

ICTS AT THE SERVICE OF TEACHER COLLABORATION NETWORKS: BASED LEARNING, DIGITAL PORTFOLIO AND RUBRICS AS ELEMENTS OF INNOVATION AND TEACHING IMPROVEMENT

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Abstract

The main objective of this paper is to describe a project whose main purpose is to promote innovation and educational improvement in a number of subjects contributing to the quality of the titles corresponding to Grade of Primary Education, Early Childhood Education, Educational Science lessons physical and Sports, Law and Nursing that are taught at the University of Seville. This project is in line with the specific objectives set out in the Call for Grants for Educational Improvement and Innovation 2013-2014 in its call design activities relating to learning support for innovative and / or encourage the use of technology information and communication as tools to support teaching; create and consolidate an interdisciplinary network of faculty to provide new insights into the use of innovative teaching methods, and create new teaching materials. The project presented here is based on the experience gained by the participating teachers, which has extensive experience in implementing innovative teaching projects.

Keywords: innovation, improvement, teaching, ICT.

1 INTRODUCTION

The main objective of this project is to promote innovation and educational improvement in a number of subjects contributing to the quality of the titles corresponding to Grade of Primary Education, Early Childhood Education, Science, Physical Education and Sports, Law and Nursing teachings taught at the University of Seville. As specific objectives set out in the Call for Grants for Teaching Innovation and Improvement 2013-2014 and his call are assumed in this project are:

Design activities to support learning for innovative and / or encourage the use of information technology and communication as tools to support teaching.

Create and build an interdisciplinary network of faculty to provide new insights into the use of innovative teaching methods.

Create new teaching materials.

Under the mode of Collaborative Networks for Educational Innovation, the project is aimed at improving a network of subjects interrelates by:

- The development of a methodological innovation proposed approach based on problem-based learning (PBL) and peer through rubrics.
- The development of teaching resources to be incorporated in the implementation of the courses and will be available to the university community on a website that will act as a repository and will be designed and implemented by the Secretariat of Audiovisual Resources (SAV).
- The development of an educational video that collects various practical experiences developed during the innovation project.

Our purpose is based on designing, implementing and evaluating different teaching strategies focused on participatory methodologies and formative assessment; and share information to improve teaching. The reasons for choosing these themes for the development of the innovation project are:

Adapt our teaching activities to methodological approaches and assessment, ruled by the European Higher Education Area (EHEA). Particularly compared to these two questions: a) How can perform formative assessment in the particular circumstances of a university, so I can serve as an example or encouragement to the university community? b) How can develop participatory methodologies in practice as the ABP?

Renew the methodology and evaluation focused on both student learning, applying to be an active and autonomous agent in this process.

Analyze and share individual experiences of the classroom, looking for solutions according to our approach. The real value of this project affects the possibilities for innovation that facilitate the professional development of teachers involved, which they share experiences, uncertainties and doubts as well as finding solutions.

The current project is proposed based on the experience gained by the participating teachers, which has extensive experience in implementing innovative teaching projects. Serve showing the relationship of innovation projects that have participated in the teachers involved (Table 1):

Table 1. Experiences in teaching innovation by university faculty.

