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Evaluation of the Learnability Principles of Mobile-Wireless Information Systems' Application Software for Children in Kenya

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ABSTRACT

Mobile-wireless gadgets are becoming increasingly important in Kenya not just as a medium of social communication, but also as a medium of learning and instruction. This shift partly exploits the learnability principle in information technology, which signifies how quickly a new user can begin efficient and error-free interaction with a system. The learnability principle was originally formulated for computer-based applications intended for adults, but currently children are increasingly becoming the end users. A gap exists in research on the effects of learnability on school-aged children in urban areas of Kenya. Against this backdrop, this study aimed at gathering information on the learnability characteristics of children of different age groups. The research further explored the degree to which the mobile-wireless information systems' applications software learnability principles are applicable to children in Kenya. The study site was Nairobi and the research participants were children ranging between the ages of 8 to 19 years. Data collection involved questionnaires and the use of tests. The research was in the form of an experiment to evaluate certain factors that affect learnability in relation to the age of the participants and their level of computer experience. The research data was recorded and analyzed by Morae, a learnability software. Major findings indicate that children between the ages of 8 and 14 years require engageability to improve their learning by using new application software, this does not mean that other users of a different age do not require this principle but the degree to which it affects them is different. As for the older kids 15 to 19 years, the findings indicated that they strongly require discoverability to improve their learnability of new application software, this does not mean that adults or children of different ages do not require this given principle but to say the degree to which it affects them varies.

Keywords: *Information systems, learnability, learnability principles, application software, discoverability, engageability.*