Promoting Entrepreneurship Studies in Practical Nurse Education through Joint Curriculum Planning

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Abstract: The present research deals with the curriculum development process realized in the practical nurse education in Oulu Diakonia College. The curriculum has been developed since the middle of the 1990s into a competence-based curriculum. The process has been spurred by the necessity to produce exams and knowledge to meet the needs of work life. The purpose was to design a program which included compulsory entrepreneurship education. It was implemented through cooperative learning and planning processes among the teaching staff.

When preparing the new theme, the staff and students were engaged in the process. The teachers defined and shared common aims, defined their mental models, assessed their personal competences and decided what to learn more. They used team work to share the ideas and conceptions. They examined their plans to make them conform to those of the foundation (ODI). They brought their conceptions and experiential knowledge to their joint efforts. The students evaluated the changes.

In the beginning the staff members had diverse attitudes to the change: some understood its importance at once, others needed more time for it. The process resulted in transformative learning experiences: both the staff members and the school organization were changed. The students valued the entrepreneurship education high, and many of them chose optional entrepreneurship courses in addition to the compulsory ones.

Key words: attitude, community learning, cooperation, transformation

1. Introduction

How should a teacher carry out entrepreneurship education in vocational contexts? The principles of entrepreneurship education were stated by the EU (European Council, 2006) making entrepreneurship a basic skill of citizens. Consequently, entrepreneurship education was taken into the national curricula of general and vocational education in Finland. The following pages describe the process of integrating added compulsory and free choice entrepreneur education in the studies of practical nurse's education through joint curriculum planning of the teaching staff in the Diakonia College in Oulu.

Oulu Diakonia College offers studies in health and social services to young and adult students after compulsory education or matriculation examination. Young people study in degree-oriented programs and adults in the competence-based system. Vocational study programs consist generally of 120 credits: 90 credits of

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vocational studies including at least 20 credits of on-the-job training and a final project of at least 2 credits, plus 20 credits of core subject studies and 10 credits of free choice studies, At least 5 credits of entrepreneurship studies are generally included and 1.5 credit of obligatory counseling. During the present pilot project the amount of entrepreneurship education was raised up to 10 credits of compulsory and 5 credits of free choice studies. They are not offered as separate courses, but are included in all subjects taught. In this way all teachers are responsible for the entrepreneurial contents in their own subject fields.

The teachers in Diakonia College are multi-subject academic, pedagogically competent teachers with at least master's degrees. No one was a specialist in entrepreneurship education in the start, but they started to educate themselves for it.

2. Curriculum

The comprehensive school reform in Finland in the 70's was a fully centralized process, but the next reform in the 80´s involved teaching staff. The modern implementations, the newest since 2010, pay attention to intertwined personal and professional commitments of the authorities, students and the staff. Thus the system tries to support linking the theory and practice of educational communities.

Reflection is aimed at helping students and teachers to develop multiple goals and encourage transformative development. Transformation is not one significant emotional event; rather it is a series of experiences which teach critical thinking. Reciprocal processes enable the students and teachers to construct meanings. Both of them occur within the context of relationships, for example in group reflection and discussions.

While in many countries, for instance in the USA, Australia and Great Britain, teachers' autonomy in school decision-making has been diminished in the 1990's, the trend has been opposite in Finland. The sectors that formerly used to dictate and order teaching no longer assume this task, and teachers are more and more expected to define their norms of practice themselves of what is good practice and what are the priorities.

Autonomy and pedagogy may be seen as interrelated and interdependent concepts, if their meanings are deeply analyzed and interpreted. To start with, there are two assumptions: first, that there cannot be any "real", genuine learning and teaching without the autonomy of the teacher, without his/her freedom in decision-making and action; and second, autonomy of a teacher does not lead to what is educationally worthwhile or educative, to what is good for students, unless it is backed by a teacher's consideration and tactfulness (Lauriala, 2002; Nissilä, 2002; Korpinen, 1996). Autonomy is neither soloism nor egoism; it is team-oriented working based on the shared aims, recognized mental models and personal competence of the staff (Senge, 2006).

