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Social presence in online learning communities: the role of personal profiles

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Online communication is increasingly used in education, but it is not without problems. One significant difficulty is a lack of social presence. Social presence relates to the need for users of technology-based communication to perceive each other as real people. Low social presence can be a particular issue in text-based, asynchronous systems such as discussion forums, leading to feelings of impersonality and disengagement from online learning. Features of online communication systems have the potential to increase social presence. One possibility, advocated in the literature on online learning, is the use of personal profiles and photos to help participants to learn something about each other and feel more connected. This paper discusses the question: To what extent do personal profiles enhance social presence in online learning communities? It presents research findings from two studies which investigated learners' use and perceptions of personal profiles in online forums. The findings suggest that personal profiles and photos help some online learners to feel in touch with each other. Other learners, however, do not feel the need for these facilities, have privacy concerns or prefer to focus on the forum postings.

Keywords: personal profile; online community; learning community; social presence; distance learning

Introduction

In recent years there has been considerable interest among educators in the use of online communication tools for learning. Online communication is now used to support learning and build community in universities, schools and many other organisations. This has considerable benefits for learners and for teachers, but it also raises problems (Kear 2011; Palloff and Pratt 2007). One common difficulty is that learners can find text-based online environments impersonal, because of the lack of communication cues such as facial expression and tone of voice. In asynchronous online environments (for example, discussion forums), the possible delays between a contribution and any responses can exacerbate the problem. These issues are important because they affect levels of participation and interaction, and therefore have an influence on learning. Unless students feel comfortable when communicating online, they may not participate openly, and so may not gain the benefits that an online learning community can provide.

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A feeling of impersonality when communicating online has been characterised as a lack of 'social presence' (Short, Williams, and Christie 1976). Social presence relates to whether participants feel that they are interacting with real people, even though the communication is mediated by technology (Gunawardena and Zittle 1997; Lombard and Ditton 1997). If online learners experience a lack of social presence this may result in low levels of engagement, and even to withdrawal from the online environment (Wegerif 1998). This paper explores the concept of social presence in relation to online learning communities, and considers whether a specific feature of many online environments – the personal profile – might help to increase social presence.

A personal profile is a self-description created by a participant, which typically includes a photo or image to represent them. Many online learning practitioners have advocated the use of profiles in order to build communities online (Arnold and Paulus 2010; Barab *et al.* 2003). Moreover, the increasing use of social network sites, such as Facebook, has raised awareness of personal profiles as a way of making and reinforcing connections between people (Ellison, Steinfield, and Lampe 2007). This paper discusses learners' perspectives on the use of personal profiles, and considers whether personal profiles can enhance social presence in an online learning community. The paper presents research findings from two studies, both using Open University students, investigating distance learners' use and perceptions of personal profiles in online forums.

Background literature

Social presence in online learning communities

The concept of social presence originated with Short, Williams, and Christie's (1976) analysis of human communication via different media, where it was defined as the 'degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships' (p. 65). Later in their book (p. 73), Short, Williams, and Christie simplified this to 'the degree to which [a communicant] is perceived as a real person'.

Definitions and interpretations of social presence have been given subsequently by researchers of online communication and online learning (see Kehrwald 2010 for a review). Gunawardena and Zittle's (1997) definition is: 'the degree to which a person is perceived as "real" in mediated communication' (p. 8), which is in line with Short, Williams, and Christie's (1976, p. 73) characterisation. Garrison, Anderson, and Archer (2000) present a similar definition of social presence, as part of their community of inquiry model: 'the ability of participants in the community of inquiry to project their personal characteristics into the community, thereby presenting themselves to others as "real people"' (p. 89).

Text-based online communication environments can be considered as low in social presence (Cobb 2009), causing potential problems for participants. Keisler, Siegal, and McGuire (1984) suggested that the lack of social cues in text-based online environments could even lead to uninhibited hostile behaviour, called 'flaming'. The suggestion was that this could be partly due to visual anonymity, leading to a feeling of reduced accountability.

