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Workshop in Moodle: A Tool for Peer Critiquing

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Abstract

This paper will begin with a brief discussion of the benefits of peer assessment and peer critiquing. In particular, it will examine how both can be beneficial in helping to introduce, and reinforce, valuable graduate attributes in students throughout their university careers.

It will then examine the tools available at the University of Glasgow and evaluate them in terms of their strengths and weaknesses. In order to explain this in detail, a real life case study from a third year class in Nursing will be presented.

The paper will conclude that, while there are obvious benefits to peer critiquing tools being used with a Virtual Learning Environment (VLE), some modifications are necessary in order to make them more easily usable by staff and students.

In recent years it has been common for institutions in higher education (HE) to talk in terms of graduate attributes. Considerable work has been done in order to define these and, in many cases, to produce a detailed list of the kind of qualities each institution aims to produce in its graduates (see Nicol (2010) for a discussion of this). The University of Glasgow has produced guides for staff and students which are freely available via its website. The guides include a "graduate attribute matrix" (see Appendix 1).¹

¹ http://www.gla.ac.uk/media/media_183776_en.pdf

This matrix lists ten graduate attributes and defines them in terms of three dimensions: academic, personal and transferable which, the document says, are not sub-competencies, 'but rather manifestations of the same attribute in different situations'.²

The message throughout the document is clear: staff should design and deliver courses so as to best help students to develop these attributes, and this requires an understanding of the learning activities available and how each might best be used. It is important to realise that the tools required can vary depending on the context in which they will be used and that there is no one universal answer to the question of how technology can best support learning and teaching. Rather, there are various relevant models of learning and teaching available to teachers depending on the kind of skills they are attempting to help to develop, and each will be best met by being supported by different learning tools. This paper will, therefore, not attempt to cover the full range of graduate attributes identified by the University of Glasgow, but will identify some core attributes which the authors believe are of particular importance to the academic subject which is the focus of this study and show how a Moodle VLE was used by one teacher in order best to support the delivery of her course.

It is obviously important, when considering how best to design and deliver a course, to think in terms of the skills and qualities which are most appropriate to graduates in that discipline. In the case of nursing, it is of vital importance that graduates are able to conduct themselves in a professional manner. This involves working as part of a team and, in particular, feeling confident in giving feedback to others with regard to their conduct. Both of the above are identified as being graduate attributes on the "transferable dimension" of the University of Glasgow matrix (see Appendix 1). In addition, an ability to critically reflect upon one's own practice is an important ability for nursing professionals, and is also identified as a graduate attribute.

Peer assessment, or peer critiquing, is a learning activity which is designed in order to develop precisely these types of skills.³ In completing a peer assessment exercise, each student must engage in a peer assessment of another student's work, and this involves thinking carefully about how to provide critical feedback to their peers in a positive manner.

Workshop in Moodle

At the time of writing this paper Workshop module was the activity in Moodle 1.9 that used for peer assessment and critiquing at the University of Glasgow.

²<http://www.gla.ac.uk/students/study/attributes/>

³ We are making a distinction here between peer assessment, where the mark given by the student forms part of the final grade attained for a course, and peer critiquing, where the mark, if given, is for the purposes of formative assessment alone, and is not part of any formal grade. See Morrow (2006) p62 for a similar point.

Moodle at the University of Glasgow

Moodle has been centrally supported at the University since 2005. Prior to that it was used in the Faculty of Education and GUIDE (Glasgow University Initiative in Distance Education) in a limited capacity. Although it's been centrally supported since 2005 it wasn't until 2007 that usage became widespread. The version of Moodle used at the moment is 1.9 although we are in the process of looking at and preparing for a future move to Moodle 2.0.

Moodle is still predominately used for course communications and sharing of resources although we are starting to see it used more and more for assessment and feedback purposes.

Currently the Learning Technology Unit (part of the Learning and Teaching Centre) are responsible for Moodle support and development including and staff support and training.

Workshop activity

It is only in the last academic year that Workshop has been used at the university (it had been disabled by default prior due to various reasons of support).

Workshop in Moodle is a peer assessment/critiquing tool that is being used successfully at Glasgow for non-credit peer critiquing activities. It is a two-part assessment where students not only have their work marked but also learn about assessment criteria and mark fellow students' work. The activity allows the students to submit work to Moodle, which is then distributed anonymously to their peers for grading and feedback using a schema set by the teacher. The teacher can then review the grades awarded by students and override these if necessary.

