

Assessment, Training and Innovation on Basic competencies in Secondary Education: ICT, Information Literacy and Conflict Resolution (ATI-LINCO)

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Abstract

The ATI-LINCO is an interdisciplinary national research project led by the Research Group “Evaluación Educativa y Orientación” (“Educational Assessment and Guidance”) at the University Institute of Educational Sciences (IUCE, University of Salamanca, Spain). Its focus calls the attention on key skills assessment, training of Secondary school teachers in Basic competences and the implementation of innovation processes.

In the first project (SEJ2006-10700) the research interest aimed at the assessment of Basic Competencies in high school students, obtaining enough evidence as to move on a second project (EDU2009-08753). In this second attempt, the research questions about the assessment and training of secondary school teachers were divided into two basic skills:

information literacy and conflict resolution competences. Finally with the ATI-LINCO project, the interest is to reverse the results of the evaluation and training on innovation processes in the secondary school setting.

The Project themes are: skills assessment, teacher training, Innovation in secondary education, information literacy, conflict resolution and Information and Communication Technologies (ICT) as integrate tools supporting the entire project. The research methodology is different and adapted to each of the objectives proposed.

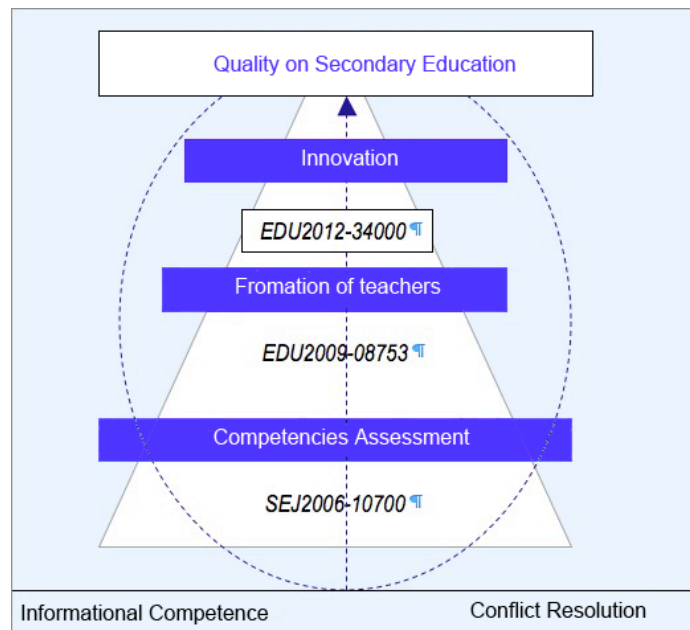
On the one hand, our goal is to continue with the diagnosis of student key skills, that support learning. On the other hand, we propose an experimental design to test the ICT effectiveness in a training program for skill development in teacher training schools. On the other hand, we intend to frame an educational innovation project based on Basic Competencies through an interactive process of action-research. The ultimate goal, therefore, is contributing to improve the quality of the Spanish Educational System in Secondary Education

Keywords: key competencies, information skills, skills for conflict resolution, Program Evaluation, teachers training, educational innovation, secondary education, ICT.

1 Introduction

The present project was approved at the Spanish Ministry Congress, with responsibility for Research and Development with reference to EDU2012-34000, with financial help from basic open research, in the context of then VI National Scientific Investigation, Technological development and innovation 2008-2011, Education sub program. The period of execution is from 2013 to 2015 and it follows the two consecutive previous projects: SEJ2006-10700 and EDU2009-08753, being carried out by The Education and Orientation evaluation (<http://ge2o.usal.es>), within research group (GRIAL), part of the Investigation team inside of the University <<University Institute of Educational Science>> (IUCE), at the University of Salamanca (Spain).

The first project(SEJ2006-10700) was mainly about the key role of evolution competences, particularly, informal competency, in Secondary education students (Rodríguez Conde, Olmos Migueláñez, Pinto Molina, Martínez Abad & García Ríaza, 2011; Rodríguez Conde, Olmos-Migueláñez y Martínez Abad, 2012), with results which helped us carry on with a second project (EDU2009-08753), basing the problem of investigation around the **evolution and formation of the teaching team of secondary education** in two basic responsibilities: informal responsibilities and social responsibilities ((Rodríguez-Conde, Martínez-Abad y Olmos-Migueláñez, 2013; Torrecilla Sánchez, Martín Izard, y Hernández Ramos, 2012). This third project concludes the cycle, looking at the results of the evolution and the training, about the proceedings of **innovation**, within the centres of secondary education (students aged 12-16)



The interest of the European Union (European Union, 2000) in this type of research is obvious, because the cycle of **educational evaluation and innovation** forms part of the strategic agenda in the area of education, as is the development of the key area of productive team networks. Citizens' competence development focused on the demand for the working environment of the XXI century, and should form of a fundamental concern for the government.

