University-Business collaboration on tailor-made CEE A case story

B. Nørgaard

Assistant Professor UCPBL, Aalborg University Aalborg, Denmark E-mail: bente@plan.aau.dk

Conference Key Areas: University-Business cooperation

Keywords: Tailor-made CEE, equipment, purpose, identity and style

INTRODUCTION

The case story presented in the paper will be based on data collected during the Via Nord project. A project on introducing an approach for tailor-made continuing engineering education aiming at developing 80 courses in a collaborative setup between university and business - within a three year period finishing in 2014. The Via Nord project was funded by the European Commission and specifically by the European Social Fund, and the scene set is the northern part of Denmark, the surroundings of Aalborg University.

The overall aim of the project, to develop 80 tailor-made courses, turned out to be a more difficult task that expected. The cross-collaboration was a challenge and the recruitment of business to the project turned out to be more time consuming and demanding than expected when drawing up the application for the project. Additionally, even when a business showed interest in the process of developing a tailor-made course, it still was a lengthy task to actually develop a course and accomplish it.

This paper will contribute with new knowledge on the challenging process of cross-collaboration between University-Business and furthermore, it will disclose what goes on in the practise when actors engage in a process of developing tailor-made courses.

RESEARCH APPROACH

The research approach in this study is action research, which is defined by a participatory process concerned with developing practical knowledge in an attempt of improving e.g. life of human beings (Lewin, 1946; Reason et al., 2003). An action research approach walk very well hand-in-hand with the case studies methodology (Flyvbjerg, 2006), while 'a case study is an intensive analysis of an individual unit (e.g., a person, group, or event) stressing developmental factors in relation to context' (Flyvbjerg, 2011). However, choosing a case study can be difficult because

you do not know beforehand if the case will contain the criteria on which it was chosen. However, in the circumstance of the Via Nord case, it did provide the expected data on implementing a tailor-made approach of continuing engineering education (CEE) but furthermore, it provided data on the process of cross-collaboration between University-Business. The empirical data collected for the analysis are primarily dialogues, minutes of meetings and observations supported by various documents from the practise of managing and coordinating the Via Nord project.

DEFINITIONS AND THEORETICAL GRIPS

A tailor-made concept is not unequivocal and explicitly defined, it is often used in different contexts with different meanings and there is a variation in the mix of practise, which organises and coordinates a tailor-made course. Boud however, provides an operational attempt to describe the concept of WBL, which runs in the track of a tailor-made course. 'WBL programmes meet the needs of the learners, contribute to the longer-term development of the organisation and are formally accredited as university course' (Boud et al. 2001 p. 4). The involved partners in WBL collaborations are: the company, the employee, and the university academic staff and a long-term collaboration between the partners is often intended. The employees are the focal point, since they are responsible for negotiating agreements with both the superior manager and the university (Boud et al. 2001). However, in the case of the Via Nord, the companies were responsible for identifying learning objective as well as negotiating the agreement. The tailor-made course was characterised as a collaborative setup between business and university who develops a course based on identified learning objectives so that employees at their work continuously can go through a well-defined and tailor-made learning process. The course is supervised by teachers from the university and if possible integrated in a relevant development project internally in the company (Nørgaard et al. 2004).

To be able to clarify what is going on in such tailor-made practices', Spinosa's et al. concept of a disclosive space will be introduced as gripe of the analysis. This disclosive space concept is identified by four characteristics - equipment, purpose, identity and style. By applying Spinosa's concept to the analysis of the Via Nord case - will Spinosa then be able to give meaning to the poor engagement and time consuming process of developing tailor-made courses within the Via Nord project or are there other contextual influence on the process, which makes it challenging?

This cross-collaborative setup, the case will be analysed in regards to how well the approach (the tailor-made model) preformed in regards to the four characteristic identified by Spinosa - equipment, purpose, identity and style of which the first three are accounted for by Heidegger (1927) (Wind, 1974). *Equipment* will refer to the tailor-made approach – was the approach meaningful to the actors of the practise? Or in Heidegger terms was the tailor-made model 'ready-to-hand' or 'present-at-hand'? *Purpose* more obviously refers to whether the actors of the practise were able to find purpose in the activities – did the actors somehow see purpose in implementing this particular approach in order to e.g. gain new competences or obtain practical experiences? *Identity*, through action or through what we do – we build our identity. Did the actors of this practice of developing the courses build on their identity? In regards to the collaboration setup both business employees and university staff members analysed. *Style* is what makes it all come together

according to Spinosa. All individuals have a style – and if these styles match, collaboration is more likely to be successful.

