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# A PUZZLE OF PROFESSIONAL COMPETENCES – WORKING LIFE PROJECTS AS LEARNING ENVIRONMENT

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## Abstract

This article aims at finding best practices of working life related studies from the learners' point of view. The use of working life projects as a real learning environment was based on promoting future working life needs. The implementation described took place on the Bachelor of Social Services programme studies at Laurea University of Applied Sciences (UAS), Finland. The data for this article is the feedback collected from the students during the academic years 2014-2015 and 2015-2016. The feedback was collected using a questionnaire including statements and open questions. The data was processed using SPSS Statistics and the open questions were categorized. The main results from the students' feedback dealt with diversity of opportunities, the role of the team as an asset to learning and development of time management. As a whole, this pedagogical solution seemed to provide a real learning environment that served the development skills needed in working life.

Keywords: Learning by Developing, Learning Experiences, Learning Environment, Competences.

## 1 SETTING THE SCENE

The objective of this article is to analyze students' feedback of an implementation of project-based studies of the Bachelor of Social Services programme during the academic years 2014-2015 and 2015-2016. By exploring students' experiences, the article seeks best pedagogical practices of working life related studies from the learners' point of view. The writers have been engaged in developing this learning environment at Laurea UAS in the Helsinki metropolitan area, Finland. The article will describe the signature pedagogy of Laurea, called the Learning by Developing (LbD) action, model and this specific implementation of it, give an insight of students' experiences and finally discuss the strengths and critical points of using this learning environment in this context.

Future labor market will expect professionals to be more self-conducted and motivated employees. Setting the framework of workload and working hours are also demanded. Choices need to be made quickly and independently, and they will need to be responsibly made by the worker. This requires diverse skills and knowledge. Aside from technical performance, a future professional will need creativity, fluent communication and interpersonal skills, the ability to adjust oneself to changes as well as tolerating uncertainty. The 21st century worker will be competent in problem solving. The ability to administer one's own work will be of the essence. A skilled worker will know how to support networks and how to reflect on his/her work. Keeping these demands in mind, the next section will describe the pedagogical basis of the studies in question. [1], [2], [3]

### 1.1 The Pedagogical Model

Laurea's strategic choice is the Learning by Developing (LbD) action model, which integrates the mission of Finnish Universities of Applied Sciences - education, regional development and research and development. The LbD model is rooted in a pragmatic learning concept and in competence-oriented learning. In the LbD model, learning takes place in development projects that are genuinely rooted in the world of work and and it gives an opportunity to address the phenomena and problems of authentic situations. The LbD model is based on five characteristics which are: authenticity, creativity, partnership, experiential nature and research-oriented approach. [4]

Development projects require collaboration and inspire creativity between lecturers, students, end users and workplace experts. Project work generates new knowledge and new practices. All actors participate as equals, developing their competences and personal or professional growth in their varying roles and responsibilities. Partnership can be seen as doing together, learning together and sharing competences. Development projects offer an experiential nature which can be formed as communal sharing and utilising experience-based knowledge. Projects aim to solve problems and develop operations in working life with a research-orientated approach. The starting point is to define

the core phenomena behind each case and to find out the key concepts through which the phenomena can be analysed. [4], [5], [6], [7], [8] The combination of working life and studying serve both the purpose of initial and lifelong learning by enabling mutual development of students and their working life mentors. [9]

According to the LbD Guide, the planning of the study unit can start comparing existing projects and the contents of the study unit, or create a new project together with working life experts and end users which is suitable for the objectives of the study unit. Students can also participate the existing R&D projects and subsequently evaluate the competence generated by the project in relation to the learning outcomes described in the curriculum. A team of lecturers can coordinate studies, and the main task of the team is to check the correspondence with the curriculum and the project plans. [6]

The guidance and support of peers and workplace experts play a very important role in the LbD model. Lecturers encourage participants of the project to work together and define common tasks and aims for the project. They also facilitate reflection among participants and help students understand competences, set own goals and make self-evaluation during the project.[6]

The LbD action model focuses on competence evaluation and this requires lecturers to develop the evaluation system of the study units. The main task of the evaluation is to support the students' professional growth. When the evaluation is not based on written materials, the feedback of peer groups, working life experts, end users and lecturers plays a very important role. [4], [6]

