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IT IS AN INERTIA THING, NO-ONE USES IT, SO NO-ONE USES IT: THE FAILURE OF A VIRTUAL SOCIAL SPACE (VSS) INTENDED TO CREATE A LEARNING COMMUNITY

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Abstract

This paper reports on the evaluation of a Virtual Social Space (VSS) intended to resolve the problems of isolation and lack of socialisation in a continuing professional distance education Masters programme in Information Technology (MA in ITM). These phenomena are due to geographical dispersion and disparate time schedules of learners. Very often, peer-to-peer socialisation in distance education only occurs as part of formal learning activities, or is just left to the student's own initiative. This situation is then compounded by the modularity of VLEs, forcing students to jump from one module space to another as they progress through a course. All discussion threads, conversations or record of previous dialogues are then lost. This paper reports on the evaluation phase of a project that used an action research approach to establish student needs and requirements, design and develop the site, and, finally, explore it with the students. Initially received with enthusiasm and seen as a good idea by students, the VSS was not entirely successful. This paper discusses how the characteristics of this cohort of students had an impact on their perception and usage of this social space to create a learning community.

Keywords

Distance Education, Educational Action Research, Virtual Social Spaces, Learning Communities

Introduction

Most Higher Education (HE) institutions are still working through the development of 'best practice' models for the use of web-based technologies in the delivery of distance education programs. In fact, online environments, and the use of the WWW in online courses, has been seen as the most recent *panacea* to try and resolve the problems of distance education students (Ausserhofer, 1999). The emergence of new educational approaches and epistemologies, such as constructivism and problem based learning, have also been identified as possible ways of addressing these problems. However, distance education has inherently very specific characteristics that require careful consideration before success can be achieved.

As Galusha (1997) suggests that while Distance Education (DE) has been in existence for at least 100 years, the delivery medium of pencil and paper correspondence has changed little until recently with the introduction of electronic mediums of delivery. Traditionally, students taking DE programmes have faced a number of barriers including: costs and motivations, feedback and teacher contact, student support and services,

alienation and isolation (Galusha, 1997). The introduction of web-based educational technologies has provided programme development teams with new opportunities, namely through the introduction of both synchronous and asynchronous Computer Mediated Communications (CMC) tools. These are thought to alleviate some of the communication-based barriers defined above. However, to date, the educational use of these tools within a course or module has largely related to completing learning activities, rather than the development of social networks, which may support the student. This focus on the completion of learning activities through CMC, often fails to take into consideration the wider social dimension of the learning process (Wegerif, 1998). In fact, learning in general terms can be described as a process of becoming part of a community of knowledge (Lave and Wenger, 1991). Thus, the lack of understanding of this facet of the learning process is one of the contributing factors for the feelings of isolation referred to by Berge and Muilenburg (2001).

This paper reports on the findings of a research project that sought to understand the development and importance of social support networks by students of a Masters level programme that is currently being delivered online. This programme uses a Virtual Learning Environment (VLE) as its vehicle of delivery. The programme is divided into different modules, and each module has its own learning space. The project reported in this paper examined students' use of a Virtual Social Space (VSS) that aimed at bridging the different components of the programme and connecting the different cohorts. The research also aimed at investigating the use of parallel communication channels (such as private email lists) by students to develop social networks to support their learning.

Research Background

This project is a discrete piece of action research completed within a larger research project being undertaken within the Department of Information Studies, University of Sheffield, UK. This larger project had been underway for several years and has used an action research approach to continuously improve the quality and to shape the redevelopment of the Masters in Information Technology Management (ITM) offered by this department. This larger project and the subsequent pedagogical and implementation models developed have aided the evaluation, management, redesign and delivery of the programme (McPherson and Nunes, 2002).

From a full cycle of action research, that consists of *Diagnosing* → *Action Planning* → *Action Taking* → *Evaluating* (Coghlan and Brannick, 2001:19), this paper reports only on the last phase. Diagnosing was a result of the overall cycles of development and specific user needs were then fully investigated by Gilchrist (2000). Action Planning and Action Taking were consequences of this study and further work was undertaken in coordination with Sheffield University's Learning and Media Unit (Nunes et al, 2002). This paper reports the Evaluation findings.

