USING META-REFLECTION TO ENHANCE PERFORMANCE

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Overview

- Bit about me
- Motivation
- Aims
- Study
- Future work
- Feedback please
Senior lecturer in psychology
Curriculum Fellow
Principal investigator on EPSRC project

www.shoestringacros3.com
Postdoctoral research

www.citiesandparks.com
BSc Psychology and Computing
PhD Cognitive Neuroscience
Lecturer research methods

www.studybournemouth.com
Professionals and students in Higher Education (HE) encouraged to be reflective practitioners for personal development… and more typically, routinely assessed as a stand-alone piece of work.

Potential short-term benefits, but in the long-term, reflections can become distorted and forgotten.

Thus full potential not achieved.
Aims of project

- To promote use of reflection as a learning tool to improve student performance
- To encourage a systematic and structured approach to reflective practice
- To inform pedagogic practice
- To enhance student experience and performance
- To evaluate acceptance, efficiency and effectiveness of technology as a tool for reflection
Methods

- Use simple technology to structure, record, store and retrieve individual reflections
- Individual reflections will populate a database
- Ultimately, with permission, each individual's reflections can be accessed by others via the database
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<th>A</th>
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<td>Week</td>
<td>Date</td>
<td>Topic essay</td>
<td>Feelings never done this sort of assessment before</td>
<td>Hurdles to get over where should I start?</td>
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Advantages over traditional reflective journal approach

- Maintains and stores permanent, true record
- Original reflections retrieved alongside reflections on tasks with similar aspects
- Facilitates analogical, case-based reasoning (CBR)
- CBR improves problem solving via mapping current to previous reflections (solutions)
- Similar concept to Lessons Learned
- Technology available through VLE
Human memory is fallible

- Using technology facilitates classification and retrieval and reduces the problems associated with human memory
- Spreadsheet designed to facilitate recording
- Column headings will be developed into drop-down menu
Data collection

- Data collection designed to be more systematic than traditional logs or journals
- Reflections on a particular ‘episode’ can be placed alongside other reflections from similar episodes for comparison (learning)
- Initial focus group meeting was held to elicit a common understanding of ‘reflective practice’
- Second focus group after completion of data collection (12 weeks) to establish development and/or changes as a result of the study
Participants

- Volunteer students from level 1 Psychology
- Required to use reflective practice as part of their coursework
- Recording to the spreadsheet requires little extra effort on their part (cut and paste)
Participants can …

- Use and adapt the spreadsheet (e.g. add columns, leave blank cells)
- Reflect on own earlier entries
- Make additional notes and link to the spreadsheet
- Link to external sources (e.g. the work in question)
- 6 week cross over design to reduce possible disadvantages

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<th>Procedure</th>
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<td>Record reflections using spreadsheet</td>
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<tr>
<td>1-6</td>
<td>2 control</td>
<td>Record reflections in journal as course requirement</td>
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<tr>
<td>7-12</td>
<td>1 intervention</td>
<td>Record reflections in journal as course requirement</td>
</tr>
<tr>
<td>7-12</td>
<td>2 control</td>
<td>Record reflections using spreadsheet</td>
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Thematic analysis of focus groups
Quantitative and qualitative analysis of the entries to the spreadsheet
Future work

- Develop database (DB)
- Seek permission form participants to populate a ‘public’ DB with their reflections
- Enable access to all reflections for participants
- Extend DB use to other users: ‘meta-reflection’
- Develop ‘intelligent’ case based reasoning tool populated with cases from DB to recognise contextual similarities (analogies) given parameters from users
Benefits and beneficiaries

- Students encouraged to record and retrieve reflections to improve performance
- Reflections used actively as a learning tool
- Simplifies recording and retrieval using prompts and drop-down menus
- Students learn from own and others’ reflections
- Frees cognitive capacity for novel aspects of task at hand
- Potential to develop metacognition
To develop a technology to eliminate distortion and forgetting, facilitate recording, storing, retrieval and ultimately *sharing* of reflections.

Many thanks for listening!