

Measuring Faculty Participation in ALN as a Basis for Faculty Development

Stanley R. Trollip, PhD
Capella University

A. Seugnet Blignaut, PhD
Capella University and University of Pretoria

The concept of instructor “presence” in online asynchronous learning environments has become a focus of attention in the field of online learning. It is generally accepted that instructors must be “seen” in order to be perceived as present in online learning communities (Blignaut & Trollip, in press). An instructor who is physically in a traditional classroom is perceived as being present, even if silent. However, being silent in an online classroom is equivalent to being invisible. That is, in the online world, presence requires action. The question that may be asked is how often should an online instructor be “seen” by learners to be perceived as present. This paper addresses this issue of presence and how to measure it, largely with the goal of providing the foundation of a high-quality faculty development course.

Background

From a learner’s point of view, the single most important point of communication in online courses is the interface with an instructor in the online discussions, which are usually asynchronous. This crucial cognitive communication interface between online learners and instructors has up until now not been well explored and addressed (Rourke, Anderson, Garrison, & Archer, 1999).

When considering the concept of the perceived “quality” of instructor participation (feedback or interaction) in asynchronous discussions, it is evident that it comprises two components, namely the facilitation strategies an online instructor uses (the substance of the feedback); and how often individual learners receive feedback on their intellectual contributions (the number of messages they get from the instructor). It is our belief that both quality and quantity of participation should be addressed in faculty development to ensure that learners are satisfied with their online experience.

This paper focuses more on the “quantity” aspects of faculty participation in online discussions than on the quality, although our approach deals as much with the types of interaction as it does with their frequency.

Developing a Taxonomy of Faculty Participation in Online Discussions

Three courses were selected using a convenience sampling methodology. The content of a total of 469 instructor postings was inspected as a basis for developing an initial taxonomy ((Garrison, Anderson, & Archer, 2000). This led to an initial classification comprising six categories. In order to make the classification more sensitive and to ensure that all types of instructor messages could be captured, we temporarily expanded them to 14 categories. Three more business courses were randomly selected, and all of the 559 instructor postings were analyzed. This turned out to be too unwieldy and time-consuming. However, it was evident that instructor messages could be divided into two main high-level groups, namely messages containing academic content (with sub-categories *Administrative*, *Affective*, and *Other*) and those containing no academic content (with sub-categories *Corrective*, *Informative*, and *Socratic*). These are shown in Table 1.

Table 1: Proposed Taxonomy of Instructor Postings

Category	Description and Example
Administrative	Postings that relate to general administrative topics, such as dates, profiles, formats, functionality of software and many other organizational aspects
Affective	Postings that acknowledge learner participation and provide affective support
Other	Postings that contain non-content related messages
Corrective	Postings that correct the content of a learner's postings
Informative	Postings that comment on a learner's posting from a content perspective and provides individual feedback
Socratic	Postings that ask reflective (Socratic) questions about the learner's postings

Classifying Faculty Participation in Online Courses

The aim of this phase was to validate the taxonomy by applying it to a number of business-related courses. Four business-related graduate-level courses presented during the Spring Quarter 2002 were selected at random. Each of the courses had at least two parallel-sections, each with a single instructor. These selection criteria resulted in having 8 different instructors. A total of 1298 instructor postings were inspected, with the lowest number of instructor postings per course being 63 and the highest 299, with a mean of 162.3 postings per course. The smallest course had 10 learners and the largest 17 learners, with a mean of 15 learners per course. During these quarterly courses, learners were required to substantively contribute to each of the one or more weekly discussion assignments. All instructor postings for each of these discussion assignments were consequently inspected, classified and included in the analysis.

After coding and scoring all the postings, the data were tabulated and frequency tables constructed. The raw scores were standardized as messages per learner in order to make comparisons across instructors and course sections. The number of messages that fell into each category were divided by the total number of scores in a given category and presented in the table as a percentage of the total number of messages for each course. For example, 34.7% of all postings in the Bus1a course fell into the Other category, which translated into there being on average 6.0 Other postings per learner. Similarly, 34.4% of all postings in the Bus4b course were Informative in nature, translating into there being 1.9 Informative postings per learner.

