# Can Web-Based Environments Talk the Talk?

Matthew Wheeler

Sheffield Hallam University

M.A.Wheeler@shu.ac.uk

## **ABSTRACT**

This paper aims to discover what current student democracy / advocacy systems are prevalent within higher education institutions; focusing upon the communication between learners and their educators. The paper raises two questions; do the current democracy systems work (the learners perceptions)? And could a web-based environment assist the learners and educators to communicate in a more effective way? A case study of the operations within a new web-based environment (V-Rep) will be included as a comparison to the current systems. The study finds that web-based environments would be a useful addition to the current systems available within higher education institutions. The implications for the current systems are not great, as the web-based environment is aimed at enhancing communication between the learners and their educators, not to replace them.

### **Keywords**

Web-based environments, student democracy, student advocacy, communication, collaborative learning.

## INTRODUCTION

The accessibility of the Internet has meant web-based environments have become an integral part of education, becoming more prevalent since the late 1990's (Calder & McCollum 1998). The open and flexible style of learning, which is promoted through such environments, enable the learner to construct their own methods of learning (Bruner 1966); thus many commentators perceive these environments to be built along a similar pedagogy of constructivism (Wilson 1995).

The opportunity of a more open and flexible learning style appeals to many students upon entering higher education institutions (Barratt 2000). The processes that surround entering higher education however, can often be traumatic for the learners, moving away from home and having to cope with their finances, often for the first time (Gatta et al 1997). The traumatic events often leave the learner with a feeling of loneliness, which can be worsened if there are communication barriers (Maher 1969); such barriers exist between peers and their new educators.

The higher education institutions try to counteract these feelings of loneliness by developing student democracy and advocacy systems throughout all courses and units (Ayers 1994); thus encouraging the learners to communication with each other and their educators. In effect the institutions are attempting to give the learners a voice, allowing them to feel valued, worthwhile, and an asset to the institution (Moorhead 2000). The aim of this research is to discover if the current student democracy and advocacy systems being used within higher education institutions are benefiting the learners. And whether a web-based environment could assist the learners in communication. The advantage of using a web-based environment is the non-confrontational communication; as the face-face aspect is replaced with face-screen.

The environment in question within this research is entitled V-Rep (meaning Virtual Representative), developed within the School of Education at Sheffield Hallam University, it aims to give students a voice through an unbiased computer media. V-Rep encourages the learners to discuss their academic and pastoral concerns with both peers and educators, enabling any communication barriers to be broken down. Although discussions are via the web-based environment, V-Rep encourages, in a rather reversal way, face-face communication after that, once the learners confidence has been raised.

# **METHOD**

The aim of this research is to discover if the learners within higher education institutions feel that the current student democracy systems work, and to what degree they are successful. To obtain this data, the paper issued a short, simple questionnaire to an undergraduate audience of 100. Also used in this research is actual data gained from a pilot study with a small group of second year students, using the web-based environment Blackboard, as a means of non-confrontational communication. This is included to try to discover if web-based environments can provide a useful assistance in communication within higher education.

The paper has taken research issues into consideration, for example, all responses to the questionnaire were anonymous, and permission was requested, and given, from the students involved in the Blackboard pilot. The questionnaire was written so as to limit any amount of bias, whilst still containing some triangulation questions. The types of responses available were varied, from closed questions requiring a simple yes or no answer to open response questions.

# **RESULTS**

The response rate for this study was very good, 88% of the audience completed and returned full questionnaires. The first section of the questionnaire focused upon the current democracy / advocacy systems, drawing upon the individual perceptions of the students. The results were as follows:

What year of study are you currently in?

| $1^{st} - 26\%$ | 2 <sup>nd</sup> – 42% | $3^{rd}$ – $32\%$ |
|-----------------|-----------------------|-------------------|
|                 |                       |                   |

In what ways have you communicated your academic / pastoral concerns during your time within higher education?

| Personal Tutor;         | Academic Tutor;          |
|-------------------------|--------------------------|
| Student Support Centre; | Students Union;          |
| Chaplain;               | Counselling;             |
| Course Leader;          | Unit Leader;             |
| Conference;             | Student Representatives; |
| Peers;                  | Family;                  |
| External Agencies;      | Learning Centre Staff;   |

What system of democracy do you feel worked the best in enabling you to discuss your concerns?

