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When technology is not enough: a culture of competition is the real obstacle to online collaboration

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Abstract

This paper discusses an integrated online learning tool that allows staff to display items from library reading lists. The tool has been widely used across the University for the last two years. Whilst the basic functions have been readily adopted, there has been very little use of the collaborative features. Very few students have rated articles on the reading lists or shared comments with staff or other students. The reasons for this lack of engagement amongst staff and students are explored using questionnaires, email and face to face discussions. These show that cultural factors play a strong part in determining how users perceive these tools. Particularly amongst students, a strong ethos of competition is seen to deter students from activities that involve sharing ideas with others on their course.

Background

This paper explores an attempt to provide a more engaging, collaborative way of presenting course reading lists to students. There were two drivers for this work, a frustration with the existing restrictive online collaboration options open to students and secondly, the University Library's need for a custom online learning solution.

The first driver is a personal long-held frustration with the University's online learning environment (duo: *durham university online*, based on Blackboard™ Learn). Whilst powerful and flexible, it is based on a top-down model of control (see Rose (2004) and Coopman (2009)) meaning that there are relatively few opportunities for students to actually *construct* knowledge online. Although there are notable exceptions, on many courses students' experience of duo is still largely transmissive: downloading lecture notes, reading announcements, submitting assignments online, etc. Relatively few courses use the more reflective tools such as blogs, wikis, portfolios, group file exchange, peer evaluation or discussion boards¹. Durham is far from alone in this pattern of conservative pedagogy, a recent JISC study confirms that this transmission approach to online learning environments is widespread across UK higher education institutions (JISC (2007)).

The second driver was a request from Library staff who wanted a way to make copyright cleared² scans of articles in books and journals available to students via the University's online learning environment (duo). This could not be achieved in a simple fashion using any of the standard tools. Instead it was decided to develop a bespoke Blackboard building block (Java extension) for duo. This building block defined a new content type and the ways staff and students could interact with it. As

¹ Obtained from annual student evaluations, see <http://www.dur.ac.uk/its/lt/duo/evaluation/>

² Items cleared under the Copyright Licensing Agent agreement – see <http://www.cla.co.uk/> and specifically for HE: http://www.cla.co.uk/data/pdfs/he/he_quick_guide_comp_he_licence_jan_10.pdf

these factors would be defined during the coding process, it opened up the possibility for adding greater user interaction.

Jumping ahead for a moment, as the development work began, the scope of this work expanded. After seeing early prototypes, the Library asked if the interactive rating and comment features I'd developed could be applied to another project I was working on – to deliver Library reading lists online. As the first problem was essentially a subset of the second, the projects were merged. As such, the new project provided me with the opportunity to answer a comment in the 2007 duo student evaluation that had haunted me for the last three years:

“give some questions for the reading rather than posting nothing but a lonely reading list”.

This report considers the pedagogical aspects of the subsequent development of a custom Library Resources content type.

Aim

The project aimed to create a custom tool in duo that would display a list of library resources (book chapters, journal articles, CLA-cleared items, etc.) in a course. This tool would provide staff and students with opportunities for constructing knowledge within the online learning environment. As such it would help the institutional learning environment to become more learner-centred, positioning students

“as co-constructors of knowledge... ... participants in their education rather than passive receivers of preconstructed ‘truths’.”

Webb Boyd (2008, p224)

Staff should be able to classify individual items to help students distinguish between essential, recommended and supplementary reading. Both staff and students could add comments about items on the list. These could be used by staff to provide some scaffolding and context for the learners, e.g. to direct students to particular sections, invite comparisons with other items, or relate them to particular lectures or other learning activities.

Students could comment and rate the items. These extra functions were added in an attempt to use theories of distributed cognition (e.g. Salomon (1997)). Ratings and comments would help provide an environment where learning - understanding through knowledge construction - can occur as an online *community* as well as at the *individual* level. By recording and sharing the individual learner's experiences of these resources, it was hoped that students would actively engage with them online. As such the tool would provide the learners with a space to *develop* the context. It would become integral to the *process* of learning, rather than just being a mechanism for the *delivery* of content. It would also satisfy many of George Siemens's principles of connectivism, notably that:

- *Learning and knowledge rests in diversity of opinions*
- *Learning may reside in non-human appliances*

Siemens (2004)

As the tool also makes these data available to staff who teach on the course, it provides them with insight into (and evidence of) the learning process. It also offers them the opportunity to check whether students' engagement with these items is aligned to the aims of the course. It was also important that the tool should be simple for students and, particularly, staff to use. As Kirkup and Kirkwood have noted in their study of the effect of ICT on the teaching in the Open University, most teaching staff are looking for

"those technologies which they can incorporate into their teaching activity most easily, that offer affordances for what they already do"

Kirkup & Kirkwood (2005, p188) .

