How can we benefit smartphone users by implementing interactive tutorials?

Team Kaleidoscope
Will Baker, Matt Williams, Melissa Farrer, Duckhwan Hwang

What we found after we conducted preliminary research:

- Research shows that interactive tutorials result in better results.
- The use of technology to teach in class tutorials
- Relatively new idea for learning

The Survey:

Research and background information showed us that students retained more information when they used an interactive tutorial versus classic teaching methods.

We conducted an online survey for multiple age ranges to see how people learned about how to use their smartphone and the features that it provides.

We narrowed the four different mediums down to:
- Listen to someone tell you
- Read about them in a manual
- Watch a video
- Participate in an interactive tutorial

Ages 19-25 primarily wanted to have someone tell them how to work their phone while ages 46-55 wanted to use an interactive tutorial.

Our online survey that we sent out to over 180 users

The Conclusions from the Experiment:

Each member of the team conducted a retention test to multiple users for one specific learning medium: reading, video, listening, interactive. These graphs show the time in seconds it took the users to complete the retention test after learning using the specific medium.

Average Time by Teaching Type

<table>
<thead>
<tr>
<th>Teaching Type</th>
<th>18-45</th>
<th>46-65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive</td>
<td>15.6</td>
<td>18.8</td>
</tr>
<tr>
<td>Audio</td>
<td>18.7</td>
<td>25.9</td>
</tr>
<tr>
<td>Video</td>
<td>25.9</td>
<td>34.3</td>
</tr>
<tr>
<td>Manual</td>
<td>33.3</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Participants: 57

<table>
<thead>
<tr>
<th>Teaching Type</th>
<th>Interactive</th>
<th>Audio</th>
<th>Video</th>
<th>Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-45</td>
<td>15.6</td>
<td>18.7</td>
<td>25.9</td>
<td>33.3</td>
</tr>
<tr>
<td>46-65</td>
<td>18.8</td>
<td>25.9</td>
<td>34.3</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Average Age Group:

- 18-45: 43.9%
- 46-65: 56.1%

References:

