Methodology for the design of a student pattern recognition tool to facilitate the teaching - Learning process through knowledge data discovery (big data)

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Abstract

Imagine a platform in which the teacher can access to identify patterns in the learning styles of students attached to their course, and in turn this will allow you to know which pedagogical techniques to use in the teaching process - learning to increase the probability of success in your classroom?. What if this tool could be used by students to identify the teacher that best suits their learning style?. Yes, was the tool able to improve its prediction regarding academic performance as time passes? It is obvious that this would require specialized software in the handling of large data. This research-development aims to answer these questions, proposing a design methodology of a student pattern recognition tool to facilitate the teaching-learning process through Knowledge Data Discovery (Big Data). After an extensive document review and validation of experts in various areas of knowledge, the methodology obtained was structured in four phases: identification of patterns, analysis of the teaching-learning process, Knowledge Data Discovery and Development, implementation and validation of software.

Keywords

Identification of patterns, Knowledge Data Discovery and Development, Teaching-learning process.