

# **Moodle as a means of Student Collaboration**

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## **Background**

### *The digital natives*

According to Prensky (“Digital natives, digital immigrants; 2001), today’s students “are no longer the people our educational system was designed to teach”. Instead, they are the native speakers “of the digital language of computers, video games, and the Internet. They process information and act differently than previous generations.” In short, these students are “digital natives”. An article published by the Telegraph in 2009 seems to support this idea. The article claimed that teenagers spend around 31 hours a week in front of a computer, mostly on the net. These digital natives spend “some three and a half hours communicating with friends on MSN, and around two hours on YouTube and in chat rooms.” Researching cosmetic surgery, family planning and pregnancy, and weight loss tips make up another three and a half hours of net use. Three hours a week are spent on homework tasks, looking up information to complete tasks set by school and college teachers. A lot of time is taken up simply surfing the net, as well as online gaming.

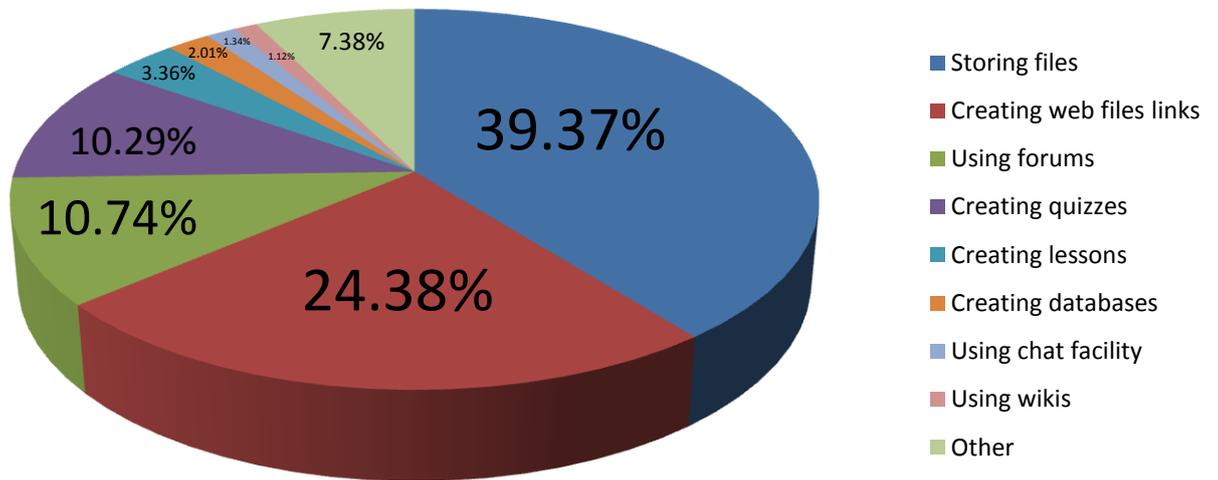
One possible explanation as to the popularity of the social media mentioned in the article, such as Facebook, Bebo, Habbo, MySpace, Flickr and YouTube, is that the content of these sites is principally user-generated. These sites enable people to create, edit and publish their life to the world, and thus arguably empower them to choose whom they wish to invite to participate in it. When so many important decisions in life are made for young people by others (where to live, where to go, what to do, even who to know), such social media arguably enfranchises them to be autonomous authors of their private lives.

The adoption of web 2.0 software in the classroom, a process which began at the beginning of the 21st century, seems to be a direct attempt to harness and channel for educational purposes this desire both for self-expression and human interaction. From a purely functional point of view, VLEs (virtual learning environments) such as Moodle, Claroline and eFront are useful to an educational institution since they allow the administration, organisation, and coordination of courses, as well as provide the opportunity to upload content of these courses for student consumption. But they are also useful in their attempt to employ those same web 2.0 based interactive platforms which young people enjoy using in their free time. Moodle for example, has a variety of ‘interactive’ features which allows students to chat with each other just like MSN, whilst the ability to upload their own content to the VLE is at a fundamental level the same thing which YouTube offers. The opportunity to participate in both synchronous and asynchronous online discussions through the medium of a Moodle forum taps into the need for self-expression and interaction which has made sites like Facebook so popular. On the surface then, it would seem that a VLE like Moodle might be able not only to organise the life of a school, college or university, but also offer an alternative, more dynamic way of students taking an active role in their learning.

### **Moodle at Farnborough Sixth Form College**

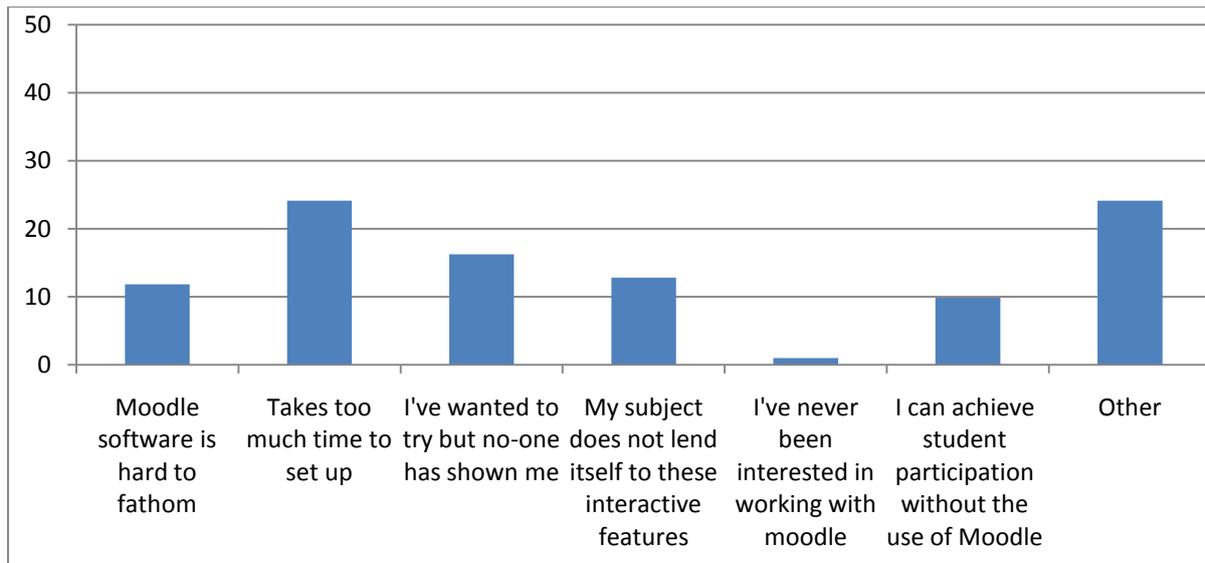
Since 2010 Moodle has replaced Sixth Net as the VLE of the college. The chart below shows how Moodle is used by staff throughout the college at present.