Researchers of online learning have found associations between perceptions of social presence and satisfaction with the learning experience (Kim, Kwon, and Cho 2011;

Richardson and Swan 2003). Social presence is important in online learning because many students need to feel a link with others if they are to share ideas, exchange views and work together. However, this does not mean that the focus is on social interaction, or 'niceness', at the expense of intellectual exchanges. As Garrison and Anderson (2003) point out,

> social presence does not mean supporting a 'pathological politeness' where students will not be sceptical or critical of ideas expressed for fear that they might hurt somebody's feelings and damage a relationship. Social presence means creating a climate that supports and encourages probing questions, scepticism and the contribution of more explanatory ideas. (p. 50)

One factor that influences social presence is the medium of communication. Short, Williams, and Christie (1976) viewed the degree of social presence as a characteristic of a communication medium – or of the user's perception of that particular medium. From this point of view, a videoconference has the potential to offer higher social presence than a discussion forum because participants can hear each others' voices and see each other. These visual and auditory aspects are characterised as cues which aid communication. This focus on the medium of communication is in line with Daft and Lengel's (1986) concept of media richness, which considers the potential effects of the different communication channels that a medium provides.

Subsequent research in educational contexts demonstrates that the behaviour and attitudes of the participants can make a significant contribution to the degree of social presence experienced. This research introduces the idea that participants in an online community can act to create or build social presence, for themselves and others. For example, Gunawardena and Zittle (1997) concluded that:

> In spite of the characteristics of the medium, student perceptions of the social and human qualities of CMC [computer-mediated communication] will depend on the social presence created by the instructors/moderators and the online community. (p. 23)

Taking this idea further, Swan (2002) argued for an equilibrium model of social presence, where participants adopt styles of interaction which make up for the lack of communication cues. When using a medium which does not itself provide many cues to support communication, some learners use the content, style and timing of their interaction to increase social presence. However, this takes time, effort and sensitivity, so not all learners will do this. There is therefore a need for educators and social media designers to consider ways in which participants can be helped to create and experience social presence when learning and communicating online.

Personal profiles to enhance social presence

Short, Williams, and Christie's (1976) research on social presence was primarily concerned with the effect of visual and auditory cues in various types of real-time communication (for example, video-conferencing, audio-conferencing and face-to-face meetings). However, in a text-based medium such as a discussion forum, there are no auditory cues and typically very few visual cues to add a personal touch and distinguish one participant from another. Many practitioners of online communication have therefore advocated the use of personal profiles: self-descriptions created by

participants, which can include a photograph. For example, Zimmer, Harris, and Muirhead (2000) advised:

> setting up the community in a way that allows individuals to gain an understanding of who is addressing them in what can be an impersonal textual environment. This could include: photos, résumés and biographies and general introductions to the online group.

Kim (2000, p. 84) suggested that personal profiles can help to create trusting relationships in online communities by providing context. Barab *et al.* (2003) encouraged members of their *Inquiry Learning Forum* online community to create personal profiles, so that they could learn more about one another, decide who to communicate with, and understand each others' perspectives more easily. Similarly Bonk *et al.* (2001, p. 81) asked students using their *Smartweb* system to write information, such as their hobbies and where they lived, into their student profile.

More recently, against the backdrop of widespread use of social network sites, the potential benefits of personal profiles have been revisited (Ellison, Steinfield, and Lampe 2007). In an employment context, Skeels and Grubin (2009) highlighted the value of LinkedIn and Facebook profiles for building and maintaining relationships among colleagues. One participant in their study explained: 'I get sort of a bird's eye view into their personal life and you know what their hobbies are or what their interests . . . and it actually helps me build rapport with them' (p. 99). Discussing the educational use of the Ning social networking environment, Arnold and Paulus (2010) identified community-building as an unplanned benefit of the Ning profile page feature. They noted that 'Profile pages allow posts and completed work to be connected to a person, not just a name, adding to a sense of community' (p. 195). Lampe, Ellison, and Steinfield (2007), while acknowledging that 'little is known about the specific effects user profiles have on interactions in online communities', go on to say 'Intuitively, we believe that profiles can help create a sense of presence'.

It is recommended practice to include a photograph in a personal profile. Nicol, Minty, and Sinclair (2003) described a system, where 'each online contribution is accompanied by a digitized thumbnail picture of the sender in order to personalize contributions with a social reference' (p. 273). The forums in the *Moodle* virtual learning environment adopt this approach, with messages including a photo or image representing the sender (see Figure 1). Clicking on the user's name then takes you to their profile (Figure 2).