The Learning Set: MA Information Technology Management Programme

The Course

The MA ITM is a part-time Continuing Professional Distance Education (CPDE) programme, offered by the Department of Information Studies. It aims to provide Information Technology (IT) and Information Systems (IS) managers with the diverse range of skills needed to bridge the knowledge and practice gap that often exists between professional systems developers and potential users within organisations. It is intended to aid participants to resolve problems arising from the implementation of IS in the workplace. Emphasis is placed on improving students' knowledge, understanding and practical skills as well as developing the confidence and competence required in applying newly gained skills in the world of work.

The Students

This programme attracts students from as far a field as Norway, Sweden, Greece and Malta. The course is primarily aimed at professionals with a technological background who need improved skills and qualifications specific to the management of information technology related environments. Students enrolling on the MA are required to have a relevant first degree or a minimum of three years experience in industry.

Course Delivery Mode

The MA ITM was initially designed as a paper-based distance education program in the early nineties. However as Internet based technologies developed and become more accessible, this programme has evolve through action research into a web-based distance education program making use of WebCT as its VLE. The programme consists of four modules and a work-based dissertation thesis. Each module runs for six months and requires students to attend two separate day schools on campus during which they complete group tasks.

The Virtual Social Space

Campus based learning environments have developed a multitude of student support systems to assist students in their studies. These not only include academic systems such as libraries and learning skills units, but also include pastoral and social systems such as induction weeks, counselling and health services, student accommodation services, clubs and societies, etc. To date most models proposed for the development of online programs, such as (Luck 2001) do not always incorporate the development of these types of learning support systems. However, it is clear that the communication tools provided within VLE can be used for this purpose. Theorists, such as Lake (1999), suggest that the types of communication tools afforded by VLE enable the development of empowering modes of communication such as: one-way (tutor →students) communication through course notes and explicit knowledge web pages; two-way discussions (tutor ↔student) through tutorial learning activities; and unstructured communication (tutor↔student↔student) either in informal asynchronous communication (module café) areas or in private chat rooms.

Typically, and the MA in ITM is no exception, courses are usually arranged around a number of modules, which when completed equal the number of credit points required to gain the qualification sort. When this course design is translated into the VLE, online DE programmes often end up with a modular architecture. Each module usually has its own learning space facilitated by a module team. This modular approach provides an ideal support for the specific, module learning activities and tasks, and may also encourage all the types of communication modes described above. Social interaction often occurs in informal module spaces - *Cafés*. All ITM environments do contain such a facility. However, students have to change *Cafés* each time they change modules. So, although adequate to support informal and social communication, these facilities are only available while undertaking a particular module. Because, students usually lose access to completed modules as they gain access to the next semesters enrolment, they lose socializing conduits and conversation threads, as well as useful study mechanisms (e.g. non-module specific topics, well known environments, link facilities). Furthermore, students lack an overall anchoring space that binds the different modules, cohorts and educators together.

The MA ITM team identified the need to provide a persistent overall social and information environment for online peer-to-peer communication and socialising in a familiar setting, as well as for administrative support, general course and university information. This resulted in the design, development and release to students of the Virtual Social Space (VSS).

The early design and structure of the VSS resulted from an MSc research project undertaken by Gilchrist (2000). The initial set of requirements was identified through a survey of student needs and wishes. The survey was composed of a questionnaire and a series of group interviews in day schools. Student initial enthusiasm in interviews was encouraging and was confirmed by questionnaire results.

