

## Online Student Attitudes to Ownership of User-generated Material within an Online Community of Practice

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### ABSTRACT

This paper investigates online student attitudes towards ownership of collaboratively created online resources and explores whether a sense of community might influence such attitudes. Five participants were randomly selected as they represented a group working collaboratively to complete part of an online module aimed at postgraduate education professionals located in different parts of the world. Applying Rovai's framework (2001) to identify a sense of community, the work adopts a case-study methodology whilst utilizing a range of data collection methods including email, personal online journal postings and a short questionnaire. Data generated was coded to identify emergent themes with a colleague acting as critical friend to verify the findings and ensure validity of the research. The findings indicate that students believe jointly- created resources should be freely available to participants and to tutors who may request that they be given permission to reuse or repurpose such artefacts. The sense of belonging to a Community of Practice is key to this view although the subsequent question of making such materials freely available across the institution or through OERs requires further investigation.

**Keywords:** *Community of practice, user-generated resources, ownership, online, attitude*

### INTRODUCTION

There is growing commitment within Higher Education in the United Kingdom for the establishment of interactive environments in which technology is used to support and enhance collaborative learning processes (Jonassen, Peck & Wilson, 1999). Students tend to support the premise of active engagement with others which they view as both constructive and rewarding (Horizon, 2007) and in response tutors are endeavouring to secure engagement by encouraging the development of communities of learning (Ebersbach, Glaser & Heigl, 2005). In support of Wenger's theory that acquisition of knowledge relies on the interaction between individual experiences and socially defined knowledge structures (Wenger, 2000), a community of practice would seem to be an ideal way in which to generate viable ideas, share problems and seek solutions whilst enabling individuals to fulfil a common goal of knowledge creation (Owen, Grant, Sayers & Facer, 2006). Within such a community students adopt new roles as producers, commentators and classifiers (Horizon, 2007) which, in turn, raises questions of ownership of user-generated resources.

### BACKGROUND

The groups at the centre of this study are, in the author's view, communities of practice (Lave & Wenger, 1991) in that they encompasses the socio-situational learning which occurs when a group interacts in order to share proficiency and understand a given topic (Marathe, 1999). It is beyond the scope of this study to discuss the concept of Communities of Practice (CoP) in detail, but the groups within the main cohort are deemed to be because they meet Wenger's characteristics of *Mutual Engagement* as members establish norms and build collaborative relationships; *Joint Enterprise* through their group interactions negotiating the group ethos and identity as it develops; and *Shared Repertoire* as group presentations are created and shared (Wenger, 2003). The group as a whole is registered onto an MA programme and form smaller groupings (up to eight) for the completion of a three week collaborative project half way through the ten week module. As such, each smaller group is an *intentionally- designed* CoP (Por, 2004) with a short lifespan to accomplish a specific purpose and thus demands increased energy for a shorter timescale with a narrower focus than is usual with more permanent CoPs.

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Yet, sharing and learning cannot be ‘legitimised into existence’ (Hara, 2003). Though intentional CoPs share the same characteristics as regular communities of practice, they are based on a core plan (Langelier, 2005) which may negatively impact on retaining student engagement and require greater facilitator, or ‘technology steward’ input (Wenger et al, 2005). Because a CoP is seen as a ‘container of competence which grows out of a convergent interplay of competence and experience that involves mutual engagement’ (Wenger, 2003:80), CoP theory sees learning as fundamentally social, which can lead to conflict between individual and social identity when considering the question of ownership of knowledge. If communities create knowledge, then ‘dissecting a creation in order to assign individual credit can easily become counterproductive’ (Wenger, 2003:3). This question of student attitudes towards community-created knowledge lies at the heart of this study.

## THEORETICAL FRAMEWORK

A ‘sense of community’ is defined as

*‘a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together’* (McMillan & Chavis, 1986).