However, researchers have found negative, as well as positive, effects from personal profiles and photos. Cress (2005) found that personal profiles (consisting of photos and short descriptions) had a positive effect on group interaction for some

> Very helpful! Many thanks.
>
> Folks, do keep the feedback coming through if you have any.
>
> Karen

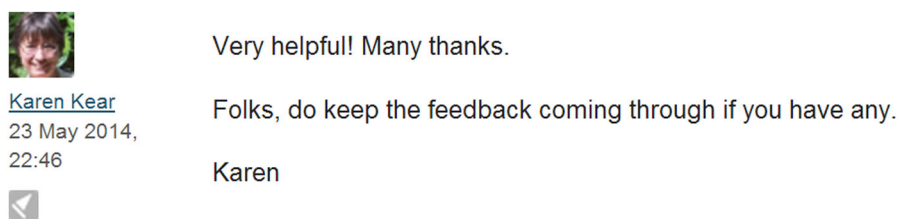Karen Kear
23 May 2014,
22:46

Figure 1.   A message in a Moodle forum, with a photo of the sender.

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Figure 2. A personal profile in Moodle.

members of online groups (those who were more individually oriented) and a negative effect for others (those who were more group-oriented). Tanis and Postmes (2007) found that member photos and names had a negative effect on participants' satisfaction with the online interactions. Walther, Slovacek, and Tidwell (2001) found that member photos had a positive effect for newly formed groups of learners who were working together for a short time, but a negative effect for groups working on a more long-term basis. In all these studies, the researchers suggested that personal profiles can reduce some participants' sense of solidarity.

Concerns have also been expressed in relation to privacy and the risks of inappropriate disclosure of personal information and images, particularly in profiles on social network sites (Berlanga *et al*. 2011; Madden 2012; Peluchette and Karl 2009). A related issue is the need for participants to maintain boundaries between social life and professional or academic roles (Skeels and Grudin 2009). It is clear that, although many educators have advocated the use of personal profiles for enhancing social presence, further research is needed on whether students find profiles helpful for this purpose.

Personal profiles in online learning: two studies

This section reports the views and experiences of distance learners at the UK Open University on the use of personal profiles in online learning environments. It discusses two investigations which took place in 2006 and 2011/12:

- Study 1: an evaluation of learners' use of personal profiles in a prototype online communication environment (using optional closed questions in assignments and open questions in a survey)
- Study 2: a small scale investigation of personal profiles in forums within the Moodle virtual learning environment (using an online survey of open and closed questions).

Study 1 was carried out at a time when social network sites such as Facebook were not in widespread use (boyd and Ellison 2007; Curtis 2013). It was therefore of interest to follow up this study several years later, when Open University students were much more familiar with using social network sites and sharing profile information online.

The Open University is the largest provider of distance education in the UK, with over 250,000 undergraduates, mainly mature students who are studying part-time while also in employment. Students are divided into tutor groups of around 20, with a tutor who is geographically local to them. For most modules, there are active online forums where students can support each other, and make contact with module staff. These forums are an important communication route for many students, who are typically studying in their own homes at evenings and weekends.

Study 1: use of personal profiles in a prototype online communication environment

This study investigated possibilities for using personal profiles to enhance students' sense of social presence. It was based on earlier findings from interviews with distance learners who used the *FirstClass* online communication system as part of their studies (Kear 2003). In these interviews, a number of students specifically mentioned the value of personal profiles – which are called 'résumés' in FirstClass. One student said she was 'disappointed if someone hasn't got one' and other students expressed a wish that more participants would use the résumé feature. The view was that this would help them get to know each other, and would therefore ease communication.

A few years later an opportunity arose to follow up these findings. A personal profile facility was implemented in a prototype online communication system (offering forums and instant messaging) for use in a 12-week, 100-hour distance learning module on web technologies (Kear 2007). The profile facility was described as a résumé because this term was familiar to students from their use of FirstClass. When a user first logged into the system they were prompted to enter some information into their résumé. The only obligatory item was the user's first name; their email address was shown if they chose to make it public. There was also a facility for adding a photograph or image.

Once a user had added information to their résumé, a small icon representing a face was displayed next to their name at the top of each message they posted. Other users could click on this icon to view the résumé. Clickable résumé icons were also displayed against users' names in a window that showed which users were logged into the system, and enabled contact with them via instant messaging. A search facility was provided so that resumes could be found which matched a name or keyword.

Research methods for Study 1

Evaluation data on students' use and perceptions of the résumé feature were elicited, using a mixed methods approach (Creswell 2003), from the 195 registered students on the module. To gather quantitative data, optional closed questions were appended to the first two of the module's three multiple-choice assignments. Care was taken to ensure that students knew that the questions were for research purposes, were optional and anonymous, and formed no part of the assessment. The questions appended to the first assignment asked students:

- whether they had put any information into their résumé (and what kind of information)
- if they had not, what was the reason?
- whether they had looked at other users' résumés.

