

UNIVERSITI TEKNOLOGI MARA

**EXPLORING DIGITAL LITERACY
SKILLS, MOTIVATION AND
DETERRENTS AMONGST
STUDENTS WITH LEARNING
DISABILITIES (SWLD) USING THE
GAMIFICATION LEARNING
APPROACH**

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MSc

August 2021

AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.


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ABSTRACT

The 21st century learning requires students to be equipped with learning skills, knowledge, media literacy and also life skills. In order to achieve these skills, the school curriculum embedded technology tools and strategies to provide teaching and learning strategies for learners including Students with Learning Disabilities (SWLD). However, students still lack digital literacy skills and teachers still struggle to find suitable approaches for SWLD study in a digital learning environment. Studies show that digital literacy skills are related to boost student motivation, using online learning and gamification that can increase the participation and engagement in students' learning. Therefore, the aim of this research is to explore digital literacy skills, motivations and deterrents amongst students with learning disabilities (SWLD) in gamification learning approach. The study was conducted in one of Vocational Secondary schools in Malaysia and used a qualitative research method approach for data collection. The first phase was by interviewing five teachers who taught Desktop Publishing Classes to overview their perspectives on digital literacy skills among SWLD and later use as instruments for note checklist for observation among 16 SWLD who are involved with Digital Competency Score (DCS) Tapir Hero Challenge. Model of digital literacy namely: technology, cognitive and ethical use as a basic guideline to explore digital literacy skills strategies among Students with Learning Disabilities from Desktop Publishing Classes. The findings indicate that level of SWLD DCS Tapir Hero Challenge with the highest score in the ethical domain with 86.75%, followed by technology with 45.25% and cognitive domain with 43.38% respectively. These findings were consistent with observation analysis where the ethical domain was easily answered by SWLD compared to technology and cognitive domain, supported by teachers' perspectives. The emerging findings of the sub-domain derived in this study that need to take attention and also information skills highlighted exist in between the three existing digital literacy domains. SWLD faced challenges when the item in DCS Tapir Hero Challenge related to the cognitive and technology domain, and the internal and external motivation accelerating digital learning age process among SWLD. From the findings, it is hoped that policy makers and the Ministry of Education highlights the needed of digital literacy skills programme to be offered in the 21st century learning education in digital age that demand the students to be a self-determined learner they need to be digital literate, align with SDGs 4 for quality of education and Malaysia Education Blueprint (2013-2025), providing equal access (Shift 1), leveraging on ICT (Shift 7), and collaborating with parents, community and the industry (Shift 9).

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