In order to explore whether or not the online learners within this study felt a sense of community in line with this definition, a theoretical framework to understand ‘sense of community’ was sought, with the four components of McMillan and Chavis (1986) *Membership, Influence, Integration & fulfilment of needs* and *Shared emotional connection* initially considered. However, this framework ignores the importance of social connections and community values within the online education environment and as such, Rovai’s model which recognizes interaction as essential for achieving shared knowledge construction was applied.

Rovai (2001) offers four aspects:

1. Spirit- a feeling of belonging to and acceptance of group identity

2. Trust- a feeling that the group is trustworthy and group members will offer and accept feedback, encouraging openness
3. Interaction- where members believe interacting with the community will be of benefit to all involved
4. Learning- the belief that community discussions and information sharing will result in knowledge construction

Alongside this framework, two key questions guide this exploration:

- i. What are student views regarding ownership of user-generated resources created as part of an online group?
- ii. Are student attitudes influenced by their sense of community within the online environment?

In order to answer these questions, a review of relevant literature was carried out.

## REVIEW OF THE LITERATURE

It is useful for this study to clarify the confusion sometimes felt with not by the terms collaboration, co-operation and coordination. The distinction made by Dillenbourg et al (1995) sees co-operative work as accomplished through the division of labour among participants, unlike collaboration whereby all participants are engaged equally in a coordinated effort to jointly problem solve. The key difference is in how tasks are divided. Co-operative working breaks the main task into independent subtasks. Co-ordination occurs whilst the work is broken down and restructured into subsequent parts. In collaborative working, however, a significant role change may occur but the group is still focused on a joint notion of the problem (Dillenbourg, 1995:190) with interactivity reflecting how far interactions influence participants’ thinking, and, through negotiation, the prevention of a single group member from dominating the group (Dillenbourg, 1999).

Within the MA module at the centre of this study, it is collaboration which is key to completing the online project, with technology-supported teamwork encouraging collective contribution, as

opposed to individual ownership (Johnson & Johnson, 2004; Jenkins, 2006) and social interaction developing trust between members emphasising the value of reciprocal support (Rheingold, 2000).

This key aspect of collaborative learning is indicated by Dhesi:

*Most forms of social capital come into being through the combined actions of several or many people. The decisions of each have consequences for all. So it is an attitude of social structures. It is not the private property of any one person who benefits from it all. It only exists when it is shared (Dhesi, 2000:3)*

Salamon (1993) calls 'genuine interdependence' the key to successful collaboration, with the key to success being a valid reason for groups to interact, a view shared by Cohen (1994):

*'One may give a group a task, but, unless there is some reason for the group to interact, students may well tackle the task as individual work.'* (Cohen, 1994: p.11).

This collaboration develops interdependence which in turn encourages learner accountability for individuals as well as groups because if group accountability is given too much emphasis students unwilling to remain could adopt social loafing or free riding (Latane, Williams, & Harkins, 1979; Wagner, 1995) where some individuals fail to fully commit to group collaborative working. Although research indicates that the notion of learning through legitimate peripheral participation (Lave and Wenger, 1991) can be effective, and suggests that lurkers, shirkers and workers all have a valid role to play within the online community (Taylor, 2002), group members need to show commitment to a common goal in order to create a sense of security within the group, as doubts regarding the level of commitment could jeopardise the group's planned outcomes (Roberts, 2005). This can result in motivation gain, whereby learners make more effort if involved in collaborative rather than independent working, or to social compensation (Williams & Karau, 1991) where more capable group members make additional efforts if the collaborative activity is valued but they see some group members as disengaged.

For interaction to be sustained, social trust leading to cooperation in knowledge-sharing and a deepening trust (Chiu et al, 2006; Fang and Chiu, 2010) is required. Establishing trust early on is key to developing learning opportunities through community collaboration (Hiltz and Turoff, 2002) and reflects Rovai's *trust* and *interaction* categories.