In transformational leadership teachers are committed and self-motivated to respond to changes in the long term. Lieberman and Pointer Mace (2009) described the role played by experienced teachers in professional learning communities and the importance of the fact that these practitioners made their teaching public and shared. It resulted in the conclusion that the robust, lasting professional development must begin with what teachers know and do, effecting educational reform from inside the educational units (Lieberman et al., 2009). Thus the whole community is engaged in the sharing of knowledge that enhances the creation of professional knowledge. The reciprocal dynamics create a web of relationships and construct individual and organizational identities. They emerge from a variety of sources depending on the issue or the individuals' expertise and creativity (Harris & Muijs, 2003; Mitchell & Sackney, 2000). Personal strength goes hand in hand with effective collaboration. Personal and group mastery thrive on each other in learning organizations (Nissilä, 2006; Fullan, 1993).

According to Leithwood and Riehl (2003) educational institutions are today undergoing critical changes and they need the combination of different forms of leadership that involve mobilizing the learning community staff and clients to face and take on the task of changing teaching and learning culture. The necessity also concerns harnessing and mobilizing the resources needed to support this process of change (Spillane, Halverson & Diamond, 2001).

The change in an educational organization needs a distinctive model, since using concepts foreign to the values of the community will most likely fail to engage the very people who must bring about the change (Kezar, 2001). Consequently, the following features should be taken into account: interdependent organization, relative interdependence of the environment, unique culture of the organization, institutional status, values-driven, multiple power and authority structures, loosely coupled system, organized decision-making, professional and administrative values, shared governance, employee commitment and tenure, goal ambiguity and image and success (Kezar, 2001, p. 8).

In a sense organizational change is always based on learning. According to the social cognition theories we can assume that sustainable change will take place through the learning of individuals if there emerges reflective sense-making interaction among institutional actors (Kezar, 2001).

The problem of a teacher is the relation to his/her students: how to assist such deep learning that will make a difference. This speaks for intensive teacher in-service learning which promotes authentic teacher competencies and activates the teacher identity formation (Karjalainen & Nissilä, 2008). Teachers' power to change education is more and more conditioned by their reflective capabilities and professional competencies (Loyd Yero, 2002; Menges & Rando, 1989; Fox, 1982).

Transformative learning has brought a change from strict curriculum thinking towards learning environment thinking which emphasizes everyday practices and competence-based learning in the education for them. They bring real contacts to education and add to motivation, enhance more meaningful practices and encourage critical reflection. When the actors in vocational contexts develop and gain new perspectives, the change should follow in the organizations as well.

3. Entrepreneurship Education

How could entrepreneurship education be included and carried out in practical nurse's education? At its best the process should be flexible. Work life changes set challenges to develop one's competences throughout the career. Since work is a more and more important environment of learning, new methods for supporting personal development in work places are needed. The purpose of the present project, entrepreneurship education in social and health services is firstly to create students a path from an educational institution to work life, secondly to provide the staff with opportunities to promote their professional competences, and thirdly to meet the increasing needs of social and health services in today's society.

In entrepreneurship education leading oneself is the basis of meaningful action. It presupposes self-knowledge, ability to regulate one's actions, define meaningful aims and act effectively towards them. Creativity, self-confidence and innovativeness should be supported by them as well.

Entrepreneurship education in Finland is defined through three main components: self-oriented, internal and external entrepreneurship (Kyrö, 1997; Seikkula-Leino et al., 2013). They will be dealt with in this study to find out how the path from attitude creation leads through "intrapreneurship" to outer entrepreneurship.

The aim of inner entrepreneurship is to support the significance of entrepreneurship at individual level in

studies and work life as well as to help the learner understand that they keys of success will be found in him/herself. At the same time the learner will be guided to find the meaningfulness in his/her life and become socialized in society.

Outer entrepreneurship is the hoped-for continuance of inner entrepreneurship. It should be supported by vocational education as well. In all national economies employment is supported more and more often by private and public entrepreneurship, and this process is desirable. Above all, the most important aim is still the individual person, his/her inner entrepreneurship and success. The inner spirit of entrepreneurship should be cherished in every individual. Finding it out needs a wise pedagogue who asks: what can we do to kindle the spark? (Pietilä, 2012)

A school community which functions in an entrepreneurial way is not dependent on money and resources in the first case, but is, instead, dependent on ideas and measures to reach the aims with, maybe, less money. The reforms and innovations shall be guided by strong core prospects and strategies, and the whole staff should be involved in it (Pietilä, 2012).