Description of the Tool

The finished tool is shown below in Figure 1. The tool can be accessed directly from the course menu in Blackboard (by adding a custom 'Library Resources' button) and/or from the standard tools section in every course. It is automatically populated with data held by the Library.

The screenshot displays the Blackboard 'Library Resources' tool. The sidebar on the left includes links for 'Writing Building Blocks', 'Home', 'Information', 'Getting Started', 'Useful Links', 'Terms of Use', 'Standard Tools', 'Test Yourself', and 'Library Resources'. The main content area is titled 'Library Resources' and features a 'Sort By' and 'Actions' menu. Below this is a table of resources:

Category	Type	Item	Rating
Essential Reading	Text	Advances in historical ecology / William Balée, editor. Language: English Type: text Publisher: New York : Columbia University Press, c1998.	5
Recommended Reading	Text	Agricultural involution : the process of ecological change in Indonesia / by Clifford Geertz. Author(s): Geertz, Clifford. Language: English Type: text Publisher: Berkeley : Published for the Association of Asian Studies by University of California Press, c1963.	0
Background Reading	Text	An Amazonian myth and its history / Peter Gow. Author(s): Gow, Peter. Language: English Type: text Publisher: Oxford : Oxford University Press, 2001.	1
Essential Reading	Text	Another reason : science and the imagination of modern India / Gyan Prakash. Author(s): Prakash, Gyan, 1952- Language: English Type: text Publisher: Princeton, N.J. Chichester : Princeton University Press, 1999.	0
Essential Reading	Text	An anthropological critique of development : the growth of ignorance / edited by Mark Hobart. Language: English Type: text Publisher: London : Routledge, 1993.	0

Figure 1: Custom tool deployed in a course

The screenshot shows a list of library resources for a course. Wherever possible the Library resources tool uses standard features from Blackboard's user interface (e.g. sortable lists, action menus and buttons). Library resources have been categorised by the lecturer (shown in column one), icons in column two indicate the type of resource (these are also described using tooltips and title fields). Column three display details about the item, e.g. the author, language of the article and

publisher. There is also a link to take the student directly to the item, or if it is not available online, to the relevant library catalogue entry. Staff in this course have enabled the optional commenting and rating feature (seen in column 4). Both staff and students can perform further actions (e.g. altering the sort order and grouping of entries) and using the blue buttons above the list.

Commenting

The tool also has a commenting feature, which is enabled for both staff and students. When a user clicks the comments icon next to an entry they are taken to a page which allows them to add their own comments, and see those added by other users (see Figure 2). To try and encourage people to add comments, the page starts with a form which can be used to submit comments. If the staff allow it, students can choose to submit comments anonymously. This facility has been designed to encourage learners to post comments even if they have low self-confidence or if their posting by its very nature displays some lack of comprehension.

Figure 2: Top of the 'Comments' page

Kao *et al.* (2008) have identified four models of sharing appropriate to co-operative and competitive active learning: *basic sharing*, *sharing with notification*, *sharing with feedback* and *sharing with interaction*. This tool falls into either their “basic sharing category”, where students cite or use information from one of their peers, or possibly the “sharing with feedback” as subsequent comments can help the original author. In truth this implementation is probably somewhere in between the two, as it lacks a notification system meaning that the original commenter would have

to return to duo to see that someone had responded to their comments. Comments are unthreaded and displayed most recently posted first to highlight the latest activity.

During the design of the tool it was decided to display the comments in such a way that the viewer can differentiate between comments that were posted by staff members and those of their peers (see Figure 3). This decision was informed by the work of Webb Boyd (2008). In an analysis of students' perceptions of discussion board postings, she showed that they placed greater emphasis on postings from staff who taught on the course.

Comments

Staff comments are shown in orange, student comments in blue (except anonymous student comments, which are shown in grey)

Thanks Fred :-)

Posted Anonymously at 1:27 pm on 23 April 2010 [Delete](#)

I almost gave up this chapter half way through too! Keep at it. I found reading Peter Gow's article first helped me to understand this one. HTH :-)

Posted By Fred Bloggs at 1:26 pm on 23 April 2010 [Delete](#)

Can anyone help me with this article pls? It makes no sense to me!

Posted Anonymously at 1:26 pm on 23 April 2010 [Delete](#)

When reading this article take careful note of the language used. Compare it to that used in the other items. What can you deduce about Baleé's background?

Posted By Malcolm Murray at 1:24 pm on 23 April 2010 [Edit](#) [Delete](#)

Figure 3: Sample staff and student comments which are displayed on the lower part of the 'Comments' page.