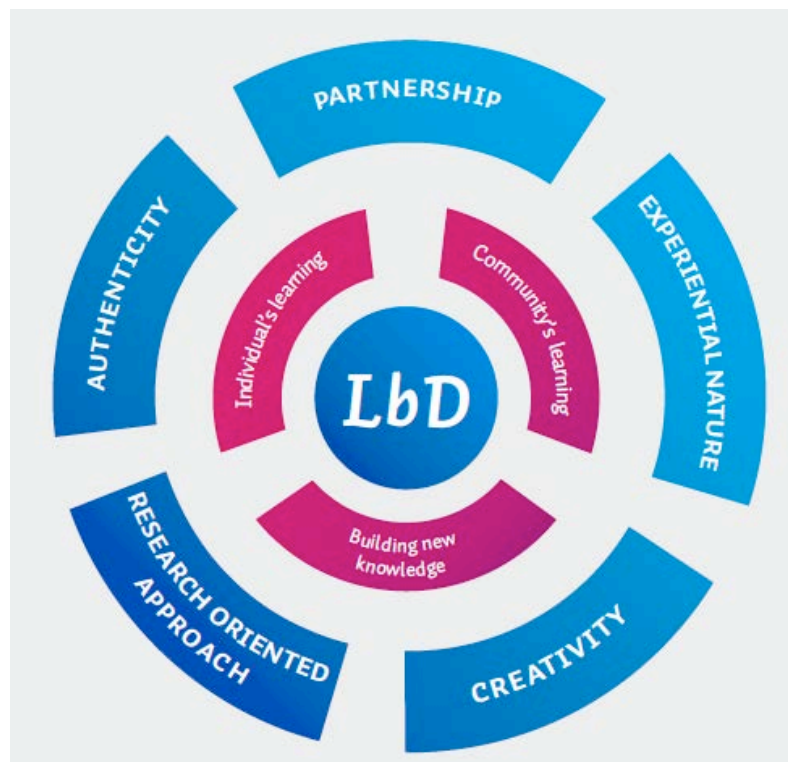


Fig. 1. Learning by Developing Action Model characteristics.

From an international perspective, the LbD action model relates to service learning as pedagogy, especially adapted to Social Services studies. First of all, community engagement and partnership are highlighted both in the LbD action model and service learning in order to promote a collaborative approach. In both pedagogies, curricular objectives are enhanced through community service projects where students will need to apply their skills of reflection, critical thinking and problem solving. Secondly, there are multiple parallel features in the implementations: there's a requirement of authenticity; the project(s) need to genuinely serve the community, course objectives need to be clearly integrated to working, the students need to reflect their experience and there needs to be interaction between the students and the community. [10]

Wayne, Bogo and Raskin discuss whether authentic learning environments should be even more emphasized in Social Services studies, as they enhance many of the key competences of the field, such as fundamental ways of thinking, performing and acting with integrity. [11]

## 1.2 Implementation

The curriculum of the Bachelor of Social Services programme is designed to last 3.5 years. The third year study units focus on research and development skills as well as management and exerting influence in the social care sector. These themes can be adapted into a working life project and as students' input can produce added value to the associates, this seemed like a worthwhile framework to further develop working life projects as learning environment.

From 2013 to 2016 these studies (30 ects) were implemented around a real learning environment of various community projects. In addition to working in the field in the projects, the studies also consisted of other means of professional capacity building, i.e. written assignments, lectures, workshops, portfolio building and clinical supervision for the students in charge of the project.

At the beginning of the semester the students were presented with diverse community projects where they could do their field work. In order to serve the students' interests, the project associates were NGOs and municipal institutions that represented different target groups and opportunities in social services. This included organizing events and activities for the homeless and unemployed, producing material to raise awareness of domestic violence, managing children's workshops against bullying and racism, designing a guide book for volunteer workers of children's workshops, supporting young immigrants, using art as well as researching an art project dealing senior citizens at a care home. During the year, the student could choose to work in 1-3 projects.

Combining studying with project work was not new to the students. However, their positions varied from their previous experiences, as they were now expected to make more decisions independently and within a team of students. The ones sharing the same interests built a team of 4–6 students that was supported by a lecturer. As the team started working, they wrote a project plan and the learning plan. They described the team members' roles and each member's individual learning objectives. Compiling this plan was quite a puzzle and it demanded the students' reflection of the units' and the project's goals, workload division within the project's framework, agreement of schedules and logistics and the team's ground rules. In addition to these variables, the students in a team might have had different amounts of units to be studied or they might have wanted to do them in a different order, and this needed to be taken account of by the team. The plans were presented and discussed both by the other teams and supporting lecturers and revised if needed.

## 2 THE DATA AND METHODOLOGY

The feedback was collected by questionnaires during the academic years 2014–2015 and 2015–2016. The questionnaire was developed by a team of students and the data consisted of responses from 35 students in 2015 and 29 in 2016. Laurea UAS granted permission to use the gathered data.