The curricula and courses should integrate entrepreneurial contents availing of working and teaching methods, e.g., the support of autonomous learning, team work, tutoring, mentoring and activities sponsored by connected enterprises. These aims should be opened also in research strategies, staff development, business networking and everyday cultures of educational organizations. Didactical ways of organizing teaching will be presented in the following table (Table 1).

Table 1   Different Approaches of Traditional and Entrepreneurial Didactics (Gibb 2008)

General traditional didactics	*Entrepreneurial didactics*
learning from a teacher	learning from the others
passive role as a listener	learning by doing
learning from a written text	learning from personal discussion and argument
learning in the framework of the teacher	learning by finding out
learning from the teacher´s feedback	learning from many people´s reactions
learning in organized scheduled environments	learning in flexible, informal environments
purposeful learning	learning without the stress of purposes
copying from others is evaded	learning by borrowing from others
mistakes are feared for	mistakes are for learning
learning from notes	learning by solving problems

A research carried out in Oulu University of Applied Sciences, The school of Vocational Teacher Education showed that there were numerous differences in the foci of traditional and entrepreneurial learning approaches, as is seen in the following table:

Table 2   Foci in Traditional and Entrepreneurial Learning (Pietilä 2012)

Traditional education	**Entrepreneurial education**
the past	the future
knowledge	insight
passive understanding	active understanding
absolute objectivity	emotional sharing
symbolic processing	processing of events
written communication and neutrality	personal communication and influence
concept	problem or possibility

Entrepreneurship can also be seen as a goal of personal development and as the aim of individual and social growth and development. Individual employment and success in work life are highly connected to the commitment to communities, guidance of one´s life and positive self-image as well as to the capacity to change personal aims. They will lead to a lifelong professional growth process of an individual.

4. Research Methods

The aim of the present research is to find out how the practical nurse's education and entrepreneurship education can be intertwined in a degree education and how in-service teachers' professional and pedagogical development can be connected to it. The research persons represented two levels of vocational education: students at the basic secondary level and teachers in in-service education including a wide range of respondent ages and experiences. The study tried to find such ways of acting which seemed profitable both to students, teachers and work life. The participants' theoretical and practical premises were also charted as well as their attitudinal expressions about them.

Research questions were:

(1) How did the practical nurse students in vocational basic education react to entrepreneurship education which integrated theory and practice? (1a) How did it appear in designing the learning program according to their opinions? (1b) What did the students expect the teachers to take into account when preparing lessons?

(2) How did the teachers in the practical nurse education define the meaning of entrepreneurship education? (2a) What did integrating entrepreneurial cognitive thinking into pedagogical thinking mean in their practices according to their self-assessments? (2b) What was the process like in their reflective practices?

The research group was made up of multi subject, academic teachers in the college of social and health services (n = 20), newly qualified students after the first round of entrepreneurship education (n = 19) and beginning students (n = 92). The teachers participated in different data collection occasions 3 times. The total number of respondents is 131.

Researchers. The researchers are engaged in vocational education, vocational teacher education and vocational teachers' continuing education.

Methodology and data collection. The research approach was mainly phenomenographical, supported by some quantitative data. The data sources were complementary including experiential information vocalized by the participants. The data sets included: questionnaires, action/context observations, interviews, portfolios, written reports and background statistics. Prior to any data collection the respondents were appropriately informed about the research, and they consented to participate.

Data analysis. A selective reading approach was employed to analyze the data. Each relevant passage was read and the statements were isolated which captured the meaning expressed by the participant. These idea units ranged in lengths from a few words to sentences. Thematic patterns were developed. They were examined in their entirety creating a hermeneutic cycle. Thematic codes were organized to give meanings to themes.

Trust worthiness. By utilizing multiple sources of data, the researchers were able to construct converging lines of inquiry which lead to the descriptions to be presented here. Through the prolonged engagement with the participants and the incorporation of member checks, the truth value was sought to be established (Moschovich & Brenner, 2000).

5. The Process of Curriculum Design and Implementation

2010: Autumn 2010: the Principal of the Diakonia College, MNSc Liisa Ukkola participated in the entrepreneurship education organized by the National Board of Education.