## Sixth Form College Farnborough Staff's Use of Moodle 2010-2011 (based on 202 respondents)



73% of staff use Moodle in a passive sense, by uploading files for students to access from home, by creating web links for them to research independently, or by composing quizzes for them to answer. Only 18% of staff use Moodle's more dynamic functionality, in which the student is actively engaged in generating content for themselves, in the form of wikis, forum contributions, databases and chat. Perhaps staff are sticking to what they know: the uploading of files and creation of web links was possible on Sixth Net before it; student creation of wikis and databases was not. Interestingly, 67% of all staff feel that they have not had enough training on how to use the features available on Moodle, and a massive 79% feel that with training focussing on how Moodle features could be used and applied more effectively in their own subject would lead to them using Moodle more. Those who have not used the more dynamic functions of Moodle, like wikis, forums, databases, and chats, express different reasons for this:

If you have not used the interactive features of Moodle (forums, wikis, databases, chats), what are your reasons for not doing so? (Vertical axis indicates percentage value)



These results are based on 202 respondents to the questionnaire. What stands out is the desire of staff to learn how to use these dynamic functions of Moodle, even if they do not then implement them in their teaching – only 1% of staff who responded claim they are not interested in Moodle’s interactivity. There is a perception of Moodle as being hard to use, as well as taking up preparation time. Judging by the percentage of staff who feel they have not had adequate training on Moodle, and the percentage of those who would like training tailored to their specific subject, one can also infer that teachers do not feel confident exploiting the entire functionality of Moodle. Uploading files for students is one thing, but basing a lesson around using a wiki for example, is something altogether different. Prensky seems to be correct when he extends his metaphor of “digital natives” to teachers, whom he describes as the “digital immigrants”, whose “accents are discernible” when using technology for educational purposes. For teachers, there is an unfamiliarity with the more interactive features of Moodle, and an uncertainty about how to include them in teaching and learning.

At the same time I conducted a survey on these “digital natives”, or more specifically, the learners in my three AS English literature classes, to find out their experiences of using Moodle. Clearly, the fact that the vast majority of students have never heard of Moodle before joining college is not a barrier to learning quickly how to navigate around it. By November, when students were surveyed, 70% were visiting the literature page on Moodle as much as every other day to once a week. Furthermore, 94% of students believed Moodle to be either very useful or useful to their learning – they understood that with Moodle they could access course news, events or simply download documents from missed lessons. The results of the survey are shown in full below:

Student Entry Questionnaire      November 2010      Number of respondents: 38

*Have you ever used Moodle before coming to college?*

**Yes: 7.89%**

**No: 92.11%**

<i>Have you found it useful since coming to college</i>	
Extremely useful	44.74%
Useful	50.00%

Not that useful	5.26%
Not at all useful	0%

<i>How often do you check the English literature Moodle page</i>	
Every day	2.63%
Every other day	26.32%
Once a week	44.74%
Once every fortnight	15.79%
Once a month	2.63%
Less than once a month	5.26%
Never	2.63

### **The purpose of my research and the methods used.**

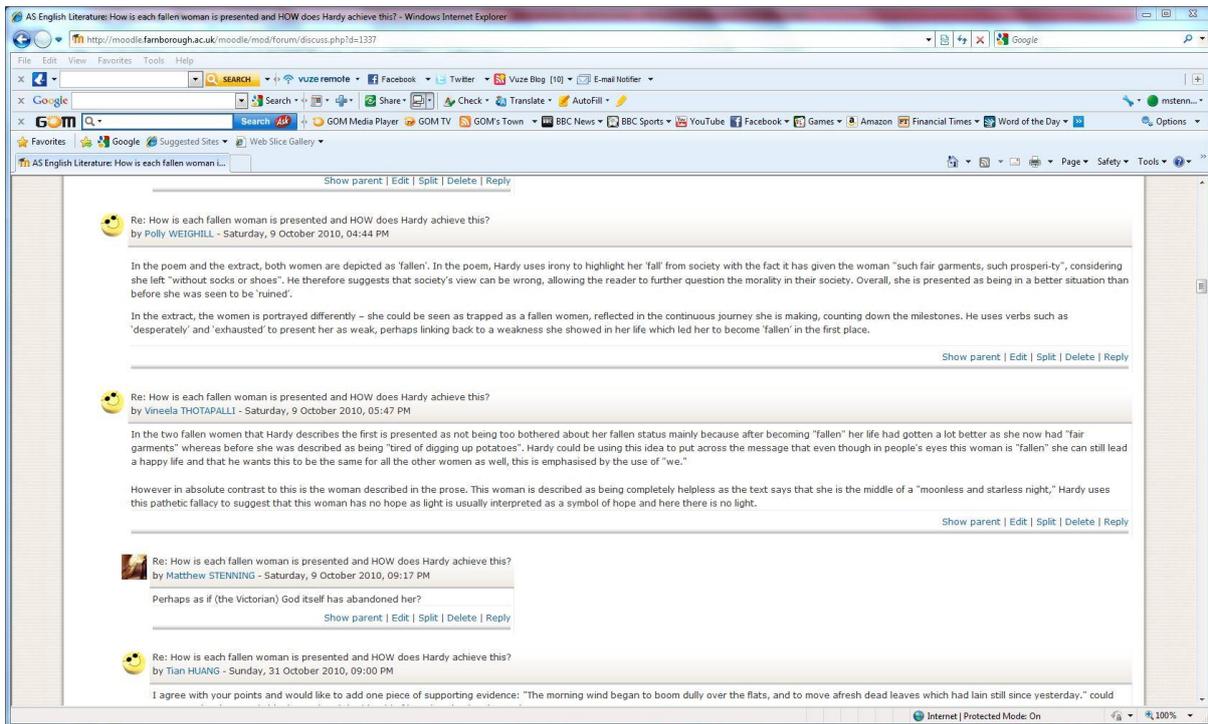
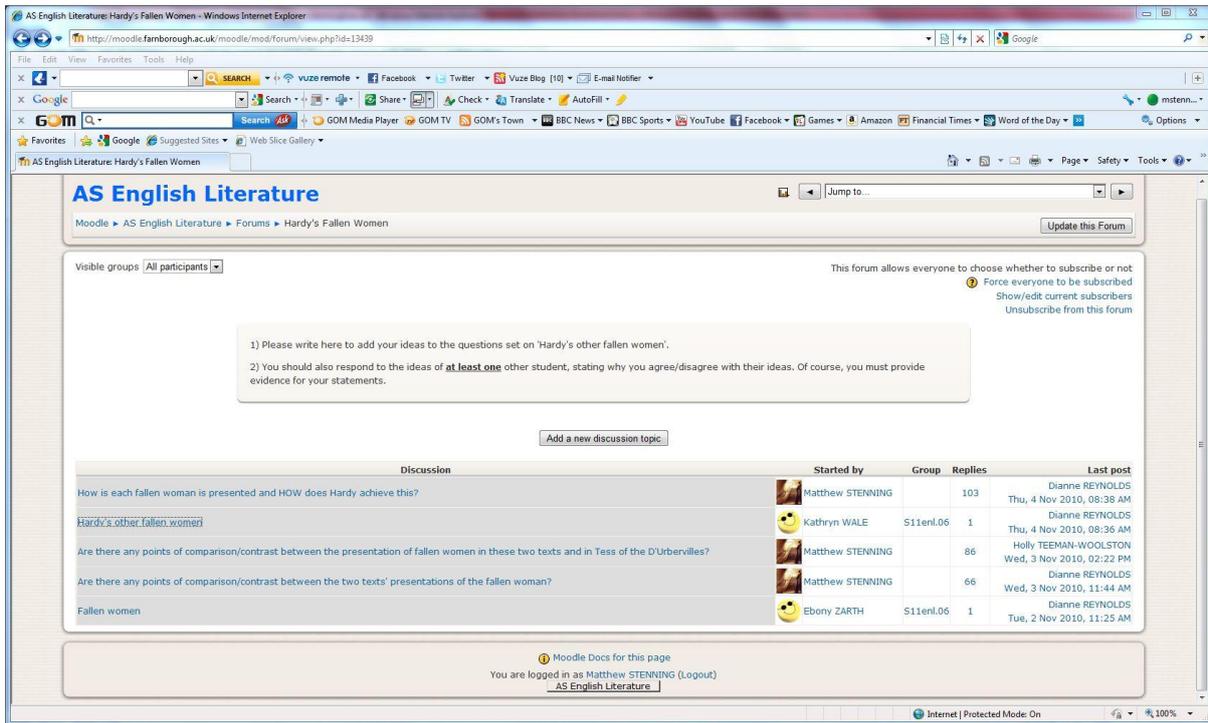
Specifically, I wanted to try and use some of the web 2.0 based functionality of Moodle to understand whether or not it assists student collaboration. By collaboration I mean a type of co-operative learning in which students use each other – rather than the teacher – as a means of discovering knowledge, and sharing ideas. As K.A Smith (“Cooperative learning: Making ‘groupwork’ work”;1996) defines collaboration, the teacher is involved only in the setting up of the task, and not in its realisation. Collaboration is really just “small groups of students working together to maximize their own and each other’s learning”. As James Coyle (2007) adds, this kind of co-operative learning has as its most essential elements positive interdependence, interaction, individual accountability, interpersonal skills, and group processing. Again, the students are entirely active in the process, since there is no guidance from without – as such, each learner must assume responsibility not only for his/her own learning, but the learning of the whole group. Since however, students would be using Moodle as a means of learning, such collaboration should also be termed **electronic**: a process “that connects individuals electronically via the Internet to work together on an intellectual, academic, or practical endeavour” (Koufman-Frederick, Lillie, Pattison-Grodon, Watt, & Carter; “Electronic collaboration: A practical guide for educators.”; 1999). As such, the tasks which were to be carried out did not require students to sit together in the classroom – in theory they could do them equally well from home, in the library, or anywhere else where there was a computer terminal with access to the net.