The questions appended to the second assignment asked students:

- whether they found it helpful to have other students' résumés available
- whether reading résumés helped them to feel they knew other students better
- whether photos or images in résumés were helpful.

The collation of responses was carried out by the university's assignment handling procedures, which ensured anonymity for students. As a proportion of the 195 registered students, the response rates were approximately 80% for the questions appended to the first assignment and approximately 60% for those appended to the second.

Open questions were asked as part of an online survey towards the end of the module, in order to gather qualitative data on students' perspectives. The questions were also provided for students to respond to via discussion threads in the module forum. The open questions asked students:

- If they had looked at other people's résumés, was this helpful, and in what way?
- How important was it to know something about other students?
- Did they have any further comments about résumés?

Unfortunately, this element of the data gathering had a very low response rate – only 14 student responses. The responses to the open questions were nevertheless analysed to elicit themes related to students' views on resumes.

The findings from the quantitative and qualitative data are summarised, respectively, in the two sections which follow.

Findings from Study 1: quantitative data

A question appended to the module's first multiple-choice assignment asked students: 'Did you put any information into your résumé?' Approximately half the respondents (51%) said that they did. Table 1 shows the types of information that respondents reported. The percentages are of the students who reported adding information to their resume.

Students were also asked 'If you did not put information into your résumé, why was this?' The main reason (selected by 58% of the respondents) was that they 'didn't get round to it'.

Students were asked 'Have you looked at other users' résumés?' The results revealed that 43% of respondents had, and that this was mainly to find out something about other students who had posted messages.

A question appended to the second multiple-choice assignment asked students: 'Did you find it helpful to have other students' résumés available?' Just under a third of respondents (31%) said that they found it helpful, but the remaining respondents (69%) said that they did not.

Table 1. Types of résumé information (the percentages are of students who reported adding information).

Added information about studies	43%
Added information about family/hobbies	75%
Added information about employment	35%

Students were also asked 'Did reading other students' résumés help you feel that you knew them better?' Just over a third of respondents (36%) felt they knew others better through reading their résumés, while a third (33%) did not. The remaining students had not read any resumes.

Students were asked 'Do you think it is helpful to have photos, or other visual representations of users, in résumés?' Again, about a third of the respondents (32%) found this helpful, but 58% did not. The remaining students were not sure.

Findings from Study 1: qualitative data

Students' responses to the open questions in the survey gave a range of views on the value of résumés. The main themes that emerged from the qualitative analysis were: visualising others and their perspectives; concerns about privacy; preferences for learning about others from their postings.

When asked whether looking at others' résumés was helpful (10 responses), some students said that it was helpful to learn something about other students' backgrounds, interests and expertise:

> They gave an idea of where people were coming from, what their perspectives were.

and

> Helpful to place an image (or written description) of an individual against their comments. It assists in "identification" in the mind's eye.

Some students commented that résumés were mainly useful for early familiarisation:

> Like the round of introductions at a tutorial.

Others students did not find résumés particularly helpful. For example:

> Other people's personal details don't really interest me and I like my privacy, so I was not tempted to fill one out myself.

There was a suggestion that it was better to learn about others from their postings:

> You can tell all you need to know about a person from the messages they post.

When students were asked whether it was important for them to know something about other students (10 responses), several said that it was not. Again students commented that learning about others through their postings was preferable:

> It's not important to know anything other than what comes out from reading questions, answers and comments.

and

> I think we should be left to learn about each other in a more natural way over a period of time, rather than learning it from a résumé, which only tells us what the person wants us to know.

However, some students commented that knowing about others was helpful and that it provided context for their postings.

When asked for any further comments about résumés (7 responses), students reiterated that résumés could act as an icebreaker, and help them to see that others were studying in similar circumstances. There were also comments about privacy:

> Nice to have, but it should be optional as many people like to maintain their privacy and anonymity.

Study 2: use of personal profiles in Moodle forums

Since Study 1 was carried out, there has been a considerable increase in the use of social networking sites. As these sites are based around extensive personal profiles, this could encourage students to make more use of personal profiles in online learning environments. To investigate this, in 2011 a small scale study was initiated to look at Open University students' use of profiles in the Moodle virtual learning environment (VLE).