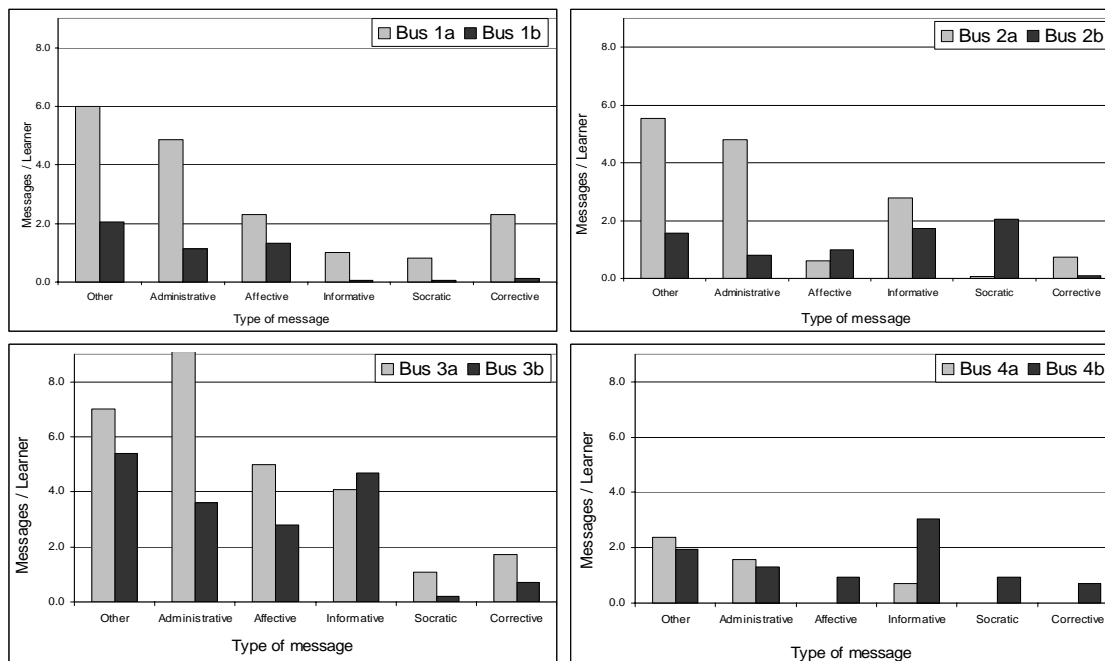
Each graphic in Figure 1 represents the distribution of messages by the instructors in each of the four courses. Individual differences between instructors are immediately apparent.

The data of the eight instructors represented in these courses illustrate the degree of the variation in teaching style and faculty involvement. It is obvious that some instructors provided much more input in the online discussions than others in terms of Informative messages (Business course 3b); while others focused more on Affective messages (Business courses 1a, 2a and 3a). Although Business 2b scored the highest on Socratic messages, all the courses scored disappointingly low on the use of the Socratic method as part of cognitive interaction with learners.

It is, however, important to stress that these figures only represent instructors' effort in the discussion section of online courses, and much unrecorded effort takes place via private communication and individual feedback on papers and assignments. These graphical representations do not depict an instructor's total effort in a course.

The next step in the process was to establish a set of expectations with respect to the number of feedback messages learners could expect during a course. From this, the concept of an “ideal” instructor participation profile emerged.