I also discussed with my students the collaborative tasks we would do in the year, and how I would evaluate the success of the research – their feedback during and after each individual task was crucial to my arriving at any decision as to how beneficial to co-operative learning the interactive features of Moodle were. I stressed to them the importance of being honest with the questionnaires which I would give them periodically throughout the year. The tasks would include forums to discuss extracts of novels, wikis for coursework planning and, later in the year, a database to compile a list of excerpts with analysis for the examination.

### **The Forums**

Throughout the year I set up two forums. The first forum required students to respond to a passage of prose by reading it first and making five posts on the forum, each post being a response to a different question. I played a role too, by commenting on students’ contributions, guiding them if

they had got confused as to the text's meaning, as well as referring them to other students' ideas. Students completed their responses over the course of a week, as a homework task.



The second forum was more debate-based. Students had to contribute one idea to each one of five statements about the love poetry of John Clare, and respond to at least one other student on the forum. They could either agree or disagree with another's claims, but if they disagreed, they had to produce constructive reasons for thinking so. I played a ghost role in this task; I read students' contributions, kept an eye on who had contributed and who had not, but never actually commented on their ideas. I was hoping other students would play the role of the critical voice instead. In both forums, students were entirely responsible for **generating content** – only their ideas were voiced, not those of a teacher.

The screenshot shows a web browser window displaying a Moodle forum page. The browser's address bar shows the URL: <http://moodle.farnborough.ac.uk/moodle/mod/forum/discuss.php?id=2343>. The forum title is "AS English Literature: Statement 1: 'Clare's love poetry is more about the pain of loss than the delight of devotion.'".

The forum post content is as follows:

May be, it centers Mary's still with thee, therefore this gives evidence to the fact that Clare's love poetry does focus more around the pain of loss.

Re: Statement 1: "Clare's love poetry is more about the pain of loss than the delight of devotion."  
by Serenna MACKENZIE - Sunday, 3 April 2011, 11:36 PM

I believe that the emotions are equal in content throughout Clare's love poetry. However I agree with the statement that the pain of loss is overuling the love of devotion, because the majority end with the sad tone of loss that Clare feels for his dead lover, 'when life bade thee farewell.' (Love and Memory.)

Clare often talks about finding love, then losing love as though it is a cycle, simply following the patterns of nature, 'suns have risen and set nor found us once together.' (First love's recollections.) The negation reflected represents Clare's little faith in long-lasting devotion. This makes Clare's poetry feel very personal, as though his writing is symbolic of his mourning, 'who can help mourning' (Love and Memory.) Mourning is a process of dealing with the pain of loss and therefore I think this is reflected the most from his poetry.

