction and communication skills from all participants. In all customer service situations, interaction skills are at the core of the customer encounter, and even within a work community the social skills of members are significant to the success of the group as a whole. Communication skills and success in working life are linked to one another. For instance an analysis by (6) found good communication skills and motivation for social interaction to correlate with high performance at work.

In *the innovation competence*, the first level consists of the individual's own continuous innovative renewal, encompassing both internal changes and modifications of external behaviour and contexts. The second level consists of innovations created in environments immediately surrounding the individual, i.e. teams. These innovations can relate for example to the team's work methods or services. Social innovations can be for example new technologies or political processes. As a minimum, all working professionals should be able to assume responsibility for continuous personal innovation, and to work amidst changes in their teams. Thus the pedagogical aim is to make all students at LUAS approach change as an opportunity and not as a threat. Innovations are insights created through a search for new things, research and learning, which are visible in the market as new products or services or ways of producing them (7). It is this that is trying to be achieved at LUAS.

The globalisation competence is the most difficult to cover of the 5 competences within LbD. This competence is not a specific discipline such as ethics, but a concept that describes the development of the human race in history. Thus there are no commonly accepted subjects one could study in relation to globalisation. It is a highly debated topic, with a lack of consensus even on its basic definitions. The word

'global' refers to things that encompass a whole group of objects, that is comprehensive or complete, or that involves the whole world (8). In other words, here 'globalisation' refers to the processes by which phenomena acquire worldwide scope.

2. Experiential Learning and the P2P Model

I will consider a brief literature review of the experiential learning concept at this point the reason being that it is my opinion that within such a concept the P2P model lies. I will also consider some of the major aspects of such learning and whether the P2P model possesses them.

It is a cliché but people in everyday conversation often quote Confucius as to whether something is wise or not. I will also use it in the sense of experiential education as (9) Confucius said in 450 BC "I hear and I forget, I see and I remember, I do and I understand". Experiential learning is an educational method in which educators interact with students in a direct way through experience and focused reflection in order to increase knowledge, develop skills as learning through action, learning by doing, learning through experience, and learning through discovery. (10),(11)the words "experience based learning" have been used by academic authors and it has also been described as experiential teaching or training. The ideas behind such learning are far from new but have been around in academia for many years although perhaps today they are being thought about and engaged in more because of the increasingly globally connected world we live in and the ever increasing desire for a more employable student. Being more employable is something today students have even more in their mind set due to increasing tuition fees and the debt that studying can bring.

The idea of experiential learning is to incorporate both theory and practice in an integrated way for a student. Additionally the students have the opportunity to learn from each other and each other's experiences through participation. According to (12) there are 4 basic concepts that need to be included; the student is aware of processes that are going on and these processes are enabling learning, the student is involved in a reflective experience, the experience and content are personally significant, and the whole of the student is involved (body, thoughts, actions).

Another author (13) when discussing experiential learning stated: "Experiential learning exists when a personally responsible participant cognitively, affectively, and behaviorally processes knowledge, skills, and/or attitudes in a learning situation characterized by a high level of active involvement". (14) Indicate that in their view experientially-based approaches to learning involve four phases: design, conduct, evaluation, and feedback. When looking at an overview of what most academics consider important within experiential learning three "key" things

stand out in my opinion; doing, theoretical learning and reflection.

The Laurea P2P model adequately provides those three aspects within its framework through its provision. Firstly, the doing which takes place within a mixed cultural student team and with an independent client company.

There is its fair to say "no hiding place" for a student as they are specifically questioned as to what they have done and/or doing within the project in relation to the objectives, during the weekly teacher project meetings. To obtain the normal 15 credits for an international project a student has to show that they have done the necessary number of hours of "doing" connected to the project. Secondly, the acquisition of theoretical knowledge acquisition and learning which is found by the students themselves and tested by the teachers during evaluation. There is also a presentation made by each student on different aspects of the theory to the two teachers involved in the project. Thirdly the reflection part of the P2P model is found in reality throughout as the students have to consider their role in the project and the work they are doing. It is more specifically focused when the students have to consider their work and what they have done in the project at the weekly teacher project meetings.

There is also self-evaluation as both a team and as an individual when the students reflect on the quality of their work and their grade in relation to specific criteria connected to the project (the achievement of the objectives, research ability, and team work in the project). Although self-evaluation takes place it is of course the teachers responsible for guiding the project who decide ultimately on the grade. The P2P model is a project based system and experienced based in the sense that the students have to work in a project with specific practical tasks.

