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**Article** *in* Computer Applications in Engineering Education · May 2020

DOI: 10.1002/cae.22251

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Received: 27 May 2019 | Accepted: 19 April 2020

DOI: 10.1002/cae.22251

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# Analysis of adaptive e-learning systems with adjustment of Felder-Silverman model in a Moodle DLS

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**Abstract**

E-learning, as a complex system, includes distance learning, teaching materials in various forms and shapes, group and individual learning processes, as well as interactive and tutorial work. To increase the effectiveness and efficiency of the e-learning system, it is necessary first of all to consider the characteristics of students and their learning styles. Based on the data collected in various ways, in surveys, using the distance learning dystem (DLS) Moodle, based on the subjective assessment of the subject teachers, as well as based on data from the business information system, the student preferences are determined. Then, based on these data, an adaptation is made, a process that adapts the work of the DLS based on student knowledge. The primary goals that can be achieved through the adjustment of the e-learning system are to improve the design and usefulness of the course, help with finding information on the course, more efficient searching and placement of search results in the context of students' interest, as well as increasing students' loyalty to a higher education institution.

**KEYWORDS**

DLS, efficiency, e-learning, Moodle

  