| Student Support Centre  |
|---|
| E-Mail (often difficult to contact members of staff by other means) |
| Personal Tutor  |
|   |

#### First Class Conferences

Do you feel the current systems work?

| Yes - 8% | No - 31% | Not Sure – 61% |
|----------|----------|----------------|
|          |          |                |

The second section of the questionnaire focused upon the possible inclusion of a web-based environment within higher education dedicated to student advocacy. The answers were as follows:

Do you have any experience of using web-based environments?

| Yes - 84% | No - 16% |
|-----------|----------|
|           |          |

Which type of communication do your feel is most effective?

| Face-Face – 19% | Electronic – 7% | Combination – 74% |
|-----------------|-----------------|-------------------|
|-----------------|-----------------|-------------------|

What advantages do you see electronic communication has over face-face communication?

| Quicker than Post               | Long Distances not an issue |
|---------------------------------|-----------------------------|
| Cheaper                         | Ease of Contact             |
| Time to think before responding | Able to Track Conversations |
| Able to Record Conversations    | Convenient                  |

Do you feel web-based environments could assist in student democracy / advocacy systems within higher education?

The questionnaire was designed to try to enable the students to have an opportunity to express their opinions in an anonymous format. The first two questions enabled the students to understand the feel of subject and were aimed at encouraging them to think hard about issues that faced them in higher education. It was felt by the majority of the respondents that e-mail was a useful mechanism of communicating issues to members of staff, mainly due to the fact the staff were hard to locate or were busy during times which the students were attempting to access their support. The surprising element of the fourth question was the huge gap between whether the support systems work, with a large percentage of the respondents either not sure or feeling that the systems are not working; only 8% feeling satisfied with the current systems of support.

The second section of the questionnaire was attempting to understand the levels of competency in the use of ICT and in particular web-based environments. The majority of the students questioned had experienced work within a web-based environment, and felt

that electronic communication was as useful as face-face communication, although a combination of the two is much preferred, something that was expected. The advantage of using electronic communication is evident from question seven; time, distance and costs are all valuable arguments for electronic communication. The most convincing argument though is the ability for non-confident participants to have time to think, read and ponder answers before having to join a discuss or debate. The final question of whether web-based environments could be a useful addition to student democracy was very surprising, 93% of respondents felt they would, a much higher percentage than had been expected.

# **CASE STUDY**

The case study being discussed in this paper was taken from a pilot scheme of using a web-based environment for student democracy. The scheme was run with a group of 50 students from a second year education degree at Sheffield Hallam University. The pilot scheme acted as a trial for a new web-based environment currently being developed at Sheffield Hallam University entitled V-Rep. The web-based environment that was used in this case study was Blackboard as V-Rep has yet to be completed; of the 50 participants 22 had previous experience of using Blackboard. The environment was only open to the students and myself, with no members of staff from their course being allowed access. The aim was to allow the students a space where they can voice their concerns and issues, with each other, away from the eyes of staff.

To begin with, it was difficult to convince the staff and students that this was a worthy idea, both felt un-easy with the concept. However, after a few weeks the activity within the environment accelerated, and both staff and students began to warm to the idea. The scheme began in September 2001 and was initially open to the students until February 2002, at which time V-Rep was expected to have been up and running, however, the V-Rep environment has taken a little longer than expected, and due to the success of the pilot scheme has been extended until the end of July 2002.

The environment was structured to enable students to access useful resources, discussion boards and the virtual classroom in any way they felt to be beneficial to their learning at the university. Initially only the discussion boards were used, however, around assignment time the activity within the virtual classroom increased, it was not only used to discuss personal issues, but also for group meetings for assignments. This was not expected when the project was first designed, however, it shows that students are willing to use any available means of communication to get the desired results.

Two noticeable patterns were evident from the usage within the Blackboard environment, firstly the type of issues being discussed and secondly the times and frequency different areas of the environments were accessed. To begin with the paper will discuss the interactions that took place in the environment, and the implications that these have for current student democracy systems. Throughout the initial pilot scheme, there was a limited amount of issues being discussed; those participants who did engage within the environment discussed some of the following issues:

Frustrating communication links with staff;

Lack of time spent by the staff explaining assignments;

Issues with a specific unit.