Figure 1: Histograms Depicting Faculty Participation in Four Business Courses



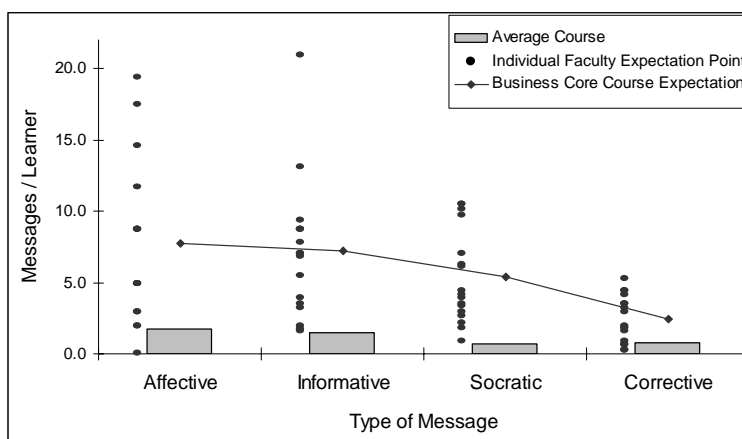
Determining Expectations of Faculty Participation in Online Discussions

A questionnaire for determining what they regarded as the “ideal” quantitative participation of instructors in the online discussion section of courses was administered to decision makers (faculty directors, course moderators, and experienced faculty members). They were requested to consider the scenario of a 9-week, online course, with 10 learners who actively posted discussion assignments, and were asked to indicate the average number of postings that they thought each learner should receive over the duration of the course; rate the importance of the three main types of instructor postings relating to academic content (Informative postings, Socratic postings, Corrective postings); and to supply the average number of affective postings they would want a learner to receive during the course.

Eighteen responses to the questionnaire were received. The numerical data of the survey were entered in a spreadsheet; the data standardized to messages per learner; and frequency tables and an explanatory chart were compiled (Figure 2). To make the data more understandable, some of the normal conventions relating to the presentation of numerical data have been disregarded. For example, although not continuous in nature, the average values of the faculty expectation points for each of the message types have been connected and shown as a continuous line. In our opinion, this provides greater visual clarity to the concept of a faculty expectation profile. Figure 2 indicates the average values of faculty participation in the eight analyzed courses represented in Figure 1; the individual faculty expectation points obtained from the decision makers; and the faculty expectation profile for business core courses obtained from calculating the averages of all the expectation points.

Figure 2 indicates that there is a wide range of expectations amongst decision makers as to what constitutes ideal performance. For example, the expectation with respect to the number of affective messages a learner should receive ranges from 0 to 18, with the mean being 7.71, which is what we have labeled the expectation profile point. The same sizeable variations can also be seen in the expectations for the other message types. We call the line connecting each category's expectation profile point the faculty expectation profile.

Figure 2: Graphical Representation of Course Averages, Individual Faculty Expectation Points and Average Faculty Expectation Profile for Business Core Courses

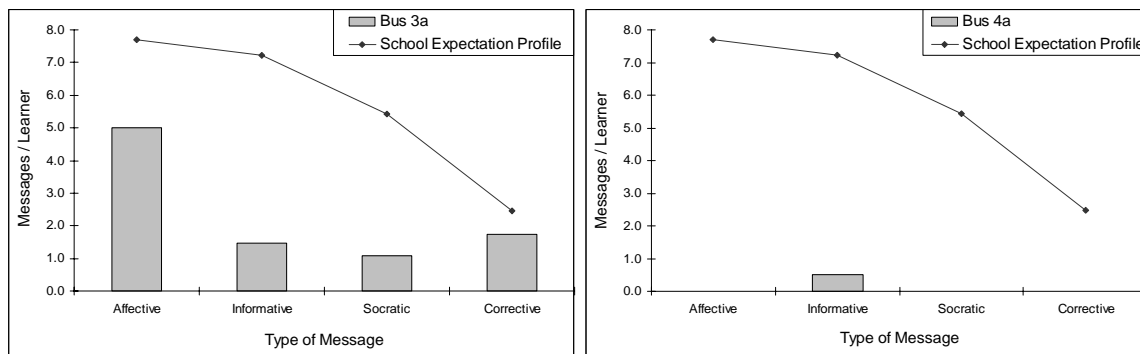


Discussion of Findings

Figure 3 depicts the average participation of instructors in eight core courses in the School of Business. It can certainly be argued that an “average business course” (the calculation of average values of all business courses in the School of Business for each of the message types) does not exist. However true, by looking at the average participation of its instructors, Academic Management can get a sense of the overall level of faculty participation of as part of general quality assurance.