This survey identified students' perceptions of important components of the VSS. This were: a *Personal Portraits Gallery*, a *Chat Room*, a *Social Calendar*, a *Course News* section, a *Useful Contacts* section and, if at all possible, an *Alumni* section. These elements were then grouped into three major VSS areas:

Work related area, leisure (*Play*) area and a *Retrospective* look into course advice and alumni area, as shown below:

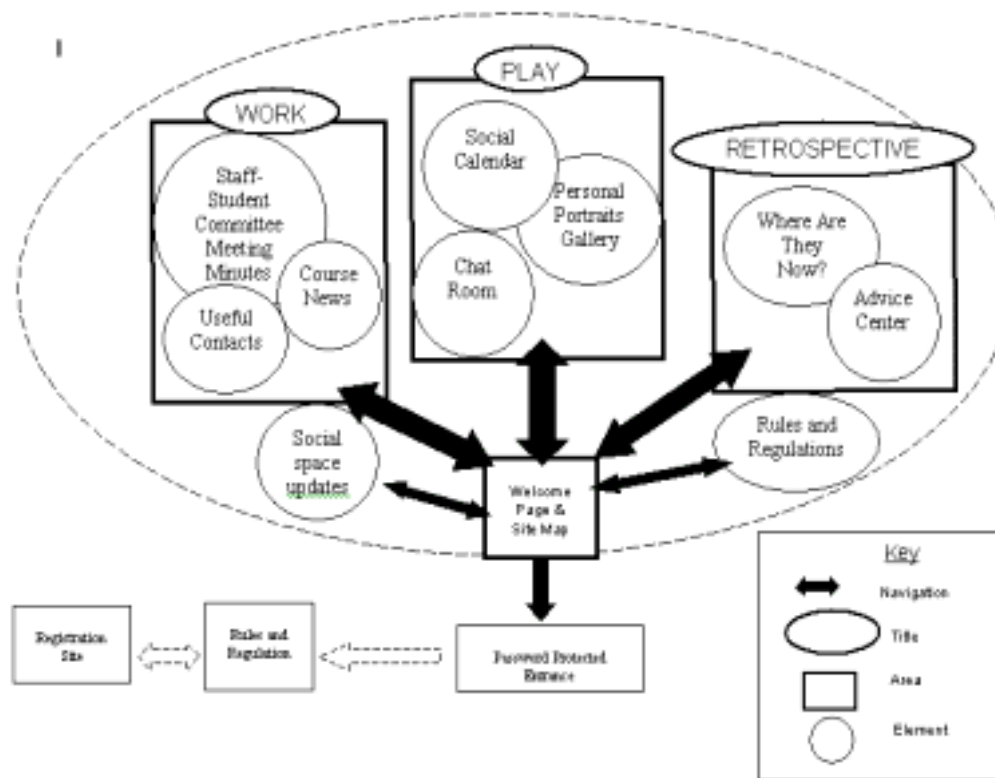


Fig. 1 - VSS architecture.

The VSS for the MA in ITM course was then designed and developed using a prototyping approach, as described by Nunes et. al. (2002). The initial VSS prototype was a working model and a first attempt to incorporate the elements outlined above into a web site. The prototype was built using WebCT (the VLE adopted by the University of Sheffield) and aimed at providing a representational space in which the students could socialise. The feedback obtained from testing this prototype was then used to develop it further. The final architecture of the prototype is illustrated in Fig. 1 and described in depth in Nunes et al. (2002).

The idea behind the initial VSS development was that of a space for students, designed and maintained by students. This would ensure a focus on student needs and interests. Once the first prototype iteration was completed, volunteers from the student body were sought. For a while, maintenance of the VSS relied on these students. It was soon apparent, however, that pragmatic aspects of student life superseded minor obligations, such as updating a web site. After the first three months, members of this research team had to accept responsibility for all administration tasks concerning the VSS.

Evaluation of the Virtual Social Space

Designing the VSS for the MA in ITM was a challenging task, but after 12 months of use by students and participative observation by the members of this research team, it became evident that there was a need to evaluate its use. Also it became clear that further research was needed to investigate why and how this usage was occurring.

Early indications emerging from participative observation showed that, despite a very high initial interest by the students, the VSS is currently underused. Students do visit the site at regular intervals, but only a small group of first year students have really used it as a social space. Furthermore, investigation has shown that other students, that did not have the VSS available from the start of their courses, had already created parallel communication channels (e.g. email list and Yahoo Clubs), which they kept as their favourite socialisation vehicle. In fact, although having expressed an initial interest in such a facility, these students have continued to use their familiar CMC environments. Thus, the research team have carried out a full investigation of usage.

