A shared design facilitation approach to co-designing games for learning

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Motivation

Why use a design-based approach to games-based learning?

- Gaming is becoming the new ‘third place’
- Has the potential to inspire community learning
- Play requires exploration, conversation and collaboration
- Which encourages creation of peripheral game resources

Wiki knowledge

Video tutorials

Media-rich blogs

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Hart’s Ladder

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Previous Work: Library Service

- Level 8 of ladder: ‘Children initiated and directed’ participation
- Goal: promote school library facilities to fellow students
- Via weekly after school club with self selecting participants
- Facilitation: passive; simply initiate and observe tasks
- Result: 50% games completed which lack learning content

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Previous Work: Secondary School

- Level 4 of ladder: ‘Assigned but informed’ participation
- Goal: inform primary pupils about secondary school life
- Via weekly Art & Design school classes with sample class
- Facilitation: active; discuss and assist with designs
- Result: 83% designs completed and approved by collaborators
Previous Work: Library Service 2

- Level 6 of ladder: ‘Adult initiated, shared decisions’ participation
- Goal: collaborate on single design with clear learning objectives
- Experimentation of ideas using basic tools (pack of cards)
- Implementation handled by facilitators to optimise time
- Result: game now used in school visits by library service

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Previous Work: Probation Service

- Scalability of approach using participation at level 6 of ladder
- Goal: can approach benefit adults at risk of social exclusion?
- Weekly design workshops using university facilities
- Working as design team of offenders, tutors and researchers
- Result: participants invited to present work at national level
- Both process and product accredited by service for future use

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Workshop Design

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Iterative Participation

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Objectives for Participatory Design

Table 20: Breakdown of proposed objectives for iterative participatory design

<table>
<thead>
<tr>
<th>#</th>
<th>Objective</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Familiarisation</td>
<td>- introduce digital design tools</td>
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<td></td>
<td></td>
<td>- discuss project design objectives</td>
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<td>2</td>
<td>Conceptualisation</td>
<td>- conduct co-operative enquiry into game concept</td>
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<tr>
<td></td>
<td></td>
<td>- use low-tech prototyping tools</td>
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<td>3</td>
<td>Creation</td>
<td>- use discussions to agree upon new resources</td>
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<tr>
<td></td>
<td></td>
<td>- implement ideas into digital resources</td>
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<tr>
<td>4</td>
<td>Modification</td>
<td>- present digital resources using tools available</td>
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<td></td>
<td></td>
<td>- discuss modifications and improvements</td>
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<tr>
<td>5</td>
<td>Presentation</td>
<td>- reflect on design process and discuss roles</td>
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<td></td>
<td>- prepare and deliver presentation of product</td>
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Conclusions

Elevating learners to design partners:
• creates powerful learning environments
• but requires facilitation regardless of age and experience
• must balance of learner input with educator experience
• balanced approach applicable and scalable to a range of students
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