Instructional Design for Developing Informatics Competencies

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Abstract: This paper describes a brief overview of an instructional design in the Informatics discipline, which is based on the SOLO taxonomy, Bloom's taxonomy, ASSURE instructional design model, Honey and Mumford learning style questionnaire, and flipped classroom strategy. The purpose of implementing this instructional design is to promote personalised and differentiated learning, develop competencies in the informatics discipline, and increase the students' results. The learning activities were differentiated according to the student's learning style, as it is important in teaching to take into consideration the student's learning preferences just at the beginning of the instructional design. It investigated the instructional design effects on the teaching process and student acquisitions framework in order to improve learning. By implementing the flipped classroom strategy, the students become more active, engaged in the learning tasks, and have a higher responsibility for their learning. The result shows the impact of the described instructional design and its pros and cons.

Keywords: Instructional design, Informatics competencies, ASSURE model, BLOOM's taxonomy, SOLO taxonomy.

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