However, conflicting research suggests that for some technology supported CoP the expected interaction sometimes fails to materialise because '...the risks outweighed the benefits' (Pearson, 1999: p.235). Further concerns are of students in HE increasingly focusing on individual rather than group benefit (Colby et al, 2007) and participation inequality (Koh, 2007).

Because this study explores ownership, it was deemed pertinent to briefly investigate issues around Intellectual Property Rights and attribution.

### **Intellectual Property Rights & Attribution**

Who is the owner of the content of group collaboration online - the institution, faculty academic, student authors? A thorough literature search offers discussion of either academic or institutional ownership, but a lack of research into student attitudes towards ownership of their online learner-generated resources, an omission this study seeks in part to address.

Thompson (1999) argued that copyright is inappropriate for the question of electronic learning materials, but the growing volume of student-generated work being created within institutional VLEs demands a response to the ownership debate. Issues around the transfer of music, text or ideas on a discussion board can be seen as opportunities for monetary gain to some, but these conflict with the ideal within community education networks of making information freely available (Cohill, 2000).

To be protected by copyright, a piece of work has to be an original literary or artistic work (JISC, 2007) but the question of originality is complex. A special case of copyright ownership - *the academic exception* - can be applied when an academic author is the originator of any work produced but academic institutions may demand employees assign such copyright to the employer institution,

including material posted to an institutional VLE (Chisholm, 2006) and students have also been required to sign a ‘memorandum of agreement’ which usually means relinquishing control of their work.

However, there is a further consideration with regard to this study of ownership - that of Open Educational Resources (OER) defined as:

*‘... any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation’.* (UNESCO, 2017)

By adopting OERs, usually with a Creative Commons (CC) licence to support the principles of open access across the Web, individuals are no longer accountable for licence costs nor any copyright issues (Downes, 2007). As universities move closer to OER, determining ownership and obtaining permissions to reuse and repurpose are becoming increasingly pressing (Hawkridge et al, 2010; Burke, 1997).

## **METHODOLOGY**

The author supports an interpretivist approach to research, based on an ontology in which reality is subjective, a social product constructed and interpreted by humans in accordance with their belief and value systems. As such, the aim is ‘to understand phenomena through accessing the meanings that participants assign to them’ (Orlikowski & Baroudi, 1991: p.5).

This exploration of an identified group of people (online MA students) in a specific situation (working collaboratively to complete a joint project) over a limited period of time (three weeks), being closely bound within a real-life context lends itself to the exploratory case study methodology (Cohen et al., 2007; Robson, 1993; Stake, 1995). Cohen emphasises this point saying:

*‘case studies investigate and report the complex dynamic and unfolding interactions of events, human relationships and other factors in a unique instance.’* (Cohen et al, 2007: p.253)

The literature suggests that multiple sources of evidence are associated with case studies (Cohen et al., 2007; Robson, 1993; Bell, 2005) and that the nature of the data collected is essentially qualitative. This has guided my choice of methods for this study, with a questionnaire, email communication (as interviews and observations were not possible) and personal journal postings within a VLE.

Despite critics arguing that a single case study can offer no grounds for establishing reliability or generality of findings and that intense scrutiny of a case may bias the findings (Flyvbjerg, 2006), the use of case study was deemed as a best match for this study.

## **Participants**

Participants are education practitioners enrolled onto a ten-week online module which carries 20 Master’s level credits. The course, Technology & Education, is based on constructivist pedagogy and encompasses collaborative working and links tasks to participants’ real life professional contexts. In weeks 5-8, students sign up to a particular topic area, such as GoogleReader, Twitter, Linked In, Google Wave or Gaming and Simulation, or suggest an alternative if none matches their interests; each group then uses Web 2.0 tools and services to communicate and collaborate asynchronously and synchronously to complete a joint presentation in the form of a wiki, video, powerpoint presentation or other, which is then uploaded to the institutional VLE (Blackboard) for peer review. As such, this module represents networked learning on two levels: the linking of dispersed learners, tutors and resources as well as on the level of co-operation and collaboration where participants work together as part of a learning community sharing expertise, responsibility and resources (McConnell, 1998: p.vii).

