

Active OnLine Student Feedback

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Synopsis

This paper describes the use of web-based groupware, as a means of gaining direct and regular feedback from students. Some of the pitfalls and issues are discussed, including motivation for use, barriers to effective feedback, the value of anonymity and appropriate netiquette. Some recommendations are made for others wishing to use such a feedback mechanism.

Feedback Strategies

Inherent in the teaching and learning process at most Institutions is some form of mechanism for students to give feedback regarding the courses they are studying. The process may consist of informal dialogue between teacher and class, it may occur through the standard formative assessment processes of good teaching and learning practice, or via the formalised course and teacher appraisal processes of the institution. However, embedded in these processes is distortion. As teachers we have the right to arbitrate upon the quality of student work and assess whether they pass or fail the course. By the very nature of the teacher/student relationship there is an imbalance of power. The power differential can mitigate against free, frank and undistorted communication. The consequence is that students are often too timid to voice concerns or make suggestions, and in some cases, some may fear victimisation.

The use of web based groupware is a partial solution to the imbalance of power relations in the classroom. Frequent, frank and open student feedback regarding the course can proceed without identification of the participants. But this is no blank cheque, and standards of behaviour or "netiquette" require teaching.

Computer Mediated Communication

While the promise of new information technologies is always enticing, the reality often falls short of initial claims. Groupware systems bring their own sets of challenges which require managed change processes to effectively introduce a new technology into an existing context. To get the best out of a technology, teaching time needs to be taken to understand the capabilities of a technology, communicate those effectively to the user community, and to realise the potential of that technology in use.

Findings regarding the suitability of Computer Mediated Communication (CMC) in the virtual classroom context are contradictory (Benbunan-Fich & Hiltz, 1999). They found that the quality of work produced by groups was higher when using a CMC, but subjective satisfaction was lower. A key problem appeared to be the nature of asynchronous interaction, characterized by delayed feedback...and login-lags...Apparently groups working in an asynchronous environment had more difficulties coordinating the distribution of work and had to work harder than face-to-face groups...Since no other means of communication was allowed, it was up to each team to decide when to stop waiting for absent members...For these reasons, groups who used the ALN [Asynchronous Learning Network] were the least satisfied with the process. A brief overview of this form of learning depicted in the table below may explain the frustrations inherent in these environments.

Advantages	Disadvantages
Increase group process gains (efficiencies)	Procrastination
Decrease group process losses (inefficiencies)	Frustration due to login-lags
In depth reflection on topics	Pressure to meet deadline
Higher quality decisions	Impersonal medium
Integration of external expertise	Incentives for participation

Student Perception

For our students using the groupware application some of these issues would have been relevant. While anonymity may have reduced "group process losses" by encouraging greater participation, the students appeared to perceive limited "incentives for participation". Since students did not need to work together on the task, some of the procrastination problems with "log-in lags" may not have been such an issue. Yet we have observed that procrastination in filling in course reviews is a noted problem in off-line contexts, and response rates drop considerably in mail-out or other situations requiring self motivated after the event responses.

It is acknowledged that the take-off of a groupware application seems to depend on how it is embedded in the local context and the local work practices (Karsten,1999). Our standard practice of course review is by informal interaction with the teacher and by students filling in paper forms usually at the end of a course. The new online process of course feedback via a discussion database required a fresh set of habits to be learnt. The students needed to regularly post issues or questions, and the teacher had to regularly read the postings to acknowledge the issues raised and demonstrate responsiveness. This need for timely and substantial response has been observed as critical to developing trust in asynchronous online environments. Responding behaviours are as critical as initiating behaviors and members have to explicitly verbalize their commitment, excitement and optimism (Jarvenpaa & Leidner, 1999).

Realising OnLine Potential

The barriers to embedding such a seemingly sensible and simple practice such as anonymous any-time any-place student course feedback should not be underestimated. Some of the issues may be put down to usability problems, others due to the need to remember both the URL for the system and the need to undertake the task. More generally it has been claimed that Computer Supported Collaborative work (CSCW) radically changes the status of the computer. Until now, the computer has been used as a *tool* to solve problems. With CSCW, the computer/network is a *medium*: a means to communicate with other human beings, a vector for information rather than a box that stores and crunches data. If we look at the history of technology, new media have been much more difficult to invent, create and operate than new tools. From this perspective it is not surprising that CSCW has not yet realized its full potential, even in the research community (Beadouin-Lafon, 1999).

