

Innovative Learning, Peer To Peer (p2p)

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Received 10 January 2014, accepted 14 February 2014

Abstract. This paper seeks to examine a specific *Peer to Peer* (P2P) degree programme of business management within a new *learning by development initiative* (LbD) in a university setting. Laurea University of Applied Sciences (Finland) introduced LbD in 2006 as a pedagogical framework for learning in all its degree programmes based on authenticity, partnership, experimentation, research orientation and creativity. There are five competences within this pedagogical framework to be acquired by the learner: ethical, global, networking, innovative and reflective, respectively. Within this framework Laurea Hyvinkää campus has developed since 2008 a P2P learning model.

Four specific projects involving real businesses within this unique P2P programme are described and assessed within that objective in this paper. The research approach used involved assessing quantitative empirical findings from this P2P model and through those findings evaluating the reality of the presence of the LbD competences. An anonymous questionnaire was given to participants within the P2P model. The findings show that this particular P2P educational model is a good example of the LbD initiative, and that the LbD's 5 competences are present in reality within it. The empirical evidence shows that the most present competences within the P2P model are the innovative, reflective and network ones, which are strongly incorporated. The global and ethical competences are present in reality to a far lesser extent. This paper demonstrates additionally that this P2P educational model fills the gap between traditional teaching methods and pure research based learning. It highlights the successful reality of collaborative learning and the development of knowledge for those involved in the process (mentors, students and businesses).

Citations: Paul Gordon Dickinson, Piia Haavisto. Innovative Learning, Peer To Peer (p2p) – *Innovative Infotechnologies for Science, Business and Education*, ISSN 2029-1035 – **2(17)** 2014 – Pp. 9-13.

Keywords: Learning by Development; Peer to Peer; p2p; education; competences.

Short title: Innovative Learning.

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 3 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.

1. The LbD model and its competences

The LbD model defines a learning environment which utilises internal and external networks and is in constant interaction with the world of work. Authenticity is implemented in practice as research and development projects and initiatives linked to the students' studies, work placements and theses. The opportunity to participate as developers in such projects

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helps students to grow into people who can change established workplace practices, and develop into business leaders.

These development projects are built on the concept of partnership, which implies cooperation between lecturers, experts from the labour market and students. The core of development activities is formed by development teams in which shared expertise is generated. Development teams manage partnership networks and the progress of the project and organise work activities and methods. 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.

Of Laurea's five competences, the *ethical competence* concentrates on the private dimension which is embodied in the student's selfreflection. 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 competence-based core curriculum has made it possible to give a definite role to ethical competence. However, the integration of ethical competence into the teaching of subject-specific units is challenging particularly in terms of ethical sensitivity and moral-ethical problem solving. The inclusion of ethical sensitivity implies a need for specific objectives in interaction skills. Developing moral ethical problem-solving skills, on the other hand, requires that the teaching naturally include the consideration of professional problems from ethical points of view. The real tool for teaching ethical competence is the message and the effectiveness of traditional lectures has been found to be low. Effectiveness in this case is linked to diverse pedagogical solutions, such as role-play, simulations, film analyses, interaction skills, dilemma discussions, reflective journals, professional mentors and projects related to ethical issues [4].

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 researching 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 [5, 6], directed by human cognitive abilities [7, p. 27-28]. 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. Swift changes in the employment market create a need for self-directed learning, and for individuals to take responsibility for their own management, they need reflective competence that is the ability to critically evaluate their work [8, p. 46]. Together with self-directedness, reflection makes up the content of the research-oriented and developmental approach described in higher education pedagogy [9].

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 [10]. The significance of communication competence is particularly marked in today's global networks. Dialogue and interaction are essential resources of the network society [11]. In order for social and economic structures to become networked, new kinds of skills and attitudes are needed in the network's participants [12, 10].

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. Regardless of the sector, employees need diverse social skills to complete their tasks. 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 Payne [13] 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. The third level consists of innovations produced by broader organizations of which the individual is a representative. These are typically product, process and strategy innovations, and are often of incremental or standard type. The fourth level consists of innovations from the individual's various operating networks. These networks are essential in the creation of all-new, radical innovations. New companies, for instance, can be based

on innovations generated by a network. The broadest fifth level consists of societal innovations, which can be anything up to global in scope.

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.

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 [14].

The word 'global' refers to things that encompass a whole group of objects, that is comprehensive or complete, or that involves the whole world [15, p. 1011]. This is a good working definition when we look at globalisation as the series of events and processes that cause the world to merge into a single, all-encompassing social system [16, p. 53], [17, p. 3]. In other words, here 'globalisation' refers to the processes by which phenomena acquire worldwide scope. '

2. The P2P programme

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 which are rooted to the reality of working life. 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. 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 participate in international projects as well, and these projects are often related to Russia, Scandinavia and the Baltic countries. The main emphasis lies, however, in Russia, and very common themes are export/import, creating marketing plans to a new market, finding new target groups or possibilities for using social media in business operations.