Evaluation Methodology

The methodology chosen was a summative approach using an in-depth questionnaire as the main data collection tool. The questionnaire was designed to include closed and open questions, in order to allow the collection of both quantitative and qualitative data.

The research team decided to provide all current students enrolled in the MA ITM with the opportunity to provide a response. This effectively translated to a possible sample group of 34 students. In order to ensure student collaboration and interest in this evaluation process, the researchers met each year group during one of their on campus day schools. Students were asked what their preferred mode of response was (email, web-form or paper-based) and a verbal participation contract was then established.

Having identified that students overwhelmingly preferred to respond via email, preferred addresses were collected. Those who provided email addresses were subsequently emailed with details of the project, and a clear statement that their participation in the project was voluntary and anonymous, and would in no way prejudice their studies. These confidentiality arrangements, which would be used during the life of the research project, were made absolutely clear: the only researcher that had a complete overview over the entirety of the data was from a different university (RMIT University, Australia) and in no way related to the course.

The questionnaire was developed with three distinct sections under the following headings: Demographic Data, Understanding the Social Networks that Support Learning and The Virtual Social Space Site. The latter was broken into four components: an overall exploration of the students' use of the VSS and three separate sections that explored the respondents' use of the three different components of the VSS - The Work Zone, The Social Circle and the History Channel.

In designing the questionnaire, it was decided to use a combination of qualitative and quantitative methods in order to explore the volume and nature of student social contacts. This approach strengthens the overall evaluation design (Darlington and Scott, 2002). The demographic data section contained questions, which not only included standard demographic information, but also sought information about students use of the Internet for both social and work/study related purposes. Their reasons for choosing this mode of study were also explored. The remaining two sections of the questionnaire contained questions relating to students' social contact with one another and their use of the VSS.

It was decided that the evaluation questionnaire should specifically explore students' social interaction and the possibility that they had developed parallel social networks independent of the VSS. This would allow the research team to draw some conclusions about the importance or otherwise of social contact between the students' and had implications for the evaluation of the VSS. If students had no contact with each other, or believed there was no value to have social contact with each other, then obviously their use of the VSS would be low.

Effectively both the qualitative and quantitative data from the questionnaire was analysed using Neuman's (2000) Successive Approximation method of qualitative data analysis. This method involves drawing out key themes from the data by allowing for the successive coding and recoding of data. As Neuman (2000) suggests, each pass through the evidence allows the concepts to remain abstract, while being 'rooted in the

concrete evidence and reflecting the context' (Neuman, 2000). The quantitative components of the questionnaire were simply tallied and used as part of the analysis of themes, clarifying patterns of Internet use and their relationship to social contact and use of the VSS. This method of analysis was also aided by the design of the questionnaire, which steered respondents through a series of questions that allowed them to reflect and then build on their own responses. As such, the final "Any other comments?" question often yielded a very reflective understanding of student use of the VSS as well as the importance of social contact in the learning process.

Discussion of Findings

The total number of surveys returned was 16 (out of 34), hence this represented a surprisingly high return rate of 47.06%. Of these 16 respondents, 7 were male and 9 were female, they formed a representative sample both in terms of age breakdown (as shown in Table 1) and cohort depiction (as illustrated in Table 2).

Age Band	Distribution
<34	4
35-39	4
40-44	1
45-49	4
>50	3

Table 1 – Student distribution by age.

Year of Study	Distribution
1 st year	3 out of a possible 9
2 nd year	6 out of a possible 12
3 rd year	7 out of a possible 13

Table 2 – Student distributions by year of study.

The analysis of the social contact with other students revealed that very few students actually visit the campus outside day schools (4 out of 16). However, it is clear that the social aspect of learning was maintained, 10 out of 16 students had regular contact with another student on matters unrelated to the course. Furthermore, 13 out of 16 regularly used email or phone to talk to one another. The same number of students actually met up face-to-face (f2f) to socialise outside the day school programme. The significance of the socialising aspect was confirmed by these students when asked to ascribe importance of having social contacts with other students in the programme: of the 13 yes respondents, 11 believed social contact was important. From the 3 who stated they had no contact with other students, 2 believed social contact was not important, but one was ambivalent. The preferred means of communication with other students is clearly email (15 out of 16 were regular users of email for social purposes), although most added they also used a bulletin boards. In terms of contact with tutors, all students preferred email contact.