ANALYSING THE VIA NORD CASE

The Via Nord project, with the aim of developing 80 individually and tailor-made courses, obviously took place in different settings, several places and involved a great number of people in the practices of designing these courses. To be able to clarify what was going on in these practices - Spinosa et al. emphasize that 'any organised set of practices for dealing with oneself, other people, and things that produces a relatively self-contained web of meanings, a disclosive space' (1997, p. 17). A disclosive space can take many forms and in everyday life we all deal with and act in numerous and different disclosive spaces. The webs of practices and meanings generated by the activities and tasks undertaken in the individual Via Nord courses will here be characterised as disclosive spaces.

Equipment

When looking at the activity in the Via Nord courses, it is obvious that meaningful things are encountered. Things are meaningful when they fit the practices people have for using them, such as working with a desk, chair, IT-software, EU rules and regulations etc. Had there been no practise for using them, they would have been encountered merely as artefacts or technologies in need of an explanation or in Heidegger terms they would have been 'present-at-hand'. The 'equipment' encountered in this analysis is the tailored-made approach - how did the actors receive the tailor-made approach for developing courses?

The tailor-made approach did, in writing, look very promising. It met the demands from various stakeholders (politicians, managers, researchers etc.) on flexible and relevant continuing engineering educations. And it was fairly easy to explain the approach to the academic staff members at the university but had they not known of problem-based learning to the extend they did, the concept would, very much, have needed further explanation. The companies, however, had no practice with e.g. identifying learning objectives; they were unfamiliar with the tailor-made approach and perhaps therefore hesitated to get involved in the Via Nord project. In other words, it was difficult to convince the companies to use the 'equipment' because the tool was unknown to them and therefore it did not fit with the practise they had for continuing education.

Especially the definition of learning objectives was un-known. What knowledge, skills and competences were needed among their employees? The project experienced several withdrawals due to the lack of knowledge on how to identify a need of competence development within the company. Very often the companies responded 'We will look into the opportunity and come back to you' but they never did! Or another company said 'Yesterday we had 8 employees, today we have 5 – I don't know what continuing education we need'? The financial crisis probably had an impact on the Via Nord project but some of these difficulties might also be traced back to the lack of knowledge of tailor-made courses and its dialogue based approach. The Via Nord project did not bring a ready-made course for the companies to jump-on to, but a concept based on dialogue, which needed more involvement than just pointing at a given course in a catalogue.

Purpose

The end-users of a tailor-made course are the management as the decision-makers and the employees as the learners partaking in the course, however it is important that both parties find 'purpose' in the course. It is well known that competence development is a management task - very much aligned with Holt Larsen who highlights that 'Learning on the job is a management responsibility (2002, p. 49). The fact that the responsibility for organizing learning at the job is a management responsibility does not mean that the employees' attitude towards learning is unimportant. Without the employees' personal engagement and motivation, no tailor-made courses would take place.

When meeting the companies and introducing the concept, most managements were keen on the idea of a course, which they, themselves, could decide the content of and it was delivered at the doorstep of the company – and even free of charge because it was an EU funded project. Yes, it almost sounded too good! And it was, it turned out that the managers had very great difficulties defining the learning outcome – what should be the purpose of the course. Like the cheerful manager who asked, so 'what courses do you have to offer?' And when replied, 'the course you need?' It was very obvious that he was taken by surprise and he was not able to identify a need of competence development within his company. However, this was a very common picture: the management did not have a clearly identified need which they were able to articulate not even when taking a bit of time, and get back to the project later. This general picture the absent of a clearly identified learning outcome is very closely related to the 'purpose' of the course.