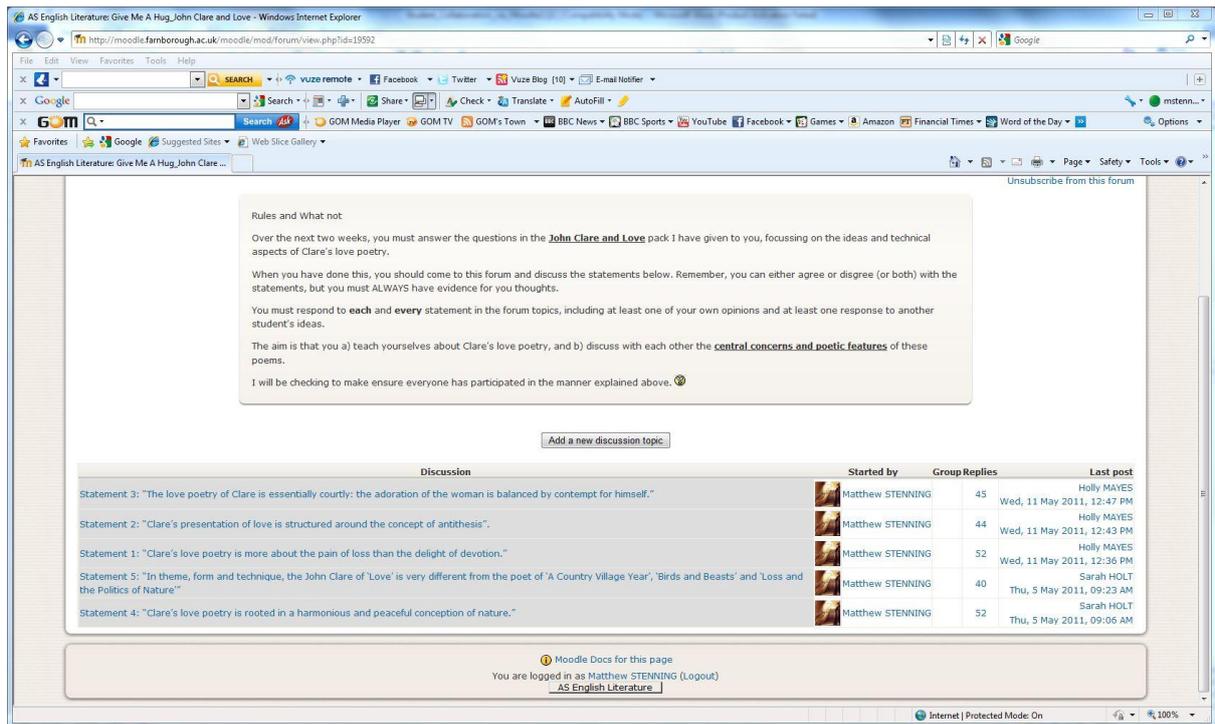
Also, i have to disagree with James' point about the joyful tone in 'First Love's Recollections because this poem isn't written from Clare's perspective and so it cannot be argued that this is his opinion.

Re: Statement 1: "Clare's love poetry is more about the pain of loss than the delight of devotion."  
by Samuel BROOK - Monday, 4 April 2011, 07:38 PM

I think you meant 'I dreamt not what it was to woo' in reference to James' comment, assuming this, i would suggest that while the poem is not written from Clare's perspective, it is still Clare assuming the perspective of another. Therefore the joyful atmosphere to the poem, with its bucolic imagery and romantic exchanges, represents, if not Clare's true attitude and beliefs in regard to love, then certainly an idealised, perfect view of it.

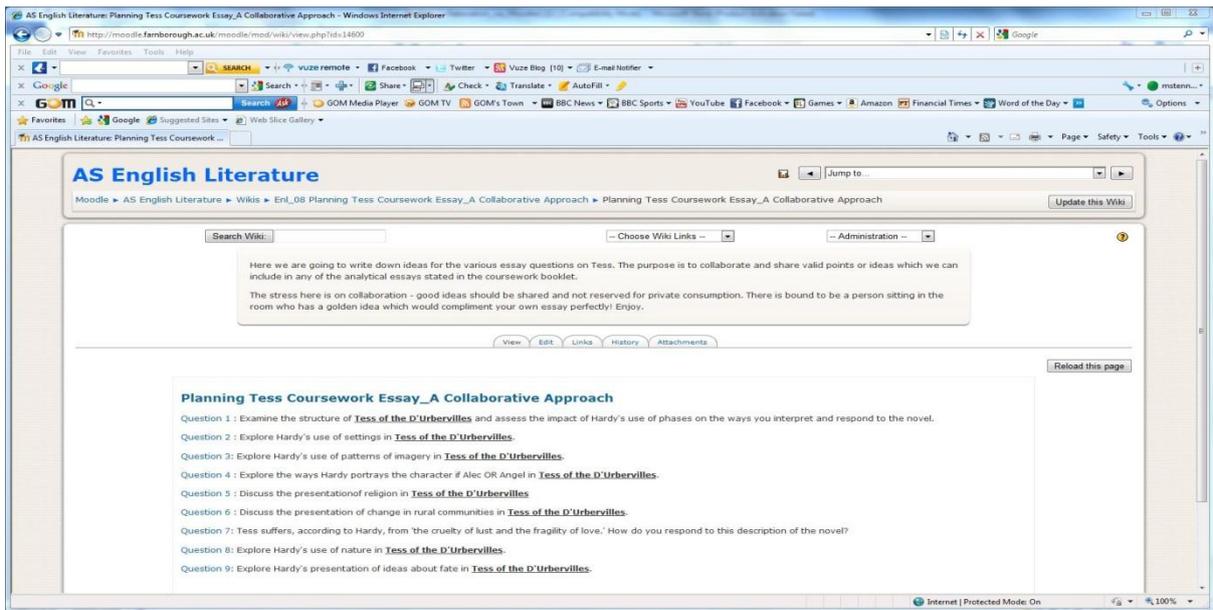
Re: Statement 1: "Clare's love poetry is more about the pain of loss than the delight of devotion."  
by Samuel BROOK - Monday, 4 April 2011, 09:41 AM

Certainly Clare's main point of emphasis is in how he deals with the loss of his lover. Clare returns repeatedly in his poems to the temporary nature of relationships, juxtaposing this with the eternal feelings of love for Mary "Heaven's halo around thee/ Earth's hopes to deceive". This ties in with Clare's focus on the pain of absence - "as thy absence destroyed" - which admittedly is preceded by "thy presence possessed", yet the emphasis is still firmly on the pain as opposed to the previous joy. In fact there are suggestions that the joy of devotion is a burden in itself, with several passages suggesting that Clare had issues, suspecting that he was never enough for Mary and dearly dependant on her praise "how rapturous to thy lips i dung".

