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Affective Feedback in Intelligent Tutoring Systems

A Practical Approach

 Springer

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Integration of Affective Feedback in Intelligent Tutoring Systems

Impacting Student Motivation to Learn

Abstract Affective components are as important as cognitive components in tutoring assisted learning processes. Feedback from tutors is an essential part to maintain the student's motivation. Affectivity and motivation are also significant in computer-based tutoring systems. However, several educational frameworks do not include this kind of interaction between students and tutoring systems. In those cases, the student's learning interest and the motivation to learn could be negatively affected, and student's profits from the system could be decreased. This is why tutoring systems need to provide direct and affective interaction to students; it can encourage them and increase their motivation to learn.

This book presents a broad range of topics. The text offers a deep conceptual background, covering relevant concepts of affectivity, feedback, and motivational components in learning environments. It describes the design of a proposed model for providing affective feedback, and the mathematical validation of the conceptual model and its implementation. Moreover, it presents an analysis of the impact of the affective feedback on student motivation to learn. Finally, the book offers research perspectives of the impact and applicability of the affective feedback in computer-based tutoring environments.

Integration of Affective Feedback in Intelligent Tutoring Systems can be used by human tutors who want to include motivational and affective elements in the learning process, researchers in Human–Computer Interaction and Education, and by software developers who want to develop learning systems using these elements.

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