



PROMOTE PROFESSIONAL DEVELOPMENT IN AN INTERPROFESSIONAL COURSE

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Summary

The purpose of this presentation is to describe the course design and present results from the course evaluation. The course was developed as a part of the multidisciplinary Master of Medical Science program at Lund University, Sweden. The intent was to enhance lifelong learning, interprofessional learning and internationalization. The course Movement Science was a web-based course (7.5 ECTS). It was running part time during 10 weeks, with English as the course language. It was primarily designed for physiotherapists and occupational therapists.

The course was structured as a preparation for research which was strengthened by the pedagogical approach used; inquiry based learning. All course activities were focusing on the participants' information processing skills from observation and expressed questions to synthesisation. To facilitate peer-learning, peer-reviews and self-reflections were used.

The course was found to be valuable for developing professional skills. It has a sustainable structure and the pedagogical approach support the bridging between theory and clinical practice. The approach allowed depth and width in content. The course evaluation showed engagement and motivation.

When developing new courses within a program, many opportunities are available and there are also many issues to consider. Within a post graduate program that is intended for several professions there are several challenges to meet. The courses have to be attractive and meaningful for several professions. As the education is postgraduate lifelong learning aspects are relevant as courses in best case scenario should fit in to the participants' professional life. In postgraduate courses e-learning has a number of advantages. Many potential course participants may not have applied and participated had they not had the geographical and time independence.

When courses are delivered in an e-learning format, internationalization can be realistic for more course participants as it does not require any travel and thereby additional costs. Importantly in our decision making was our previous experience [Euler 2007] that the technology enhances the learning when the pedagogical approach allows it.

When offering online courses it is important to facilitate the use of the homepage, so that students from a diverse background can participate. The students can focus on the course content and take advantage of the homepage and not experience the technical issues as time consuming obstacles. This is of particular interest in courses aimed to invite course participants not used to interacting in e-learning activities or using the web. There is a need for tailored information that is easily accessible and can be frequently repeated. Screencasts or podcasts (including a short video-recording with a speaker voice) can effectively support students and inexperienced teachers [Shantikumar S 2008]. From the experienced teachers perspective there is also a need to use cost-effective, sustainable techniques that enhance the learning process, and are efficient for the teacher.

The challenges and opportunities for us were to develop an interprofessional online course with a pedagogical approach that could enhance lifelong learning skills.

Courses for different professions can be designed for multi professional education or interprofessional education. In our opinion it is highly valuable to take advantage of the opportunity and not only make the course multi professional, but interprofessional as well.

“Interprofessional education is those occasions when members (or students) of two or more professions learn with, from and about one another to improve collaboration and the quality of care.” [CAIPE 1997&2006]

A purpose of interprofessional education is to maintain high quality of the specific knowledge within a course, but to broaden students' perspectives on attitudes, behaviors and professional roles. Another important aspect is to promote a common language within different professions. Course participants should learn to understand the content both from their own and others' context. This should enhance collaboration and communication. The background idea is that by implementing this in education, team work should become more efficient and safe in health settings.

Evidence based practice has become a popular approach when describing health care delivery. It means that for the decision making, the best available research should be integrated with patients' values and clinical circumstances [Haynes R et al 2002]. This approach requires skills in defining questions, information searching, selecting information, critical appraisal, and then the ability to interpret, communicate and implement the findings in the decision making. Many of these skills are easily integrated in an online teaching environment.

E- learning can be delivered using many different approaches. In flexible learning (e-learning) our vision is that it is important to ensure that the course participants are engaged, motivated and inspired to work and learn. The approach we are using is learning centered and allows participants to be trusted to identify their professional educational needs in relation to the learning outcomes. The pedagogical approach can be described as Inquiry based learning (IBL), where learning outcomes are the starting point from which the participants own needs can direct the learning and working process [Tosey & McDonnell 2006]. As part of the learning process the course participants have the opportunity to design their individual schedule and time budget [Rangachari 2006]. This is possible since the students individually have to select their own examination forms, from a menu of options and in relation to the individual researchable questions. Out of 200 study hours, 90 hours are assigned to mandatory activities and 110 can be planned independently. The course participants are given a set of 11 assignments (for examination) to choose from in order present their arguments, example given: commentaries, mini-lecture, discussion leader, individual exploration, research proposal, book/chapter review, case report, poster, poster related to other assignment, journal club, and developing a quiz. According to the student activities webinar/and or face-to-face events could be planned.

All course activities are focusing on the participants' information processing skills from observation, expressed questions and critical appraisal to synthesis and communication including reflection on your own and others' learning.

Lifelong learning skills-practice implemented in a course can be recognized as opportunities designed where course participants can develop skills which will be useful to continuously learn after the course. The skill of learning how to learn can involve aspects such as; defining questions, information searching, selecting information, critical appraisal, the ability to interpret information, communicate and implement the findings in decision making. One may note that these are the same as those required for evidence based practice, as described above.

The purpose of this paper is to describe the course design and present results from the course evaluation.

A new course, Movement Science – Practice, was developed as a part of the multidisciplinary Master of Medical Science program at Lund University, Sweden. The intent was to enhance lifelong learning, interprofessional learning and internationalization.

