

SOLE: Thematic Reports Series

Communications

Document Notes

Main author	Sue Timmis
Contributors	Ros O'Leary, Cynthia Cai, Colin Harrison, Elisabet Weedon, Annie Trapp, Sylvia Alexander, Andrew Lockwood
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Summary

This report is part of a series of themed reports examining a number of key aspects of the SOLE study: an evaluation of students' online learning experiences.

Reports in the series cover the following:

- Introduction to the SOLE study
- Summary of key findings
- SOLE methodology
- Student and tutor roles and relationships
- Communications
- Student motivation and confidence
- Activities, tools and learning strategies

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1. Introduction

This report will present the findings from the SOLE case studies that concern communications undertaken through a virtual learning environment. The report begins with a consideration of what we mean by communication in this context, relevant aspects of the SOLE methodology are then outlined before presenting findings from the case studies. Issues emerging from these findings are then discussed before presenting conclusions and recommendations for practitioners. There is a companion report on student and tutor roles and relationships and a detailed discourse analysis of one case study, which are recommended as complementary reading on this aspect of the SOLE study. They are available from: <http://sole.ilt.bris.ac.uk/findings.html>

2. Defining Online Communication

This report offers a broad interpretation and coverage of communication issues that have emerged from across the SOLE case studies. Schon (1987) has described communication as the process of sending and receiving messages. However he also stresses the need for every participant to engage in meaning making for him or herself and the need to design messages others' can decipher. This report will consider the case study evidence from students and tutors using a variety of communication mechanisms and will consider the findings on meaning making and message design. However, Schon's interpretation of communication still focuses largely on a one to one dialogue between tutor and student, as did Laurillard's original conversational framework (1993) before it was updated to take account of peer-to-peer dialogue (2002). It is therefore, also necessary to consider the wider community and context in which the communication is situated. In his exposition of communities of practice, Wenger (1998) in describing the features of a shared repertoire¹ states that this will include a wide variety of shared linguistic markers such as routines, words, gestures, genres and symbols: "It (the shared repertoire) includes the discourse by which members create meaningful statements about the world, as well as the styles by which they express their forms of membership and their identities as members" (p83).

Communication mechanisms within the SOLE studies include asynchronous discussion boards, email and face-to-face support within blended elearning contexts. None of the studies were totally online courses and none included the use of synchronous discussion facility or chat rooms. The literature on virtual learning environments has focussed much attention on the potential benefits and affordances of online communication mechanisms rather than students' experiences of these technologies (Hara & Kling, 2000). In this report, rather than an in-depth review of the characteristics of tools, we will discuss issues surrounding communications, how they contributed to the teaching and learning context and explore some of the possible reasons for the problems and issues, which arose.

3. Methodology

As part of the SOLE research design, the following research questions were included in order to investigate communications between students and tutors and students themselves:

- How do students choose to communicate (how? when? why?) and for what purposes? How do the VLE tools support this?
- What are the roles of the tutor and the student? How do these relate to the implicit and explicit model of learning? How does it relate to student participation in the VLE?
- Is it possible to identify issues around authority, for example, of knowledge, of expertise and teacher-student communications, in relation to VLEs?

¹ Wenger describes three dimensions to a community of practice: joint enterprise, mutual engagement and shared repertoire

These were addressed in a number of evaluation instruments but primarily through semi-structured interviews with students and tutors. In interviews with students and tutors, we asked participants to identify critical positive and negative incidents that occurred during the module. The critical incident technique was used to frame these questions (see Flanagan, 1954; Gilbert & Lockwood, 1999). Students were also given a series of statements on cards and asked to physically place these on a 5 point Likert scale from strongly agree to strongly disagree according to their view. They were then asked to say why they took this view. Statements included the following, which are relevant to this aspect of the study:

“Communicating online with the tutor and fellow students in this module was a real challenge”

“Online discussions were a good way to learn in this module”

“You have to think for yourself with this kind of learning”

“We didn’t need a tutor for this course”

“Working in [vle] is all about working on your own”

“On this module, I have learnt a lot from discussions with fellow students”

“Working online in [vle] encourages me to feel part of the group”

These responses have also been analysed as part of this aspect of the research. In addition, an in-depth study of the discourse presented in discussion board postings and interview data was undertaken². The full student and tutor interview schedules and further details on the methodology are also available from the SOLE Website³.