In terms of understanding the VSS itself, 13 students stated they had visited the site at least once. From the three that had never visited, one was just not interested, a second did not feel it was relevant and the third stated "I find the internet extremely slow from home in the evenings so I would tend to use e-mail from work. Probably because of this I just don't think about using it" (02_2).

Of the 13 students that had been in, 4 could not see how this type of environment would be of use to them and soon lost interest. One had a lot of technical issues in entering WebCT in general and therefore never got past first base. 7 expressed disappointment that there was little or no activity happening in there when they visited and therefore felt that there was little incentive to go in. Of these 7, most felt frustrated that it was always the same group of people contributing. Curiously, all 13 suggested that some sort of incentive was needed to encourage greater use of the VSS.

The importance of social support networks for students

Overwhelmingly students who responded to this survey believed that the social contact they had with one another supported them in the learning process. 75% of those surveyed believed that the social contact they experienced was important. Analysis of their comments indicated this occurred in two ways:

- Support related directly to course based learning activities or assignments - some students suggested that when it came to completing learning tasks or assessments, they contacted other students and established a social connection in order to confirm their own understanding of the content. Respondent 02_3 summed up the general feeling by suggesting that the social contact “offered good reassurance factors at critical points in the course, i.e. normally before hand-in of assignments” (02_3).
- Support by sharing similar experiences, anxieties and problems - this second theme was more ephemeral in nature. It would best be described as students feeling that they had a sense of connection with each other, a sense of shared experience, a feeling that others knew what they were going through. As Respondent 03_2 suggests, the social contact “was very helpful in providing support and just reminding me that everyone is in the same situation and that it is not impossible – as it sometime seems” (03_2). Respondent 07_3 also conveys this sense of connection, but also sees these personal connections remaining active and important after graduating from the course:

“(social contact provides) support and motivation. Drives you to keep going and also to have a good moan occasionally. Helps to share ideas in particular, but also to meet a new friend and create a good friendship that hopefully will last beyond the course. It may also be useful in terms of career development and support”.

(Respondent 07_3)

Of the 4 respondents who didn’t believe that social contact was important, 3 also stated that they ‘preferred studying alone’ when asked what the main reason was for them choosing a distance learning course. This suggests a more independent learning style and probably a resistance to social contact with other students.

Students Prefer Email

While a number of these students commented on their lack of skills relating to CMC facilities like Chat and Discussion Boards, all respondents used email regularly. 15 of the 16 (93%) respondents used email to maintain social contact with friends and relatives. On average, respondents sent 13 emails a week that they defined as ‘social’. This high level of email usage in their personal and professional lives also defined their preferred method of communication with each other in their student life. In fact, and as stated above, 15 of the 16 respondents confirmed that email was their preferred method of communication with other students and tutors. Again, when asked how they might resolve a course content related concern, all respondents answered that they would email either a fellow student or the tutor. 2 of the respondents reinforced this opinion by adding that they might post a question on the Discussion Board if they felt their question might relate to or be of use to other students.

Given these students high level of email preference it is now evident that the communication tools provided within the VSS, namely the discussion boards, the chat rooms and the social calendar, were of little additional value to their existing methods of developing social support networks.

Low Use of the VSS: 3 Possible Reasons Why

While a number of students commented that, due to this questionnaire, they had gone back into the VSS and found “lots of interesting and useful stuff” (06_1), it was obvious that this facility did not play a central role in the development of their social contacts. In actual fact, four key themes emerged from the data:

- Firstly, as previously stated, most students developed their social contact with each other via email. This is being an generalised and established method of communication for them and requiring no extra effort to understand, learn and operate different CMC facilities;

- The second key theme was that the VSS was not integrated into the rest of their study programme. This was actually a design decision to differentiate it from the individual module environments. However, as students had to consciously think of accessing this additional site, many felt there was just no incentive to go there. Typical comments were as follows:

'If we knew that this was 'the place' to obtain the information and everything was available through a single access point then it would be used more. The current arrangement seems a little fragmented and I tend to go to the message board for the current module only.'