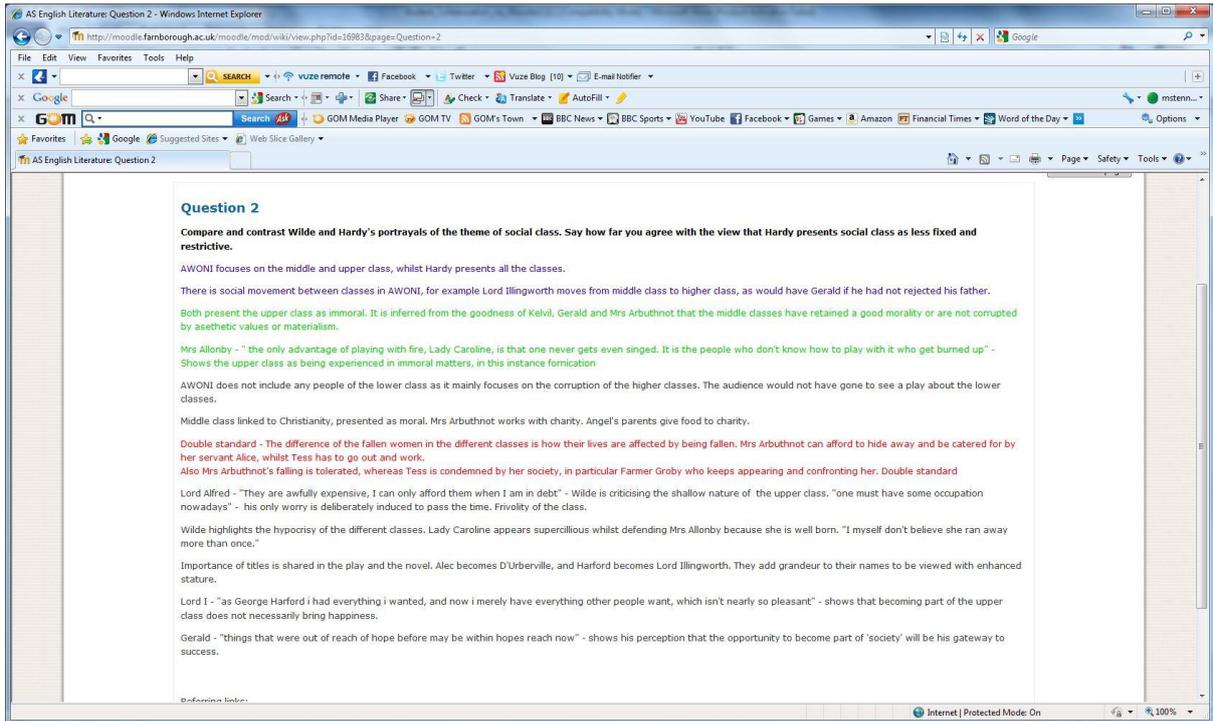


## The Wikis

We used the wiki function both to plan coursework essays and revise for the summer exams. The two coursework wikis on Tess of the D'Urbervilles and A Woman of No Importance were used both to generate ideas for the content of the essays, and also to help plan structures for these essays. For the Tess wiki, students were paired together, and had 15 minutes to consider and brainstorm ideas for one of the seven coursework questions available. They then moved on to the next question, which had already been begun by another pair, and added to (and/or modify) those ideas already there. This process continued until all students had contributed ideas to each one of the questions. Having done this, each pair would take responsibility for structuring and editing all the ideas generated by the wiki into a formal essay plan, and attach it to the particular wiki. That way, students had many ideas to work from, and a full essay plan as a result; they could access all of this anywhere, using any device with web access (phones, pdas, pcs, laptops). The images below show the front page of the wiki with links to the coursework questions, and an example of a structured plan which was the result of a whole-class collaboration.

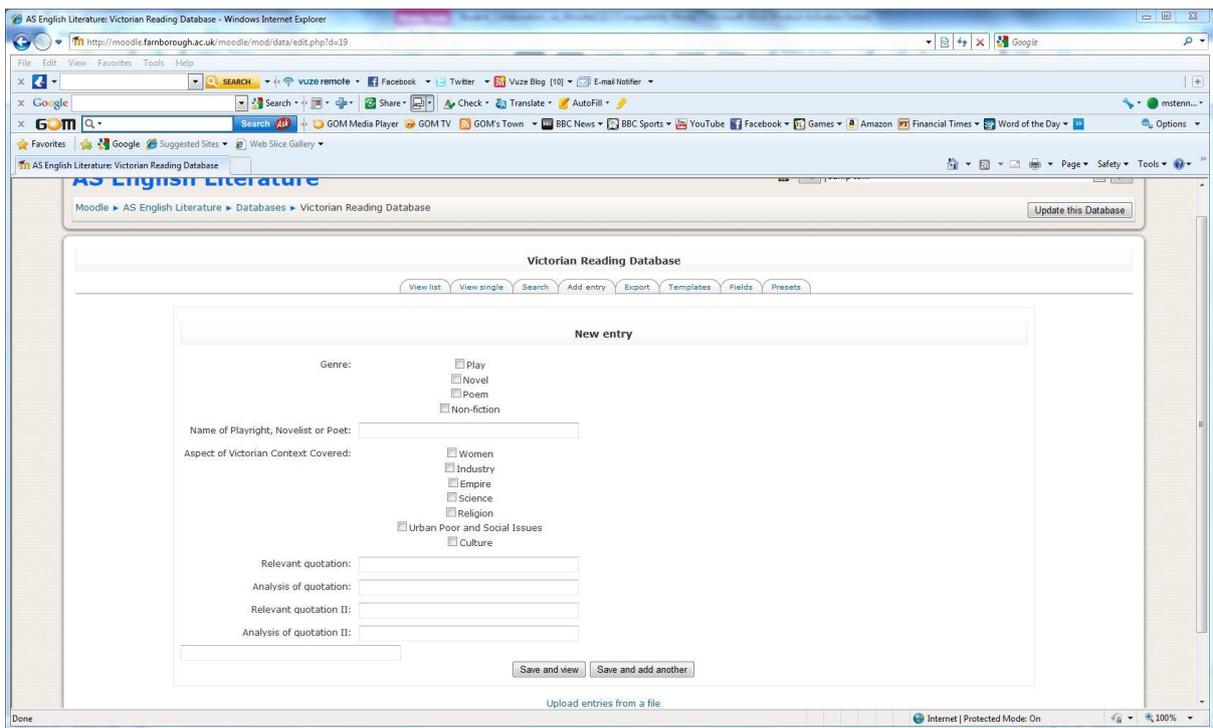


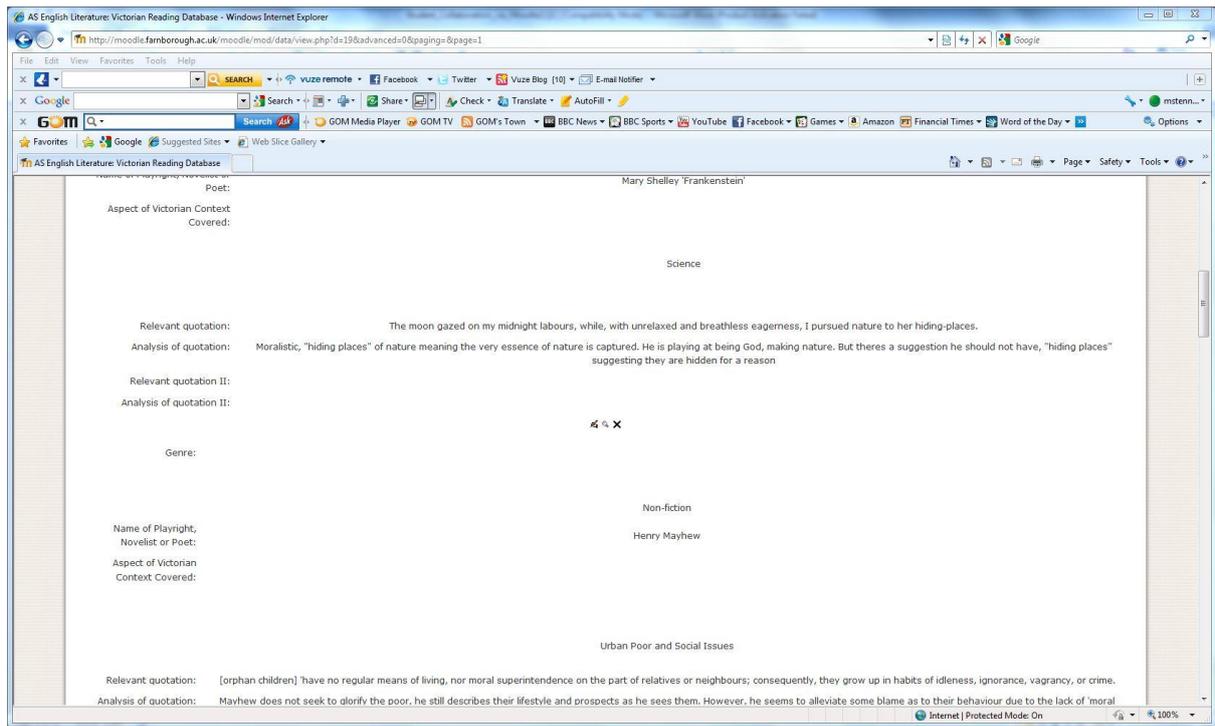
The second coursework wiki was used in the same way – as a means of brainstorming and structuring ideas into an essay plan – but this time each pair was given responsibility for one question. This was done as a response to some of the feedback I had received after the first wiki, in which some students expressed a desire to spend longer on one particular question, rather than moving on to the next after a short time. We also used the wiki function as a revision tool, whereby students could split an essay question between themselves, with each group dealing with one paragraph. When they had finished, another group would check, edit and add to it if necessary. In both cases, content was generated only from students. The image below shows the work of a pair who have completed ideas for a particular question.