The project experienced some companies who with great difficulties managed to identify some sort of competence needs. However, none of them made it through to the actual course because without clear purpose of the course (learning outcome), it is truly very difficult to maintain the driving force to continue the process. Not only as a company but also the employees, the learners need to see the purpose of their efforts – 'adults are not likely to get involved in learning that they do not get the meaning of or that they have no interest in' (Illeris 2009 p. 217)

Also, the academic staff members need to find purpose in getting involved in continuing engineering education activities, this however has to be seen in the light of, unfortunately, mostly barriers within university structure and processes. The incentive schemes did not at all meet such new activities as teaching individual continuing education e.g. each academic staff member has a research and teaching obligation, which is approx. 50 % of each calculated in hours.



Figure 1: Examples of teaching

The pillars above illustrate a situation where an academic staff member teaches a tailor-made course and a traditional university course both covering 10% of his or her timer. Teaching tailor-made courses, the teacher gets reduced research time with 5% and teaching obligation also reduced with 5%. On the other hand, teaching traditional courses only reduces the teaching obligation with 10%. Of course, from the perspective of the university, the grant from e.g. the European Social Fund did not finance the research time of the academic staff members and therefore, in order to balance the university economy, the 5% had to be financed by the academic's research time. This of course was a problem, since the academic staff did not do research in the companies. And furthermore in academic organisations staff I recognised through their research - therefore, having reduction in research time does not encourage academic staff members to find purpose for getting engaged in CEE activities. Not only did the incentive structure not support the activities in the Via Nord project - most academic staff members were already full-time booked because the university has long term planning or at least semester planning, which normally do not leave open time slots for unexpected work such as the individual courses. The feedback for academic staff was often 'unfortunately we do not have the possibilities and time to conduct such a course' (e-mail 21st January 2010) or 'I believe my answer will be, I would like to take part in an actual education programme with ECTS but I will not provide expert advice at a discount price' (e-mail 22rd November 2010). Nonetheless, the lacking support of the university structure and processes academic staff were in general helpful and most of them agreed to take the first meeting with the company in spite of underpayment and a lack of time. From dialogues with the academic staff, the understanding was perceived that many of them found the purpose in the obligation the university have in collaboration with the local business.

The analysis showed that the companies had difficulties in general with identifying the aim (learning objectives) of the course; in other words the purpose was not clear to them. So, not only was the 'equipment' unknown to the companies and generated some uncertainties; they simply also had difficulties identifying and articulating their need of competences. On the other hand, the 'equipment', the tailor-made approach, gave meaning to the academic staff to use in CEE, but they lacked the time and the payment was lousy - perceived from the perspective of the academic staff.

Identity

Spinosa emphasis 'identity' as being of vital importance for the involvement in action 'These identities are the meaning or point of engaging in these activities' (Spinosa 1997, p. 17). The collaborative setup in the Via Nord project brought along identities to the actors involved in its activities. However, these identities were merely characterised as being secondary to the identities the actors already had through the work they undertook in their respective organisations. Since the Via Nord was a timelimited project, the identities created by the activities in the project was also in some way time limited such as being a learner in a tailor-made course or a teacher of continuing education, but even though the project had closed down, the actors still had identity of graduate students of a 'university' course and the teacher still had identity as 'former' teacher of continuing education. However, the identities created by the activities were mostly additional identities since the actors already had identities of being managers, employees and academic staff at the university. The identity of being the manager most certainly was more acknowledged than being a student in tailor-made courses. But some of the employees might have found the new identity rewarding if they had no previous credit from university, being involved in the Via Nord might have touched-up their curriculum vitae.

Identity being the meaning or point of the actors engaged is not the obvious perception form the Via Nord actions, here identity did not appear as the driving force or the point of engaging in the activities. Apparently, there was really not that much to gain by the identity provided by the Via Nord since the actors already had occupations, which brought them identities. This lack of need of identity might have had an impact on the outcome of the project. If, like Spinosa emphasizes, the identities are the meaning of engaging in activities, the identity provided by a tailor-made course was not strong enough to drive the process.

