Telling (User) Stories

Empathy Mapping from User-Centered Design and Agile

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Know the User
Empathy Mapping

- Translate user observation into effective design
- Create a shared understanding
- Learn about user experience that they may not know either

David Gray 2017, "Updated Empathy Map Canvas" https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a
Virtual Reality in the Geography Classroom

- Immersive Virtual Environment facilitating a collaborative geomorphology lesson
- Creating heuristics to guide development of the technique
- "Nuggets of understanding" when observations don't match user reports

## Heuristics for VR in the Classroom

- **Derived from**
  - Observation of user in VR
  - User questionnaire
  - Observation of teammates

### Heuristic Definition

<table>
<thead>
<tr>
<th>Heuristic</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Engagement with learning materials</td>
</tr>
<tr>
<td>Provocation</td>
<td>Imaginative thinking</td>
</tr>
<tr>
<td>Stimulation</td>
<td>Demonstrate understanding and expertise to others</td>
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<tr>
<td>Collaboration</td>
<td>Work together to enhance learning materials</td>
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<tr>
<td>Control</td>
<td>Feel responsible for improving skills and knowledge</td>
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<tr>
<td>Digital Life</td>
<td>Develop digital citizenship</td>
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<tr>
<td>Learner Skills</td>
<td>Enhance different learning experiences and opportunities</td>
</tr>
<tr>
<td>Multimodal Experience</td>
<td>Connect all of the student's sensing</td>
</tr>
</tbody>
</table>

One Large Dose of Empathy
Agile Methods

- Agile development is built around participation:
- Roles:
  - Scrum master
  - Product owner
- User stories
  - As a - - I want - - so that - -
- Sprint retrospective
User stories
User engagement
Sprint planning
User representation
Multimodal user response

Story maps
Data bias
Inference
Modifiable unit bias
“Data speaks for itself”
Analyst/Researcher/Developer

is a user too!

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