Peer Ratings

The tool also has an option to allow students to rate individual items in terms of the ease of reading, relevance to the course and value (in the sense of time spent on it). These terms were specified by the Librarians after discussing possibilities with students. Students can rate each factor using a five point likert scale (from very good to very poor). Students are free to alter their rating at any time.

Ratings

[Advances in historical ecology / William Balée, editor.](#)
 Language: English Type: text
 Publisher: New York : Columbia University Press, c1998.

Use this form to change your rating of this item
 Other students' rating(s) are shown below

★ Indicates a required field.

Cancel Submit

1. Your Rating

★ Ease of Reading Good ★★★★★

★ Relevance Poor ★★★☆☆

★ Value Very Poor ★☆☆☆☆

2. Submit

Cancel Submit

Figure 4: The top of the resource 'Ratings' page

The five star ranking feature use a process that was designed to be familiar to students. Similar tools are already available in the standard Blackboard discussion boards, and are common across many blogs and e-commerce sites such as Amazon and YouTube. It was added because Thoms *et al.* (2010) - citing a 2008 marketing survey³ - show that the feature most desired by visitors to a website is the ability to rate products and services. They go on to show how, in an educational setting, a rating system can provide learners with a simple, quick method of providing feedback to the community, increasing what Tu and McIsaac (2002) term its "social presence". It was hoped that (particularly when combined with the comment data) the rating tool would provide valuable information for the lecturers about which resources the students were using and found useful. This information could be used when reviewing the course reading list at the end of the year.

Below the form students use to submit their rating, three histograms display the ratings of other students. Two of these graphs are shown in Figure 5.

³ Grau, Jeffrey (2008) "Consumer Interactions: social shopping, blogs and reviews." *eMarketer* April 2008.



Figure 5: The bottom of the 'Ratings' page, which allows the viewer to compare their ratings with others

If this student has already rated the item, then the corresponding column in these histograms is shown in a different colour. In the example above, the student has rated the ease of reading as good – so the fourth column is shown in blue. No student has rated it as very poor, so the first column is empty. These histograms allow students to compare their perceptions with those of their peers to see if they are consistent or at odds with other students on the course.

Deployment

After suitable testing, the tool was deployed into our production online learning environment, making it accessible to approximately 15,000 students and 2,500 staff. It was launched quietly, added to our standard staff training materials and online documentation. Unusually for learning environment tools, it was largely promoted and supported by faculty librarians.

Methodology

To measure the use and effect of this new tool, the following data sources were used:

- Annual evaluation of student use of duo in May 2008 and 2009 ($n_{2008}=3184$, $n_{2009}=2619$)
- Annual evaluation of staff use of duo in May 2008 and 2009 ($n_{2008}=225$, $n_{2009}=270$)
- Analysis of the Blackboard log files and database entries relating to this tool
- Discussion and emails exchanges with students in three selected courses
- Discussion and emails with staff who used this tool to help support their teaching

The annual evaluations and emails contained specific questions relating to whether or not the individuals had used these tools and asking them to explain their answer. At all times the methods used to gather data were entirely optional and designed to minimise the disruption to staff and students.

Results

This section begins with a description of the rollout of the tool, then describes a pilot data gathering project. The results of the pilot were significantly alarming that an institution-wide investigation was launched.

General adoption

At the time of writing, this tool had been deployed in more than 1,580 courses. Of these, 1,261 are live in the current academic year (approximately 50% of all the courses taught using duo this year have library resource lists enabled). 267 reading lists have been customised for a particular course (e.g. specifying a different display order, or using a custom source list – common in Medicine). 56 have been classified into essential, recommended and background reading, this is most common in courses from the Faculty of Arts and Humanities, but examples can be found from all three faculties.

Surveys of our students showed that the majority had used this tool (54% in 2008, 59% in 2009). In both years, just over 60% of the students questioned said that they would be willing to use the tool to rate and comment on learning materials. Similar surveys of teaching staff showed that many were aware of this tool: 14% of staff had used it in 2008, rising to 21% in 2009. Further questioning of the staff who had used the tool showed whilst most had found it to be of some use (see Table 1) that few were aware of all the features. For example, only 41% (2008) and 45% (2009) were aware that the tool could be used to let students rate and comment on the reading. More concerning was the fact that staff overwhelmingly reported a negative experience when encouraging students to comment on articles (see Table 2).