Roles and responsibilities of the teacher-tutor in the framework of the European convergence: development and implementation of a tutorial program for university students.
Teaching psychology of groups and organizations through collaborative research projects. approaching the credit in the European higher education
Mentoring support learning and tutorial in the right career
Learning in the context of European convergence: developing models of action research in which students analyze the formation of older people in the classroom experience
An active knowledge construction methodology in group: cooperative learning
Development of a participatory methodology through training in assertive communication skills
Comparison between learning styles and rates of return and abandonment of a sample of university students
The teacher-tutor university in the European Higher Education Area
Promoting teamwork in the largest student body of the University of Sevilla
Improved teamwork skills and communication in university students
Assessing the social climate of the students in subjects where webct virtual learning platform has played a leading role
Development of a tutorial program (pat) for university students in the context of European convergence: towards quality education
Support and promote the activities of educational innovation that teachers put into practice in the teaching of their subject in order to improve the quality of teaching
Encourage teaching reflection, creating educational resources, innovation teams and groups of educational research to help improve university teaching
Discovering the recent educational past from oral history (II)
The use of new tools to develop and implement the Teacher Guide ECTS degree of Pedagogy
Preparation of materials in Red
Developing skills workshops extracurricular critical press
The portfolio as a method of training and innovative learning in higher education
Implementation of innovative teaching-learning and assessment in the new subject of Corrientes Contemporary Education Grade Children
Education, identity and immigration: historical factors and current
The new professional skills of teachers in multicultural contexts
New Strategies in the Teaching of the Course of Educational Planning and Forecasting from a professional and Practical approach
The educational experience of Pedagogical Museums: development of new techniques for learning the history of education in Spain
Joint development of teacher-student online learning materials for the subject Educational Policy and Legislation
Oral memory and school memories
I UV-US Educational Travel: Catching historical educational suitcases in Valencia to visit and learn about the University of Seville
Implementation of innovative teaching-learning and assessment in the new subject of Corrientes Contemporary Education Teacher Grade Children
An ethical and participatory look at Pedagogy Practicum Grade
Personal Learning Network (PLN): Escola i Historia 2.0

2 THEORETICAL FRAMEWORK AND OBJECT OF STUDY

Teaching practice is analyzed, questioned and rethinks to learn collectively (Knight, 2005), for innovation in the classroom, to influence the professional development and seek to encourage new commitments in the students in collaboration with faculty (Benito, Cruz and Icaran, 2005; Margalef and Alvarez, 2005). To Zabala (2003-2004) innovation not only looking to do different things, but do them better maintain the changes over time. This process requires certain attitudes and skills by teachers, among which are: openness, flexibility to adapt to changes and make necessary adjustments gradually, update knowledge and educational resources to articulate new teaching methods and formative assessment, avoiding improvisation and improving teaching practices that seeks to create viable and useful changes, involving actors (students and teachers) and the institution (department, degree, college and university) (Hannan and Silver, 2006; Zabala, 2007). In addition, a set of personal and professional characteristics that require continued involvement and individual commitment that seeks to improve teacher professional development.

The work of designing and implementing PBL modules undergraduate degrees in Elementary Education Degree, Degree of Physical Activity and Sport Degree of Law and Bachelor of Nursing to develop in this course 2014/2015 allow us to gather evidence that the model provides positive elements such as developing self-regulated learning by the students themselves; address specific professional and real problems can be motivating for students; enhance a custom and original work based on a project, providing added value of creativity that will be very instructive (Ortega et al., 2010). This is consistent with the teaching guidelines that inspire the European Higher Education. According to Ortega et al. (2010) there developed PBL experiences that recommend a short, but well planned prior training of students to take the ABP model; systematizing the cross-faculty support for the implementation of the model. In this sense, our project is based on the premise consider the following optimization strategies: a) improving communication and exchange of educational tools and resources among the teaching staff; b) optimization advice when projects are in the process of realization; c) improvement of assessment rubrics of products delivered by the students; d) detailed log of the level of achievement of the specific competencies of final projects (Fernandez Garcia, Case, Fidalgo and Arias, 2006).

More specifically, as specific objectives set out in the Call for Grants for Educational Improvement and Innovation in its call 2013-2014 University of Seville, which are assumed in this project are:

1. Design activities to support learning for innovative and / or encourage the use of information technology and communication as tools to support teaching.
2. Create and consolidate an interdisciplinary network of faculty to provide new insights into the use of innovative teaching methods.
3. Create new teaching materials.

