Assessing online collaborative work

Conference or Workshop Item

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Assessing online group work
ALT-C 2016

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Background and aims

- Importance of online group work:
  - Develop teamwork skills
  - Learning with others

- The challenges:
  - For students
  - For educators

- Context:
  - Distance, part-time learning at the UK Open University
  - Group project in the module: *Communication and information technologies*

- Aims of the research:
  - Investigate the challenge of implementing an online group project
  - Gain perspectives of students and tutors
  - Design group projects which are engaging to students and fairly assessed
Today’s presentation

• Introduction to the online group project:
  – Website development
  – Work in a wiki
  – How the project work is marked
• Research methods
• Findings
  – From students
  – From tutors
• Framework for assessing online group projects
  – Individual marks versus group marks
  – Product versus process
The module: *Communication and Information technologies*

**Key facts:**

- 9-month part-time study
- Integrates a wide range of technical topics with generic skills development
- 60 credits at level 2
- 400-600 students per presentation
- The assignment for one of the five study blocks is a group project
- Students work in groups of 6-8 for the project

**Block 3: Creating & collaborating**

Online collaboration technologies and approaches

Large element of group work in the assessment

- Creating a group website (40%)
  
  *Focus of the research presented here*

- Collaborative working in a wiki (50%)
  
  *Previous research – some results included here*

- Reporting and reflecting on the collaboration (10%)
Creating a group website

WordPress for the website:
- Groups develop a website for a given scenario & client e.g. a holiday company, a walking club
- They use WordPress, forums, wiki, web conferencing (optional)

Marks allocated for:
- product (the website); and process (collaboration)
- group as a whole; and individual contributions

Marked by viewing:
- the website and WordPress dashboard
- discussions in the forum
- documented decisions in the wiki

<table>
<thead>
<tr>
<th></th>
<th>Marks for product (website)</th>
<th>Marks for process (collaboration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual marks</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Group marks</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Collaborative working in a wiki

Wikis for peer feedback:
• Each student writes a wiki page about an aspect of online communication and collaboration
• Each student gives/receives feedback to/from two group members; then improves their own page
• They use wiki, forums, web conferencing (optional)

Marks allocated for:
• product (wiki page); and process (giving/receiving feedback)
• group as a whole; and individual contributions

Marked by viewing:
• wiki page and feedback (copied into assignment)
• wiki history
• discussions in the forum
• documented decisions in the wiki

<table>
<thead>
<tr>
<th>Marks for product (wiki page)</th>
<th>Marks for process (peer feedback)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual marks</td>
<td>60%</td>
</tr>
<tr>
<td>Group marks</td>
<td>0%</td>
</tr>
</tbody>
</table>
Research methods

• Undertaken as two separate projects:

**Website research:**
Student data (qualitative):
• 27 students via six online focus groups
• Open ended questions to explore students’ experiences:
  • e.g. Did they find it rewarding? What were the frustrations? How did they feel about the assessment?
• Focus group data transcribed and coded.
• Emergent themes identified.

Tutor data (qualitative):
• 10 tutors in online discussion forums
• Open ended questions to explore tutors’ experiences and views
• Coded using themes already identified.

Forms the basis of the following findings.

**Wiki research:**
Student data (qualitative and quantitative)
• 74 students via an online survey
• Closed questions with open comment boxes
  • e.g. did the wiki provide all the features needed? Did group members contribute equally?
• Quantitative data analysed; qualitative data coded and analysed.

Tutor data (qualitative):
• 21 tutors in online discussion forums
• Open ended questions to explore tutors’ experiences and views
• Coded and analysed.