Table 1: Perceived usefulness of this custom tool

How useful was the library resources tool		
	2008	2009
Very useful	32%	26%
Somewhat useful	50%	67%
Not very useful	18%	7%

Table 2: Perceived success of ratings and comments

If you encouraged students to comment on the readings, how well did it work?		
	2008	2009
Very Well	0%	0%
Quite Well	0%	29%
Not at all well	100%	71%

Comments

Looking at the underlying database entries, it quickly became clear that the comment feature was barely used. All comments submitted during the study period (excluding any submitted but later deleted) are listed below in Table 3.

Table 3: Comments submitted by staff and students

Course	Role	Text	Anonymous
Anthropology	Staff	Key reading for essay Title No. 1	No
Anthropology	Staff	A classic-- this is one of the best early attempts to apply the case study method, common in western jurisprudence, to societies which other anthropologists had said have no law.	No
Anthropology	Staff	This is one of the most important books in legal anthropology. This is not to say anyone agrees with everything in it, but even those who would disagree with all of it will tell you it's essential reading for anyone who seriously wants to understand how we got to where we are in legal anthropology.	No
Anthropology	Staff	I have found this book to be tremendously helpful in making sense of the key debates in legal anthropology. I don't know if I would go so far as to say I agree with everything Pospisil says, but I'd have a hard time coming up with good arguments against most of it.	No
Geography	Staff	This is excellent	No
Law	Student	I wish you would make it easier to actually find the relevant texts. Why hide it under a different title?	Yes
Psychology	Student	Oh yeah.	Yes
Sociology	Student	A very informative, non jargon book	Yes
Education	Student	link does not work	Yes
Education	Student	This link doesn't work	Yes

It is interesting to note that all the students' comments were submitted anonymously. Whilst some staff members (particularly those in Anthropology) have submitted detailed comments providing the reader with some context and/or encouragement to engage with these items, only one of the student comments (Sociology) conveys information about the content of the resource. It is strange and rather sad that students saw fit to add comments that some links failed (where it is unlikely to be read by anyone with the necessary technical skills to resolve this) but not share any understanding gained from these resources. No course had more than one comment, meaning that there was never any really active dialogue. As such, it would seem likely that students faced with no comments, and more particularly those who posted a comment experience emotions similar to those articulated by Robertson (2008) when he is confronted with empty discussion boards:

"I get frustration and a feeling of loss, of negativity toward the arena and to the others who aren't there to ask me questions or answer mine and to stimulate my thoughts to new insights".

Robertson (2008)

Pilot Investigation

In order to try and understand why so few comments had been submitted a pilot investigation was carried out. After contacting staff who taught the modules, emails were sent out to all students on three Blackboard courses (a first year undergraduate Geography course, a second year

undergraduate Theology course and a postgraduate course in Education). These courses were selected because they numbered amongst the most frequent users of Library CLA-cleared resources, as measured by the number of document downloads. Some students on these courses frequently accessed the same documents multiple times (to a maximum of seven times for one file, spread across a period of several weeks). This behaviour implies that they are assuming that these resources will be available anytime on demand, rather than feeling the need to download a local copy for their own use. As such it is consistent with the Web 2.0 online collaborative approach. The responses from the students are shown in Table 4. The column headings show the responses to the following questions:

- **Noticed:** Had the students noticed the comments feature?
- **Relevant:** Would they consider this tool relevant to the task (e.g. seminar/tutorial preparation or essay writing)?
- **Elsewhere:** Did they discuss these articles with their peers elsewhere?
- **F2F:** If so, was this discussion carried out face to face?
- **Email:** or by email
- **Online:** or online using another method
- **Rating:** Would they like a way of rating content in duo?

Table 4: Responses from direct emails

Student	Course	Noticed	Relevant	Elsewhere	F2F	Email	Online	Rating
A	Geography	No	Yes	Yes	Yes	Yes	No	Yes
B	Geography	No	No	Yes	Yes	No	No	Yes
C	Geography	No	No	Yes	Yes	Yes	No	Not sure
D	Geography	No	No	Yes	Yes	No	No	No
E	Geography	No	Yes	Yes	Yes	No	No	Not sure
F	Geography	No	No	No	No	No	No	Yes
G	Geography	No	Yes	No	No	No	No	No
H	Geography	No	No	Yes	Yes	No	No	No

The students all reported that they were unaware of this feature of the Library Reading List tool (despite the fact that the rating and comment icons were displayed in their courses). Some could see the relevance of performing this kind of activity within the learning environment, but most were sharing their experiences within a narrow circle of friends, either online, face to face, or both.

These findings were shared with the staff who taught on this course. One response from a lecturer on the course provides a clue as to why students were not embracing the collaborative tools, it was not part of their lesson plan:

most of the use of the resources related to a compulsory tutorial so I am not surprised the hit rate was high -the comment/discussion take up would be low as they would have been encouraged to do this through Tutorials where the class sizes are smaller (6 rather than 300) and where the Tutor can really make sure they have understood things (as they are 1st years)

Geography Lecturer

Ratings

The ratings feature was equally under-used. Table 5 lists the ratings supplied by students during the study period.