2011: Spring 2011: three teachers participated in the same education. All employed teachers wrote essays about their expectations concerning entrepreneurship education.

2011: the community was still dubious about entrepreneurship education. The principal and two "key" teachers went on educating themselves.

2011: in June the joint work on planning entrepreneurship education as a part of curriculum was started. To begin with, all teachers prepared their portfolios ("Files of growth").

2011: at the beginning of summer all the staff made a study visit to Denmark to a college of sister organization. Travelling and shared experiences increased togetherness within the staff.

2011: in autumn the qualification for entrepreneurs in practical nursing was included in a non-degree-based qualification as optional contents.

2011: in autumn the new curricula were introduced. The courses within practical nursing were planned to have entrepreneurship education as a red thread through all teaching. The curriculum presupposed the teachers to use team teaching, project learning, collaboration with work life and learning journals as their methods.

2012: in spring the first group that was given the possibility to choose entrepreneurship education as an optional course within degree-based studies was started. In the spring of 2012 the college also joined the Business Oulu, the driver of business and industries, for collaboration.

2012: in spring the knowledge charting of 20 teachers was carried out.

2012: in autumn 10 study weeks of entrepreneurship education was made compulsory in the degree-based course of young entrepreneurs in nursing. The qualification for entrepreneurs in practical nursing was continued as optional contents (home services and care for the elderly, 10 credits).

2012: in autumn the development discussions with all the teachers (20) were carried out.

2012: working on the portfolio during the whole year began to bear fruit: new pedagogical methods were taken into usage, for instance more and more often teachers began to create teams for teaching.

2012: during the whole year inner entrepreneurship was present in the exhibitions and advertising of the college.

2012: during the whole year the students prepared learning portfolios.

2012: the follow-up education of the National Board of Education concerning project learning (entrepreneurship academy) took place. The slogan for advertising: a little better knowing

2010–2012: entrepreneurship education has been included in the agendas of all monthly development days of the college. The teachers in charge of several training programs (Support and guidance of growth, Nursing and care and Support of rehabilitation) piloted entrepreneurship education in the courses working in pairs. When necessary, they sent the feedback and experiences of the courses to other teachers through e-mail for comments. In the next team meeting a joint decision concerning the practices was made.

The development days are and were forums open for criticism, opinions and suggestions for developmental measures. The team meeting dealt with joint decisions. In the leader team of the college, three persons (the principal, vice principal and strategic head) devised the strategic guidelines.

Students started to plan and implement various projects autonomously within the subjects they were taught. The projects were accepted as part of their entrepreneurship studies. For instance they took initiative in "postcard days", Park Day and a day in Caritas nursing home. In arranging the National Conference of Practical Nursing Students they were active and shared the responsibilities with the teachers.

Students developed also comprehensive projects, some of them outside their own locality. An example of them is offering nature-experiences to handicapped persons in a course called Explore the wild. It included wandering in wild nature making observations, boating on a lake and making coffee on an open fire.

6. Findings

(1) How did the practical nurse **students** in vocational basic education react to entrepreneurship education which integrated theory and practice? How did it appear in designing the learning program according to their opinions? What did teachers have to take into account when preparing lessons?

During the last two spring terms the students finalizing their studies were interviewed about the pedagogical methods that they think have best supported their professional growth. The most significant were on-the-job learning and practical exercises. Team work and functional, activating methods gained increasing popularity. They are also the methods that are used in entrepreneurship education.

For students the methods mentioned above mean that their expectations concerning their studies were congruent with the realization of learning and teaching. It also means that theory and practice were and will accordingly be given attention to.