Experiential learning in higher education is not a completely new concept and there have been some relatively recent studies that have indicated very positive viewpoints from its use. However there have also been views from academics as to whether this type of learning belongs within a university where the onus should be on concepts and theory.

(15) comments on great resistance from faculty, administrators and academics who view it negatively from a progressive political perspective or others who see it as simply not an appropriate source of scholarly knowledge. But in my opinion one very recent academic author puts the idea into context when commenting on the fact that all learning is experiential and goes on to say also that the most challenging discipline for the use of experiential learning is in international business and management training. He states that simulating multicultural global environment is often a daunting task and requires real first-hand experience which is very important in an international business environment (16). The P2P programme however does just that by bringing in exchange students from all over the globe, dividing them into multi-cultural project teams often with a client from another country.

LUAS Hyvinkaa, introduced the P2P model of learning in August 2008 in its Business Studies Department. This degree programme model has been based around business projects and the students learning is directly linked to these development projects from the very beginning of their studies. In this unique programme (there are no lectures or exams), the students work in teams to solve business problems. The teachers' role is to supervise the projects, let the students become more independent during their studies and to raise future professionals that will not hesitate to start identifying and solving a problem they face. The themes and contents of the projects vary, but are all related to business operations, marketing, management, communications or finance. All students in the P2P programme participate in the international projects which are related to both European countries and Russia and potentially anywhere. Themes are; export/import, creating marketing plans to a new market, finding new target groups or possibilities for using social media in business operations as well as website design.

Projects are implemented with very different organizations: SME's, associations or even governmental bodies, but share one similar characteristic, they are all development projects aimed at solving a problem that is important for the organization, which the organization itself has neither time nor knowledge to resolve.

The goal of the P2P model is to fill the gap between traditional education and businesses' expectations. Companies are encouraged to participate actively in the process and their feedback is valued through the whole process. A clear motivational factor for the students in the projects is the project briefing at the beginning of the project and the assignment is given to them by the company representative, not by the teacher. This fact both increases the motivation of the students, as they see that the project and its success is important to the company and helps the students to create networks and relationships to promote their future careers.

Every project has a project manager and the selection takes place at the start of the project normally after the briefing from the client. The student team (normally 5/6 student members from different countries) is asked by the supervising teachers (normally 2 per project) who would like to take the role on and then after discussing with the team members a person is made project manager. Being the main communicator in a project, it is usually the project manager who is the actual face of the project. Ultimately it is up to them how the project goes and how the project looks outside. With a detailed plan that can adapt to possible changes and risks dynamically, actively communicating with the project's interested parties, reaching the milestones and remembering to celebrate it to motivate the team any project should be on a solid platform. A project that is in good progress also looks good to the client (17).

The very first step for the students is to draw a mind map that clearly presents the theoretical parts included in the

project. In order to do this they have to familiarize themselves with the theme in question and read books, academic articles and other research materials. A good mind map that is approved by the supervising teachers forms a basis at least for the theoretical part of the project, but quite often also for the table of contents for the final project report. The main challenge for the students lies in combining the theoretical and practical parts of the project. The students search for relevant materials mainly in books and academic journals, but look also for research materials on the Internet. All the theory has to be clearly linked to the project and all the sources need to be clearly marked. Common theory to be found by the students and linked to the project includes; competitor analysis, market segmentation, market entry modes, benchmarking, networking and cross cultural communication. The linking is often the most difficult aspect that the students encounter and it is often something that they get better at as they progress with both the theory and the practical parts of the project. An example could be in relation to competitor analysis. For a company it is important to know how to analyze all the competitors. According to certain eminent academic authors (18) there are three steps how to analyze competitors. The first step is to identify the competitors. The second step is to assess competitors' objectives, strategies, strengths and weaknesses and reaction patterns. The third and the last step is to select which competitors to attack or avoid. The company must compare its marketing strategies, products, prices, channels and promotion with those of close to competitors. By doing this the company can find areas of potential competitive advantage and disadvantage as business x is a small pottery production it is very important to find out all the competitors and an effective marketing strategy will help the company to reach its goals.

The final result of a project is a large report consisting of theoretical and practical part of the project, as well as conclusions and further recommendations. The project results are presented to the company representative at the end of the project either at the P2P offices, in the company or by using a programme on the Internet.

By their nature some of the projects are more practice oriented, for example, developing business processes by looking for practical solutions, building Internet-sites. Some other projects are based more on finding information about target groups, new markets, marketing channels or creating handbooks for a company's use. At the end of each project an evaluation discussion is held and both the process and results are evaluated. Special attention is to be paid on co-operation within the team and also with company representatives and teachers during the project as well as the quality of the sources used. Evaluation is based on students' self-evaluation, team evaluation and teachers' evaluation.

One of the most popular project themes covers social media. One example of that project type was connected to a hotel and social media. The main research question for the project was how the hotel should be visible in the social media. This main question was divided into several sub

questions: What are the user profiles in social media, what applications are used the most, is the information in social media usable and if yes, to what extent. Additionally, how popular are the social media channels, what channels could the hotel use, risks related to using social media, can social media be used for a marketing and information channel for both restaurant business as well as an accommodation side.

Another typical example is a market entry plan to a new, selected country. In this second project example a domestic entrepreneur and designer wanted to have a market entry plan to Germany and Netherlands. The project included market research, finding out different logistics solutions, researching legal restrictions, contacting organisers of handicraft exhibitions and sellers. The client was very pleased with the results, indicating that the plan helped her to negotiate with future partners and intermediates.

A third example was a marketing plan to Russia for a Finnish SME. The students found out information related to consumer preferences, buying behaviour, competitors and market trends.

A fourth project example was related to planning and developing business processes for a Finnish entrepreneur. The entrepreneur specialised in translations and wanted to reorganise his large network of subcontractors and to change his business model. At the beginning the student team created a new business plan with concrete instructions on how to change the legal status and the operating form. The business plan was complemented by a marketing strategy, brand strategy and a marketing plan. At the same

time a new logo and slogan were planned and image marketing studied. One of the biggest motivating factors was the entrepreneur himself who valued the student team, gave them a lot of responsibility, asked for their opinions and participated very actively. At the end of the project the entrepreneur gave very positive feedback and was very happy with the whole process. A snapshot of P2P is shown in figure 2 below.

3. The Role of Technology

Technology has often a very important role within the P2P process. At the start there may be an on-line (via computer technology) discussion with all students, teachers and company representatives when the company’s objective for the project is stated and discussed. During the projects the students use the internet for research tasks as well as Microsoft office software to put tasks in diagram or table form and the use of the email, of course allows cheap, quick contact for everybody. At the end of the project technology again maybe used to make a presentation on-line including discussion, question and answers and feedback relating to the project. Often companies and students are located in different countries and it is too difficult and expensive for company visits. ” Time is money” for any business and technology solves that problem in a real sense during the P 2 P project process. Additionally, technology has helped in a real sense towards the students learning of parts the competences described earlier in the paper.