For the activity /assessment to be successful good scoring guides need to be developed by the teacher. It is also a recommendation that a marked example assignment be made available to students before they take part.

When the nursing students accessed the workshop activity in Moodle they were required to submit their coursework (uploaded document) for marking. Once they had submitted their essay they could access a specimen assessment and marking schema to give them an understanding of the marking criteria. As soon as the start date and time was reached for assessment students were randomly assigned another student's piece of work and by using the assignment schema marked it. Staff could then view the peer assessment mark and review it if required. Staff also had the option of secondary marking the assessment and providing an additional mark (in which case both marks would be combined for the activity overall mark).

Limitations of Workshop in Moodle 1.9

Although we have successfully used workshop in a limited capacity at Glasgow it has not been without problems.

The main limitation of workshop in Moodle 1.9 is it is no longer being supported with all developer effort being concentrated on the version for Moodle 2.0 meaning that bugs/suggestions tend to get ignored in the Moodle community.

It would also be fair to say that it is not the most intuitive of activities to set up in Moodle and much "hand holding" is required during a members of staff's first attempt. It also suffers slightly from lack of documentation and online help. The user interface can be a bit daunting to the new user and it feels that there is an overabundance of options. A recommendation would be to leave the majority of settings at the default setting.

The grades from workshop do not feed in to the course gradebook. If the mark was to be used for an overall course mark the work around was to set up an offline activity assignment and enter the marks in manually.

It is not possible to use it for groups in Moodle.

Case Study: using Workshop as part of a 3rd year Bachelor of Nursing course at the University of Glasgow

A formative paper-based peer assessment assignment was introduced two years ago for approximately 50 undergraduate 3rd year students in the final year of the Bachelor of Nursing degree at the University of Glasgow.

Via Moodle, students were assigned a 1000 word essay asking them to write about the nursing care of a patient with a chest drain in situ. With permission from a previous student, an A rated exemplar was posted on Moodle.

A submission date was given when students were expected to submit their work. The work was then randomly allocated and distributed by the course leader and secretary to another student for marking and a date was given for resubmission. The University of Glasgow 22 point assessment scale along with the feedback form used to provide formal, written feedback and final grade was attached. These marked assignments were then returned via the school secretary to the original students. The course leader noted the grades and their distribution.

This was the students' first experience of peer assessment in the three year programme.

Findings

This anonymous paper based system was cumbersome and administratively time-consuming with margin for error resulting in delays and incomplete return rates.

Development Initiative

The course leader was already familiar and confident with using the Moodle activities including wikis and forums for on-line seminar group work and understood from a colleague that, potentially, the Workshop activity might replace the existing paper based system. She had no prior experience of this activity. However, she believed designing and delivering the course in this way would help develop discipline specific graduate attributes i.e. (1) communication (2) confidence and (3) collaboration. These attributes are essential for nurses to work safely and effectively in clinical practice (see Nicol (2010) for a discussion of how graduate attributes are developed through peer assessment).

The students were given the background and evidence base on peer assessment and the anticipated process (see Willey and Gardner (2008)). They were then consulted about the change (from a paper-based to an online exercise) and informed that pitfalls might be experienced however that every attempt would be made by the course leader to mitigate these. The class voted unanimously to support its implementation.

Workshop in Practice

The course leader set up the Workshop activity, selected dates for submissions and chose from a selection of various difficult to understand assessment criteria methods. For example, a simple yes or no could be awarded or a grade based on a Likert scale if specific criteria were met. Each student was asked to submit one piece of work for assessment, and to complete a peer assessment on one piece of work (which were randomly allocated by the Workshop activity). This peer assessment grade was not part of the final grades for the course.

As the process began problems immediately became apparent to the course leader specifically relating to (1) the initial choice of assessment criteria (2) confusion surrounding the percentage weightings awarded to the student and the assessor and (3) misunderstandings by students about how to upload their work, via attachment, to Workshop (although . This resulted in some not gaining experience in assessment and providing feedback and others being disadvantaged by not having feedback. The latter accounted for approximately 10% of students, the majority of which were resolved by the course leader manually, although a few remained outstanding due to non-submissions the last being a weakness in the process.

Student Evaluation

17 students responded to a survey posted on SurveyMonkey from a class of 52 (34%) response rate (see Appendix 2).

