

**Title:** Intelligent Voice-Based E-Education System: A Framework and Evaluation.

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**Abstract:** Voice-based web e-Education is a technology-supported learning paradigm that allows phone-access of learners to e-Learning web-based applications. These applications are designed mainly for the visually impaired. They are however lacking in attributes of adaptive and reusable learning objects, which are emerging requirements for applications in these domain. This paper presents a framework for developing intelligent voice-based applications in the context of e-Education. The framework presented supports intelligent components such as adaptation and recommendation services. A prototype Intelligent Voice-based E-Education System (iVEES) was developed and subjected to test by visually impaired users. A usability study was carried out using the International Standard Organization's (ISO) 9241-11 specification to determine the level of effectiveness, efficiency and user satisfaction. Report of our findings shows that the application is of immense benefit, based on the system's inherent capacity for taking autonomous decision that are capable of adapting to users' requests.