<Evaluating EdTech, Evaluating, Designing, Prototyping>

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LearnIT Conference Workshop
Methods of Evaluation

Card Sort

Task Analysis/Think Aloud

Heuristic Reviews
Card Sort

Users are asked to categorize system content, providing the design team with user input on how to best structure the system.

Pros/Cons
Task Analysis/Think Aloud

Users are asked to complete a set of tasks

As learners advance, they provide feedback on their task and how to complete it.

What your users’ goals are; what they are trying to achieve

What users actually do to achieve those goals

The workflow they follow to perform their tasks

Their design vs. Your Goals

Pros/Cons
Heuristic Reviews

Experts are given a criteria set and asked to evaluate the informational resources/learning materials

Pros/Cons
1. Define usability heuristics and its role within design

2. Evaluate technology using a usability heuristic.

3. Select design revisions based on a usability heuristic.
"several evaluators examine an interface and judge its compliance with recognized usability principles called 'heuristics' (Nielsen, 1994a, p. 26). Non-compliant aspects of the interface are captured as interface bug reports, where evaluators describe the problem, its severity, and perhaps even suggestions of how to fix it."

(Greenberg et al, 1999)
### Examples - Nielsen Heuristic

<table>
<thead>
<tr>
<th>Feature</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility of system status - what is going on</td>
<td>Recognition rather than recall</td>
</tr>
<tr>
<td>Match between system and the real world</td>
<td>Flexibility and efficiency of use</td>
</tr>
<tr>
<td>User control and freedom</td>
<td>Aesthetic and minimalist design</td>
</tr>
<tr>
<td>Consistency and standards</td>
<td>Help users recognize, diagnose, and recover from errors</td>
</tr>
<tr>
<td>Error prevention</td>
<td>Help and documentation</td>
</tr>
</tbody>
</table>
Reeves et al (2001)

Visibility of system status:

Match between system and the real world

Error recovery and exiting

Consistency and standards

Error prevention

Navigation support

Aesthetics

Help and documentation

Interactivity - meaningful interactions vs. long pages of text

Message Design - placed on the screen most likely to draw attention?

Learning Design - support stated objectives?

Media Integration - cognitive load theory

Instructional Assessment

Resources

Feedback to learner
Reeves et al Continued

Severity Scale

1. cosmetic problem only; need not be fixed unless extra time is available

2. minor usability problem; fixing this should be given low priority

3. major usability problem; important to fix; so should be given a high priority

4. usability catastrophe; imperative to fix before this product is released

Extensiveness Scale

1. this is a single case

2. problem occurs in several places in the program

3. this problem is widespread throughout the program
Card Sort Example
Task Analysis
Example
Moquups

https://app.moquups.com