P2P-Educational Process

Figure 2. Education process in P2P

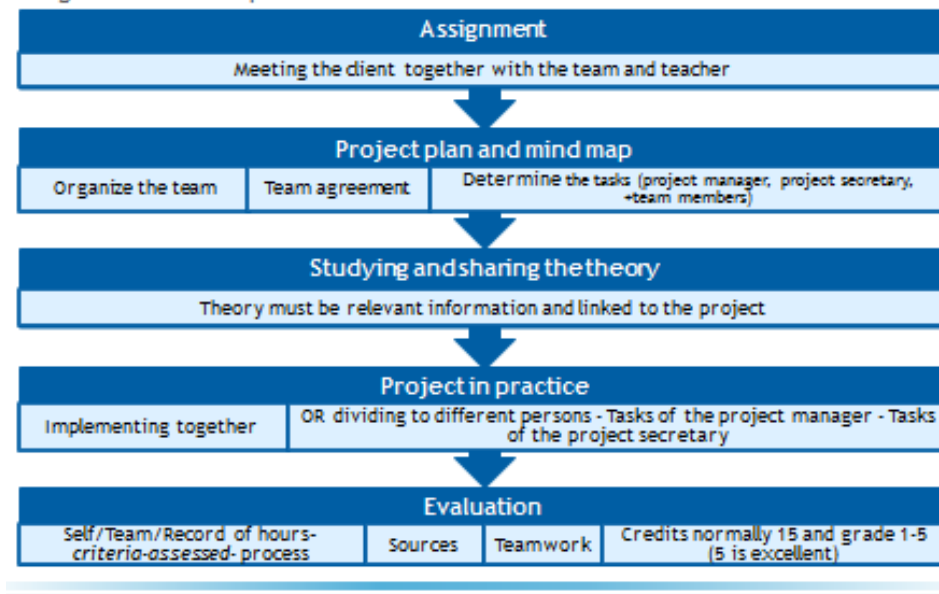


Figure 2. Education process in P2P

Research indicates that computer technology can help support learning and is especially useful in developing the higher-order skills of critical thinking, analysis, and scientific inquiry "by engaging students in authentic, complex tasks within collaborative learning contexts" (19). There are indications that within the P2P project process that the computer technology has helped student learning. For example within the competences computer technology has helped the reflective competence through the ability to record the presentation and questions and consequently for the students to self-reflect on their skills and interaction during the presentation. Academic literature also backs up the globalisation competence that technology brings and helps support the reality of the competence through real global connection. Within the network competence helps improve In particular an individual's communication skills one of the key parts of the networking competence Figure 3 below succinctly shows the impact of technology on the competences within the LbD system.

4. Research Method and Design

The basis of the LbD learning method as discussed earlier in the paper is based around the attainment of 5 core competences for the student which is academically assessed. To assess the attainment of these competences by business students and to evaluate the level of success as precisely as possible, a qualitative approach was pursued.

To assess how far the gap recognized between theoretical business education and business reality is being filled

interviews were carried out. The interview questions were approached in a logical and thorough way.

The way a question is framed can influence the answers given by the interviewee and in this particular case it was decided that it was important to avoid leading questions and trying to persuade a student to give a certain type of answer. Consequently open interview questions were used as much as possible eg. As well as avoiding influencing the interviewees towards certain an answer there was a need to get as full as information as possible from the students who had participated in the P2P programme.

There were 21 questions in each interview and after closed questions related to age, nationality, and length of time spent on the programme, there were specific and open ended questions. This was in order to collect as much essential material as possible although Initially covering each separate competence of learning (networking etc) .Each competence was specified and the interviewees were asked if they had understood its meaning and what they had learnt in relation to the competence. This was followed by completely open ended questions such as; what general things had they learnt and or improved to help them in the future with their business careers from the P2P programme, how they found the P2P system compared to their own countries education system ,what teaching techniques would they like to bring to their own system from the P2P programme, and what problems or difficulties had they encountered during the programme. The same questions were given to each interviewee.

Technology and Competence learning

Figure 3. Technology help in learning parts of competences

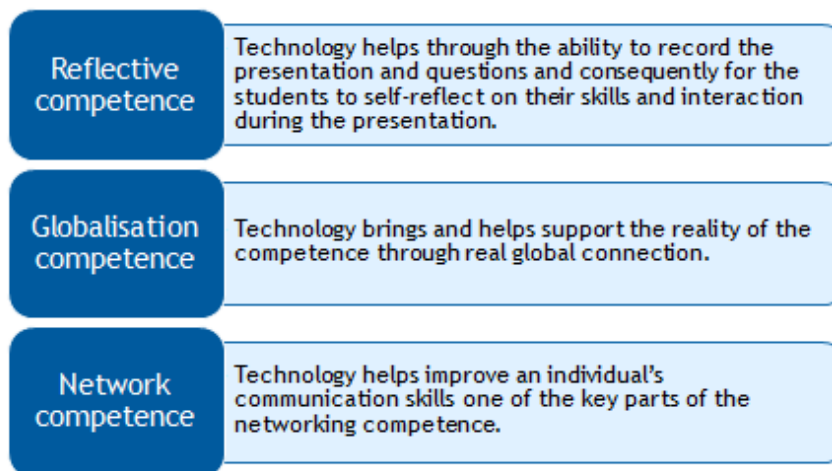


Figure 3. Technology help in learning parts of competences

There was a questionnaire which was conducted orally, (face-to-face with each participant) and responses were recorded via voice recorder and then typed. Authors such as (20) indicate that the research should be designed in such a way so that there is a clear connection between the research questions and the research design. In this particular study the research questions were identified logically and precisely before the most suitable research design was chosen. It was decided that qualitative research could fill some gaps of previous quantitative research that had previously been undertaken by written questionnaire delivered to similar exchange students involved in a previous p2p semester programme. It could provide more in-depth analysis and it was felt that these gaps could be filled by such a design which is considered suitable for exploratory educational research (21).

The reality is that qualitative research can bring a more complete picture and understanding of the overall factors at play as they are flexible and can be used to explain and give in-depth answers to various aspects of a problem, consequently they were considered the most suitable here (22).

