

User Experience Model in The Interaction Between Children with Special Educational Needs and Learning Media

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Abstract—The utilization of Information and Communication Technology (ICT) is not an unfamiliar thing and has reached almost every aspect of human life, including aspects of education and learning. The use of ICT has become a fundamental requirement in supporting the effectiveness and quality of the educational process, especially in supporting creativity and accuracy in the development and utilization of learning media. The need to develop learning media is necessary for special educational needs (SEN), which is to educate and prepare children with SEN to be able to live independently in the society. The development of learning media for children with SEN should be arranged with a clear study on the user experience (UX) model development framework. The existing challenge is how learning media could be developed with the focus on UX aspect and the ability/ limitations of children with SEN, with the hope that the prepared learning media can be used to help these difficulties and limitations in SEN, which in turn motivate children with SEN to learn. UX modeling aims to optimize the development of learning media that is appropriate for SEN, thus is expected to enhance the children with SEN experience in the process of knowledge acquisition and absorption as an independent life provision.

Keywords—learning media, special needs, User Experience

I. INTRODUCTION

The utilization of Information and Communication Technology (ICT) is not an unfamiliar thing and has reached almost every aspect of human life, including aspects of education and learning. The use of ICT has become a fundamental requirement in supporting the effectiveness and quality of the educational process, especially in supporting creativity and accuracy in the development and utilization of learning media. The need to develop learning media is not only necessary for public schools, but also for Special Education

Needs (SEN), which is to educate and prepare children with special needs to be able to live independently in the society. SEN is an educational unit that aims to help learners who bear a physical and/ or mental disabilities to be able to develop the attitudes, knowledge and skills needed as individuals and members of society in the conduct of reciprocal relationship with their social and cultural environment as well as to develop skills in the workplace or embark on further education.

There is an existing grouping of students with SEN has been stipulated in a Government Regulation, namely the blind, deaf, physically disabled, mentally disabled and those with behavioral issues. This grouping is based on the existing abnormalities in children, whether physical, mental or behavioral. In this study, we look at the group with mild mental disability with an IQ ranging between 50-70 [1] [2]. In general, mild mentally disabled have an incompatible development of everyday behavior compared to their potential capabilities, often experience delays verbally, saying words that are not easy to understand, delays in the understanding and use of the language, and also have a weakness in motor skills [3].

To provide quality education for all children, especially for children with SEN is challenging. SEN should be well prepared [4]. Mild mentally disabled difficulty can affect the preparation of learning media, among others, is to increase the capability to read and write simple words or sentences and also the management of limbs motion. The existing development of learning media for SEN has not been drawn up by a clear study on the user experience (UX) model development framework.

The existing challenge is how learning media could be developed with the focus on UX aspect and the ability/ limitations of SEN, with the hope that the prepared learning media can be used to train reading and writing simple words or sentences and also managing body movement, which in turn