Anonymous Feedback

From their inception Groupware or Group Decision Support Systems (GDSS) have been designed with certain features to overcome problems or needs of decision making groups. The role of "anonymous input of ideas and votes" in GDSS is to overcome the "reluctance of some members to speak due to their shyness, low status or controversial ideas" (DeSanctis & Gallupe, 1987). Web-based groupware can provide for either anonymous or identified contributions. For student course feedback anonymity is appropriate, as it may enable shy students to have a voice, or give students the confidence to give robust feedback or present "controversial ideas" without fear of victimisation.

But the need to protect individual rights is also a two way street. In a previous semester I had conducted a similar exercise seeking student feedback and some students had entered disparaging comments into the database about a lecturer who was co-teaching the course. This enabled us to discuss with students the issue of what comments were course related, versus what comments were lecturer related, what information was group and shared information, versus what information was private. This then led to a discussion about the standard appraisal practices of the Institution, and the ability of a new technology to reinforce or counteract those standards. The very real example of inappropriate use of the database reinforced the dangers of "flaming" (abusive online behaviour) and the importance of "netiquette", a topic covered in the course text (Turban & Aronson, 1998).

A Classroom Example

Since semester two of 1998 I have used a standard Lotus Notes & Domino discussion template, to enable students to give feedback on the course as it has progressed. This web enabled discussion database permits student entries to be made anonymously, a feature which has been exploited to provide for student feedback on the course. The database supports threaded discussions, in which a message is entered under a topic heading,

and users of the database build up a discussion by responding to a selected message or the last message in the thread. Discussions thus retain their history online, and contributions are made into a shared workspace.

Two discussion threads were set up to enable students to give feedback on the course. One thread to give feedback on *course positive aspects*, and another to give feedback on *course suggestions/improvements*. This year there were two streams of the class, one day stream and one evening stream so the topics had to be set up for each stream. The introductory messages, which I posted for either topic are shown below:

- **Topic Heading** - Course suggestions/improvements sem 1 2000 day class:
First entry - "this topic thread allows for entry of suggestions regarding the course; ways to improve it, make it more easy to understand, or more satisfying and enjoyable"
- **Topic Heading** - Course Positive Aspects - sem 1 2000 evening class:
First Entry - "this topic thread allows for entries regarding positive aspects of the course, and things that we should continue, or give more emphasis to"
I also modelled use of the database to students by posting a sample response to my own first message.
- **Topic Heading** - Course Positive Aspects - sem 1 2000 day class:
Response Message description - Response from Tony
Response Message Entry - "I think its great, but then I would!! Tony"

User Resistance

The effectiveness of this exercise raises open questions. The response rates by students have not been high (5% and 40% respectively in each semester one class, but increasing to 50% this semester) and activity levels were low (one batch of postings only). However it could equally be asked whether a purely voluntary traditional course appraisal would differ greatly in response. I know that in off-line mode we specifically set class time aside for course appraisals and actively encourage and reinforce form completion by students. Often a degree of success in our teaching also breeds complacency. If students are satisfied with a course they may well have little comment to make, whereas if they are dissatisfied they will actively demand an appraisal and have a large number of comments to make. In this area the "no news is good news" syndrome typically prevails. But the positive aspect of the exercise was that I was able to identify during the course, issues about which students had concerns. I could take early action to improve parts of the course. For example, I introduced demonstration examples of previous student work to indicate expectations, or in some cases discuss my intentions behind parts of the course and why I would make no changes.

It could be argued that communication between students and teacher within the course was sound and that students were generally satisfied with the course. This may explain the low rates of initial response and subsequent posting activity. However, the other likely factors, discussed above, are those which relate more directly to the nature of asynchronous communication and web-based groupware.

Making Online Student Feedback Work

In eliciting feedback from students there are some key factors to consider. First the need to actively and consciously structure the process, second the need to establish and communicate norms of acceptable online behaviour, and third, selecting and administering a suitable technology environment.

Norms of online behaviour need to be clarified, and rules of "netiquette" and acceptable use should be spelt out explicitly. The nature of a shared workspace such as this, is that unlike the essentially private communication mode of email, all messages are shared and thus open to all viewers of the database. The privilege of anonymity also brings with it both rights and responsibilities. Of course, depending upon the technology supporting the discussion forum, more sophisticated security levels may be implemented with different access privileges operating at group, or role levels.