The students filled in three background information questions and gave their opinion on 20 statements and wrote their responses to open questions that concerned pros and cons of the implementation. In addition to the positive and negative factors, the themes of the questionnaire were guidance and support, working in teams, professional development and capacity building.

The data was processed using SPSS and the open questions were categorized. The categories built according to the responses were:

- 1 Working life related projects as a working environment
- 2 The role of the team in supporting learning
- 3 The role of the lecturer
- 4 The possibilities of flexibility and freedom of choice
- 5 Issues of time management.

### 3 RESULTS

Table 1 presents the results of the questionnaires collected during 2015 and 2016. The results are reported both by averages and by standard deviation. The scale was set from 1 to 5, 1 being 'I totally disagree' and 5 being 'I totally agree'. Statements 4–9 describe students' opinions about getting support and guidance. Statements 10–13 are to map experiences of students' professional development and know-how. Statements 14–17 describe experiences of teamwork and 18–23 the positive and negative aspects of working life projects.

Table 1. Questionnaire averages and standard deviations of 2015 and 2016.

STATEMENTS	2015			2016			Total		
	Mean	Std.	N	Mean	Std.	N	Mean	Std.	N
4. Optima has supported my learning during the project work.	3,34	,765	35	3,25	,967	28	3,30	,854	63
5. The lecturers have supported me enough during the projects	4,51	,702	35	4,38	1,115	29	4,45	,907	64
6. The contacts in working life have supported the project work enough	4,00	1,111	35	3,59	1,150	29	3,81	1,139	64
7. The lecturers have guided the project work personally	4,43	,778	35	4,56	,698	27	4,48	,741	62
8. I have received enough support from my team for the project work	4,63	,690	35	4,72	,591	29	4,67	,644	64
10. The project work has supported skills that I need in working life	3,86	,733	35	4,07	,530	29	3,95	,653	64
11. The project work has supported my learning during the study unit	3,63	1,003	35	3,69	,850	29	3,66	,930	64
12. There have been enough lectures during the study unit	3,49	,951	35	3,28	1,162	29	3,39	1,048	64
13. I have been able to use my theoretical knowledge in the project work	3,26	1,010	35	3,31	,891	29	3,28	,951	64
14. Teamwork has been successful in my project groups	4,47	,748	34	4,38	,677	29	4,43	,712	63
15. Teamwork has been suitable for completing the study units	4,14	,810	35	4,21	,940	29	4,17	,865	64
16. The division of work between the team members has worked	4,34	,725	35	4,03	1,052	29	4,20	,894	64
17. Time management in the teamwork has worked out	3,86	1,033	35	3,79	,940	29	3,83	,985	64
18. I have found the project work useful	3,97	,923	35	4,18	,723	28	4,06	,840	63
19. The project work has appreciated the effort of the students	4,11	,758	35	4,07	1,016	28	4,10	,875	63
20. Time management has been easy during the project work	2,89	1,051	35	3,07	1,100	29	2,97	1,069	64
21. Working in the project group has helped to complete the study unit	3,88	,893	33	3,66	,897	29	3,77	,895	62
22. I have been able to participate in projects that I am interested in	3,73	1,098	33	4,41	,867	29	4,05	1,047	62
23. The third year studies have promoted my professional skills	3,78	,906	32	4,14	,833	29	3,95	,884	61

### 3.1 A Spirited Atmosphere - The Role of the Team

An essential part of this learning environment is the team of students working together in a project. The students' experiences of this aspect are positive: the averages concerning the functions of the team are 3.8-4.5. The responses to the open questions supported this result. The results address that whereas the other statements gathered both positive and negative comments, the ones about teamwork are almost exclusively positive. This phenomena was also reported earlier among Open University students in a doctoral dissertation by Saara Repo (2010). The student experience in our data was described e.g. like this:

"The team spirit was good and positive." (18/2015)

"Working in the team supported the studies very well, and there was no need for me to cope all on my own." (25/2015)

"The project team was the best and so functional!!!!" (29/2016)

There are various ways for the team to support its' members. In a working life project the team is motivated by a shared goal. This provides the team members with a positive dependency for each other, creates both individual responsibility and a possibility of interaction. [12], [13] In their interaction the project participants can share their different knowledge and on the other hand explore their way of working from the point of view of development of their skills and the perspective of the community project. [14], [15] The discussion around project tasks challenge the learners to confront possible cognitive conflicts: when diverse aspects are elaborated or previous knowledge is insufficient, the team members may well help to reach a new level in development [12], [16].