4. Interview findings

These findings are drawn primarily from structured interviews with students and tutors from the Higher Education case studies; some evidence is also drawn from the questionnaires and transaction and discussion board postings where these were available.⁴

4.1 Economics

Students in the Economics case studies, where the numbers of students in the groups were very large (97, 216) reported difficulties with communications and discussions. In both studies, the online communications were not well used. However, in case study 7, discussion board usage was significantly higher amongst the female students.

Case study 7 had a strong emphasis on group work, which meant that communications were critical to the success of the module. The tutor had intended to set up group areas for each individual group but found the task too time consuming as each student needed to be added in individually, and abandoned the idea. Despite this, the tutor felt that the students had everything they needed:

“I was trying to achieve a situation where they would have constant access to information (...) So far as that was concerned, there was no excuse for students not knowing what they should be doing and how to do it. And so it is just a very convenient information transmission method”. (Tutor – case study 7)

² See Sole website:<http://sole.ilt.bris.ac.uk/findings.html>

³ See Sole website:<http://sole.ilt.bris.ac.uk/research.html>

⁴ Note: due to lack of student interview data (which was unfortunately damaged) for the Information and Computer Science case studies, there was little to report on communication issues that has not already been reported in the report on student and tutor roles and relationships.

"It's a nice, easy, straightforward method of communication with students" (Tutor – case study 7)

He also sees the communication as a one-way transmission model, despite the fact that students were working in groups:

"I am the person who puts the information on, so I was one that was using it. It was information from me about something new that they hadn't expected. So my role is just using it as a channel of communication." (Tutor – case study 7)

However, some of the students who were interviewed did not feel that communications and group working was adequate:

"I suppose I expected more of a discussion. You're supposed to be able to use a discussion, but nobody ever uses it." (Student – case study 7)

Any communication via the VLE was only through the email facility, which was little used. In some cases communications completely broke down:

"... I think the tutor expected everybody would be able to log on and check their e-mails and keep contact regularly. The situation.... I was not happy. I e-mailed them about five times and then they didn't even contact me..." (Student- case study 7)

This student was a student manager of one group and became so frustrated that she resigned and undertook an individual assignment. However, others did comment on the usefulness of using email via Blackboard:

"Blackboard is useful, basically... Basically, you got your group, you can e-mail your group members, just- with the names, and it provides various data from one another- say having a group meeting." (Student – case study 7)

In case study 8 the tutor had intended to enrich the student learning experience by sparking off online discussion on current news topics linked to his lecture themes:

"Somebody would come up with a good idea, and everybody would read it, and would learn from it. Somebody would come up with something, which is wrong, and a person- maybe myself- would rectify it, and others can learn why that was wrong. So, it's a way of learning that involves mutual participation." (Tutor -case study 8)

However, only two or three students ever contributed to each discussion, which as a result were very short. Students' views about online discussion varied. Here the participants raise concerns about both the lack of non-verbal signals and whether discussion itself has any value at all:

"I think for me, the best way to learn is more of a face to face kind of thing, because you actually then get to see the person's reaction towards what you are saying, if they understand or not... If you want to actually learn, I think the best way is to be within an environment itself that is conducive to that, which online chat rooms or whatever don't provide." (Student - case study 8)

"...I think this module is just about learning something that is related to the module, but there's no need [for] any discussion on something." (Student -case study 8)

4.2 Psychology

The tutor case study 6 when asked about support for students online said:

"the ease of them being able to ask questions online apart from that there isn't much actual support online. The supports actually in the workshop so although they are online they're asking questions directly to us rather than asking online. They sometimes will ask questions online even though they're in the workshop and I'm in the workshop." (Tutor – case study 6)

The tutor here sees the main method of communication for support needs to be in face-to-face contexts and certainly still sees the tutors as the main form of support. Students tended to agree:

"Int: Do you think there were any communication issues that contributed to how well the occasion went?"