This course was primarily designed for physiotherapists and occupational therapists at post graduate level. Movement Science was a web-based course (7.5 ECTS). It was running part time during 10 weeks, with English as the course language.

The course was structured as a preparation for research which was strengthened by the pedagogical approach used; inquiry based learning. All course activities were focusing on the participants' information processing skills from observation and expressed questions to synthesis. To facilitate peer-learning, peer-reviews and self-reflections were used.

The role of the teachers was to facilitate the process by asking questions. First feedback was given, when the students formulate researchable questions in relation to the learning outcomes and critical appraisal. Secondly, when the assignments were selected and a time budget proposed. The third formal individual feedback from teachers was when all assignments were presented. During the course facilitating questions and commentaries were part of the course activities, as required by the course participants.

When the course was completed, the students evaluated their learning process and progress in a formal course evaluation. It was related to the learning outcomes and the "lifelong-learning survival skills" we anticipated to develop throughout the course.

High motivation and relevance to clinical practice were experienced as the participants could identify their own educational needs and make their own choices. From the teachers' perspective, the course was valued as having a sustainable structure and a pedagogical approach that supported the bridging between theory and clinical practice.

The results from the course evaluation showed that the rating of learning and progress in relation to the Learning Outcomes was on average 4.8, range 4-6. (all ratings were from 1 = very poor, to 6=very high), Figure.

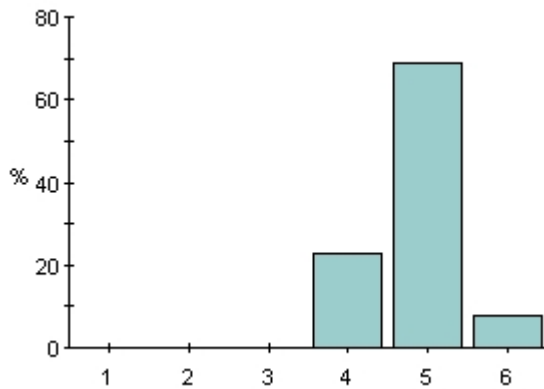


Figure. Rating of the learning and progress in relation to the Learning outcomes (n=13)

Among the comments of the learning in relation to the learning outcomes were;

"This course is a quite effective way of forcing one to think in a more scientific way."

"I have certainly learned how difficult it is to do research, but also how fun it is. The progress during the course has been clear to me during my travel but specially now, looking back."

In relation to develop skills to apply a scientific approach, the mean of the respondents ratings were 5.3, range 5-6 and formulating researchable questions; mean 4.8, range 4-6. The comments indicated an awareness and reflection of the progress;

"I have learned much and think I'm more critical in my approach to articles and other information sources now."

"Much easier this time because I knew from last year how much I could cope."

When asked to rate the use of different assignment options (such as making meaningful choices to facilitate your learning process) the mean was 4.7, range 3-6 and selecting study aids mean 4.7, range 1-6. The comments reflected a positive attitude towards the self-directed approach;

"very happy with my choices, I really enjoyed"

"I like that and I know that if I have a chance to go on another course I now know how to start and how to proceed.."

"I think the open way of letting us choose was very good. It makes it more real and also it gives you the feeling of that you have done something for yourself"

"I've tried to look on the different Screencasts and used many of the other study aids and I think they have been very helpful."

"The course library was just what I needed."

When evaluating the learning and progress in relation to making and using an individually designed time budget the mean was 4.0, range 2-5. The comments reflected the difficulties encountered and inexperience in taking that responsibility in a learning environment.

"catastrophy at the first assignment. Much better later on"

"Very good to do. I misunderstood it in the beginning, but afterwards it was good to have. In the next course (if it will be) I more know how to use it."

"catastrophy at the first assignment. Much better later on"

As part of professional development the progress of writing & organization skills (mean 4.8, range 3-6), and the use of citations and commenting on references (mean 4.6, range 2-6) were evaluated. The evaluation of sharing your knowledge (through teaching, designing a

poster, peer-review, discussions) was rated a mean of 4.1, range 1-6. The comments show awareness of the development and the value of expressing yourself in an interprofessional and international environment, learning with, together and about each other;

"I think I learned during the course to be more precise and more organized, but unfortunately it was hard to keep the time schedule and therefore I think I could have done it even better."

"That makes one read with a more open mind. And for me it's very useful to have to write down a summary or some important facts."

"learned a lot from my course participants!"

"Challenging, exciting and fun. A challenge to do it in English."

"the best part of the course. I was happy to get acknowledge for my hard work and was interesting to hear others'."

Finally the educational relevance (mean 5.3, range 1-6) and global impact (mean 5.1, range 4-6) was evaluated.

" The course design is interesting and challenging and requires some training, I think. Hopefully I will be even more prepared and more confident for this the next time.

" I learned a broader way of thinking and to present my assignments."

" Certainly! I have discovered new sides of myself. I thought I was a single (individual) learning person, but I have discovered that being able to learn new things with IBL makes the collaboration with colleagues so interesting and useful."

Conclusions

Our conclusions are that inquiry based learning and e-learning is a valuable combination for developing professional skills. The course has a sustainable structure and the pedagogical approach support the bridging between theory and clinical practice. The approach allows depth and width in content. The course evaluation showed engagement and motivation.

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