Once the communication barriers were laid down within the environment more and more people began to join in discussions, where before they accessed the responses but failed to add their own contribution. A common theme being discussed was the lack of communication and time spent with members of staff, meaning, if issues arose it became hard for the students to find and discuss their concerns face-face with members of staff. Ultimately this led to a small group of the students becoming very frustrated with one specific unit, and with the lack of assistance from their personal tutor, the students began to turn to the electronic support found within the V-Rep pilot scheme. Below is the transcript from one of the pilot scheme participants:

"After today's lesson I feel that we have to sort out something about this English unit, and the course in general. Everyone seems to be complaining but no one is doing anything about it. What should we do? Let me know?"

Following this raised point a string of comments and opinions were put forward, once support (from each other) had grown from within the environment one student took it upon themselves to discuss their concerns with the members of staff concerned. Upon this discussion their fears and issues were assured and the following comment appeared in the environment:

"I would just like to add on record that the option to discuss our feelings with each other in a private way enabled this minor trouble to be sorted out. The environment gave us all the confidence to stand up for what we felt to be a wrong doing, and now it has been corrected. Thank You."

The accessibility of the environment meant that answers appeared much quicker for the students than their personal tutors, whom,

they may only see twice a semester. The environment enabled the students to sort out their issues whilst they were still involved with the unit, at present within the current systems, an evaluation is completed at the end of the unit and the students do not get to see the benefits of their comments. With the introduction of the web-based environment to discuss their concerns, it meant that confidence in approaching members staff rose, ultimately meaning their issues got resolved whilst they were still involved in the unit concerned.

An interesting element of using Blackboard is the ability to gain data about when and where each participant has been accessing the environment, and the amount of usage the environment is experiencing; this was explained to the students prior to them becoming involved in the pilot scheme. Before the paper focuses in on the issues around accessibility of the environment, it is important that some of the comments, made by the participants, based around their first impressions of using a web-based environment for discussing their concerns.

"Having only encountered web-based environments this year I am not that confident yet, but I can already see the benefits of using this concept"

"I think it is a great idea for students to have their say and get to know what other students feel"

"Only persons who are ICT competent would feel comfortable moving around"

Generally the idea has been greeted with enthusiasm, and already issues have began to be resolved, it is important to remember that not all students are ICT literate, but with support and encouragement, even those students became active and many have now took that added confidence into using more ICT software in their studies.

The advantage of using Blackboard for the pilot scheme was the ability to track and record the students around the environment, enabling the developer of V-Rep to have primary evidence of what the students actually needed and so, had the time to add or remove sections depending upon their successes. The following evidence has been taken from the course statistics section of Blackboard. The total number of accesses during the pilot period was 1283; the most accessed areas were the communication (37.49%) and main content pages (38.97%). This meant that students were accessing the environment, looking at the content and then moving into the discussion areas to collaborate with each other. The most popular days of the week for accessing the environment were Monday (42.32%) and Tuesday (28.29%), after these two days the time was spread evenly between the remaining days. During the weekend, the total number of hits totalled only 59 (which was only 4.59%). From this evidence it appears that the students were accessing the environment early in the week with any concerns that they had, and by the end of the week they had resolved their issues and were moving on to help each other. The most popular time to access the environment was between the hours of 10am and 12 noon (54.21%), during lunch time hours nobody accessed the environment. During the afternoon there was a steady amount of hits, totalling 17.90%. This provides evidence that the students were accessing the environment and each other on a regular basis.

Before this pilot scheme was ran a little under half of the course participants had experienced web-based environments, of the 22 who had not, their ICT skills were limited, not only has V-Rep given confidence to these students but it has enabled them to discuss their concerns and issues with their peers. The ability of V-Rep to be non-confrontational, and away from the eyes of the staff was welcomed by the students, this enabled issues to be discussed openly when perhaps they would have been ignored. This was an aspect of the pilot that the course staff felt was the most useful aspect of the pilot, as it gave them fresh ideas about their units and courses.