For the teachers the results concerning student experiences of learning in the school contexts and outside school meant that they had to be able to see learning as a continuum including several elements, not as separate events. To spur the planning of learning the teachers construed flexible teams both to benefit their students and to take care of their coping. Up to this the project has been successful. The next figure (Figure 1) shows the most popular methods evaluated by the students and the growth of their popularity during one year.
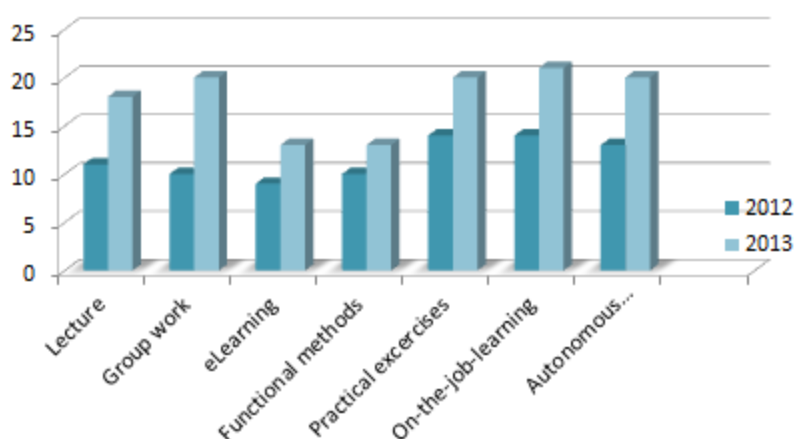

Figure 1   The Methods that Support the Development of Students' Inner Entrepreneurship According to Student Experiences

A similar trend is in examining the teachers and their experiences of reformed and/or reorganized teaching events and planning processes. The research question concerning teachers was the following:

(2) How did the **teachers** in the practical nurse education define the meaning of entrepreneurship education?

What did integrating entrepreneurial cognitive thinking into pedagogical thinking mean in their practices according to their self-assessments? What was the process like in their reflective practices?

The comprehensive development of entrepreneurship education at institutional level is challenging. The evaluations were made in 4/2011 and 4/2013 among the teaching staff concerning their assessments of entrepreneurship education development at organizational level. Their evaluations were put in the frameworks of seven viewpoints (Figure 2). The answers were produced in groups of four. The first set of questions was answered in spring 2011 after three training events.
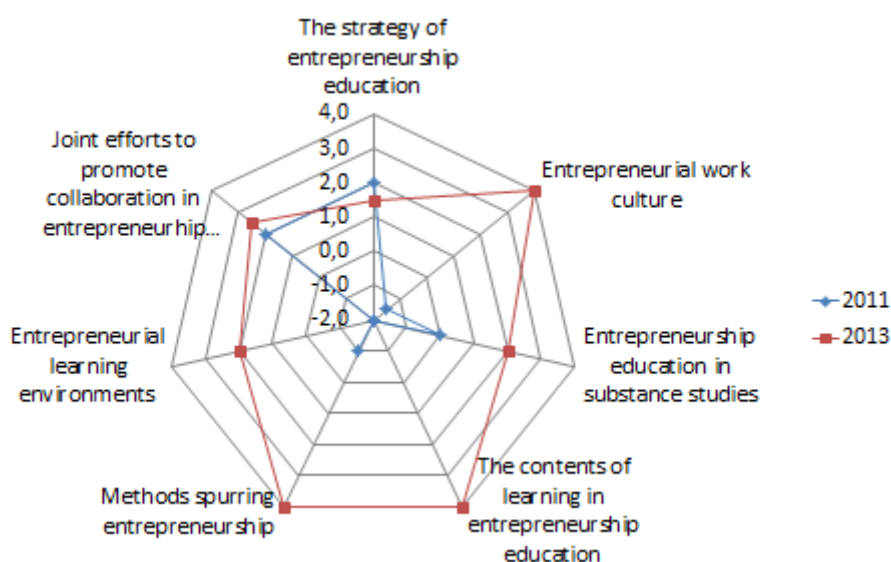

Figure 2   Developing Entrepreneurial Education at Institutional Level According to Teacher Experiences

The feedback in 2011 revealed resistance to change which divided the teacher teams into two parties and hindered the work community from proceeding as a whole. As one of the teachers put it:

"In coffee table discussions some teachers have a negative attitude all the time."

The teachers did not have enough courage to think of their teaching and teaching methods innovatively. Still part of them commented at the end of training days that

"I had nearly forgotten (to think innovatively) and sunk in the endless swamp, i.e., devising PowerPoint presentations in the evenings before. Now I am courageous enough to give the reigns to students concerning their learning."