Moodle provides a personal profile facility which enables forum participants to add information about themselves, and to upload a photo or image. This image is shown beside each of the participant's forum postings. If a participant does not add an image, the Moodle default of a silhouetted head is used instead. The personal profile itself is accessible by clicking on the participant's name, which is shown against each of their postings (see Figure 1).

The study was overseen and funded by the Open University's eSTEeM initiative for scholarship in Science, Technology, Engineering and Mathematics. The context for the study was a new first year Open University module on Computing and Information Technology, called *My Digital Life*. This is a 600-hour module, studied part-time over 9 months.

Research methods for Study 2

The data gathering for the research focused on two of the module tutor groups: a total of 29 students. Permission was requested from the Open University's Student Research Project Panel (SRPP) to carry out the project and gather data from these tutor groups via an online survey. The SRPP, together with eSTEeM, reviewed and approved the survey, which included a mix of closed and open questions.

About three months after the start of the module, the online survey was opened to students in the two tutor groups. The survey was anonymous, and was implemented and distributed using SurveyMonkey.
A series of closed questions asked students:

- whether they had posted any information into their Moodle profile (if so, when, and what kind of information?)
- whether they had uploaded a photo or image (if so, when, and what kind of image?)
- whether they had looked at other students' profiles (if so, when?).

Open text areas for several of the questions invited students to add further comments. Specific open questions were also included, asking students:

- why they did, or did not, upload a photo or image
- why they did, or did not, enter information into their profile
- why they did, or did not, look at other students' profiles.

The survey was completed by 23 of the 29 students (79%), though not all students answered every question. Students' responses to the open questions were analysed thematically by two researchers working independently. The emergent themes from the two analyses were then drawn together.

The findings from the quantitative and qualitative data are summarised, respectively, in the two sections which follow.

Findings from Study 2: quantitative data

A total of 11 of the 23 respondents (48%) reported entering some information into their profile, with six of these doing so before the module began. The responses to a closed question asking what kind of information students entered are shown in Table 2 (respondents could select more than one option).

A total of 16 of the 23 respondents (70%) reported uploading a photo, with eight of these doing so before the module began. In response to a closed question asking what kind of photo/image they used, 14 respondents selected 'a photo of me, on my own'. A review of students' profiles confirmed that most photos were of the student alone.

Students were asked whether they had looked at the information in other students' profiles. Of the 22 respondents to this question, 11 (50%) said that they had.

Findings from Study 2: qualitative data

The main themes that emerged from analysis of the qualitative data were: community; convention; putting a face to a name; privacy.

When those who had entered some profile information were asked what prompted them to do so (10 responses), responses mainly focused on being sociable:

Community spirit – share some carefully chosen info with other students for friendliness

and

To give a better understanding of who I am and what I'm aiming towards.

Other comments suggested that filling in a profile was a convention:

Just seemed appropriate.

Table 2.   Types of profile information (10 respondents to this question).

Added information about studies	8 (80%)
Added information about hobbies or interests	4 (40%)
Added information about employment	3 (30%)
Added information about family	1 (10%)

When respondents who had not entered any profile information were asked whether there was any particular reason (11 responses), several respondents said that they did not see the need. There were also several comments suggesting privacy concerns; for example:

> I have no wish to share private information on this forum.

When those who had uploaded a photo/image were asked what prompted them to do so (15 responses), most comments again related to sociability, and linking 'a face to a name'. A typical response was:

> I think it makes it more personal when you can see someone's face over the internet, and makes it easier to talk to them, instead of them being this 'anonymous' stranger behind a computer. I like to be approachable.

Again, the concept of a convention or norm arose:

> I just normally do when I'm on a forum. It seemed the convention.

When those who had not uploaded a photo/image were asked whether there was any particular reason (7 responses), some respondents said that there was no reason, while others were concerned about privacy.

When students were asked what prompted them to look at other students' profiles (13 responses), most comments revolved around curiosity, sometimes aroused by forum postings:

> Just being nosey or was interested in what they were saying and wanted to find out more about them.

There was also a connection between interacting with other students, either face-to-face or online, and reading their profiles:

> Wanted to put faces to names and remind myself who I had met during tutorial get-togethers.

When those who had not looked at other students' profile information were asked whether there was any particular reason (17 responses), typical responses related to lack of interest in personal or social aspects.

> I only really use the forums when I'm studying – not so much for a social aspect.