Student: If you went to the lectures/workshops [tutor] is always there to ask questions so I thought that was good. If you didn't go to lectures I'd imagine it would be a bit harder to communicate with her because it would all be through email." (Student – case study 6)

However students in this case study were generally positive about online communication too. This same student also went on to say when asked to rate the statement "Communicating online with the tutor and fellow students was a real challenge" how easy s/he thought online communication was but it was clear that the interpretation here was of the mechanics of it rather than the quality of the communication:

"Because the communicating part was really easy, in the email section of Merlin there's all groups of students in the year so you can just do a group email to all of them." (student – case study 6)

Another student also confirmed this:

"It wasn't a challenge at all, it was easy. It wasn't a problem for me." (student – case study 6)

Two of the students interviewed did express less enthusiasm for communicating through the VLE but attributed this to their own lack of responsibility:

".because I wouldn't say I've communicated." (student – case study 6)

"I didn't try." (student – case study 6)

In case study 5, several students in interviews again stressed their desire to see the tutor in person and this seemed to reflect more anxiety that was in evidence with case study 6 interviewees:

"Int: What would the occasion have been like if you hadn't been using WebCT on the module?"

Student: It might have been better because you would get to go and see [tutor], cause when you use a discussion board you don't always get the answer that you know, you need to ask some more questions and it takes more time, but if you go see him it gets sorted out quickly." (student – case study 5)

"I'd say it wasn't very good because he would prefer us to use the WebCT but I would prefer not to." (student – case study 5)

"I would say that one of the problems, I mean the discussion board is really good and everything but [the tutor] said we should try and use that instead of coming to see him....but I would like to see him more----I thought it would be another aid, but its like a substitute." (student -case study 5)

There were also some positive comments, where students did seem to appreciate communicating with their fellow students through online discussion and saw it as an opportunity:

"I think it is good to have discussion board, because you get to, you know, ask people things and people reply to you where you wouldn't usually talk to them face to face. Yeah and its good because people sometimes ask questions and things that you want to ask but don't." (student -case study 5)

Some of the psychology students (in both case studies) also raised concerns about the printed nature and a concern over privacy in a text-based medium:

"The discussion board is a bit impersonal really. It could answer your question fair enough but then, you know, there's always something else it might not clarify it completely and you might feel a bit silly having to write to him again saying you don't understand it." (Student - Case study 5)

".in a way if you did want to say something to someone then your ID shows up so you can't just say anything. Quite a lot of people argue through the email thing on (the VLE) and I don't get involved because it's printing your name and everything." (Student - Case study 6)

Many of the students in these two studies seem to appreciate the value of communicating online with fellow students, albeit with some concerns over the medium itself. They were less sure of using this

method to communicate with the tutor. This might be because they were looking for more support from the tutor and therefore the lack of non verbal signals, which would normally offer reassurance might have made them feel less secure in online communication with tutors.

4.3 Education

In the first of the Education studies, students did not appear to have any difficulties communicating online with fellow students and saw it as a positive experience:

“When I put my own work online I got the reply from others. They shared their ideas and opinions toward my work which are quite valuable.” (student – case study 3)

“We planned a lesson on contour lines, as a group and pasted it to the bulletin board.” (student – case study 3)

However, case study 3 students were postgraduates and a very small group so undertaking discussion and collaboration within this group might be expected to be successful. Students in case study 4, where numbers were very high (260 in the cohort) were happy with the principle, did not put this into practice:

“...I don't think that the on-line discussions- people have really used them as much as they could have done this year. And you have got the same people going on every time just to put things on. It's too easy to just sit back, read it like I do and not actually write anything.” (Student – case study 4)