Table 5: Ratings added by Students

User	Record Id	Course	Ease	Relevance	Value
1	b11331276	History	4	3	4
2	b13943807	Sociology	5	5	5
3	b19189199	Health	5	5	5
4	b19795324	International Relations	4	5	5
5	b20161463	International Relations	5	5	5
6	b20164208	Anthropology	5	5	5
7	b20409618	Psychology	5	5	5
8	b20871958	Psychology	3	3	3
9	b21058830	Law	4	4	4
10	b21092205	French	1	2	1

The identity of students and their exact course (module) has been concealed, but it is significant that in each case, rating of items was a single, never to be repeated activity. This indicates a lack of engagement with this feature and the absence of sufficient stimuli to encourage them to continue (start) contributing.

The chronic underuse of this tool was a cause for concern. In an attempt to provide a more representative analysis of staff and students experience of this tool and their attitude to online collaboration, a series of questions were added to Durham's annual staff and student evaluations of duo.

Institution-wide Investigation

The annual survey included questions designed to ascertain the students' perception of their IT literacy and their use of collaborative tools within and outwith the institutional learning environment. Their perception of their IT literacy is listed in Table 6. In both years the vast majority of students (> 90%) report that they are comfortable with a range of computer programs, and 55% claiming to be advanced users.

Table 6: Students' self-reported level of IT literacy

Level of Computer Literacy	2008	2009
I rarely use a computer and find most IT use (including this survey) challenging	<1%	<1%
I am reasonably comfortable with word processing, browsing the Internet and sending emails, but little more	8%	8%
I am reasonably comfortable with a range of computer programs	36%	37%
I am an accomplished user of a number of computer programs, using advanced features as well as basics	36%	33%
I consider myself an advanced user. I can usually master programs easily, use advanced features and perhaps even code, or advise others occasionally	15%	17%
I am an expert user. People come to me for help with a range of IT matters. (You may code regularly or IT may be the focus or a significant portion of your course or job)	4%	5%

Table 7 reports their use of Web 2.0 tools. Students do use social networking and web 2.0 tools for learning or communicating with their classmates or teachers (79% in 2008, 77% in 2009). Many of the tools they use incorporate rating and commenting tools. Thus it is considered extremely unlikely that the low library resource tool participation rates are because they didn't understand how the tool worked, or were unable to master the interface. Rather, it is probably more a result of a perceived divide between what students perceive to be learning and social activity. The figures confirm the trends reported by Fox and Cameron (in Stone (2010)) - students tend to use these external tools for communication rather than for formal learning. Furthermore the responses in these surveys suggests that their use tends to be in situations excluding the academics who teach on their course.

Table 7: Student use of Web 2.0 tools

	Facebook		Tagging		YouTube	
	2008	2009	2008	2009	2008	2009
Social - classmates	64%	61%	0%	1%	8%	10%
Social - college friends	71%	69%	0%	1%	16%	20%
Social - friends away from Durham	71%	70%	1%	1%	23%	26%
Social - teachers	7%	7%	0%	0%	1%	1%
Learning with classmates	22%	27%	0%	0%	5%	7%
Learning with teachers	2%	2%	0%	0%	3%	5%
Not Used	1%	1%	64%	59%	31%	29%

Collaborative activities often seem to be considered as “non-academic” and as such take place outside the confines of the University’s formal online learning environment. It is revealing that in the responses summarised in Table 8 that the number of students who use external sites for online collaboration (24%) exceeds the total of all the methods within duo (21%).

Table 8: Students who have used any online tools to collaborate with other students for academic work?

Online collaborative method(s) used		
None	1393	53%
Collaborated through a blog in duo:	62	2%
Collaborated using a wiki in duo:	116	4%
Collaborated in a duo discussion board:	166	6%
Collaborated through a blog outside of duo:	37	1%
Collaborated through a wiki outside of duo:	35	1%
Collaborated through a social networking tool outside of duo:	618	24%
Other (<i>please specify</i>):	189	7%

Note student could select more than one response to this question, so the numbers do not sum to 100%

As reported earlier, over half of the students surveyed claimed to have used the library resources tool in duo. Students who answered no to this question were asked to explain why. Their responses were categorised and are listed in Table 9. Sample responses from the student surveys of both 2008 and 2009 discussed below.