Some students considered the social and educational aspects of forums to be separate:

> I use the forums mainly for educational purposes and in that context most of the profile information isn't very useful – for social purposes I prefer to meet people in person.

Overview and comparison of findings from Studies 1 and 2

The research presented in this paper suggests that personal profiles and images were important to some students for increasing social presence, but by no means to all.

Table 3. Comparison of profile use from Studies 1 and 2.

	Study 1	Study 2
Added profile information	51%	48%
Looked at others' profiles	43%	50%

In both Studies 1 and 2, about half the respondents wrote some information in their user profile, and about half looked at others' profiles (see Table 3). In Study 1, about a third of the respondents reported finding profiles and profile photos helpful.

It is of interest to consider the types of information that students added to their profiles, and to see that, again, there was commonality between Studies 1 and 2. As Table 4 shows, students reported adding information about their studies, their hobbies/interests/family and their employment. In Study 2, only one of the students reported adding information about their family; this perhaps reflects privacy concerns. In Study 1, family was included with interests in a single option, so it was not possible to separate these topics in the data for Study 1.

The categories of profile information in Table 4 are in line with those identified in investigations of public social network sites, particularly those used by students (Lampe, Ellison, and Steinfield 2007). For example, a survey by Berlanga *et al.* (2011) identified particularly important categories of profile information as: occupation; interests; and expertise.

Study 2 shed light on students' choice of profile image, which was typically 'a photo of me on my own'. This is consistent with findings by other researchers: Ellison, Steinfield, and Lampe (2007) reported that just over 80% of students included 'a photo of just me' in their Facebook profile, while just over 70% included 'a photo with me and others'; in Krämer and Winter's (2008) study of a popular German social network site for students, most users included a profile picture of themselves, looking at the camera.

Studies 1 and 2 suggested that, for some students, the profile facility and profile photo could add an element of social presence or 'sociability' (Preece 2000, 2001) to online learning. However, in both studies, a significant proportion of students did not find the profile facility of particular importance. This reflects the findings of some researchers that profiles are not always beneficial (Cress 2005; Tanis and Postmes 2007; Walther, Slovacek, and Tidwell 2001). Several students had concerns about privacy, which is an increasingly important issue in online environments (Berlanga *et al.* 2011; Chen and Marcus 2012; Mesch and Beker 2010).

Some students preferred to learn about other people in a more natural way, from their online contributions, rather than from a profile. For example, in Study 1, a learner commented:

What one might want to know – if anything – can be deduced from conference posts.

Table 4. Comparison of profile information from Studies 1 and 2.

	Study 1	Study 2
Added information about their studies	43%	80%
Added information about their hobbies, interests or family	75%	50%
Added information about their employment	35%	30%

Several years later, in Study 2, a similar comment was:

> It does not seem like an important or relevant part of my course. More interested in their forum postings

These views are in line with findings by Haythornthwaite *et al*. (2000) that students using educational discussion forums gradually learn more about others from the content and style of their messages, and with Kehrwald's (2010) statement that:

> While there are explicit, situated demonstrations of particular perspectives in certain messages (e.g., in personal introductions or personal profiles), it is more common for individuals to build up a sense of others' current perspectives based on an increasing number of interactions. (p. 46)

This brings us back to the conclusions about social presence by Gunawardena and Zittle (1997) and by Swan (2002). These researchers identified that, in text-based online learning environments, participants create social presence for each other through their interactions.

Conclusion

Online communication can seem impersonal to some students, leading to poor online relationships, or lack of participation. It is therefore of value to consider how online learning environments can be designed and used in ways that increase social presence. One approach which has been advocated by online learning practitioners is to encourage the use of personal profiles and photos, in order to help students to feel a more personal connection.

The research presented in this paper found that, when using online forums, some students saw value in adding information and a photo to their personal profile, and found it helpful to read the profiles of other students. However, other students felt no need for these facilities, had privacy concerns, or expressed the view that reading others' contributions was a better way to get to know them. Perhaps this is not surprising, and we should think of social presence as 'a dynamic sense of others and relationships with them in mediated environments' (Kehrwald 2010. p. 45), rather than something that can be easily conveyed via a static personal profile.

As is often the case in online learning, individual students have different perceptions, preferences and needs. It is only by researching the use of online communication for learning that we discover the extent to which specific features are considered helpful by students. Educational practitioners should ensure that students are aware of features that may be of value, and of the potential benefits. Students themselves will then choose whether or not to use these features, according to their own personal views, needs and experiences.

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