Face to face interviews were the type of interview technique used and they have certain advantages in particular for their synchronized communication in time and place and because of this it is the only interview method where advantage of social cues such as voice, intonation and body language can be taken. This can give the interviewer a lot of extra information and can be added to the verbal answer of the interviewee when answering a question, (23). An advantage of this communication is that the answer of the interviewee is more spontaneous.

Some academics have indicated importantly that qualitative research should differ from the criteria used in quantitative research and include the important aspects of credibility, transferability, dependability and confirmability. Credibility refers to how well the researcher is able to provide data and findings that correspond to reality. This criteria is related to internal validity and is widely used in both quantitative and qualitative research. The sensitivity of the research topic could have been a threat to the credibility particularly relating to the interviewees comparing the P2P educational system with that of their own university.

Measures were taken consequently in order to reduce the actual sensitivity and the sensitivity perceived by the interviewees. This included informing all interviewees that their identity could be kept, secret and confidential if they required although none of the interviewees required such measures.

Additionally, the researcher tried to create an atmosphere of trust and relaxation prior to the face to face interviews. This was done by explaining why he was carrying out the research. Another thing which has an influence on credibility is interviewee motivation. It is fair to say that the interviewees were all motivated to participate in the study commenting on its importance. The way a question is

framed can also influence the answers given by the interviewee. In all interviews the researcher tried to make sure that the interviewee understood what was being asked. Also, open ended questions were used with some questions to get as fuller information as possible. The researcher avoided leading questions and trying to manipulate to get a certain type of answer, this ensured the reliability of the results, (24).

Transferability which is the external validity of the research refers to how the findings can be generalized beyond the case study in question. General patterns emerged that the interviewees were more satisfied with practical nature of the P2P educational system. This provides evidence of external validity and allows analytical generalizations for example the comparison with traditional educational systems. Additionally, this study was conducted in a specific country Finland however its results should be able to be replicated in other countries if it introduced the P2P model to its exchange students.

Dependability measures the ability of the researcher to present honest and reliable information about the concepts which are being investigated which is similar to the idea of reliability in quantitative studies. In a practical sense it should be possible for anyone to do the same study and get similar findings and conclusions. In this study the interviews were carefully prepared and it was based on a theoretical framework and previous quantitative data, which supported the conducting of the interviews. If interviews are conducted in the same way it decreases variation in data collection.

With regard to truthful information, (25) make the point that when an interview is recorded, it could reduce the interviewees' willingness to respond openly and honestly. This is a good point however, overall, the researcher got the impression that the interviewees were very willing to express themselves honestly.

Confirmability, is connected to the objectivity of the evidence found in the research and is very much connected to the ability of the researcher to identify the essential characteristics of the concepts of the research topic in an objective way. One thing that can have an effect on such objectivity is the relationship which develops through interviews between the researcher and the researched (26). There is also the possibility that the background and experience of the researcher can lead to a situation where it influences the interpretation of the data and consequently affects the objectivity.

The researcher did try to provide an open, friendly atmosphere for the face to face interviews and there was general conversation prior to them. However, this did not in any way influence the objectivity of the interview, data and its analysis. The background of the researcher was that he had experience of both traditional and experiential learning and was a different nationality to all the interviewees.

An essential aspect to the research design was the intention to cover as wide a ground as possible. Exchange students from Latvia, Lithuania, Portugal, Russia, and Spain

were asked if they would like to participate in questionnaire. They had the possibility to indicate clearly and transparently how the P2P system compared to the education system they are currently pursuing in their home Universities.

There were 24 international students who participated in the P2P projects during the Autumn 2012 and 20 (83%) of them were involved in the interview. They came from 11 different foreign Universities so it was a useful questionnaire for finding out the reality of the competences as extensively as possible and from 5 different European countries as shown in below in Figure 4.

5. Limitations of Research

One of the limitations was the lack of very similar research studies on the topic. Although there were studies on experiential learning in higher education there was not a great amount that related specifically to this type of learning in the sense of an actual degree programme with no lectures. The previous research had looked more at different forms of experiential learning such as internship, work placements and virtual aspects within a classroom and the subsequent reflection by the students on the actual “doing”.

