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Original Citation

Abubaker, Azza and Lu, Joan (2012) Investigation effective factors into reading online arabic textbook for learning by children age 9 to 12. In: Proceedings of The Queen's Diamond Jubilee Computing and Engineering Annual Researchers' Conference 2012: CEARC'12. University of Huddersfield, Huddersfield. ISBN 978-1-86218-106-9

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Investigation effective factors into reading online Arabic textbook for learning by children age 9 to 12"

Research problem

Defining the next line is so difficult,

Browsing the text is so hard specially when moving from window to window

I can't read this text the characters is to small & I cannot distinction the letter that has dot

How could I deal with e-school book?????

Reading from screen raise several of challenges for designer which made reading online uncomfortable .some of these challenges were considered in this research as children was indicted



Research focus

Experiment (1)
Reading process

Experiment (2)
Font size & type

Experiment (3)
Line length

Sample size


20 + 20 = 40


15 + 15 = 30


15 + 15 = 30

Aim

Reading process of e- school book

optimum font size & type to read

Optimal line length

Method

Observation

Observation

observation

RQ

How are student interact with school book in e-version?

What optimal font size to read Arabic text from screen?

What optimal line length for reading Arabic text from screen?



findings

- Reading process changes according to the reading purpose and type of recourse
- Reading process effect by the type of material & the aim of using the material.
- Reading action & interaction changes in each version of school book [e- book & paper book].
- students usually use two strategies when reading a school book: scanning and comprehension reading strategies. Each strategy requires specific tools and techniques.

- The legible font should be able to show the difference between dots and the vowels.
- The effects of character size on participants' were more significant than characters type in Arabic language.
- reading speed is generally slower in font size 14 and 16 as well in 10 between the low reading groups, especially in age 10.
- font size 14 and 16 is readable for reader age 12 and over and can be used to display Arabic text form screen.

- Older students (11to 13 year old) are faster when skimming double column, while, student age 9 are batter in single column.
- Younger students are due back the slow in reading text display on screen in double column to difficulty of scrolling the text where their experience in using computer tool especially mouse was weak.
- Designer should avoid scrolling through online text.

Recommendations: designers should take into their account the following points when defining the optimal font size;

- ❖ Identify reader skill based on age and education level as first step for designing e- text.
- ❖ Create a way increases the ability to focus vision when moving from one line to another.
- ❖ Reading online influenced by several of factors such as readers` age and education level.

