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

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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

Research focus

Experiment (1)
Reading process

Sample size

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Aim</th>
<th>Method</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 + 20 = 40</td>
<td>Reading process of e-school book</td>
<td>Observation</td>
<td>- Reading process changes according to the reading purpose and type of recourse</td>
</tr>
<tr>
<td>15 + 15 = 30</td>
<td>optimum font size &amp; type to read</td>
<td>Observation</td>
<td>- The legible font should be able to show the difference between dots and the vowels</td>
</tr>
<tr>
<td>15 + 15 = 30</td>
<td>optimal line length</td>
<td>observation</td>
<td>- Older students (11 to 13 year old) are faster when skimming double column, while student age 9 are better in single column</td>
</tr>
</tbody>
</table>

Experiment (2)
Font size & type

Experiment (3)
Line length

- 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-school & 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 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 16 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.

- 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 week.
- 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.

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