Results previously published – fed into following findings where appropriate.
Research on the website collaboration

Three key elements were considered for the website research:

• *The collaboration*  
  – how students interact and work together

• *The task*  
  – what students are required to do/produce

• *The assessment*  
  – how students’ work is graded
Emergent Themes

**FAIRNESS**
Division of work
Marks

**FEELINGS**
Motivation
Frustration
Reward
Challenge
Enjoyment

**ORGANISATION**
Deadlines
Decision making
Division of work
Timings
Meetings
Leadership

**PARTICIPATION**
Absent
Active (core)
Peripheral

**SKILLS/ABILITIES**
Technical
Organisational
Experience

**RELATIONSHIPS**
Friendliness
Personalities
Getting on
Social presence
Helping
Group dynamics
Working with strangers

**TASK**
Authenticity
Product (quality)
Brief (instructions)

**TOOLS**
Forums
OULive
WordPress
Wiki

**TUTORS**
Tutor strategies – supporting students
Tutor strategies – marking

**TIMING**
Asynchronous
Holiday
Domestic
Jobs

**EXPERIENCE**
Technical
Organisational
Experience
### Main findings - *The collaboration*

<table>
<thead>
<tr>
<th><strong>Students</strong></th>
<th><strong>Tutors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• For the majority, the group project was an enjoyable experience.</td>
<td>• Agreed that the majority of students enjoyed the group work.</td>
</tr>
<tr>
<td>• The collaboration was the most challenging element of the project, but also the most rewarding.</td>
<td>• Agreed that the collaboration, rather than the task, was the biggest challenge for students but also the most rewarding aspect.</td>
</tr>
<tr>
<td>• Some, but not all groups had leaders.</td>
<td>• Felt that in most groups an ‘unofficial’ leader emerged.</td>
</tr>
<tr>
<td>• Collaboration was a cause of anxiety for some students.</td>
<td>• Tutors’ own challenges were mainly related to assessing the collaboration.</td>
</tr>
<tr>
<td>• Evidence of cooperation rather than collaboration.</td>
<td></td>
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</table>
### Main findings - *The task*

<table>
<thead>
<tr>
<th>Students</th>
<th>Tutors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Most students were proud of their final product and would like to showcase it.</td>
<td>• Agreed that the students were proud of what they achieved.</td>
</tr>
<tr>
<td>• The tools (both wiki and website) were fairly intuitive and easy to use.</td>
<td>• Agreed that more technically experienced students complained about the task.</td>
</tr>
<tr>
<td>• More technically experienced students were frustrated with the task – the limitations of the tools.</td>
<td>• Felt that the task was authentic.</td>
</tr>
<tr>
<td>• More technically experienced students felt the task was not ‘authentic’ enough, and wanted to include other content (e.g. twitter feeds).</td>
<td>• Said that less technically experienced students learnt new skills, but often let others do the work.</td>
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## Main findings - The assessment

<table>
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<tr>
<td>• Even balance of opinions on whether work was divided fairly in groups.</td>
<td>• Felt that work was not divided fairly in groups.</td>
</tr>
<tr>
<td>• Some students felt they were ‘carrying’ others.</td>
<td>• Agreed that some students ‘carry’ others.</td>
</tr>
<tr>
<td>• Even balance of opinions on whether the group marks were fair.</td>
<td>• Did not like allocating group marks, despite the bias towards individual marks.</td>
</tr>
<tr>
<td>• Felt individual input was recognised, but would have liked to know what marks others in their group were awarded.</td>
<td>• Found marking group work time consuming and difficult.</td>
</tr>
<tr>
<td>• Some students were worried/anxious about group marks.</td>
<td>• Marking strategies involved keeping on top of forum postings, and making notes on group dynamics.</td>
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</tbody>
</table>
Wiki question

PRODUCT

GROUP

PROCESS

INDIVIDUAL
- How important are the technical (vs. group working) skills?
- Opportunity to showcase products.
- Relatively easy to mark.
- Tutors unhappy about awarding group marks (for product).

- Assigning a group leader - more authentic? How would this affect marking?
- Time consuming for tutors to mark.
- Monitoring group dynamics.
- Tutors unhappy about awarding group marks (for process).

- How to challenge ALL students?
- Freedom to undertake more complex technical tasks – more authentic?
- Can be relatively easy to mark.
- Difficult to differentiate between students at both ends of the scale.

- How to support students who struggle and how to reduce anxiety?
- Time consuming for tutors to mark.
- How to effectively monitor an individual’s input and mark accurately?
Thank you

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