Style

Having analysed equipment, purpose and identity, it is clear that the construction process is difficult. The intention was that actors should create tailor-made courses (disclosive space) through which they would reach their goals and fulfil their purposes. Spinosa's fourth characteristic 'style' refers to the fact that people are doing things in different ways and 'style is the ground of meanings in human activity' (Spinosa 2009, p. 20) style is what makes it all come together in the end. However, the style of the actors was very fragmented. There was the self-confident type who had great pride in his company and made an effort of showing it - even asked the academic staff challenging about the university's thermo graphic camera, the brand and the size – and how he did not miss the chance to underline that his camera was both better and bigger measured in pixels. On the other hand, there were the polite and gentle types who were cautious and humble, and almost looked with anxiety in their eyes when referred to the named of the academic staff with the title of 'professor' - and he said 'I don't think a professor will be necessary'. However, one common tendency of style among companies was that they did not reply – somehow they did not feel obligated to reply e-mails or calls concerning their preliminary expression of interest (learning outcome), not even to inform that they were not interested. In general, there seemed to be a style of not feeling obligated to reply to various enquiries or inquiries from the university or the academic staff members.

University academic staff members are researchers with a teaching obligation - this is the prevailing self-image of most academic staff members. At least they cherish

their research time even though they have strong obligations to perform and publish their research in select journals but research is where the acknowledgement is to be found, which may have some interferences on their 'style' and what matters to the academic staff.

FINDINGS

For the past decade, various initiatives to promote cross-cooperation of university-business have been explored in different settings, which have resulted in different models. But this cross collaboration aims further than at the courses itself; the structure, culture and processes of the institutions involved also have to support the collaboration.

The tailor-made model implemented in the case project was a dialogue-based model, which e.g. anticipated companies to be able to identify competence needs within their company and in collaboration with academic staff define learning outcome. This however turned out to be not as straight forward as expected because the companies were seldom able to articulate competence need, in general the dialogue-process was un-known to them and it did not fit the practise they had for continuing education. The academic staffs on the other hand were familiar with dialogue-based models and also the process of defining learning outcome in a university context, which they to some extend could transfer to a company environment.

When it comes to the 'purpose' the companies not being familiar with the tailor-made model and further having difficulties in identify competence need - obviously entailed great difficulties of motivating the purpose. On the other hand, the academic staff that did find the model 'ready-to-hand' but due to university structure and processes they still had difficulties finding the purpose of their involvement in the activities.

'Identity' and 'style' are both very dependent on the first two characteristics (equipment and purpose) and as it turned out, the tailor-made model being 'present-at-hand' to the companies it never really came to the point where identity and style could be analysed thoroughly within the practises of a course only some general findings were elaborated.

A thorough introduction to the model is crucial. This is a new practice for most companies, which need to be carefully explained and supported though out the phase of identifying the learning outcomes and further the progression in general has to be closely controlled and planned by a person assigned to the task. Especially the university structure, culture and processes have to be altered in order to ensure that the involvement in flexible and individual courses motivates the academic staff and further the semester planning has to take these new practices into account. These are some of the challenges, which need to be addressed in order to implement a tailor-made approach for continuing engineering education.

REFERENCES

- [1] Boud, D and Solomon, N 2001, Work-based Learning, A New Higher Education? St. Edmundsbury Press
- [2] Flyvbjerg, B 2006, Five Misunderstandings about Case-Study Research, Qualitative Inquiry (219-245)

- [3] Flyvbjerg, B 2011, Case Study, in Norman K. Denzin and Yvonna S. Lincoln, eds., The Sage Handbook of Qualitative Research, 4th Edition, Chapter 17, pp. 301-316.
- [4] Illeris, K 2009, Læring, Roskilde Universitetsforlag.
- [5] Lewin, K. 1946, Action research and minority problems. J Soc. Issues 2(4): 34-46
- [6] Nørgaard, B and Fink, F 2004, Continuing Engineering Education and Facilitated Work Based Learning, 4th International Workshop on Active Learning in Engineering Education (ALE)
- [7] Reason, P and Bradbury, H 2003, PhD course 2009, Design and Learning in/for Action, E-learning Lab, Aalborg University
- [8] Spinosa, C, Flores, F and Dreyfus, H 1997, Disclosing New Worlds, Entrepreneurship, democratic, and the cultivation of solidarity. MIT Pres
- [9] Wind, H.C. 1974, Erkendelse og Eksistens, Gyldendal ISBN 87-00-09181-