## The Database

Students often struggle to identify appropriate quotations from novels, poems, plays and non-fiction extracts which they need to know for the Victorian context question of the summer exam. The database offered students who were struggling to find decent evidence a catalogue of excerpts from a range of Victorian literature, together with a brief explanation and analysis of the passage. Again, the only content on this database, as with the wikis and forums, is student-generated. At present, over 60 entries have been recorded, and I expect this to continue until the exam.





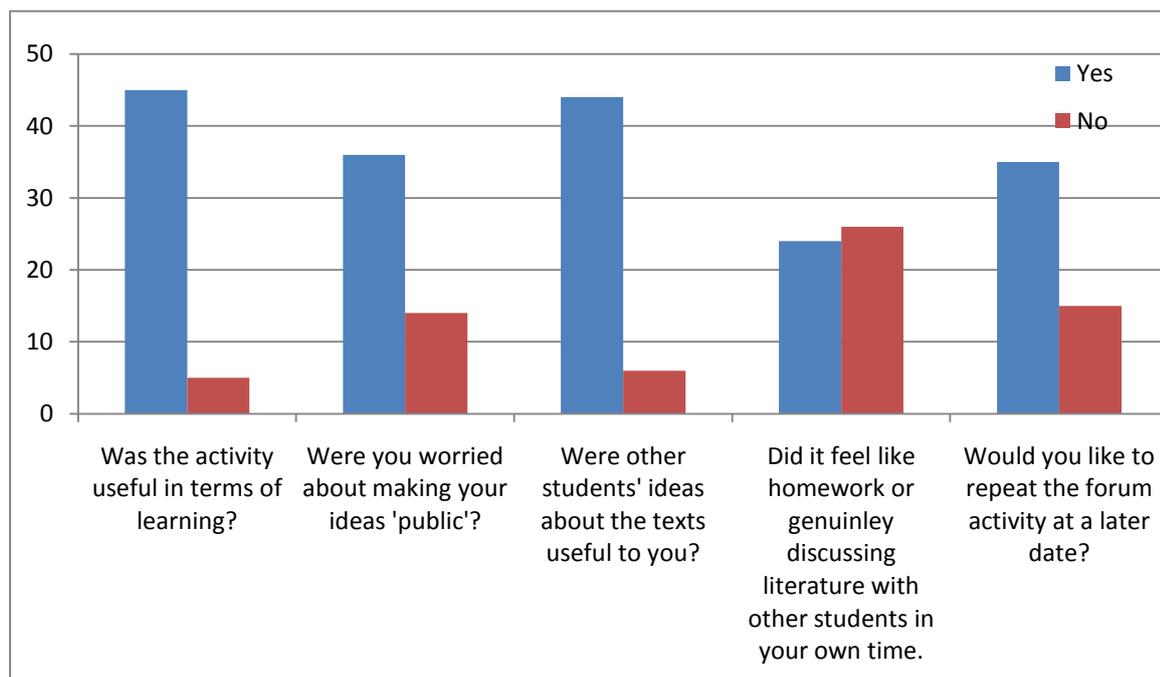
## Findings

### Forum 1: The Fallen Woman

November 2010

Number of Respondents: 50

Having completed the first forum, I asked students to respond to a questionnaire about their experiences using it. The results were interesting, as they show both an interest in using this technology as a tool for learning, but at the same time reveal insecurities about the level of exposure each individual is open to as a result. The vertical axis indicates the number of respondents to the questionnaire.



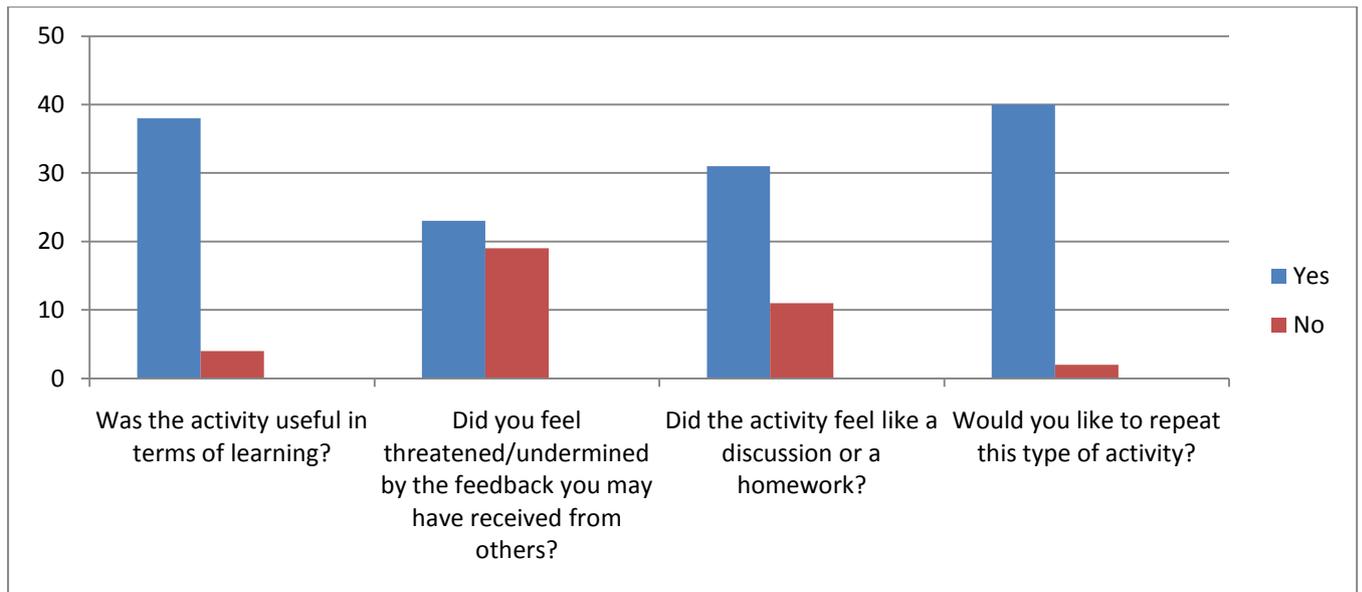
The question which generated the most response from students was the second: “were you worried about making your ideas public?” Thirty six out of fifty students (72 %) felt anxious about airing their ideas on the forum, and the most common reason for this was the fear of ‘getting it wrong’. Many students shared one particular learner’s fears that **“I was really worried others would think I was really stupid”**. Interestingly, the vast majority of students (88%) felt their classmates’ contributions to the forum helped them further their understanding of the text, since they had either not thought of the same ideas, or had reassessed their original opinions in the light of opposing evidence. For me, this was enough to make the task worthwhile, since *through collaboration and the sharing of knowledge, students had learnt from each other through the medium of technology*. However, many students’ perception of this matter was not consistent with mine. Where they were most divided was on the question of whether the forum had helped establish a co-operative and collaborative atmosphere in which they could discuss literature, or whether the task was simply a bit of homework their teacher required them to complete. 52 % of students felt it was just homework; many learners’ opinions on this matter can be summed up by one student, who wrote that **“if you are going to discuss literature outside the class then you will; you don’t need a forum to do it.”**

