

DESIGN OF AN eLEARNING PROCESS IN THE AREA OF DIGITAL SYSTEM TESTING

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ABSTRACT

A component of an ELearning environment process is presented for teaching circuit simulation (truth table), test generation and fault diagnosis in digital circuits. A low-cost tools for teaching, research, and training in various topics of digital system and test technology. The developed tool is simple in use and has explanatory windows. The platform used by the tool is simply Microsoft Excel. The produced tool supports teaching of many courses of various standard technical universities. Examples of such courses are as digital design, digital electronics, computer hardware, testing and design for testability, fault-tolerant computing and many others. The tool helps in learning by hands-on exercises on topics like how to generate tests, how to build self-testing systems, how to analyze the quality of tests or testing hardware and how to localize faults in hardware. The tasks chosen for hands-on training represent simultaneously real research problems, which allow fostering in students critical thinking, problem solving skills and creativity which are the current requirement of the survival.

Index Terms: Digital System Testing, Test Vector, Fault Diagnosis, ELearning environment, Designed Learning Tool, Web-Based Training, Research and Training. Learning Technologies

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E-learning can be defined as the use of computer and Internet technologies to deliver a broad array of solutions to enable learning and improve performance. This guide focuses on formal learning, specifically on structured courses designed to meet job-related training goals. It does not address needs assessment or evaluation stages of a training project, but rather the design, development and delivery activities which are specific to e-learning. Adult learners share some characteristics that are different from those of full-time students, which influence the design of learning programmes. In particular, adult learners Social networking systems, games for learning, and digital fabrication (making) will be further examined in this paper with case study examples. These case examples are chosen with regard to their likely impact on learning and instruction in current and future educational designs (Woolf, 2010 ; Chang et al., 2018 ; Huang et al., 2019). One example of a strategy to enhance the process of collaboration is to structure learners' actions with the aid of scripted cooperation (Fischer et al., 2013). This study was designed to integrate informal and formal learning activities for students in the context of an after-school Minecraft club. Minecraft is a multiplayer sandbox game designed around breaking and placing blocks. Implementation of digital interactive technologies and e-learning tools in english language teaching for the development of translators' professional competences. (On The Basis of Higher Educational Institutions of Kazakhstan). Seri Lazzat. PhD student, Kazakh Ablai khan University of International Relations and World Languages, KAZAKHSTAN, seri.lyazzat@mail.ru. Abstract. The alternations occurring due to globalization processes have determined the success of intercultural communication and professional development in our times. Specializing competences can be viewed as the implementation of core and basic competencies in the specific field of professional activity (specialization).