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Participatory Management, Project-Based Approach, And Pedagogical Storyboarding: A New Mixed Approach for Computer Science Teaching in Paramedical Programs

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Abstract

In an evolutionary and increasingly demanding work environment, health professionals are challenged to demonstrate operational efficiency by mastering a set of skills. Technical or specialized skills alone are far from being sufficient to guarantee a response to the expectations of actual hospital systems and the level of service quality desired.Paramedical programs in higher education shape a training path that addresses several challenges to face current and future professional issues. Collaborative skills, teamwork, communication and autonomy remain key transversal skills to be developed among students. In the digital and artificial intelligence field, developing appropriate computer skills is also essential. Among the diversity of teaching approaches, the major challenge is to go beyond the limits of the classical framework towards a more engaging, motivating and promising learning environment.

Computer science education remains an important training pillar enabling students to deploy the IT tools to manage or solve technical situations, as well as to collaborate and communicate inter- and intra-paramedical team. The participatory management project-based approach and storyboarding in computer science education is a mixed approach that encourages autonomy in learning and stimulates student engagement and motivation, not only in computer science, but also to enhance this tool's effective use in the field of health care and paramedical services. Thus, several transversal skills are activated while learning to collaborate by jointly carrying out projects, presenting them and discussing them in a collective way. In this paper, a literature review was first established to identify the main competencies and approaches for informatics teaching. On the other hand, an observational study has been conducted on a sample of 90 students from two different options to conclude the value added of the proposed approach in terms of competency development.

Keywords
Higher education, IT, participatory management, project-based approach, storyboarding

Biography

Salima HAMMADI is a PhD and Professor at the Higher Institute of Nursing professions and Health Techniques of Fez. Teaching and conducting research in education, informatics and industrial engineering transversal disciplines, she addresses new frameworks and approaches aiming at quality and performance boosting with applicability to various sectors (education, healthcare and enterprise systems). She is a member of ROADEM. She served as a session chair and reviewer for international Conferences and scientific journals (IEOM Paris Conference 2018, IEOM Rome

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