Only 23% (4) agreed they felt comfortable marking their peers' work with the majority 53% (9) either disagreeing or strongly disagreeing 12% (2). 23% (4) had no opinion. Regarding maintaining anonymity, the majority 47% (8), disagreed and 41% strongly disagreed that they would have preferred to know whose work they were marking with only 12% (2) in favour of this. 71% (12) disagreed with the idea of introducing peer assessment activities from the first year of their degree programme.⁴ Approximately half 53% (9) considered they had a better understanding of the assessment criteria as a result of peer assessment with 47% (8) disagreeing.

In general, students stated they had been honest and objective with the assessment process and the grade awarded (82%). This result is interesting in that it contradicts the initial reaction from this relatively close-knit class. The course leader discovered after this exercise that the whole class regularly communicated as a group via Facebook. One student told the course leader that the initial reaction of the group was that each would award the other an A grade despite performance, as they were resentful of taking part in this type of exercise. However, when they engaged individually with the exercise each of them realised that this would not be productive, and they therefore what they felt to be a fair grade, rather than awarding an A.

With reference to how peer assessment helped develop graduate attributes, such as communication and confidence, opinions were much less polarised with approximately equal numbers disagreeing, agreeing or having no opinion.

Course Leader Conclusions

Overall students were strongly against being asked to (1) assess their peers and (2) disclosing their identity. Interestingly, despite these reservations, the majority stated they had been honest and objective in the assessment process and grade awarded suggesting that regardless of these reservations, the task was carried out in good faith. This objectivity remained despite many having established close friendships and, as it materialised, being able to identify one another relatively easily by using the university registration number.

"I think this would only work if you do not know who you are marking to prevent personal feelings affecting grade."

"I submitted my work in the wrong section so was unable to take part in the peer assessment. However, I don't think I would have felt comfortable making my peers work."

⁴ See Liu and Carless (2006) p282 for a discussion of these points

In effect although students did not necessarily agree with the task, it was carried out with integrity resulting in over half the class reporting that they had a better understanding of the assessment process.

Students were asked if what they had learned through peer assessment had improved their performance in clinical practice, i.e. skills relating to specific graduate attributes. However in retrospect this would be difficult to claim as students were not due return to clinical placement until after completing the questionnaire. It would be valuable to review this opinion after the clinical practice placement.

Recommendations

Introducing peer assessment to a class with long established relationships late in the degree programme may well have impacted on some individual results but not on the overall outcome in that the majority benefited from taking part as they now understood the assessment process better. The course leaders' recommendations are to (1) pilot a similar on-line peer assessment in first year of the programme in order that it become an integral assessment method and (2) determine if discipline specific graduate attributes acquired through peer assessment are applied to enhance clinical practice.

The technical hitches reduced several students' confidence in the programme; however, there is merit in using Workshop for peer assessment to significantly reduce administration and student feedback time. Accessible and easy to follow guidance for course leaders and ideally personal support from other users is essential as it is not intuitive to setup in its current format.

"I felt it was unfair that those who submitted their work in the wrong section did not have the opportunity to participate. A lot of work was put into the assignments and they were never marked."

"unable to participate due to technical error."

Workshop in Moodle 2.0 (a possible future direction)

In Moodle 2.0 Workshop has been completely redesigned with a much more user-friendly interface. It now follows a series of five very distinct stages (from setting up the activity to given student access to their mark) that makes it much more easier for the teacher to see what stage the workshop is at. The five stages can be looked at as four key phases of the activity. The first phase is the setting up of the workshop activity including the submission guidelines and the rubric for peer assessment. The next phase is the submission phase where submit their work which can then be allocated for marking. Phase three is where students assess/critique work and the final phase is where the teacher evaluate the activity and assign the final grade.

Workshop in Moodle 2.0 is now also fully integrated with gradebook for the course.

Group functionality now works properly and Workshop can be used successfully for separate groups with your course.

There is still more work to do and a wish list has already started for future development. In the old 1.9 version it was possible to start distributing submissions for peer marking before all submissions had been made but this is not possible with the version in 2.0 as each phase must be completed before the activity can proceed to the next stage.

Another possible downside of the phased approach is that each phase does not follow on automatically and has to be enabled by the teacher giving the potential for human forgetfulness.

It would also be beneficial to the student if they had access to introduction text and rubric before participating in the activity (although this could be added as a separate resource in Moodle).

These are just minor grumbles/suggestions as Workshop in Moodle 2.0 is by far the better product from both a user and support prospective.

Conclusion

The case study above shows that there are benefits to students participating in peer critiquing and that a significant amount of students (about half) felt more confident in their academic abilities. The objective of future peer assessment using Workshop would be to increase the number of students understanding the assessment process by refining the Workshop application. In addition, future studies would attempt to determine whether graduate attributes such as communication and collaboration experienced through peer assessment are applied in the clinical environment.