“I think I used them once after that and I managed to sort of get a few responses from people through the discussion board, so I suppose they were – they are a good way to learn but I haven't used them much.” (Student – case study 4)

However, for some groups of students the VLE may offer just the private learning experience they need. The tutor for case study 4 offered a powerful example of where the anonymity of the VLE can support some students in contributing to discussion in a manner that was not possible in face-to-face sessions:

“The most powerful anecdote, that changed my thinking about working at a distance, working through a computer media communication, not being face to face with students was a discussion that I had with a year three student, part of a seminar session where she was talking about web boards, (...)she was very plain in comparison to the others in the group, very poorly dressed in comparison to the rest of the group and she said she loved the use of web boards because people judged her on what she wrote and not on what she looked like.

And there was a totally stunned silence in the group (...)She loved it. She loved the fact that she could stop and think, she could pause her thoughts, ...and she didn't have to come up with lots of articulate ideas within the group setting and she could actually concentrate on it, she could go and get her references and then she could go on and construct her argument. And people judged her on the strength of her argument and not what she looked like or any peripheral information about her.” (tutor - case study 4)

In general, the tutors' view of how students were communicating through the VLE was positive and collaborative. They reported that students were sharing teaching strategies and that they were able to encourage deeper thinking in the discussion board - for example by contributing to discussions on how to manage a child's behaviour by suggesting that you need to consider why a child is causing disruption. After this initial guidance, tutors felt that peer support and discussion tended to take over and that this ran smoothly. This did not seem to be reflected in the comments of students who were interviewed, who focussed mainly on the need they perceived for communication within the group when on placement.

“I agree strongly with the fact that number eight, working on Blackboard encourages me to feel part of the group. I thought that was particularly so when I was on placement and I was able to log on and see what was happening and if there were any notices.” (student - case study 4).

“I agree that discussions were good because I found out how everybody else was feeling, not just how you were feeling and say things were going terribly bad you know everybody else was having a really bad time.” (student - case study 4)

4.4 Hospitality, Leisure, Sport and Tourism

There were some similarities in responses from the students in the Hospitality, Leisure, Sport and Tourism case study (9), where first year undergraduate students were studying a module on business research methods. There were in total 400 students registered for this course, though only 157 participated in this evaluation. The tutors had adopted an explicitly constructivist learning model and there was a heavy emphasis on the use of the VLE for discussion and group work, both of which were assessed:

“The emphasis on participation is a dominant feature of constructivism.” (tutor – case study 9)

In the second questionnaire, students were asked what had contributed most to their learning and the overwhelming response here was the interaction through the course discussion rooms and the group aspects of the work, indicating that the implicit and explicit learning models appear to be well aligned and that group work and communication through the VLE were accepted parts of the course.

This was also evident from the interview responses:

“We learnt a lot in general ... it didn’t force us together ... people voluntarily came together.” (student – case study 9)

However, student responses also show that they were more focussed on the group tasks than the communication mechanisms:

“the group work was different ... people had to link up to do it ... there was a lot of work outside it (the VLE) ... the group work had to be more organised than others ... it really worked making sure that everything was in order and everything that was required.” (student – case study 9)

The tutor who was interviewed (part of a larger team) emphasised the need to plan and manage the process very tightly:

“I simply couldn’t teach a large group without it ... it has made the approach possible ... I couldn’t connect all these people in any other way ... to develop their own case study material but to keep control over what they are doing gives them the confidence and allows me to draw back as they develop more knowledge ... but it all needs to be planned in advance.”

“(asynchronous communication) you’ve got to be on top of things and action things but you manage your own time and have much more control over how you do things ... you can plan it better ... but you do have to respond quickly.” (Tutor – case study 9)

The tutor also pinpointed another aspect of the communications within this module. She had a very large cohort of students to manage and felt that communicating with students through the VLE allowed her to reconnect with the students that would not be possible in a lecture theatre, though it is not clear how many of the 400 the tutor had in fact connected with.