Table 9: Reasons why students didn't use the library resources tool (2008)

Reason cited		
No need for this sort of tool	57	20%
Claimed course didn't use books in this way	6	2%
Alternative method of online sharing available	13	5%
Preferred to do this face to face	38	14%
No time for this activity	48	17%
Too lazy (their own words)	23	8%
Don't understand how this could help	23	8%
Didn't know the tool existed	44	16%
Students who don't currently share their ideas	17	6%
Students who won't share their ideas	41	14%
General cynicism/lack of faith in online community of practice	24	9%

Some students clearly did not see the need for this sort of tool:

For many of my modules, lecturers provide either a core text or a short reading list - i.e. everyone reads these, regardless of how highly they rate them!

Some responses indicated that students may not value the feedback of others on their course:

Because everyone finds different information useful, and I know that if someone told me that I didn't need to use it I probably wouldn't read it and then I couldn't make the decision for myself.

As a philosophy student my essays should be somewhat original. How someone else rates the usefulness of book is likely to be irrelevant to me. The comments could be more useful, I suppose. Though in my small class it's far easier to talk about these things through word of mouth than it is to write a review.

Most respondents who gave this answer felt this sort of activity should occur elsewhere, normally in a face to face encounter including members of staff:

because that's what you do in seminars, and i see duo as a place for getting handouts, reading lists, not as another form of discussion

I would just TELL them. Like a real human being SPEAKING to another one. Why would I need a computer to do this?

More alarmingly, some students (all restricted to the Faculty of Science) adopted a naive position rejecting the need to engage with written materials. This response is typical:

Sciences course does not justify copious amounts of reading and hence such a tool.

A small number of students (5% in 2008) were already using or considering other online tools to perform this function:

It would probably be easier to send a link via email or a facebook group for the project. Having said that, I haven't looked at or used this system.

I use Facebook or email already, I see no reason to change.

We would discuss them elsewhere, in a preferred web app.

Many preferred to discuss articles face to face:

If I really wanted to talk about books or whatever I would talk to them in person

cos i like to talk and discuss the course in person with my class mates

A frequent response (representing a quarter of the total comments) was that students felt that either they lacked the time to use this tool, or described themselves as too lazy to use it:

I'd just likely not bother.

Too lazy/shy

Takes time to give feedback at a time when you would need to be learning – would be a distraction.

It is illuminating that this third student clearly does not equate this collaborative peer activity with the act of learning. Several students reported that although they might not take the time to rate or comment items themselves, they might value those from others on the course:

Realistically, I probably wouldn't think about taking the time to rate materials, though I might look at other people's rating and take it into consideration when deciding which materials to study.

Probably wouldn't bother to review, but would probably read reviews if available.

Time it takes - I'm a distance learning student with a full time demanding job and time is limited as it is! I would probably use the ratings others had given it though to help me narrow down my selection

Others didn't understand what this tool was, or just didn't know that the tool existed.

Some students didn't want to share their perceptions, perhaps through personal insecurity or a fear they would be subject to criticism or mislead their peer group:

I don't trust other people, because i know myself i'd rate something badly just because i don't like the course!

*Would not want to comment on them and my comments might not be relevant to other users.
(A bit like finding a book in the library already underlined!)*

Indeed some went further and seem to attach no value to comments from their peers:

As with wikipedia, anybody can write anything. I don't want to have my opinions influenced by a half-wit.

It could also be inferred that the respondent is admitting that they feel poorly equipped to evaluate this more informal source of information, compared with the "secure" content of published materials.

Others expressed doubt about whether such a community of practice exists/would develop in their course:

XXXX has a very apathetic student group. I know that I would get very little out of sharing information.

I don't have any problem sharing books/sources with classmates but whether I bother to do it this way would depend how many people knew about the function and how many people went on to use it.

I am doing a degree after retiring consequently I am much older than my class mates, so our social interaction is limited

I think the third response is particularly sad, as this student is robbed of the chance to share their own life experiences with the rest of the class.

What was striking was the strong hostility some students expressed to the concept of sharing comments about items on the reading lists with their peer group:

I have other means of sharing information with my classmates, and frankly the atmosphere in Durham is too competitive to do that.

i dont want to give away my knowledge

I'm not going to do my own work, just for someone to 'share' ie copy my ideas!

In an ideal world I'd say yes. But it means whilst some do all the reading and all the hard work others can then piggy back of others' efforts. In this sense, it is no longer a sharing of information

Reduces my competitive advantage!

There is a competitive aspect about university. Loading information simply for the pure benefit of my classmates is a bit further than I'm willing to go

Why on earth would I try and help my classmates? I am competing with them for marks, however much one might wish to gloss over this. What a remarkably stupid question.