Another limitation is that personal experience and knowledge influences the observations and conclusions

related to the problem and that a particular problem may go unnoticed (27). Consequently the fact remains that the researcher had personal knowledge of the students and personal experience of the programme as a mentor/lecturer on it. However as the interviews were conducted at the end of the semester and after their evaluation the interviewees would not feel that anything of a problematic nature stated by them could possibly have any bearing on how they were viewed as students being assessed. Consequently in that sense they would have felt free to give a full and honest opinion on problems with the programme.

Additionally, self-reporting of data (which was the situation in this research) can also have limitations in the sense that it can rarely be independently verified. In this case what the students said has to be taken at face value although there are some potential sources of bias which are regarded as limitations; selective memory(not remembering experiences that occurred in the past),exaggeration(of things as more significant),and attribution(attributing positive things and outcomes to oneself but negative things and outcomes to external forces).

However the main limitation of the research was probably that it was only for one semester and the number of students involved was 24.Certainly, a longer time period and a larger number of students would have improved the research.

Empirical Results

An essential aspect to the research design was the intention to cover *as wide a ground as possible*. Exchange students from following countries were asked to participate in questionnaire:



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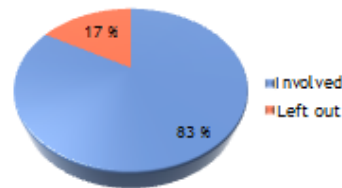


Figure 4. Share of exchange students involved in interview

Figure 4. Share of exchange students involved in interview

6. Findings

In relation to the reflective competence, 73% of students, asked if and how they got a better understanding of rules for making business and contacts, responded that they did improve the overall understanding of fundamental rules through hands-on experience in project work. In addition, the changes include recognition the influence of cultural differences when communicating with entrepreneurs, paying more attention to details, using situation based approach. Others pointed out that they already had sufficient knowledge (summarised in figure 5)

Compared to the ethical competence, the answer to the reflective competence was sought through more questions. Almost half of the students (around 45 %) noted that active usage of English as a primary language for communication has helped them to use it more comfortably and competently.

Furthermore, students commented that they have recognised improved teamwork capabilities, adapting theoretical knowledge to practice, as new personal abilities during studies in P2P; only 27 % stated they haven't identified new competencies.

According to students, good reasons for working in a team are workload division, shared responsibility, faster task completion, team may be able to solve a problem that an individual cannot, sharing of new information, and building

teamwork skills. On the other hand, working alone offers independence: a person can work on his/hers own pace, be responsible only for your own actions and decisions. Additionally, they identified trustworthiness, ease of communication, availability for private consultations, as the main differences between lecturers' in their home universities and project supervisors' in Laurea P2P programme.

When building timetables by themselves students expressed that it was a more comfortable and fluent approach to time management. The downside was the necessary arrangements between team members which doesn't allow student to make very personal schedules. More than half of the students (around 60%) acknowledged that feedback from companies support the development of knowledge by helping them analyse their work, identifying differences between theoretical ideas and reality in the industry(as shown in figure 6). The other half had insufficient contact or feedback from the companies' representatives. Several students, asked how the exchange period is going to be useful for their studies at home institution or for future career, noted improved multicultural communication skills, learning how to use theoretical knowledge in practice, enhancing teamwork capabilities, preparing oneself for work in a company.

Empirical Findings (1/3)

Most part of interviewed students (Figure 5) responded that **through hands-on experience in project work** as well as **their ability to self-reflect on situations**, students got better understanding of:

- Rules for making business and contacts,

- Fundamental professional conduct

In addition changes include:

- The recognition of the influence of cultural differences
- Paying more attention to details

More than half of the students (Figure 6) acknowledged that **feedback from companies** support the **development of knowledge** by:

- Helping them analyse their work,
- Identifying differences between theoretical ideas and reality in the industry

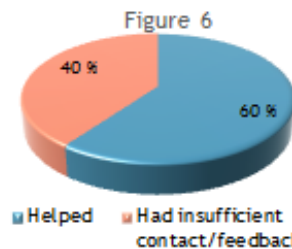
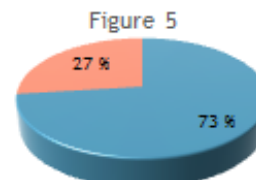


Figure 5 and 6. Understanding business rules and company feedback

In relation to the network competence, only 45 % of students encountered some misunderstandings or disagreements in their team based project work. The most common problems were: some group members lacked motivation or time to do their parts, language barrier (some Finnish students preferred talking in Finnish to English), cultural differences between students. Almost all students (around 91 %) agreed that information on business communication (cooperating with companies, making agreement, memos, invitations etc.) have helped them to prepare for work in a company as they will already have practised preparation of some documents.