Fifteen students were emailed, asking for their participation. Of the first seven to respond, five represented the five different subject areas for investigation and thus were selected for the study. These students were of mixed age, geographically dispersed, and comprised three female and two

male learners, none of whom had worked together previously.

### Data Collection Tools

Data were collected via three different data collection methods (Yin 2009, Robson, 2002):

- A questionnaire using open ended questions to allow respondents to respond in their own way (Fink, 2003). The questionnaire explored how students felt about ownership of collaboratively created resources and whether they felt a sense of community within their online grouping.
- An email was then sent to clarify who the learners felt owned the final output of the collaboration and establish learner views regarding the reuse/ repurposing of their student-created resources and the issue of OER.
- Student postings to personal journals within the VLE were used to establish whether or not a sense of community influenced student attitudes towards ownership of user-generated resources. Journal entries responded to the question: 'Has anything in Block 4 influenced your attitude towards ownership of jointly-produced online resources?'

Because this study sought to explore what the participants thought and felt a questionnaire provided a *'straightforward approach to the study of attitudes, values, beliefs and motives'* (Robson, 2002:234). Although questionnaires may limit the answers that can be given, they allow the participant to communicate their thoughts 'privately' (Cohen, Manion and Morrison, 2007:344) though answers may be influenced by the characteristics of the respondents meaning *'the quality of data cannot always be determined'* (Robson, 2002:234).

The questions had been piloted with three students not included in the final project in order to ensure validity of the study (Deem and Brehony, 2000) and amendments had been made to the wording to ensure clarity of understanding, particularly to separate issues of ownership of online resources from the issue of disclosure, which was not part of this study as *'the printed word raises problems*

*unforeseen in spoken, human contact'* (Wellington, 2000:105).

Because of time limitations and the geographical disparity of the learners, email offered a viable method of establishing student views.

*'E-mail appears to provide a context for the kind of non-coercive and anti-hierarchical dialogue that .... characterised by equality of opportunity and reciprocity in roles assumed by participants'* (Boshier 1990, p. 51).

Spender (1995) argues that the concepts of race, gender, age and sexuality do not necessarily apply when communicating electronically, and because respondents are free to respond at their convenience, unlike with synchronous communication methods, e-mail offers a user-friendly tool for data collection (Thach, 1995).

However, email targets a specific and narrowly defined population and respondents in this study could not be assured anonymity for email replies (Schmidt, 1997). Despite this, students were keen to share their views and all the five participants responded to the email communication.

Journal entries explored whether learners felt that a sense of community might have influenced their attitude towards ownership of collaboratively created resources. Because individual reflection can be encouraged through the use of a learning journal, the 'inner voice of reflection' (Costa and Kallick, 2000) completing a personal journal is seen as a valid activity. However, entries are visible only to the student and course tutor, provided a request for access and permission to use the postings for this research project has been granted.

### Validity, Reliability, Triangulation

Aspinall et al (1994) cited in Briggs and Coleman, (2007:96) regard reliability and validity as key tests in judging the adequacy of research. In an effort to reduce researcher bias the use of multiple methods of data collection was applied in a bid to *'enhance the rigour of the research'* (Robson, 2002:174). By using email, a questionnaire and personal journal postings the research design drew upon data triangulation, *a process of using multiple perceptions to clarify meaning verifying the*

*repeatability of an observation or interpretation* (Stake, 2000 in Denzin and Lincoln, 2000: p.443). Ethics offer guidance as to what we '*should question; how we should think and act*' (Dahlberg and Moss, 2005:66). Given my dual role of researcher and Course Tutor, participants' responses may be influenced by a desire to please (Plummer, 1983) which caused the author to utilize a critical friend to reduce any personal bias which could have influenced the interpretation of data.