Projects are implemented with very different organizations: small and large enterprises, 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 solve.

The goal of the P2P model is to fill the gap between tra-

ditional education and companies' 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.

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 well-built 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. 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 will be presented to the company representative at the end of the project either at P2P office, in the company or by using a negotiation 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. An example of that project was to find out how a hotel should be visible in social media. The hotel was mainly interested in "easy" marketing and to possibility of communicating easily with their clients. 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 project, 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, announcing that the conducted plan helped her to negotiate with future partners and intermediates.

A third example is related to a typical theme, a marketing plan to Russia. A small Finnish company wanted to find the best way to get to the Russian market. First, a market entry plan was conducted, and later on a marketing plan followed as a separate project. The students found out information related to consumer preferences, buying behaviour, competitors and market trends, and made a realistic marketing plan based on the gathered information. In addition to marketing and social media, they had learnt about internationalisation as well as cultural and business differences between Russia and Finland. The students wrote at the end of the project: "We came face to face with the fact that international marketing is very challenging and it needs a lot of preparation and background research about the target country to be successful. The peculiarities of marketing in Russia were paid special attention to".

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. The entrepreneur wanted the team to help him to create an easily distinguishable image and brand. In addition, the project group found out information about different programmes in financial management and negotiated with different companies to find the best features. During the project new Internet sites were created by English and Russian. The student team found the project very interesting and regarded it as one of the best projects that they had had. One of the biggest motivating factors was the entrepreneur himself who valued his 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. In addition to all the practical help provided by P2P students and staff, the entrepreneur thanked the project group for changing his attitude towards his business, as the project had activated him to plan and develop his business and to think more like an entrepreneur.

3. Student feedback by questionnaire

Data was collected through an electronic anonymous questionnaire administered to all 65 students who had enrolled and participated in P2P projects during one semester. The questionnaire was of a quantitative style, in the sense that it was questions which were seeking a response in terms of ticking boxes. The ticking of boxes does not provide the level of evaluative information that is optimal for quality enhancement. However, ticking of boxes allows for the identification of a specific aspect of the programme, and are particularly useful for quite high student numbers as well as enhancing response rates. These are points well made by Rowley, Ref. [18]. In this case there were 65 students who participated and 44 responded to the questionnaire. Consequently, it was a useful questionnaire for finding out the reality of the competences as extensively as possible. Additionally, questionnaires should be presented when the course is complete (Rowley loc cit). This was the case here as they were sent shortly after the project evaluations.

The data collected in relation to the ethical competence particularly highlights that 75% of students answered that they had learnt and knew the ethical principles in their area of study. Over 70% answered that their ability to analyse and develop their own actions had increased, and additionally over 80% answered that their ability to evaluate their own knowledge had increased. Consequently the reflective competence of the LbD was well learnt within the P2P programme by the students.

With regard to the network competence two of the key findings were that approximately 80% of the students had learnt to co-operate with different partners, significantly improved their communication abilities, and that co-operating with company partners had helped their knowledge levels. The innovation competence in reality through the student feedback is particularly present in the sense of independent actions of students (90%). Additionally, the learning of new skills and use of equipment was quite high. The fifth competence, globalisation, was the weakest of the competences within the student feedback. Although, there were still over 50% of students who were involved in the projects were able to recognise aspects of internationalisation.

Conclusion

Overall this study indicates that the *Peer-to-Peer* learning model is a good example of the LbD initiative and that the LbD's five competences, ethical, global, networking, innovative and reflective competences, are present in P2P projects, to a greater or lesser extent. The analyses show that in reality the students learn more about reflective, networking and innovation competencies, whereas ethical and especially global knowledge remain weaker. However, even inside a certain competence, different kinds of skills are acquired. Some

of them are related to the development of the students' own knowledge and skills, some to the innovations and phenomena in different companies or networks. The analysis shows clearly that the students have learned to assess and evaluate their own skills in different situations and are able to realise the value of peer feedback both from other students, teachers and company partners. The basis of the P2P learning method, (collaborative learning for all involved in the process), fills the gap between universities and businesses and enables new methods, innovations and ideas to be created and developed further.

This learning model, which concentrates on both practice and research, is constantly being developed further by its students, teachers and company partners and this includes the five LbD competences. The global competence is shown

within the empirical findings to be the weakest in attainment by the students. However, new contacts to foreign universities and companies are constantly being created, and new international student projects started both with exchange students and student teams from foreign universities. Also special attention is being paid to international cooperation skills (for example through cross-cultural student visits). Consequently this competence will hopefully be more easily absorbed by P2P students in the future.

If higher education is to be based on the demands of the employment market and its development, universities and employers must work together closely. The reality of this unique P2P degree programme is that it provides such collaboration as well as the development of knowledge within the competences discussed, for the students involved.

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