**Forum 2: John Clare and Love**

**April 2011**

**42 Respondents**

Having changed the format of the forum to one which allowed more debate and argument between students, it was interesting to note that the feeling of collaboration was more widely felt. It seems that giving students a more dynamic role in the task—getting them to ‘talk’ to each other via the forum as opposed to just statically writing their opinions up – encouraged a greater feeling of collaboration. Asking the same question as to whether the Clare forum felt like a discussion or just homework, 73% stated it felt more like a dialogue. Clearly then, not only is it important that students feel responsible for the content generation of the forum, but also that they feel they are involved in a discussion with others, as opposed to simply adding their contribution to the page. The one major issue which this forum brought up however, was the consistency of the feedback which students were offered. Whilst some received a reply from a student (sometimes more than one student), many were left without any sort of acknowledgment, whether that be in the form of agreement or disagreement. This accounts for the mixed response of the second question as to feeling undermined or threatened. The vertical axis of the graph indicates the number of respondents to the questionnaire.



**Wiki 1: Tess of the D'Urbervilles**

**November 2010**

**34 Respondents**

Having taken students through the wiki exercise in class, I asked them to complete a questionnaire on their experiences of using it. None of the students that participated in the task had ever used a wiki before: it was an entirely new experience. The results are overwhelmingly positive.

**Question 1:** In terms of giving you ideas for your essay and on a scale of 1-10, how useful was the brainstorming activity carried out on the wiki.

Ranking	1	2	3	4	5	6	7	8	9	10
Number of respondents	0	0	1	0	0	2	5	13	7	6

**Question 2:** In terms of helping you plan an essay response and on a scale of 1-10, how useful was the essay planning activity which we attached to the wiki?

Ranking	1	2	3	4	5	6	7	8	9	10
Number of respondents	0	0	0	0	0	4	5	13	7	5

**Question 3:** Will you use any of the ideas you have come across on the wiki or will you stick to your own?

Yes	31
No	3

**Question 4:** Did you get a sense of collaboration and all students working together towards the same goal from this exercise, or did you just feel it was a way of my getting you to do some work?

Yes	31
No	3

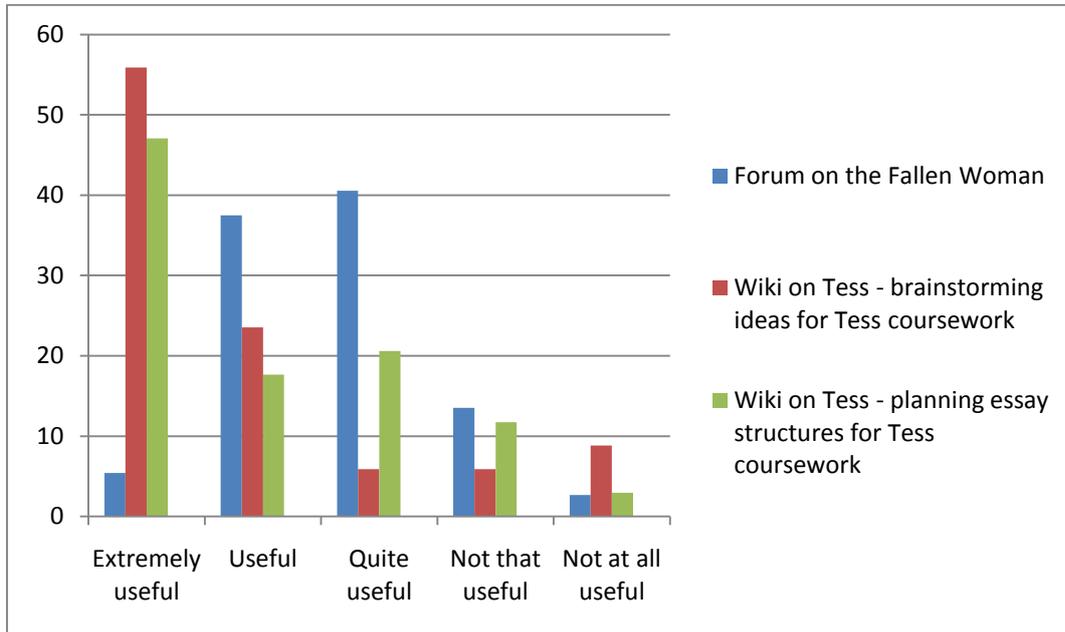
**Question 5:** Would you like to repeat the same activity of sharing ideas and essay structures when planning the second piece of coursework, or would you prefer to work on your own?

Yes	33
No	1

Twenty six out of thirty four students (76 %) ranked the brainstorming activity between 8 and 10, and thirty one of them (91%) claimed they would use some of the ideas generated by the wikis as material for their coursework. Crucially, thirty one out of the thirty four (91%) felt as if they were directly involved in a collaborative exercise with others. In fact, only one student on their questionnaire claimed that there was no such feeling (“Not a sense of collaboration as I felt like I was only working with my partner”). There were a couple of students who claimed that “only some students worked hard”, but overall the response the wiki was very positive. Many felt much more comfortable with the coursework questions now, since they had a variety of ideas to choose from. In terms of using the wiki to plan essay structures, the results were just as positive. Twenty five of the thirty four students (73 %) who responded to the questionnaire ranked the activity between 8 and 10.