Information in advance of using any online student-generated artefact was given, including the purpose (Jones, 2006), opt out opportunities and the chance for students to edit or withdraw their postings, and the use to which the postings and subsequent data might be made (Fahy, 2002; Zimitat and Crebert, 2002). These issues of how online student work is used raise concerns (Caulley, 2000) around both personal ethics and group ethics, with a stark reminder from Bowker and Tuffin (2004: p.231):

*Although an online forum may be accessible to the public, the activities engaged there might be confidential to the participants. Public access does not guarantee public disclosure* (2004: p.231).

## DATA ANALYSIS

As data were collected, the information gathered was coded selecting specific words, phrases and foci allowing for responses to be scrutinized for emergent themes via 'open coding' (Strauss and Corbin, 1990) which involved "breaking down, examining, comparing, conceptualizing, and categorizing data" (Strauss & Corbin, 1990: 61), a key aspect, as highlighted by Dey:

*'Categorizing is therefore a crucial element in the process of analysis'* (Dey, 1993: p.119)

Categories of evidence from the questionnaires, emails and journals were identified in order to establish '*underlying trends, motives and structures*' (Tripp, 1993: p.24). In addition, a colleague acted as a critical friend throughout the process to verify the findings and contribute to the validity of the research (Burton and Bartlett, 2009).

## FINDINGS AND DISCUSSION

### Question1: What are student views regarding ownership of user-generated resources created as part of an online group?

The findings indicated that online students in this study:

- believe in shared ownership of collaboratively created resources, though to varying degrees
- mainly (80%) feel no individual credit is due when final community-produced artefacts are evaluated
- support an ethos of sharing and reciprocity during the collaborative process of online community resource creation
- believe in allowing non-community members within the VLE access to their joint resource as this is seen as a sign of success and cause for celebration
- welcome academic tutors wanting to use their work as exemplars for other learners
- regard themselves as owners of the final artefact at **the end of a process** of collaboration within an institutional VLE, but view themselves as owners from the **first posting** via Web 2.0 sites such as Facebook.
- see the question of ownership as important because they see attribution of ownership as a form of both recognition and respect (Table 1)

Concerns were expressed with regard to:

- privacy issues if personal information was made freely available via OER
- latecomers whose contribution may have been less evident than that of more stable, long term group members but who are credited equally
- reuse and repurposing of community-created resources without due attribution and permission, especially with an intent towards institutional commercial profit
- inequality of contributions from community members (echoing the findings of Koh, 2007).

**Table 1.** Student Questionnaire and Email Responses: Who owns community created resources?

Student	Individual students	CoP	Institution	Comments
A		✓		It's a community product which has come out of a community process.
B		✓		It's everyone's, everyone who contributed, regardless of how much or how little.
C	✓	✓		The community should all own it jointly, but only if they each contributed. If someone just came on at times and watched and posted a message which wasn't of any real use to those going through the process, I don't think they have equal rights of ownership
D		✓		I felt everyone took on the task and worked together, It should belong to us all.
E	✓	✓		We all jointly own anything we have created together. If that weren't the case, I'd probably want to claim just my contribution as my own..

The key findings from the questionnaires and the email responses indicate that learners support an ethos of joint ownership, but are aware of pressing issues. For example, Student D supports a sharing culture but recognises the challenge of identifying not only the original author but also the origin of the co-created final piece:

*Within the online group, whilst we were working together, I could see ownership becoming quite complex. ...as we developed a stronger group identity and each member of the group engaged in the task, I could see the original idea being adapted and tweaked and in parts completely overhauled, so the origin of the concept and owner became decidedly blurred.*

He continues:

*In this case, it would feel as if I were cheating if I claimed ownership because it was a real collaboration and as such, we all have equal claim to the final presentation and ideas which it contains (St D).*

supporting Wenger's argument against splitting community-created knowledge to enable individual attribution (Wenger, 2003:3).

