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COMMITTEE—ADAPTIVE INSTRUCTIONAL
SYSTEMS WORKING GROUP**

CONCEPTS FOR CLASSIFICATION OF ADAPTIVE INSTRUCTIONAL SYSTEMS

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CONCEPTS FOR CLASSIFICATION OF ADAPTIVE INSTRUCTIONAL SYSTEMS

ABSTRACT

A new series of international standards for adaptive instructional systems (AISs) are being developed by the Adaptive Instructional Systems working group of the IEEE Learning Technology Standards Committee. Projects address specifics such as evaluation, ethical design, and interoperability of AISs. A project working group was formed to define and classify the components and functionality of adaptive instructional systems (AIS). The working group was able to classify at a high-level the components used in these systems and to generalize levels of adaptation offered by adaptive instructional systems. Given the pace of innovation in the industry, the group elected not to enumerate the full range of features, processes, and events used across all contexts and applications of adaptive instructional systems, opting instead for representative or illustrative examples. This white paper gives a brief introduction to conceptual classification of high-level functional components of adaptive instructional systems identified by the project group, and a proposed model for classifying AISs based on levels of adaptivity. It is offered as a frame for current and future standards development, baseline concepts to facilitate dialog across AIS standards projects.

Keywords: adaptive engine, adaptive instructional system, content model, interface model, learner model