The team of students constitutes a peer group to support and to count on whenever there are difficulties in learning. This enables the student to move on despite individual challenges. The emotional support holds up the student; it also allows them to celebrate moments of success. [12] According to Wayne et al. (2010), the students being accountable for their peers is an important factor for professional growth, even though better recognized in fields other than social sector. This accountability, however, may raise the emotional stakes of the students and hence create anxiety. The role of anxiety in learning will be discussed further in exploring the results of other aspects. [11]

### 3.2 To Act at a Pace of One's Own – Time Management

In their open replies the students described the first days of working life project studies as unclear, busy and chaotic (11 replies on 2014, 12 on 2015) – or they appreciated the flexibility and freedom of choice (10 comments on 2014, 6 on 2015). The burden of scheduling the project as a whole made the students anxious. The replies reflect not only inspiration but also fear of failure. Statement 20 'It has been easy for me to schedule my work in the project' resulted as 2.9 on an average. The students' comments clarify the division of their experience:

"This autumn I have been very stressed by school assignments. I was happy to transform some of the work until early next year." (2/2015)

"There was a touch of academic studies due to the freedom of choice." (4/2015)

"It was lovely to act at a pace of my own." (14/2016)

On the other hand, according to statement 17 (Time management in the teamwork has worked out) one could interpret reasonable success in scheduling the teamwork (see Table 1). Kallioniemi-Chambers (2010, 2007) has described cultural models of time in pedagogical action. Coordinating pedagogical processes and timetables is an effort to avoid chaos and support learning. At the same time it makes the students' self-discipline pointless, and in that way it might prevent the developing of skills of students' self-orienting. [17], [18]

Wayne et al. (2010) point out that working in the field inevitably causes anxiety in the students. As they need to put aside their role as students, become visible as professionals and take the responsibility of coping in working life environment, the challenge to their emotions is apparent. As this takes place, anxiety is a stepping stone on the path of professional growth. [11] Regarding this, it is essential for the teachers in higher education to allow the students their independence to go through the uncertainty and surprises – and in case of freezing be there for sufficient support. From the point of view of the data, the lecturers' role as the teams' facilitators seemed functional: both statements 5 'The lecturers have supported me enough' and 7 'The lecturers have guided the project work personally' come up to high averages, 4.45-4.51 and 4.43-4.48 (see Table 1.)

### 3.3 Frozen by the Project Puzzle

In their replies the students expressed their learning in the projects as diverse. They also found working life projects as a concrete and a functional way of developing their professional competences. The assignments in the projects served multiple aspects of the field and there were authentic challenges to be met in order to promote one's know-how. These elements of learning are recognized in the LbD action model [4] and also in the service learning model [10]. The responses to open questions regarding professional development, benefits and disadvantages of working in the projects had the same results as the averages of related statements (statements 10, 11, 18, 19 and 23, averages 3.6-4.1; see Table 1). The responses also reflect the experience of the demands created by working in several projects:

"I was frozen by the project puzzle but then again I wasn't out of work" (18/2015)

"The haze, even the teachers don't know, especially in the beginning, how to do the job." (27/2016)

The average of statement 13 'I have been able to use my theoretical knowledge in the project work' is relatively low (3.3) compared to the other statements. This seems to relate to some students' expressions of dissatisfaction in regard to the project not concerning own professional interests or to the difficulties in reaching the study unit's aims.

## 4 CONCLUSIONS

The article has highlighted some of the prominent experiences of the students. The purpose of the conclusions is to explore the best practices and possible challenges of this way of implementing project-based studies in working life. According to our study the experience of the students was diverse. As a whole the data brings forth these studies as a concrete and functional way of developing professional competences. The tasks in the projects offered authentic challenges to individual learning and also community learning.

The support of the team seemed to be a central element of positive experiences. The teams were quite small and that gave the students an opportunity to be active in the project groups. The team members were responsible for communities due to the project plan bounding the students to operate parallel to the objectives that were mutually agreed. It is paramount to the teacher to work as a facilitating partner to promote peer learning and competence building.

Time management is one of the most important skills in future working life. If a student has an opportunity to organize his or her own assignments and practice time management during studies the experience can be transformed into a working life practice.

The connection between theory and practice appeared to be one of the most important targets of developing this pedagogical approach. The principal idea of the Learning by Developing action model is to share existent knowledge as well as build new knowledge. In order to ensure this, the teacher needs to be consistent in encouraging and challenging the students to strengthen their knowledge. Within the team there needs to be in-depth thinking of the theory that's related to the project. The role of the teacher is to make observable all the pieces that compile the future professional's competence.

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