There would be a temptation for some people to rely on these notes. It would also increase pressure on books as people would only read those recommended. From a selfish viewpoint, I read the material, and don't want other people putting in less effort and automatically finding the best material.

The language they use suggests that understanding is a limited quality – only available to the first few to access it. Despite the fact that marks are *not* normalised on these courses, so potentially all students could be awarded firsts, there is still a frequently aired concern that sharing information could somehow reduce students own chance of receiving a high grade.

One student took a wider view and raised concerns about the effect of this tool in shaping the final essays:

For essays/extra research it may encourage laziness as people will just read the most highly rated books - rather than reading around. Lecturers could find themselves marking 200 identical essays!!

Finally this comment echoes the frustration of Robertson cited above:

No one else does. I have been on them and I do not feel that anyone really understands them. Think you should start the list off or other people will not add to it.

The surveys also included questions designed to obtain information about the experience and motivation of lecturers when using the tool. Analysis of the responses showed that some staff chose to deploy the tool to support learning activities designed for individuals, rather than as collaborative activities:

I use this function for essential reading for seminars. The students must read the articles so I see no requirement to rate or comment. This is what we discuss in seminars, therefore it would be a distraction and undermine students' independence of thought within seminars, as students could simply look at other people's comments about the reading etc. on DUO.

Others saw it simply as a convenient way for displaying a list of reading, and chose not to encourage online commenting:

*Considering the amount of students' time to be spent on reading, the reading list should only contain relevant material of high quality anyway. Discussion of reading should take place *in class*, being a complex matter.*

This is why we have seminars

Some expressed frustration at the surface learning approaches adopted by many students on their course:

Most students can barely be bothered to read one item from a reading list, never mind comment on it. The keen ones would be wasting their time doing it.

One, although self-deprecating about their IT experience, clearly understood the value of staff direction and encouragement for students:

I guess just because I am a bit of a Luddite, as are many of many of my students. I would prefer to introduce an ability to comment when I was sure they were comfortable with the use of this technology for ordinary usage. (This is not evident at present.) I would then trust them to respond to the question at hand and not just their frustration??? at accessing materials.

Discussion

This tool was designed to extend the value of library reading lists by drawing upon the intrinsic advantages of Web 2.0 tools, such that it

“gets better the more people use it, consuming and remixing data from multiple sources, including individual users”

O'Reilly (2005)

Stephenson (2001) notes that much of online learning is still little more than “electronic page turning” meaning that it simply replicates traditional activities, not taking advantage of the opportunities the new medium offers, particularly the inherent connectivity. In essence basic deployment of this tool (the simple movement of reading lists from paper handbooks to online courses) is an example of such page turning. This paper has shown that whilst the tool functions as designed, very few staff or students are using the additional collaborative features it offers to support learning and teaching, which would deliver a Web 2.0 experience.

Stephenson claims that if students are to embrace the more interactive features of online learning environments to manage their own learning, then this will require considerable efforts on the part of staff to change their approach:

“Many students, it seems, respond to the notion of a course in a traditional manner, seeing the experience as just being another course delivered online rather than an online experience from which considerable learning can take place.”

Stephenson (2001, p221)

The need for supported change reflects the fact that many staff whose teaching includes an online component may have little direct experience of using online learning environments as a student. This can result in staff adopting a behaviourist model of learning, perceiving the system as merely an efficient largely one-way form of communication. This was highlighted by the JISC:

“VLEs are often used for passive rather than active learning... This may indicate a need for staff development in creative learning designs based around a VLE and greater understanding by both staff and learners of the role of asynchronous communication in learning.”

JISC (2007, p26)

As such there is a failure to constructively align the collaborative component of this tool with the aims of the course. There is also the possibility of friction between the models of learning used by staff and students (behaviourist), and that assumed (a more co-operative, social constructivist approach

sensu) when the tool was designed. Cole (2009) has reported a similar phenomenon in the educational use of wikis.

Burke (2000) identifies a particular problem when first deploying tools which include comment or rating features. A

“system with a small base of ratings is unlikely to be useful... These factors contribute to a ‘ramp-up’ problem: until there is a large number of users... ..the system cannot be useful for most users, and until a sufficient number of rated items has been collected, the system cannot be useful for a particular user.”

Burke (2000, p2)

Yet when first deployed in a course this is exactly the position – the tool has no comments or ratings, so no-one adds any. It is worth revisiting this comment from a student when asked to explain why they didn’t use this tool for commenting or rating:

No one else does. I have been on them and I do not feel that anyone really understands them. Think you should start the list off or other people will not add to it.