When considering the globalisation competence, the students noted that the differences in learning process in Laurea and their home universities are significant: Laurea offers a practical approach to studying (students work in teams with real companies) is a unique feature in Laurea; flexible schedule (students themselves can decide on their meeting times); the material provided is relevant and contemporary. Students noted that globalisation and cultural differences and enhanced English language skills (100 % of students). These enhanced language skills include: speaking (54 % of students), writing (27 %) and vocabulary (36 %).

In relation to the innovation competence, nearly half of students responded, that they have gained new studying skills and techniques, and new knowledge of information and communication technologies. These consist of: project and group work, writing according to official guidelines, time management, and improved research abilities Google Scholar, Laurea's own ICT technologies (Laurea Live, Intra). Moreover, exchange students were impressed by very modern Laurea's library as it enables students to find books online and minimizes the time needed in order to find specific information. Students have also found self-service in the library and Theseus publication database very useful.

The interview was concluded by a summarising question "what teaching techniques would you like to bring from Laurea P2P model to your home university?" nearly 83 % of students said they would like to introduce the whole P2P model – students working in group projects with companies. The answers also included: flexible schedule, e-library services and student mailing system.

7. Discussion and Conclusion

The data collected indicates that all 5 competences to a higher or lower extent were significantly attained by the students who participated in the study. The implications of the study are that it indicates that such an approach to learning brings a positive effect on students' perceptions of the education process and a more practical and business oriented one making them more employable. Additionally, that this can be achieved within one semester and by students from different countries which have different educational systems. The analysis clearly shows that the

"business reality gap" can be filled through this P2P model which is a good example of the LUAS LbD method. The collaborative learning involved fills the traditional educational gap between universities and businesses enabling new methods, innovations and ideas to be created and developed. Both academically and practically this type of model delivers a more employable graduate with more transferable business skills. It also shows that Laurea University as an organisation is initiating innovative ideas and managing them in a successful way solving a problem between real business life and education.

Modern technology is found to be integral to the model because of the need to connect to those "key" players in the process. This includes on-line discussion with all students, teachers and company representatives, internet for research tasks, and power-point presentations to company representatives. The use of such technology in itself also helps the learner acquire some part of the innovative and networking competences in a practical way as well as enhancing student research abilities in relation to the specific objects of projects such as those requiring market research.

Studying in the P2P educational system helps the students to improve their working life competences. Firstly, they will have a better understanding of business life rules and practices, as well as practical working life experience from the projects. Secondly, they will gain business communication skills as well as improve their level in English, both in speaking and writing, as well as acquire a wider vocabulary. Thirdly, the students will learn team and project working skills that these days are a necessity to improve employability.

However, despite acknowledged benefits, experiential methods are still far from being universally accepted by educators themselves. There are several reasons for this, including classroom time constraints, difficulties with assessment, and lack of training in how to meet course outcomes experientially. This is a problem with higher education and acceptance of the idea but in a global connected society with the need for more readily employable graduates there is perhaps a need for less of an "old school" attitude. Experiential learning requires teachers to take time to encourage reflection. This is not only time-consuming, but requires the creation of a comfortable, relaxed classroom atmosphere and skillful questioning on the part of the facilitator. In the P2P model the classroom is an open one (meetings take place in informal surroundings at different tables) and teachers are often referred to by their first name this encourages approachability and a more relaxed atmosphere. (28) comment on the role of the teacher in experiential learning indicating that it is important for the teacher to establish a sense of trust, respect, openness, and concern for the well-being of the students. Many teachers are still expected to "teach to a test" (29). However perhaps the implications from this present research is that a model like the P2P one can encourage a more positive approach to experiential learning as well as providing a more employable

graduate.

The personality of the teacher is then perhaps an important part of making experiential learning work and particularly in the P2P model. It requires a flexible, energetic, down to earth, and open minded approach and it would be something that Educational Management considering introducing experiential programmes into their institution would need to consider carefully. Have they the right kind of staff to make it work?

The personality of the student is also a factor in being suitable for the programme there is no hiding place in such a system as P2P a student cannot sit in the back row of a lecture theatre and say very little. The meetings and the team work ensure that does not happen consequently experiential learning of this type does not suit every student. Although it does not mean a shy student cannot participate it just means that they will have to do something and be heard.

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