

Investigating Strategies for **DYSLEXIA**-Friendly Online Learning Environments (on-going project)

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Overview

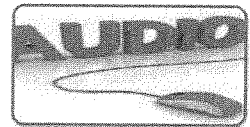
The rapid development in Information and Communication Technologies (ICT) has promoted the use of online learning in universities, secondary schools and primary schools around the world, including Malaysia. The Education Act 1996 in Malaysia clearly states that government ought to provide high standard of education to every individual in the country, including children with special education needs. This study focuses on dyslexia, a specific learning difficulty with reading, spelling, writing, memorising and numeracy which affects the learning process. Some of the common problems dyslexic encounter when using the Internet includes small fonts, poor contrast background, large blocks of text, cluttered page layouts, and justified text. This implies that the often adapted usability principles for web accessibility and design do not generally consider these limitations of dyslexics, therefore producing insurmountable barriers for them when engaging the web. This poster presents the underlying difficulties of dyslexics and how the proposed strategies can help to alleviate some of their difficulties.

Proposed strategies



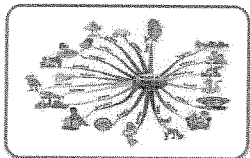
Online reminder

- Auditory dyslexia are characterised with poor memory as they do not retain things said to them, unable to follow instructions and get disturbed and frustrated very quickly.
- Easily recall things pictographically but are confused when the same thing is repeated verbally



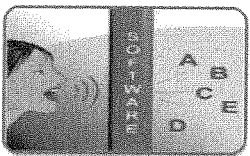
Online reading

- Slowness in reading due to the 'crowding' effect, poor contrast background and font size
- Dyslexics tend to appreciate the opportunity of being able to hear the word or sentence being vocalised



Online information organisation

- Problems with organization skills, breaking large pieces of information into chunks and writing a logical flow of thoughts
- Brain imaging scans study showed there is little activation in the left temporal area instead had greater activation in the right temporal area
- Therefore, they rely on more visual methods to support their reading and learning abilities



Online writing

- Unable to write compositions that express their ideas without limiting to the words they can spell without embarrassment
- Poor quality work produced can detract from the student's actual ability and potential being acknowledged.



Online collaborative learning

- Text-based not suited for dyslexics as they feared being humiliated for spelling and grammar errors
- Video conferencing may serve as alternative for dyslexics as they are able to articulate and express ideas verbally



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