

# **iCFS: Developing Intelligent Tutoring Capacity in the Accounting Curriculum**

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## **Abstract**

Higher Education, globally, is in a current state of flux where increased technological pressures and social demands are challenging the traditional classroom-based approach to education. This is increasingly causing university management to search for innovative learning and teaching solutions that attempt to address the paradox of catering to personalised learning whilst operating within the parameters and constraints of mass education. Intelligent Tutoring (ITS) may provide one such innovative solution, where a learner is able to interact with a bespoke designed computer-tutoring system, which delivers a degree of individualised learning support and guidance. This paper aims to describe the conceptual design and construction process of iCFS, an ITS designed to assist students to develop a conceptual understanding of Cash Flow Statement (CFS) generation and their integration within the business reporting system, in an intermediate financial accounting course. In doing so, the practically focused paper provides a detailed description of the context in which the study takes place, the ITS environment, the creation of the tutoring system including problem design and motivation, problem construction and user interface design. Practical reflections on the design and development of such an ITS within an accounting context are subsequently advanced.

**Keywords:** Accounting Education, Intelligent Tutoring Systems, Cash Flow Statements.