When asked about reuse and repurposing of their resources and whether they would support or

oppose the idea of OER, students indicated (Table 2 below) support for:

- the idea of everything being accessible to everyone for reuse or repurposing within the MA cohort (**80%**) or to tutors, if referenced
- the use of their resources via OER, accurately referenced (**60%**)

Yet students also expressed concerns:

- I. with reusing and repurposing for commercial profit:

*I think the days of 'what's mine is mine' are long since gone!*

*Having said that, I don't like the idea of an organisation owning my work and then presenting it as the organisation's resources (St D).*

- II. when considering personal privacy issues

*If anonymity could be guaranteed, I'd be more inclined to say ok, use what you want where you want, but I don't want my name being used unless I know about it and have the right to veto it (St B).* reminding us of Bowker and Tuffin's warning that posting to a forum does not signify learner agreement for public revelation.

**Table 2.** Email Responses for Reuse, Repurposing and OER

<b>Student N=5</b>	<b>Do you support reuse and repurposing?</b>	<b>Explanation</b>	<b>Would you support the use of OER?</b>
<b>A</b>	Yes	We worked together so we all had a claim to the final product, a shared claim. If the group hadn't gelled so well, I'd have felt more inclined to take out my bit.	Yes
<b>B</b>	Yes	I felt part of the community because we shared a goal, planned each step and negotiated each edit. It wasn't always easy but I couldn't opt out because I owed it to the others, and they helped out when I couldn't make some of the chat sessions. I felt I had to put in an equal amount of work as others in the group to complete the set task.	Yes
<b>C</b>	No	This has highlighted how much we need to think about collaborative work in advance. Perhaps we need to have a tighter control over who does what, as I didn't feel some of the group really pulled their weight. I don't really like the idea of our work being put out to the public arena, but if it was, we should be given credit.	No
<b>D</b>	Yes	Yes, absolutely. The more I put in, the more I can take out. That's why communities work and if we all contribute, we should all get to decide what happens to the final resource. I think our group would all agree that it should go out to OER.	Yes
<b>E</b>	Yes	The process had to flow so we could take on board everyone's view and contribution. At the same time not everyone contributed equally so I have mixed feelings about fully shared ownership beyond the confines of the group who created it, and certainly not outside in cyberspace.	No
<b>Total</b>	<b>Yes = 80%</b> <b>No = 20%</b>		<b>Yes = 60%</b> <b>No = 40%</b>

### III. inequality of contributions

*Late joiners 'felt' that they lacked a sense of responsibility in the same way as those who had worked together from the start, but perhaps this is my annoyance at the fact that they arrived late and we had to accommodate this. I felt I had to do extra to compensate and was left feeling miffed! (St A)*

evidencing what Williams & Karau (1991) label 'social compensation'.

### **Question 2: Are student attitudes influenced by their sense of community within the online environment?**

#### **Questionnaire**

Responses indicated that students all identified with Rovai's four categories for a sense of community (Rovai, 2000) and indicate ways in which the sense of community has influenced their

views, examples of which are given below in their own words:

**Spirit:** *Identity is so important. It helps us to build relationships because we can ask others about themselves and their experience or interest and identify shared interests from the outset (St C).*

**Trust:** *When group members share their experience and their knowledge, I feel a sense of trust with that person and with the group if it is a group activity (St E).*

**Interaction:** *If I completed a task and someone commented, there was an obligation to develop the discussion so as to move forward and support others within the group (St A).*

**Learning:** *I wanted to learn so I participated and shared ideas (St B).*

In addition, commenting on work in progress helped establish a sense of community:

*'Working towards a common goal created a sense of community. You were an equal and all your views were respected.'* (St C)

If others developed an idea, this was seen as 'motivating', 'inspiring', 'a boost to self-esteem' and showed their individual ideas 'have merit' within the cohort. Praise, whether from tutor or peers, was deemed instrumental in supporting the sense of community:

*I like the fact that I can bask in shared glory' (St E).*

In contrast, if a posting is not responded to, it was seen as disheartening:

*When I post a message, if people respond, I can see that they are treating me with respect, listening to what I have to say- listening and valuing. If they didn't respond, I'd stop posting (St A).*

Furthermore, the creation of an artefact which represents a group rather than individual view was deemed of value:

*'It triggers your own thought processes, makes you think about things differently' (St B)*

and

*'offers a chance to see something created from a broader perspective which shows you have thought more deeply and reflected more during the group process' (Student D).*

which clearly evidence the merging of Rovai's third and fourth categories of interaction and learning.

