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Autor

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Título

(Emergency) Remote Learning and Assessment: Challenges and Opportunities

Área temática: Avaliação das aprendizagens

Resumo

The 2020 civil year will go down in history as the year in which the global pandemic caused an unprecedented global crisis in all areas of activity, leading to transformations hard to imagine. In the case of education, more than 1,500 million students have been unable to attend face-to-face classes, leading to re-thinking traditional teaching and learning. This work describes a didactical implementation that took place in the 2020/21 academic year in a first year Physics course, in (forced) blended learning. It was used active and collaborative learning methodologies through the proposal of several engaging and challenging learning/assessment tasks: online tasks (at the end of the theoretical classes), a project (composed of 4 tasks, and a final written and oral presentation) and some lab assignments. It was designed an assessment strategy to support students' learning, with timely and adequate feedback though all the semester. The aim was to increase students' engagement and motivation, contribute to the development of their personal competences (autonomy, responsibility, etc.) and avoid the typical final exam. Plus, with the former methodology it would be easy to go to completely online, from day to night, if necessary (as it was the case, nearly the end of the semester). The results (grades, class attending, participation as well as the perception of students' opinion obtained through a questionnaire) allowed to identify several positive factors and also some minor constraints in the adopted methodology. The former analysis was considered in the methodology adopted in another first year Physics course that is going on in the current semester.

Palavras-chave: *Engineering Education; Education Transition; Assessment for Learning; Feedback.*

Bibliografia

Biggs, J., & Tang, C. (2007). *Teaching for Quality Learning at University: What the Student Does* (3rd ed.). McGraw-Hill: Society for Research into Higher Education & Open University Press.

García-Peñalvo, F. J., Corell, A., Abella-García, V., & Grande, M. (2020). La evaluación online en la educación superior en tiempos de la COVID-19. *Education in the Knowledge Society (EKS)*, 21, 12-1-12-26. <https://doi.org/10.14201/eks.23013>

Laurillard, D. (2013). *Rethinking university teaching, a conversational framework for the effective use of learning technologies* (2nd ed.). London: Routledge Falmer: Taylor and Francis Group.

Lopes, J. Bernardino, Viegas, C., & Cravino, J. P. (2010). Improving the Learning of Physics and Development of Competences in Engineering Students. *International Journal of Engineering Education*, 26(3), 612-627.

Viegas, C. (2017). Students' Assessment in Teaching Science and Technology. In J. B. Lopes, J. Cravino, E. Cruz, & A. Barbot (Eds.), *Teaching Science* (pp. 283-301). © 2017 Nova Science Publishers, Inc.