A surprising element was the adaptability and confidence shown by the pilot scheme participants. After only using the environment for a short period of time, interactions within the virtual classroom for unit work was being conducted, it was hoped that this may have happened but not expected. Many issues were discussed during the pilot, but two themes kept arising, one was relating to a specific unit, the other was the lack of communication between staff and students. Although the pilot scheme could be seen as encouraging discussion away from the staff, in fact it enables a convenient place for students to discuss the concerns with each other before going to the people concerned. In a rather backward way V-Rep actually promotes face-face communication with both peers and staff, ultimately leading to a satisfactorily end. Essentially answers to questions and concerns were provided quicker in the environment the other methods the students had experienced before, as the students were experiencing one of the benefits of being a collaborative learner.

One thing that has been evident from this pilot scheme was that collaborative learning and determination will get issues resolved. There are ways and means to an end, and V-Rep is only a stepping stone in that path, however it is very evident that the confidence and drive of these students has increased considerably, and the fact that the students are still using the environment past the pilot scheme completion date proves it has been a success.

A key aim of this paper was to discover if a web-based environment could assist in the communication between students, their peers

and the staff, especially around student democracy issues. The pilot study of V-Rep detailed above provides strong evidence that this may be the case. However, until V-Rep is fully operational and open to all education students within the School of Education at Sheffield Hallam University, judgement shall have to wait, this has been only a small-scale pilot scheme open to a mix of the potential audience. It has though provided a glimpse of what is possible with the technology available today, and it is hoped that in future V-Rep may grow into a traditional aspect of higher education around the world.

# CONCLUSION

This paper has looked at issues around student democracy and the current ways in which students voice their concerns. There are many traditional ways of doing this but the question was raised about how successful they actually were. Following on from this the paper began to look at the possibility of using web-based environments to enable students to voice their concerns back to staff. A case study was included of a pilot scheme; this was aimed at giving primary evidence to the questions raised within the aims and objectives. The study did not come across many problems, mainly because the case study was already underway. It would have been nice to extend the project to a wider audience to assess if the results would be different. From this study it is evident that students are able to voice their concerns in many different ways, although essentially there are only two formats for this communication: face-face (tutors) and electronic (e-mail).

From the evidence gained from the questionnaire current student democracy systems are not working, as they should, although only 31% felt this way a staggering 61% were unsure, whilst only 8% felt satisfied. If only 1% of students are feeling dissatisfied then the systems are failing, students in higher education are now clients or customers to the institutions and need to be treated in a manner you would like to be treated if you were a customer in a shop. The majority of the students questioned felt that a web-based environment could assist in student democracy within higher education institutions. The implications this may have on institutions may not be great so should be looked at closely. It is believed in some quarters that technology is developing too fast, the message provided from this study is take a step back, look closely at what is happening within education, technology is not being developed to replace or remove human interactions, but to enhance it. Face-face communication is vital no-one is denying that, but surely there needs to be more than one way of expressing ourselves, especially when issues and concerns are very important to us. New technology is not readily accepted, yet, nor is it expected to be, but everything needs to tried and tested.

The case study has shown what new technology can do; it has raised people's confidence and communication skills, whilst providing valued feedback to the members of staff running units and courses. The environment was used for a variety of things, not all related to student democracy, but students are resourceful and credit needs to go to them for developing the confidence to use new technology, who for many found the pilot hard at first. The amount of times the environment was accessed (over 1200 times in 6 months) proves that web-based environments could have a place within higher education for student democracy. The implications for the more traditional students democracy systems discovered from this case study is not much different from those discovered from the questionnaire. The idea of anonymity appealed to the students who found it a more popular method of expressing their feelings. The success of this pilot is shown by the fact that the students are still accessing and using the environment even though the pilot scheme was due to be completed in February 2002. The benefit gained by the students will hopefully enable them to use the more traditional students democracy systems more effectively in the future.

This paper had three main aims or questions to be raised, firstly what are the current students democracy systems being used in higher education? And are they successful? Finally was could web-based environments assist in communication on issues of students democracy? The paper has successfully answered these points and proved that new technology, in the form of web-based environments will have an effect on student democracy within higher education, this is a combination of two aspects, firstly is the fact that students feel they gain more out of collaborative discussions via electronic communication as it is faster and more efficient than current methods. Secondly the students' perspective is that the current systems are failing them, which has to be a cause for concern.

The paper raises three questions that are yet to be answered fully, these are the following. In what ways are the current student democracy systems failing the students? Could the two systems (current and web-based) work in equilibrium for the benefit of the students? Finally, Will technology ever replace the ability of students to discuss their concerns rationally?

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