## Personal Journals

Key words from Personal Journals entries were typed into a text box in WORDLE (<http://www.wordle.net/create>) to create a visual image. Words of similar meaning were grouped, and then allocated a single word to encompass all related meanings. For example, 'responding', and 'answering', were both coded as 'responding' whilst 'participating', 'contact' and 'communication' were categorized under 'interaction'. This coding was completed by the author and a second, independent coder, and the categorization was then checked to ensure agreement. The more frequently a word was used, the larger its size on the image. The most popular term is 'interaction' followed by 'responding' and 'trust' whilst the least used include 'equality' and 'privacy'. Image 1 shows that learners felt communication and collaboration most influence their attitude to a sense of community and thus ownership, reinforcing the view that individual performance takes second place to group achievement as indicated by recent findings (Rusman, 2010; De Laat & Lally, 2003; Jenkins, 2006).



**Image 1.** Visual Representation of Personal Journal Key Words for Question 2.

## CONCLUSION

This case study shows that students are keen to share their community-created resources with the larger cohort of the MA module, and see tutor requests to reuse their resources as highly complimentary. They respect their community as joint owners of any shared creation and are less interested in independent attrition than in 'shared glory'. The participants were also clear in their view that spirit, trust, interaction and learning, Rovai's 2001 framework for a sense of community, were crucial components in successful online collaborative working and developing community allegiance.

However, there are general concerns about OERs and individual concerns around inequality of contribution and a potential lack of attribution if work is reused or repurposed.

In response to the question of whether or not a sense of community influenced their attitude, students were unanimous in their agreement. The extent of this influence varies and is beyond the scope of this study, as is the extent to which Rovai's model of a sense of community may match each student's individual sense of community, but these weaknesses may well be addressed in future studies to further determine student attitudes towards ownership of, and future reuse and / or repurposing of collaboratively created online community resources.

## LIMITATIONS

This is a small scale study and as such can only have limited value beyond the immediate context. It also suffers from the dangers inherent with insider researcher and the study was weakened by an absence of interviews due to time and location and digital access constraints. Using email was helpful, but the depth of probing found when interviewing could not be replaced. In addition, deciding on the questions in advance so that questionnaires could be sent out was a barrier in some ways as questions regarding trust, which had seemed a key issue when preparing the study, were less relevant once the data started to come in and the assignment gained more focus. Perhaps a grounded theory approach would have been more

appropriate, though the literature was revisited as themes emerged from the data. The study also could only take account of one group across three weeks of a project, and as such was a very short timescale. It would be useful to carry out more longitudinal studies along these lines in the near future and compare the research findings.

## IMPLICATIONS FOR FUTURE PRACTICE

This research has highlighted the importance of taking into account student feelings with regard to ownership of user-generated resources within the online community. It is an important issue because students see it as important. Findings show how students who gain a sense of community through online interactions and networked learning via courses based on sound constructivist pedagogies develop a desire to act within the group's interest and see ownership as a shared enterprise rather than an individual right. In other words, we, as facilitators of learning, need to ensure that our colleagues and learners are aware of the potential for building on this attitude and developing interdependence which results in higher quality experiences, the results of which can be safely shared without a top-down approach to IPR or a loss of attribution for the original authors. Our institutional policies as well as our teaching and learning practices need to be revised to reflect changes within the developing Knowledge Economy.

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