The same set of questions was repeated in the spring of 2013. The greatest changes had taken place in the working culture and the contents of teaching as well as the implementation of various teaching methods. Still, the strategy of entrepreneurship education needs clarification. The strategy is being worked on by two teachers, and the results are discussed in the development days later on concerning how the values which guide the entrepreneurship education of the college are actually understood.

According to the inquiries, entrepreneurial culture has proceeded especially strongly to a positive direction. Similar processes have taken place in the learning and guiding methods as well as the learning environments encouraging to entrepreneurship.

In general, teachers were courageous enough to rely on student learning without teachers' strict control. In other words autonomous learning was given space, which increases student motivation, but also presupposes

mutual trust. Teachers' cognitive ad pedagogical discrepancy seemed to ease — for the best of the students. For teachers it is not easy to leave old habits and thinking. It also concerns promoting entrepreneurial action in their teaching. They need a lot of reflection, both individual and collective reflection. It is the only way of development in teacher thinking. All kinds of reflection was given time and space in the organization.

Developing into experienced expert teachers demands sharing knowledge, practices and skills. Teachers should have integrated, holistic conceptions of their work, develop their situational sensitivity, ability to problematize the unproblematic, look for challenges, engage in experimentation and exploration, theorize the practical knowledge and interpret the theoretical knowledge (cf. Tsui, 2009).

In Figure 2 the changes in teachers' thinking about entrepreneurship education are shown at seven check points according to two inquiries (in 2011 and 2013).

The greatest changes have taken place in the attitudes to entrepreneurial learning environments, methods spurring entrepreneurship, the contents of learning in entrepreneurship education and entrepreneurial work culture.

In spring 2013 the teachers gave their written conceptions on what they now think of entrepreneurship education. The majority of the feedbacks told that entrepreneurship education is an important and natural part of practical nurse's education. It has come to stay and is characterized as an element of high quality practical nurse's education. A suggestion was made to carry out shared peer evaluation action in the courses. The teachers saw that entrepreneurship education meant student responsibilities on studies, shared action and learning in joint projects and events. It is both the presence and the purpose.

7. Conclusion

The purpose of entrepreneurship education is to develop such competences, skills and attitudes as are needed in work life, independent of the person's position either as an owner-entrepreneur or as an employee. Developing the needed competences presupposes creating the kind of vocational education that trains the students towards their goals. For that reason it is utterly important to evaluate the ways and methods that the teachers use during education and develop them continuously.

In the future the need of competent workers in health and social services will follow both from the number of retired employees and increasing need of services. A clear message from work life to vocational education decision makers is that, in addition to single skills and knowledge, the workers will need more and more comprehensive competence and ability to react responsibly and creatively to their work and encountering new phenomena, for instance the need of private enterprises in the field of social and health services. This challenge was met by Oulu Diakonia College, and it was answered by including entrepreneurship education in the curriculum.

8. Discussion

Under current conditions of change there are things to be conscious of and to be avoided: retrospective identity formation emerges out of collective or individual narratives from the past and provide us with examples and criteria of the past for the present and the future. Prospective identities are essentially future-oriented and may rest on narrative resources, but ground the identity in the future. They are launched by social movements and are engaged in conversation to provide for the development of their new potential (Bernstein, 1996, p. 79).

Prospective identities of vocational teachers point to collective action and professional development activities.

The teacher's duty is tied to social responsibility which will appear as teachers' mental models, activities and ability to read weak signals. Today's students will be part of work life after 50 years. It means that teachers have an important task to educate tomorrow's successful workers who will be able to meet future challenges. To a greater extent in the future the well-being will have to be built from several employments, since there won't be permanent employments after the so called heavy industries have decreased. We shall have to educate and train survivors for communities which will become more and more complicated (Pietilä & Nissilä, 2014).

In times of rapid change professional identity of vocational teachers cannot be seen to be fixed, it is negotiated, open, shifting, ambiguous, the result of culturally available meanings and open-ended power-laden enactment of those meanings in everyday situations (Kondo, 1990, p. 24).

The core of vocational professionalism is an emphasis on collaborative, cooperative action between teachers, students and educational and occupational stakeholders. The dialogue between persons, environments and cultures is constantly shaping and reshaping personalities, cognitive and metacognitive capacities, emotions, social competences and work identities (Nissilä, 2013).

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