

# Fuzzy Logic Based Learning Style Selection Integrated Smart Learning Management System

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Being cognizant of things that individuals learn promotes individual learning and motivation. Acquiring the skills and concepts based on understanding things that teachers teach inside the classroom become important. Gender, age, mindfulness, ability, interest, anterior knowledge, learning style, motivation, locus of control, self-potency, and phenomenological beliefs differentiates one learner from another. The contribution of this research is to enhance the proficiency of the instructors in preparing the learning materials by considering the learning style of each learner displayed on students' profile view of the LMS. Referring to previous literature, it was found out that most of the methodologies that are used to detect learning styles are based on advanced pattern recognition techniques which are based on huge datasets. The results of this study indicate that the use of this inventing feature called fuzzy logic can reduce the complexity of learning style selection. Rather than using complex algorithms to detect learning styles, it works similarly to human reasoning, and any user can easily understand the structure of Fuzzy Logic. As it does not need a large memory, algorithms can be easily described with fewer data, and it easily provides effective solutions to problems that have high complexity and uncertainty while being able to easily modify the rules in the FLS system. Trials of the learning style selection feature will be tested as the evaluation process. This refers to the process of analysing the survey results from students. A group of students who knows their learning style via a psychological session will be selected out of a university and each student will be evaluated by a test regarding their learning style as similar to LMS. Results will be compared and find the probability of the truth of the learning style selection feature.

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