

A person is sitting on a wooden staircase in an auditorium, viewed from behind. They are wearing a white shirt and khaki pants, and are using a silver laptop. The background shows the wooden structure of the auditorium seats and railings.

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the preliminary findings from the interviews with answers to a small questionnaire sent out to 19 Danish e-learning companies. We also add our own observations and visions for how e-learning could be used and which potentials we see for the near future. One major observation is that generally the attitudes to e-learning is positive: Denmark has political goals about access to machines, infrastructure, and internet at every school. There is dedicated substantial funding for schools buying e-learning material, and local successful e-learning companies such as Area9, EduLab, and Clio Online with international footprint and covering 90% of all schools in Denmark. Despite the many positive factors, which contribute to accelerating the use of e-learning, we also found others, which slow down the transformation: Lack of evidence of the benefits from e-learning tools, doubt about whether it is possible to gather evidence in learning, and higher demands for evidence for e-learning tools than for other educational tools. There is also a missing trust and missing communication among stakeholders. We also observed a lack of vision on how digitalization can go beyond “PDFing” a book, and, finally, we met a fear that using Big Data for personalization of the teaching/learning process will be used to stereotype education, or will only be used to save costs.

Keywords: e-learning, primary school, national investigation, stakeholders, evidence, barriers

Learning Styles and Access to Virtual Learning Environments in Academic Performance

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Abstract: This study focuses on the issue regarding student-centred teaching and learning. Based on the acknowledgement of students’ learning styles, we tried to identify indicators which might enable us to relate students’ learning styles to academic performance results as well as to the frequency of use of a virtual learning environment (VLE) used by the institution which the sample subjects participating in this study belong to. The research questions guiding this study were as follows: Are there any relations between students’ learning styles and the frequency of accesses to the institution’s VLE? Are there any relations between students’ learning styles and academic performance? Are there any relations between the frequency of accesses to the institution’s VLE and students’ academic performance results? In order to answer the above research questions, we defined the following aims: identifying the sample subjects’ predominant

style; assessing the influence of subjects' learning styles on their learning results; assessing the influence of subjects' learning styles on the frequency of access to the institution's VLE; assessing the influence of the frequency of access to the VLE on learning results. This study enabled the identification of learning styles and the search for indicators which may allow the establishment of a relation between the learning styles of a sample of 51 undergraduates from a Portuguese public higher education degree course and their learning results, as well as the frequency of their access to the virtual learning environment (VLE). The data concerning learning results and the frequency of access to the VLE resulted directly from consulting the institution's databases associated with the VLE, whereas the data regarding learning styles was obtained after conducting the Honey-Alonso CHAEA survey, also integrated in the institution's VLE. From the results obtained stands out the fact that the majority of the sample subjects have a predominant reflexive learning style. As well as this, there are a high percentage of undergraduates with higher learning preferences in more than one style. With regard to academic performance, the results show that both the final classifications mean and the mean of the course units in which the students obtained a passing mark were higher among the students with a predominant reflexive learning style. The highest mean of the number of accesses to the VLE was observed among the students with a predominant pragmatist learning style. The correlation between the variables associated with the learning styles and the mean of students' marks is low or very low in all situations. This study may reveal to be of great importance, as it enables the obtainment of indicators which facilitate the understanding of the relation between undergraduates' learning styles and the use of VLEs within a formal teaching and learning context.

Keywords: learning styles, virtual learning environments, academic performance

An Axiomatic Approach to Instructional System Design Based on the Dick and Carey Model

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Abstract: In This paper we have introduced an axiomatic approach to Instructional system design based on Dick and Carey Instructional Design model for developing an online learning course on Intellectual Property Rights. Dick and Carey model is one of the successful and straightforward models for design and development of instructions based on a systems approach, but there are some limitations to