As a model for discussion, the course with the highest instructor participation (Bus 3a) and the course with the lowest instructor participation (Bus 4a) in the discussion section were selected (Figure 3). Both courses depicted in the figure, fall short in terms of the determined faculty expectations indicated by the decision makers. In terms of faculty development, instructors should be made aware their general lack of responsiveness in online discussions and should be motivated to become more active. However, there is a possibility, despite training to the contrary, that this low faculty participation may also be indicative of these instructors' preference for using private e-mail for discussions rather than the public discussion board. Although the use of private email for communicating with learners is considered an acceptable practice by many instructors, it is one that should be carefully considered. The opportunity of sharing information, discussions, and insights is regarded as one of the strongest advantages of online distance education, where instructors can share their personal and professional information with learners without compromising the natural flow of content. In general it seems that instructors and learners should be encouraged to conduct all discussion relating to content within the discussion group and personal issues via e-mail.

Figure 3: Comparison of Faculty Participation and a School Expectation Profile in Two Business Courses



Recommendations for Faculty Development

In creating a tool for profiling faculty expectations in online courses, the intent is by no means to advocate a fixed protocol for faculty participation. The aim is to provide data for discussion in faculty development courses or forums. In considering Figures 2 and 3, it becomes obvious that this process enables faculty directors and course moderators, through a process of mediation, consultation, and faculty involvement, to accomplish a number of different things:

- To pre-establish general expectation profiles for faculty participation;
- To provide a basis for discussing modifications to the general expectation profiles for courses that require a different profile;
- To provide expectation profiles that inexperienced online faculty can use as a guideline for their own participation;
- To use as a catalyst for discussion in faculty development courses;

This project raised much interest and debate amongst online instructors. In the words of a respondent: “*I think it will be an excellent tool for faculty and supervisors. I am very pleased to see us moving in the direction of setting minimum performance standards!*” If we accept that faculty responsiveness is one of the most important elements of a successful achievement of meaningful interaction in a distance education course, the setting of standards for the amount of faculty participation is a first small step towards assuring overall high quality feedback to learners.

References

- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.
- Blignaut, A.S. & Trollip, S.R. (In press). Developing a taxonomy of faculty participation in asynchronous learning environments: An exploratory investigation. *Computers and Education*.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Lin, Y., & Ginther, D. (1999). *Cognitive styles and distance education* [Web page]. State University of West Georgia, Distance Education. Retrieved 3 January, 2003, from the World Wide Web: <http://www.westga.edu/~distance/liu23.html>

Biographical Sketches

Dr. Stanley Trollip was Director of Learning Strategies at Capella University from 1997 until 2003. His group brought over 500 courses online. He now runs his own consulting company. His latest book with Dr. Stephen Alessi is entitled *Multimedia for Learning: Methods and Development* (3rd edition), from Allyn and Bacon.

Address: S.R.Trollip & Associates, Inc.
411 River Street
Minneapolis MN 55401
E-mail: stan@trollip.org
Phone: 612.327.6664
Fax: 413.425.6036

Dr. Seugnet Blignaut is a senior lecturer in the department of Teaching and Training Studies, Faculty of Education, University of Pretoria, South Africa. From July 2002 to June 2003, she was on a sabbatical at Capella University as a post-doctoral fellow. Her research interests include faculty effectiveness in online classes.

Address: Department of Curriculum Studies
Groenkloof Campus, University of Pretoria
0002 South Africa
E-mail: sblignau@postino.up.ac.za
Phone: +27 12.420.2372
Fax: +27 12.420.3003