

Postgraduate long distance learning courses for health professionals

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Introduction
Methodology, materials and evaluation
Outcome
Conclusions
References

Introduction

Long distance learning courses constitute an innovative tool for professional scientific updating. Thus, technological drives, such as the use of computers, internet and videoconferences (RDSI), contribute to achieve a high quality in this kind of education. This type of teaching has been successfully applied during the last few years, particularly in the Economics and Business areas, due to the lack of time of potential students and the advances for intercommunication.

Research and development about open and distance learning should include student-teacher interactions, organisation and design of the learning process, building educational and knowledge systems, "virtual" teaching, evaluation development of new technologies and methodology innovation.

In this context, the purpose in developing Nutrition and Health oriented Long Distance Postgraduate Courses is the application of this methodology to facilitate the continuing education of professionals. Information and acquisition of new skills about Nutrition, Dietetics and several related topics are specially important due to the constant advances in these areas and the geographical scattering of many physicians, pharmacists, nutritionists and other health professionals.

The main aims of the course are: a) to update terms of Nutrition and apply them in the day-to-day practice b) to offer the knowledge and tools to make and evaluate balanced diets according to nowadays criteria and c) to give capacities for the dietetic advice and for the implementation of therapeutic diets in different pathophysiological situations.

Methodology, materials and evaluation

The proposed teaching methodology is based on an individual guided teaching through written materials and software as well as the resolution of questions, which is supported by the advice of members of the scientific staff through different ways of communication: tutorial sessions by personal meetings, telephone, post-mail, fax and e-mail; broadcasting of videoconferences and sessions about selected topics which allow the direct relationship between students, the speaker and other academic members; a web site (www.unav.es/farmacia/graduados/cdist/) with autoevaluation systems for the different courses through pages restricted to the registered students; and the opportunity to attend to practical sessions at the University with demonstrations and case trials.

Other materials, which constitutes the basis of this kind of teaching are: course guides, several specific textbooks and support material with conferences by video, CD-ROM, software to evaluate the nutritional state and to implement therapeutic diets in different pathophysiological situations and exercises notebooks.

Courses evaluation is usually developed through a multiple choice test which are structured according to the topics and the length of each course. Also, case solving and guided questions are offered in new courses. Passing the exams is necessary to obtain the Diploma given by the University of Navarra.

Outcome

Long distance learning courses implemented by the University of Navarra along the last five years are the following: Nutrition, Dietetics and Diet Therapy (NDD; *five editions*), Nutrition in the Infancy and Adolescence (*three editions*), Nutrition and Obesity (*two editions*), Immunity and Farmacotherapy (*two editions*) and Foods: composition and properties (*one edition*). During the two first years there was just the general course (Nutrition, Dietetics and Diet Therapy). Different monographic courses were included from the third year as a consequence of the student suggestions. New courses are in preparation.

The students interested in these courses are: physicians, pharmacists, nurses and also nutritionists and other health professionals.

Conclusions

Long Distance Teaching was established to provide postgraduate studies for health professionals, whatever their work circumstances were. It provides continuing development opportunities for students who are strongly motivated to learn in order to achieve academic and personal goals. They are very aware of the advantages and benefits of this type of learning courses because they can make academic links in a way that would otherwise be impossible. These type of courses also provide students with teaching and assessment that is specific for each course.

The University of Navarra has an expertise of five years in Long Distance Courses about Nutrition and Health. The courses have benefited students from Spain, Portugal and several Latin-American countries such as Argentina, Brazil, Colombia, Cuba, Chile, Ecuador, Mexico, Nicaragua, Peru, Dominican Republic and Venezuela. Currently, a new course is being prepared to be followed by English speaking students.

References

- Agius, R.M., Bagnall, G. (1998) Development and evaluation of the use of the Internet as an educational tool in occupational and environmental health and medicine. *Occupational Medicine*, vol 48, pps 337-343
- Bartolome, A. et al. (1997) *A study about the systems, methods and tools used by Institutions and tutors/professors in Open and Distance Education. Technology Enhanced Evaluation in Open and Distance Education*. E.U. Socrates programme. (<http://www.doe.d5.ub.es/te/teeode/report/index.html>)
- Crudele, M. (1998) Assessing the use of low cost PC-based ISDN videoconferencing in hospital training. *Medicine Information*, vol 9, pps 760-763
- Eamon, D.B. (1999) Distance education: has technology become a threat to the academy?. *Behaviour Research Methods and Instrumental Computation*, vol 31, pps197-207
- Gomez E.G., Ehrenberger, H., Murray, P.J. and King, C.R. (1998) The impact of the national information infrastructure on distance education and changing role of the nurse. *Oncology Nursery Forum*, vol 25, pps16-20
- Kalish, M., Lewandowsky, S. and Dennis, S. (1999) Remote delivery of cognitive science laboratories: a solution for small disciplines in large countries. *Behaviour Research Methods and Instrumental Computation*, vol 31, pps 270-274
- Kingsnorth, A.N., Campbell, J.K. and Vranck, A. (1999) Teleteaching: a practical and economical method of delivering surgical education. *Annals Royal College Surgery England*, vol 81, pps 66-70
- Lee, W.R. (1981) Development in education in occupational medicine in the United Kingdom. *American Journal International Medicine*, vol 2, pps 203-208
- Martínez, J. A., Santiago, S. and Astiasarán, I. (1999) Long-Distance Learning Course about Nutrition, Dietetics and Diet Therapy. First Pharmacy Virtual Congress. Granada.
- Peterson, M. (1999) Benefits and potential dangers of online CME. *Academic Medicine*, vol 74, pp 750
- Poley, J.K. and Bisbee, D. (1999) Effective poultry programming in the next century. Innovative applications of distance education: getting into the knowledge marketplace. *Poultry Science*, vol 78, pps 658-659
- Rodríguez, M.C., Larralde, J. and Martínez J.A. (1997) Computer-assisted instruction in nutrition: a creative tool for medical education. *Medical Education*, vol 31, pps 229-231
- Waddell, D.L., Tronsgard, B.A., Smith, A. and Smith, G. (1999) An evaluation of international nursing education using interactive desktop video conferencing. *Computer Nursery*, vol 17, pps 186-92
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