“Communication in the VLE is really interesting ... when you have over a hundred students in a normal class you lose the intimacy with the students ... you lose track of who they are. Using the VLE for the first time it came back ... you lose the visual cues but have lots of other information to go on ... you could actually see the learning taking place through the discussions.” (tutor – case study 9)

However, there was some evidence from student interviews and the discussion forums themselves that they were not altogether comfortable when working with the VLE and that participation, even when this forms part of assessment is not guaranteed. Some forums had few postings and some students were also keen to see different communication methods adopted:

“it should be a chat room rather than asynchronously ... set it up like that ... let people battle it out there and then ... not just post submissions.” (student – case study 9)

This desire for more immediate, responsive communication is likely to be driven by the emergence of real time chat systems such as MSN messenger and texting and highlights the importance of understanding student expectations and habits when designing an online or blended course.

5. Cultural factors

Communication was also influenced by cultural factors such as first language, and cultural background. According to Ting-Toomey (1999) cultural communication styles associated with learning cultures differ across major linguistic groupings and differences in teaching modes and attitudes to learning will have a bearing on online communication. English, German and European speakers are situated on the high context continuum, with generally learner-centred teaching, a competitive attitude to learning and generally relaxed modes of address. African, Asian language and Chinese speakers are at the low context end of the scale, with teacher-led teaching, a respect for designated authority, a range of learning attitudes including story telling (African speakers), Groupwork (Asian language and Chinese speakers) and competitive (Chinese speakers) and formal modes of address.

In case study 8, whilst overall participation was low, amongst those whose first language was not English, usage was significantly higher than the rest of the group and as the quote below shows, this group clearly appreciated having written communication:

'... I think almost everything was easier with WebCT, because my mother language is Finnish...so it is much easier to read everything and get new information.' (student – case study 8).

This was also true in case study 2 (Information and Computer Science) – at least according to the tutor:

"at the moment we are not giving out handouts, so it does mean they have to download my notes. We have a high proportion of non-English speaking students, whose English is not good, from China for example, they can download the examples the night before and make sure they can understand them so they can ask questions in the lecture. That is a real benefit to them... then they get more out of the lecture" (tutor – case study 2).

Again in case study 8 (Economics), it should be noted that 60% of students received their secondary education outside of Europe and America and 42.5% are non-English or European language speakers; the tutor was also from a non-UK country where communication is described by Ting-Toomey as 'relationship-centric'. The differences in the students' (and the tutor's) prior education and teaching mode, learning attitudes and modes of address go in some way to explain why online communications for this module were particularly challenging, and why roles and authority issues may have been more problematic.

6. A VLE as a "lean" medium

All the tutors in these studies wanted to promote some form of communication through the VLE and a variety of communication tools were in use. Whilst online discussion fora and other communication tools were included in the design of several of the courses in the studies, it was noticeable from student interviews and questionnaire responses that students often failed to see the relevance or benefit of these or they found them difficult to really feel entirely comfortable with. In the discourse analysis study, undertaken for SOLE by Cook & Jacobs⁵, genre confusion was identified as one possible factor in the lack of participation in the case study they investigated. Both students and the tutor were using a range of different forms of address and writing style without any consistency or understanding of what might be appropriate, leading to misunderstandings, a lack of connection and missed opportunities.

Hara & Kling (2000) note that human communication is inherently ambiguous but that these ambiguities are generally resolved adequately in face-to-face contexts. They found that in addition to technological issues, students in their case study, and expressed anxiety over the management of communications by the tutor. Garrison, Anderson & Archer (2000) describe a VLE as a "lean medium" where metacommunicative channels (communication about communication) are absent, meaning that statements like "*this is a joke*" have to be specifically included in the email or discussion board leading to a loss of spontaneity. Furthermore "In face to face interaction communication can be entrusted to

⁵ See Sole website:<http://sole.ilrt.bris.ac.uk/findings.html>

habit or instinct, (...) communicators in a virtual environment have to *think* about their metacommunication” (p241) (authors’ emphasis). This need for conscious thought (and planning) may explain some of the unease and discomfort with online communications reported here and the preference for face to face communication. Armitage and O’Leary (2003) also emphasise how different working online is for students, that expectations may be completely new to them and that tutors have a key role in explaining the purpose of the online environment.