Having questioned students on both the forum and the wiki, I thought it may be interesting to compare students’ feelings as to the usefulness of the tasks I had set them. The results are shown in the graph below:

**On a scale of 1-5, how useful have you found the two collaborative tasks on Moodle (forum on the fallen woman, and the wiki on Tess)?**



Whilst the forum is considered useful or quite useful, the wiki is seen to be much more valuable. Perhaps this is because students see the connection between the task and the coursework as direct and explicit – they are gathering and structuring ideas which they could use for their essays. With the forum, though it is related to their coursework, it has no bearing on their coursework in a direct sense, and therefore is not perceived to be as ‘useful’.

**Wiki 2: A Woman of No Importance**

**February 2011**

**30 respondents**

I changed the format of the second wiki based on feedback from the first. Some students had mentioned to me that they felt just working on an essay question for 15 minutes before moving on to the next was insufficient, since they were unable to develop their thinking and ideas in this short space of time. Instead, they preferred to work on one essay question, brainstorming ideas for it and creating an essay structure out of these ideas. This is how we conducted the second wiki, the results of which are shown below:

**Question 1:** Was the A Woman of No Importance wiki useful for planning your coursework?

Yes	28
No	2

**Question 2:** Will you use some of the ideas from the wiki as a basis for your coursework?

Yes	27
No	3

**Question 3:** Did you feel a sense of collaboration and sharing of ideas during the wiki task?

<b>Yes</b>	<b>27</b>
<b>No</b>	<b>3</b>

**Question 4:** Did you prefer the Tess wiki, in which you spent 15 minutes on each essay question, or the AWONI wiki, in which you were given a specific essay question to plan?

<b>Tess wiki</b>	<b>14</b>
<b>AWONI wiki</b>	<b>16</b>

Clearly, those who wished to change the wiki so that each group spent longer on one specific question are not an obvious majority; in fact, opinion is split almost down the middle. Many who preferred the Tess style wiki complained that the problem with assigning an entire essay to one group is that a) they may not understand or may not be able to develop an answer to that particular question and b) they may not use that question for their coursework. What is also obvious however, is like the Tess wiki, the AWONI wiki made students feel as if they were working as a unit, helping each other generate ideas and plans. As a result, the overwhelming majority (93%) found the activity useful.

### **Victorian Reading Database**

This is a work in progress. Students continue to upload their chosen passages from a variety of genres coupled with a literary analysis of it. It is hard to assess the degree of collaboration which the database has encouraged since the activity – at this moment in time – is still underway. However, part of the exit questionnaire I gave students in their last week of AS study shows that that majority of students have found the activity helpful for revision.

**On a scale of 1-5, how useful are you finding using the Victorian reading database?**

Ranking	1	2	3	4	5
Number of respondents	1	5	8	14	15

The rest of the exit questionnaire asked students to assess the usefulness and degree of collaboration which the forums and wikis had enabled.

**On a scale of 1-5, how useful have you found the forums in terms of learning from the ideas and opinions of other students.**

Ranking	1	2	3	4	5
Number of respondents	1	5	14	13	10

**On a scale of 1-5, how much did you feel you were collaborating with other students on the forums?**

Ranking	1	2	3	4	5
Number of respondents	1	9	14	12	8

**On a scale of 1-5, how useful have you found the wikis in terms of learning from the ideas and opinions of other students.**

Ranking	1	2	3	4	5
Number of respondents	0	3	2	13	24

**On a scale of 1-5, how much did you feel you were collaborating with other students on the wikis?**

Ranking	1	2	3	4	5
Number of respondents	0	1	6	19	12

### **Discussion**

Based on the findings of this exit questionnaire, students are extremely positive about wikis as a means of discussing and sharing ideas. They feel that they are engaged in an activity which encourages everyone to participate, whether or not that means creating ideas, modifying and editing others, or putting those ideas into some sort of structure. The wiki function on Moodle is extremely useful on this front: it allows students to unite in one space, and constantly generate new content for common consumption; it also provides the opportunity to modify previous content if and when necessary. There is a definite feeling of empowerment by students – having used the wiki, students tend to feel much more confident in approaching the coursework for English literature. The other advantage to the wiki is that it provides anonymity – no-one knows who has uploaded content and who has edited it. Students therefore can act with freedom to express their opinions and ideas without worrying about being judged or ‘getting it wrong’. The same does not apply to the forums. In fact, some of the comments from the questionnaires asked if there was an option on Moodle to make forum contributors nameless (there is no such option), since it was frightening to express oneself in writing to the class and beyond. Furthermore, there is an issue with feedback: not all students got a response from others, meaning they only had themselves to decide whether what they had said was correct or justifiable. The teacher at this stage could step in and make sure those students received feedback, but this would then open the ethical issue of levels of response; presumably the teacher’s response to a student’s ideas will for the most part be more informed than another student’s. Therefore, only some students would be getting teacher input whilst others would be getting student input. It is a dilemma not easily resolved. In terms of the database, this is too recent to evaluate, but whilst it seems useful, I would argue that it only encourages students to share ideas and texts whilst the teacher is instructing them to use it. Since classes have broken up for study leave, there has been a real drop in the amount of people adding content, though there

are many who go to database still looking for useful passages. There seems to be a desire to use it, but not necessarily to add to it (perhaps because not everyone has done extended reading).

My action research was heavily dependent on student questionnaires and surveys, and this is not without problems. The phrasing of questions is crucial, and at times I feel I did not always ask the right questions in the right way. I also feel that I should have extended the number of people involved in conducting the research, as this would have given more representative findings. Perhaps using other teachers' experiences using Moodle in the same way as myself would have given me more food for thought in terms of the way I proceeded with the research and the conclusions I drew from it. In terms of future development, the research undertaken here could be developed by attempting to use web 2.0 software to bring students together across curriculum areas. Literature students would benefit from collaborating with, for example, students of history, philosophy or politics on particular projects: it is possible that by communicating and working together via these technologies, they could enrich each other's understanding and awareness of culture and context.

### **Conclusion**

In sum, Moodle has some interesting interactive features which can be used to encourage student collaboration. The college's transition to Google Docs is one which will continue to enable students to work together, share ideas, edit and review each others' work. Whilst there is no 'wiki', 'forum' or 'database' option on Docs, the very nature by which the software operates means that any document can be shared amongst students, who can add and modify content. Having used Docs as a way of students working on a project and then presenting it as a PowerPoint, I think Docs is an excellent complement to Moodle in terms of its collaborative functionality. Word documents, PowerPoints, drawings, and spreadsheets can all be shared and modified by students, with all changes to a specific document happening in real time. Given students' acceptance of and desire to use of technology as a means of learning, both Moodle and Google docs provide them with a range of functions enabling them to share knowledge with and learn from each other.

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