The range of technology options for an electronic discussion forum are now increasing. A key consideration in selecting a suitable product which is affordable, well designed and supported, is that it is able to be installed and

administered effectively by the institution's technicians. Smaller scale teacher administered options may prove adequate in trial mode, but will not prove scalable for larger numbers of users. Institutional support is crucial.

A "do-it-yourself" Option

A number of groupware products suitable for student feedback use are available to be downloaded from the Web, as are conference hosting services by which forums may be created online using free-for-use semi-commercial on-line sites. Examples of these can be seen at (<http://www.thinkofit.com/webconf/hostsites.htm>). Delphi Forums (<http://www.delphi.com>) is a service which has been used by the Open Polytechnic of NZ (Green & Eves, 2000) more generally to support distance education teaching. To choose a suitable product, a list of minimum features to facilitate a range of learning designs would include public and private discussions, debates, and role play/simulations. Sawers & Alexander (1998) suggest the following would be a minimal list of features.

- Private email
- Threaded discussions
- Anonymous discussions
- Multiple discussions
- Open and closed discussions (esp. for debates and other learning activities)
- Browser based

By purchasing commercial web-conferencing products such as WebBoard (<http://webboard.oreilly.com/>), or online learning services such as MySmartforce (<http://www.smartforce.com>) several further options become available.

CONCLUDING REMARKS

The use of active online student feedback is a seemingly simple and up-to-the-minute tool for better learning support. In this paper I have elaborated some of the problems and successes experienced using this approach to student feedback over the last two years. Further work is required to determine how to encourage more active feedback via this mode. The absence of feedback in this case may indicate the successful progress of the course. By using the feedback tool in a larger sample of courses and improving the moderation process for these forums, results of a more conclusive nature may be determined. The functionality required for a successful discussion forum for student feedback hinges on organisation and teaching. My hope is that these reflections will enable institutions without commercial conferencing products to experiment with including active student feedback in the conduct of their courses, and thereby expand their options for the student-teacher dialogue that is a key aspect of sound education.

References (updated for TIP)

- Beaudouin-Lafon M., (1999), (Ed.) *Computer Supported Co-operative Work*, Wiley, London, Retrieved June 06, 1999 from the World Wide Web: <http://www.daimi.au.dk/~mbbl?Trends-CSCW/preface.html>
- Benbunan-Fich R., Hiltz S., (1999), Educational Applications of CMCS: Solving Case Studies through Asynchronous Learning Networks, *Online Journal of Computer Mediated Communication*, 4; 3 Retrieved April 10, 2000 from the World Wide Web: <http://www.ascusc.org/jcmc/vol4/issue3/benbunan-fich.html>
- Clear T, (2000) Using IT For Active Student Feedback In The Learning Environment, *Proceedings of the 13th Annual NACCQ Conference*, Te Papa Wellington, Jun 30 -Jul 3, pp. 61 - 67 (Online at NACCQ website, Retrieved August 23, 2000 from the World Wide Web: <http://naccq.ac.nz>)
- DeSanctis G., Gallupe R.B., (1987), A Foundation For The Study Of Group Decision Support Systems, *Management Science*, 33, 5, 587-609
- Green J., Eves C., (2000) Online Teaching Using an Electronic Forum in Distance Education, *Proceedings of the 13th Annual NACCQ Conference*, Te Papa Wellington, Jun 30 -Jul 3, pp. 127 - 132 (Online at NACCQ website, Retrieved August 23, 2000 from the World Wide Web: <http://naccq.ac.nz>)
- Jarvenpaa S., Leidner D., (1998), Communication and Trust in Global Virtual Teams, Online: *Journal of Computer Mediated Communication*, 3; 4 Retrieved April 10, 2000 from the World Wide Web: <http://www.ascusc.org/jcmc/vol3/issue4/jarvenpaa.html>
- Karsten H., (1999), Collaboration and Collaborative Information Technologies: A Review of the Evidence, *The DATABASE for Advances in Information Systems*, 30;2 Spring, pp. 44-65
- Nunamaker J., (1997), Future Research in Group Support Systems, *International Journal of Human-Computer Studies*, 47 pp. 355-356
- Sawers J., & Alexander S., (1998), A Centralised Approach To The Adoption Of A University Wide Web Based Learning Tool, *Proceedings of the ASCILITE '98 Conference*, University of Wollongong, pp. 609-615
- Turban E., & Aronson J., (1998), *Decision Support Systems and Intelligent Systems*, 5th Ed'n, Prentice Hall, New Jersey, ISBN 0-13-740937-0