Under these objectives, in the context of this project innovation and teaching improvement propose a more operational way the following objectives:

- a) Apply the methodology ABP partial or comprehensive manner by the subjects involved.
- b) Develop cooperative and group activities based on real situations that students will have to solve in relation to the use of ICT and digital portfolio.
- c) Design of formative assessment instruments such as rubrics that allow hetero, peer assessment and self-assessment of the socio-intellectual student products.
- d) Design and implement a repository march (website) innovative teaching resources for the university community.
- e) Meeting new innovative proposals by attending the 7th International Conference of Education, Research and Innovation (ICERI2014).
- f) To enhance the impact of innovation through an article that exposes the main results obtained in this project and to have an impact in the scientific community.

3 METHODOLOGY

In terms of methodology, the foundation of our innovation is based on: a) Acquire a greater commitment as teachers, students and closer to breaking with tradition. b) Develop methodological proposals consistent with democratic practices assessment, driving the role and responsibility of the students, based on dialogic learning and not only guided by the rating.

Among the activities that we consider particularly important is the training and retraining of teachers participating in the project. Thus, the opportunity to attend the 7th International Conference of Education, Research and Innovation (ICERI2014) to be held in Seville in the month of November as a way to share with other experts innovative experiences in the field of education arises and research. In this line, we intend to elaborate an article based on the main results of the innovative experience, would be published in English to achieve the greatest possible impact on the scientific and educational community. It is also important to learn from innovative experiences in other university contexts successfully as in the case of the Autonomous University of Barcelona, for a visit by five teachers (one per grade involved in the project) participants arises project during a stay of two days that will see up close how the PBL methodology under standards of quality and excellence in teaching is implemented.

The main methodological proposal which we break is the Problem Based Learning (PBL) as one of the paradigms that better fit the diversification of subjects included in this project. In this sense, it is the cooperative student learning as one of the pillars, which encourages teachers to propose interesting activities to students, originating from close to reality regarding the students, and where the debate on progress possible and results that one develops in the context of each subject. Another of the basic pillars of the ABP is the continuous evaluation of the learning process based on evidence and ongoing feedback from the learning acquired by students.

The ABP is developed based on the analysis of real interest centers, facilitating interdisciplinarity between different subjects and deeper intricacy between theoretical and practical aspects of the same. It is therefore that teachers assume a guiding role in group and cooperative processes of students, learning objectives and proposed facilitating the acquisition of generic skills such as public speaking, for information or write a report on college students.

4 RESULTS

In connection with the formative evaluation is necessary not only innovate through new assessment tools, substitutes or complementary to the examination, but requires: a) Place the student as protagonists of their learning process. b) Generate a process that guides all means serve a valuable and deep learning (self, meaningful and useful.) In short, an assessment in support of learning and as a reference for teacher quality. Continuous and formative assessment is supported by a review of the student learning process, which allows for an improvement of the same, being a central aspect of our training activity.

To do this, the development of tools for assessing the methodological innovation as they pose are: educational video produced by students in each subject with the guidance of teachers; digital portfolio developed by consensus by the network of teachers; publication of common resources and educational materials developed in each of the subjects (eg, evaluation rubrics used), and repository of experiences and teaching innovation improves on the website created for this purpose innovative aspects.

5 CONCLUSIONS

No doubt that the innovation project and presented improvement allows us to clarify some of the uncertainties about the implementation of a formative or ongoing evaluation of university students.

The fact reflect together, talk about what we do and address the obstacles that occur every day in our classrooms, enriches us as teachers to share with others. To do this we propose the creation of a web-repository to serve as experiential referent faculty. It's about creating a space in which to share experiences by encouraging innovative use of ICT in our classrooms and in the group of teachers who are part of this project. We believe that teamwork and shared reflection group faculty bring greater job security to face something different and innovative. It is make a commitment to professional development to improve the quality of university teaching.

In the innovation process presented here, the focus of our proposal is based on participatory training methodology and evaluation are implemented in the subjects of several university degrees. The use of alternative instruments to traditional, such as the digital portfolio or assessment rubrics, will improve the quality of student participation in individual and group activities, generating significant changes in the way we understand the interaction processes of teacher and student teaching.

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