

INTERDISCIPLINARY AND ICT INTEGRATION PROJECTS IN INITIAL TEACHER EDUCATION

Neusa Branco¹

Susana Colaço²

¹Escola Superior de Educação, Instituto Politécnico de Santarém, Santarém, Portugal e UIDEF, Instituto de Educação, Universidade de Lisboa, Lisboa, Portugal, neusa.branco@ese.ipsantarem.pt

²Escola Superior de Educação, Instituto Politécnico de Santarém, Santarém, Portugal, susana.colaco@ese.ipsantarem.pt

Keywords: *ICT in education, Interdisciplinarity, Project based-learning, Teacher Education.*

ABSTRACT

Innovative environments, with Information and Communication Technologies (ICT), have expanded, in recent years, in schools and have deserved added prominence in initial teacher education. The role of ICT in 21st century society is reflected in the current curricular context, with the teacher being able to use new technologies effectively and efficiently to improve the quality of learning and the development of students' skills. In the context of initial teacher education, we consider the European theoretical reference: DigCompEdu - Digital Competence of Educators that suggests that the knowledge in ICT is constructed in an integrated and sustained way in the teachers' practice. In particular, we focus two competences: the educators' pedagogic competences concerning the digital resources they select, create and modify or share, and their ability to promote the learners' digital competences, enabling them to use creative and responsible digital technologies for information, communication, content creation, responsible use and problem solving. In this communication we present a pedagogical proposal in the initial teacher education about designing projects that provide interdisciplinarity and ICT integration. Data is collected by documentary analysis of the projects' planning and observation of the oral presentation of the projects, conceived by student from the School of Education of the Polytechnic Institute of Santarém (ESE-IPSantarém). This project orchestration challenge emerges in a specific didactic course focused on the 1st cycle of basic education and in the scope of work with student teachers in the ITELab project (Initial Teachers Education Lab - ERASMUS +. This Knowledge Alliance Project is coordinated by European Schoolnet, which partners ESE-IPSantarém with other four European higher education institutions and four industry partners. This pedagogical proposal arises with the intention of developing, in future teachers, the capacity to plan teaching and learning interdisciplinary situations around interdisciplinary and using ICT projects in innovative learning environments, fostering a global and integrated professional development. The design of the projects starts with a theme that is provided by a selected sentence inscribed in sugar packets released by the 30th anniversary celebration of the Association of Math Teachers (APM) that emerges from the question "Mathematics, where are you?". In this communication, on one hand, we identify the digital resources that student teachers select or create for project development, as well as how they encourage the use of digital information and communication technologies by their pupils, identifying how they facilitate the pupils' digital competence. On the other hand, we identify the components of the curriculum that the project planning aims to involve. With the reflection about the relevance of this work in the initial teacher education, we verified the adequacy of the challenge to the initial teacher education and the appropriation made by the future teachers of the innovative learning environment, active methodologies and the potential for integration of ICT, providing interdisciplinary contexts.