Lifelong Learning – A Challenge for Education in Health Informatics

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Abstract

The health informatics field becomes more challenging as the technology advances. Health care professionals, with understanding of modern technologies, are expected to improve the quality and efficiency of health care. In health care effective use of information and communication technology sets needs for lifelong learning. Especially, improved knowledge and skills in implementation of health informatics is of high importance. To meet these needs the continuing educational program (40 ECTS) has existed since 1997. The aim of this study is to explore the success of learning and pedagogical methods, as well as to analyse the contents of the education modules. The education is based on the use of activity theory. The outcome measures of the program analyzed in January 2010 and feedback from the participants has been largely positive.

Keywords:

Education, informatics, professional

Introduction

Centre for Training and Development, Aducate (Kuopio), organized the first major continuing education programme in Health Informatics (40 ECTS) in 1997–98. At current (2009 - 2010) the 7th programme is in progress based on the IMIA guidelines for HI education. The participants (N=12) of this programme have multi-disciplinary background, including professionals from social and health care, information systems and IT. The programme (Table 1) is based on lectures, small groups working and web-based education. Discussion is promoted as an interactive method. Active use of workshop techniques and on-line training is facilitated by the course mentors.

Methods

The evaluation methods included summative assessments and open-ended questionnaires. The data (N=12) were analyzed in January 2010 using the content analysis methodology.

Table 1- The content of the modules (I-IV)

Module I	Information management in health care Security and privacy issues in health care Managing change
Module II	Electronic patient record systems Developing activities and services through information systems development Architectures, terminologies, ontology Future perspectives
Module III	Project management Evidence-based practices Information technology assessment Implementation Future perspectives
Module IV	”Real-life” exercises as project works

Results

As strengths of the programme the participants found that the programme matched well with their expectations, activity theory was highly useful and supported collaborative learning, co-operation with the experts was regarded highly important, online materials supported effectively the learning process and especially the project management skills. As a weakness of the programme, the project work was regarded as highly demanding and time consuming when conducted within the normal working days.

Conclusion

Dynamic development and utilization of health and medical informatics, as well as effective use of information and communication technology sets needs for lifelong learning. As an answer to these challenges, the continuing education is of particular importance. The results will be utilized in further development of the programme, and can contribute to positive development of the skills of participants with versatile background in healthcare.

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