In the absence of a strong lead from staff (the constructive alignment), students seem unwilling to step in and begin sharing information themselves. The paradox is that they regularly exchange information using a similar interface with Web 2.0 tools such as Facebook. One reason why this institutional attempt to harness the collective wisdom of the students on the course may have failed is because of the lack of any reward for individual contributors, to encourage further participation. (Kao et al. 2008) recognise this as one of the risks associated with the basic sharing model:

“most learning situations lack proper motivation for sharing; therefore, some self-regulated individuals model or cite works while others do not, even when requested or instructed. Furthermore, those who benefit from sharing usually have no channel for notifying idea originators, who therefore remain unaware of how others use their ideas.”

(Kao et al. 2008)

Even successful e-commerce sites such as Amazon have a very low ratio of ratings to visits (purchases). Table 10 shows the number of ratings for the top six current bestselling books on the UK version of the site, plus details for two classic academic works (Charles Darwin’s *On the origin of species* and Steven Hawkins’ *A brief history of time*).

Table 10: Selected Collaborative Activity on Amazon – 27th April 2010

Book	Rank	Days in top 100	Reviews	Discussions
The girl who kicked the hornet’s nest	1	115	339	6
The girl with the dragon tattoo	2	537	493	4
The girl who played with fire	3	332	283	2
The Dukan diet	4	9	0	0
Jamie does ...	5	20	3	0
Plenty	6	83	1	0
A brief history of time	1006	0	69	0
On the origin of species	19,446	0	4	0

Source: http://www.amazon.co.uk/gp/bestsellers/books/ref=pd_dp_ts_b_1

Whilst some books are generating significant feedback from users (reviews numbering in the hundreds and occasionally spawning online discussions between readers), these figures are still thought to be only a tiny fraction of the numbers of these books sold. Whilst Amazon does not make its sales figures public, the number one bestseller (*The girl who kicked the hornet's nest*) sold 98,167 copies in just three days after its launch on the 1st of April this year (Stone (2010)).

In both the case of Amazon and the library resources tool in duo, I think the key barrier to posting is the workflow of the web pages, specifically the dislocation between obtaining the item (e.g. a book), reading it, then submitting a review. If someone wants to rate a book after reading it, whether on Amazon or duo, they need to return to the website and find the appropriate page. For many that may be too big a hurdle with no obvious reward. This is particularly likely to be the case for students adopting surface or strategic approaches to their learning. Motivation has been identified as a key factor in online courses:

"Part of the challenge web-based courses pose is that so much of what happens in them is dependent on the self-motivation of students."

Lin & Hsieh (2001, p378)

Similar lack of engagement with Blackboard discussion boards has been explained by the fact that many students

"focus on final assessment rather than learning – if it is not compulsory or graded, then why bother?"

(Katsifli (2010, p333)

Stiles & Yorke (2007) believe that the location of such a service is also significant. They suggest that increasingly, students will implement their own sharing and collaboration environments *externally* to the institution. One of the perceived advantages of these is that they can involve individuals beyond the institution and their current courses. This hypothesis is supported by the findings of Franklin & Armstrong (2009) who record that many students are ignoring Web 2.0 tools within their institutional learning environment, preferring to use external tools such as Facebook.

Conclusion

This paper has shown that technically, it is a relatively simple task to create an integrated learning tool that allows staff to display items from library reading lists in a highly automated manner. This can be easily extended to facilitate student rating and shared comments. The basic tool was widely adopted (used in over 50% of all current courses) providing a simple method of communicating reading lists to students, more convenient than traditional paper methods.

Yet the deployment was certainly not a complete success. The vast majority of staff and students failed to engage with the collaborative opportunities offered by the tool. The reasons for this appear to be largely cultural. Most staff seem to expect this sort of evaluation and the final act of knowledge construction to occur offline, often in a structured environment such as a seminar or

tutorial. This may be a view informed by their own experience of traditional learning (pre-dating the widespread use of online learning environments).

In the absence of strong encouragement by staff, most students also avoid these features. Some fear that the act of online exchange may expose their ignorance, others that other students will not want to read their comments, or feel that participation will not realise any significant benefit. More worryingly some seem strongly opposed to any form sharing, a view possibly reinforced by a strong ethos of competition amongst the student body. Where students do perform such knowledge creation online, it seems they still favour services external to the University (such as Facebook) where they can exchange information out of the sight of their lecturers.

This represents a lost opportunity for staff to learn from this activity, and may raise issues about who is included or excluded from these informal arrangements. To try and rectify this situation requires either changing the attitude of staff to value and thus promote this activity more (involving a degree of course redesign), and/or modifying the tool to provide some form of reward mechanism (probably based on simple acknowledgement of use) to encourage students to begin and continue to share their thoughts within the institutional learning environment.

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