2 Description

The purpose of this educational research is to achieve important competencies among Secondary Education Students and in teachers of that level, based on the use of information and communication technologies (ITC), to apply and evaluate the innovation educative innovation project, to contribute to the last project, with answers from applied empirical investigation the better quality of learning in our country.

1st Topic. *Competency Evaluation: informational competency (Informational Literacy or ALFIN) and resolution conflicts competency*

2nd Topic. *Teachers and innovation training in secondary education: informational and social competency (Conflict resolution)*

3rd Topic. *Information and communication Technologies (TICs) as questioner tools for the working project.*

2.1 Objectives

Concern about quality of education is the reason why so much importance is given to key competencies, both in consideration of the base of the curriculum of compulsory learning and as an important variable in the level of training of Secondary Education teachers. Evaluation and training drive towards an implementation innovation in education centres. We believe that research that which sets out a strategy of evaluation and innovating training in Secondary Education centres, can contribute to increasing the state of scientific knowledge about the process, indicators and results of obligatory education and provide strategies to improve.

Specifically, the objectives will be:

Study 1. Perform a diagnostic evaluation of the level of informational and technological competence of students and teachers in secondary education, in order to provide empirical information that can facilitate decision making.

Study 2. 2.1. Design, implement and evaluate a training course in the areas of skills studied in secondary schools of at least two autonomous communities (Castilla y León and Andalusia), from the pilot program implemented in previous research (ef-TALCO). **2.2** Design, implement and evaluate, at least one innovation project in a educational center in each region, which intervenes in the development of these skills in high school students.

The final goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which will enable their transfer to other centres and educational contexts in those areas successfully tested for quality improvement of education in the information society and media.

2.2 Outcomes/Results

Study Result 1:

Once analysed, the **results** will be released and a **final report** will be finalised, specific for the first fase of the study, in which the conclusions will be obtained about the level of analysed key competence and teaching with appropriate recommendations for the same improvement.

Study 2.1 Results:

The **results** and a **final report** of this last phase will be published online for free, under Creative Commons, which helps explain the program to R & D + i, which is funded from the Ministry of Economy and competitiveness. The final goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which enables their transfer to other centers and educational contexts in those areas successfully tested.

Study 2.2 Results:

The **results** and prepare a **final report** of this last phase, would be published in online format free, under Creative Commons, which helps explain the program to R & D + i, since funding from the Ministry of Economy and competitiveness. The ultimate goal is to make visible the process network and the results obtained in this Innovation Project in Secondary Education Core Competencies, which enables **their transfer to other centers and educational contexts** in those areas successfully tested for quality improvement of education in the information society and media.

3 Conclusion

Competency-based education prepares students to continue learning once their schooling has finished and to meet the challenges of adult life. The school is not the only source of information, this institution is faced with the problem of having to determine content and skills that are of interest and benefit to students in school life and in their extracurricular future. Since it is impossible to accumulate all this knowledge during the period of compulsory education, the school needs to train students for learning that can provide them with the ability to continue learning independently throughout their lives. We understand information literacy to be a key competence for development and the necessary development of people after their school life (Rodríguez-Conde, Martínez-Abad and Migueláñez Olmos, 2013).

Research into **virtual spaces on the Internet**, such as potential training spaces (Rogado Gonzalez , Rodriguez -Conde , Olmos - Migueláñez , Borham Puyal , Garcia - Peñalvo , 2012) , has been carried out since the days of Web 1.0 , that is to say of the WWW, the network of networks in communication that maintains thousands of servers around the world and unlimited search results content. This characterizes, at different scales, the Internet from the mid 90's to the early XXI century. With 2000 a new concept of Internet appears, related to the integration of new content and collaborative spaces, i.e. not only trying to create or find content and information, but with the user also generating their own information which, in turn, may be exchanged or enriched by other users (Garcia- Peñalvo , Conde, and Casany Alier , 2011). Thus, considering an urgent need to conduct rigorous projects from the field of scientific research in education that provides reliable and valid data on the use and specific intervention proposals that demonstrate the advantages of these materials on certain aspects to be defined in learning of students in secondary education

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