(Respondent 05_2)

"I think the idea is excellent and it is a very appropriate tool for distance-learning students. However, as per my comments above about the Work Zone, unless you provide students with a real incentive to visit, they won't bother! Maybe vital pieces of information (assignment titles? Day school info?) could be posted there – students could then be emailed an alert to tell us that new information is available with perhaps a link to the relevant login page. This would increase visits!"

(Respondent 04_3)

"I think assignment titles and info should be posted here and not handed out on hard copies – this would mean that students would have a real incentive to visit the space. At the moment it's just an 'added extra' and certainly in my case I really don't go there unless somebody is hounding me to!"

(Respondent 07_3)

- The third key theme, that was overwhelming amongst those that had visited the VSS in the first few months of its operation, was that few people were in the space when they visited and therefore few contributions were made to the space. This led to a feeling that no one used it, as Respondent 01_3 put it: "There is an inertia thing, no-one uses it so no-one uses it" (01_3). It was clear that many of the respondents visited on a few occasions, but either weren't sure what to do next, got no response or feedback from messages posted, or never saw activity that convinced them others were making use of the space. This resulted in a sense of frustration for many of the respondents:

"I found that some were just "listeners" or "lurkers". In the early days I was one of the more prolific posters and I really wanted to make it work, but after a while I felt as though I was talking to myself and lost heart in it. – I have not used any of the online areas this final year."

(Respondent 06_3)

- Finally, the fourth key theme and possibly the most significant, related to the type of students involved with this course: part-time students with full-time personal and professional lives. This implies a general lack of time for anything beyond the bare essentials in their studies:

"I don't think I would use it. I find it difficult finding time to do everything I have to do without using the facility.

(Respondent 02_2)

"I don't find it of value to the academic nature of the course. I have clear ideas about what I want to achieve and believe these to be met through study rather than an exchange of ideas in the way that the VSS facilitates. As a distance learner I am not on the course to gain further social contacts and as such don't really find enough time to just 'hang out' in the VSS. That is, I work hard and late, I have studies to do and somewhere fit in a social life. This schedule does not leave time to engage in VSS'ing"

(Respondent 03_1)

The point made by this last respondent is actually quite significant. In contrast, with full-time, on-campus students, the MA in ITM students have their own established and usually rich social networks, that are not necessarily compatible with the creation of a new learning community:

“My cultural space involves family, work colleagues, work contacts, friends, neighbours, the office, the gym, the holiday home, etc. many of which share the same cultural space. I also have another more distant section of my cultural space and that is the students on the ITM course, which is not shared by any other person within my own cultural zone. There is also the time element – I have (and consequently my partner has) given up a lot of actual social time to do these studies. It goes against the grain for me (but particularly for my partner) to swap this for virtual social time!”

(Respondent 06_3)

Conclusions

In sum, the VSS, a conceptually appealing idea that is well supported by the literature, was of little use to the students. Clearly, they expected that this space would be popular, dynamic and changing, but due to the nature of the cohort visits were sparse and finding anybody online was unlikely:

“The VSS as a social space is akin to sitting alone in a bar with no atmosphere drinking diet Tango and, just before you leave, jot a cryptic message to say that you have been there on a post it note and stick it on the fruit machine. - a bit sad really.”

(Respondent 02_3)

Numerous authors have commented on the need for educators to model appropriate behaviour for students in online learning environments, whether it be in order to promote discussion within groups, develop learning communities or to engender a sense of trust with and between students in order to facilitate learning (Clark 1999; Ferry, Hoban et al. 1999; Palloff and Pratt 1999; Brown and Johnson-Shull 2000; Lowry, Thornam et al. 2000). Nevertheless, although literature suggests there is a need to create learning communities and to support student socialising needs, different cohorts of students have specific needs and characteristics. This research indicates that mature, full-time professional, part-time students have neither the time nor the inclination to spend effort on non-essential and unrewarded learning tasks.

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