In addition, Perold & Maree (2003) argue that education may be regarded as a corrective process because it aims to bring about change in knowledge and skills. They present a model of failures and higher order corrective processes, which was developed to show how students and tutors must adapt to problems, especially communication issues. They argue that communication in a virtual environment is therefore unstable and may mean it is unintentionally omitted, leading students to “experience *greater* pressure to cultivate independent problem solving skills. So that the “very failures that seem to place web-based instruction at a disadvantage sometimes stimulate higher order corrections – some of which are valuable ends in themselves, and some of which are difficult to achieve in a traditional educational context”. (Perold & Maree, 2003, p245). This suggests that the discomfort students feel could be advantageous in developing creativity and problem solving but we would argue that students may need to be made more aware of this possibility, it is unlikely to happen unconsciously.

The relationship between teamwork and communication also needs to be considered. Curry (2001) also suggests that “for collaboration to work, the team project must be challenging enough to demand teamwork. Members need to sense that they are dependent upon one another in order to be successful.” It could be argued that this is also true for communication and especially online discussion: - the task must require communication in order to ensure that students “need” to engage. This was certainly true in some of the case studies where online communications were more successful (e.g. case study 9 – assessed group tasks, case study 4 – communication when on placement). Similarly, Cook & Timmis (2002) note that for virtual learning to be motivating, it should: “provide learning opportunities that are not available elsewhere”, which could again be specifically applied to communications.

7. Conclusions and recommendations

Communication was found to be problematic in several of the studies and participation in discussions was patchy, except where this had a clearly identifiable purpose and structure or formed part of the assessment. Different subjects had different levels of success in these case studies and cultural and first-language differences presented barriers to some (though was also advantageous to others from different backgrounds). There was clearly some anxiety in some of the groups around the lack of (or perceived lack of) face-to-face support, the nature of the printed medium or the management of discussions. However, it is worth noting that those case studies that had a clearly articulated theoretical perspective (e.g. case studies 3 & 9) seemed to encourage more active participation and purposeful communication.

Metacommunication challenges and the lack of non-verbal cues in a virtual environment make it essential for students and tutors to understand how to engage in and through the medium (and this may be different for different communication tools – e.g. chat rooms versus discussion boards). It seems clear from these findings that we cannot assume that this is obvious to students or that it can necessarily be picked up along the way. A shared understanding and repertoire appear to be essential elements for successful communications online and this may include modes of address, type and level of contributions required, type and frequency of response. Perold & Maree’s suggestion that communication difficulties may of themselves present students with challenging tasks that can encourage higher-order problem solving and independent learning may be worth further consideration. However, students still need to reflect on and evaluate their communications and participation within a course to allow such connections to take place.

We can also conclude that there is a need for developing greater awareness of the need to *manage* discussion activities as several of the studies showed a lack of communication management and resulting low levels of participation and engagement . However where there is evidence that discussion has been more successful, it was clearly planned, linked to specific tasks and assessment (case study 9) and then carefully facilitated to ensure there were shared expectations and approaches.

A number of recommendations are suggested to improve and manage different types of communication within virtual learning environments:

1. Develop a communications "protocol" between students and tutors to encourage shared understanding and expectations of different activities, tools, styles and cultures
2. Students should be recruited as co-participants and invited to jointly develop the "protocol" so that they will feel their contributions are worthwhile and valued
3. Allow opportunities for experimenting with tools and protocols during induction or the start of a module
4. Link discussion activities to tasks with a clearly defined purpose and structure
5. Consider linking discussion activities to assessment
6. Provide opportunities for students and tutors to reflect with others and evaluate online their experiences
7. Experiment (and encourage students to do so) with the use of synchronous tools such as virtual chat to identify any new forms of discourse or effective communication they might afford.

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