There are obvious benefits to implementing a peer critiquing exercise via a VLE, as this is less cumbersome and time-consuming than alternatives. Although the tool available at the University of Glasgow, Workshop for Moodle 1.9, is not intuitive to set up, this could be alleviated by better training and documentation, and this is the approach that will be taken by the Learning Technology Unit (LTU).

As a result of this course, the LTU has begun an investigation of other tools, for example the improved Workshop for Moodle 2.0 (see above). The LTU is also evaluating Aropa, which is a peer assessment tool being developed by the University of Auckland and the University of Glasgow which, it is hoped, will be available in the future as a Moodle activity.

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Appendix 1: Graduate Attributes

University of Glasgow graduate attributes

The academic abilities, personal qualities and transferable skills which all students will have the opportunity to develop as part of their University of Glasgow experience.

Attribute	Academic Dimension	Personal Dimension	Transferable Dimension
Subject Specialists	Understand and respect the values, principles, methods and limitations of their discipline(s).	Possess a breadth and depth of knowledge within their disciplinary area(s).	Possess discipline-relevant professional skills, knowledge and competencies.
Investigative	Are intellectually curious and engage in the pursuit of new knowledge and understanding.	Are able to locate, analyse and synthesise information from a variety of sources and media.	Are able to investigate problems and provide effective solutions.
Independent and Critical Thinkers	Identify, define and assess complex issues and ideas in a researchable form.	Exercise critical judgement in evaluating sources of information and constructing meaning.	Apply creative, imaginative and innovative thinking and ideas to problem solving.
Resourceful and Responsible	Are experienced in self-directed learning and authentic research-led enquiry.	Are motivated, conscientious and self-sufficient individuals capable of substantial independent work.	Manage their personal performance to meet expectations and demonstrate drive, determination, and accountability.
Effective Communicators	Articulate complex ideas with respect to the needs and abilities of diverse audiences.	Present their ideas clearly and concisely in high quality written and spoken English.	Communicate clearly and confidently, and listen and negotiate effectively with others.
Confident	Defend their ideas in dialogue with peers and challenge disciplinary assumptions.	Possess excellent interpersonal and social skills fostered within an internationalised community.	Demonstrate enthusiasm, leadership and the ability to positively influence others.
Adaptable	Experience multi-disciplinary and/or inter-disciplinary learning in an internationally renowned institution.	Respond flexibly and adapt their skills and knowledge to excel in unfamiliar situations.	Demonstrate resilience, perseverance and positivity in multi-tasking, dealing with change and meeting new challenges.
Experienced Collaborators	Engage with the scholarly community and respect others' views and perspectives.	Are experienced in working in groups and teams of varying sizes and in a variety of roles.	Conduct themselves professionally and contribute positively when working in a team.
Ethically and Socially Aware	Consider and act upon the ethical, social and global responsibilities of their actions.	Welcome exposure to the richness of multi-cultural and international experiences, opportunities and ways of thinking.	Have a practical and contemporary knowledge of relevant professional, ethical and legal frameworks.
Reflective Learners	Use feedback productively to reflect on their work, achievements and self-identity.	Set aspirational goals for continuing personal, professional and career development.	Identify and articulate their skills, knowledge and understanding confidently and in a variety of contexts.

www.glasgow.ac.uk/attributes

Appendix 2: The Survey Questions

1. Please indicate the degree of your agreement with the following question.

	Stongly Agree	Agree	Neither	Disagree	Strongly Disagree
I felt comfortable assessing my peers work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)					

2. Please indicate the degree of your agreement with the following question.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
I would have preferred to know whose work I was assessing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)					

3. Please indicate the degree of your agreement with the following question.

	YES	NO
I was honest and objective with the assessment process and grade awarded	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)		

4. Please indicate the degree of your agreement with the following question.

	YES	NO
As a result of participating I now have a better understanding of the assessment criteria	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)		

5. Please indicate the degree of your agreement with the following question. The experience has improved my.....;

	Strongly disagree	Disagree	Neither	Agree	Strongly agree
...confidence in providing feedback (appraisal)to my peers about their performance in the clinical areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...ability in report writing and documenting the performance of my peers in the clinical areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)					

6. Please indicate the degree of your agreement with the following question.

	YES	NO
I would have preferred that peer assessment activities had been introduced from the first year of my degree	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)		