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Teaching Presence in Computer Conferencing: Lessons from the United States and Australia

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Abstract

This paper uses the category of teaching presence as a framework to analyze and compare teaching presence in two computer conferencing contexts. Teaching presence is defined as the design, facilitation, and direction of cognitive and social processes. This paper is based on an interview designed to capture reflections about teaching practices of two instructors, one from the United States and the other from Australia. We first present individual case studies of the two computer conferencing contexts, followed by conclusions and implications for research and practice.

1: Introduction

Within a ‘community of inquiry’ comprising categories of cognitive, social, and teaching presence, Anderson et al. [1] define Teaching Presence as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. They recognize that although teaching presence mediates all components of teaching, including course readings, web explorations, exercises and individual and collaborative projects, they have used their analysis tools only on the computer conference components.

In this paper we use the Teaching Presence functions and indicators as a framework to analyze and compare teaching presence in two computer conferencing contexts, based on a discussion between the two instructors. Like others [2], we engage in reflection about our practices of teaching. To generate the data for this research we conducted a discussion of our classes over a period of several hours. The discussion, between Karen from the United States and Elizabeth from Australia, was facilitated by Peter, and recorded on audiotape. The audiotapes were transcribed to text and analyzed for content to develop the systematic observations made in this research. We first present individual case studies of the two contexts in the United States and Australia, and then we identify lessons that might be derived from the data, and that may be useful to practitioners.

This research analyzes Karen’s and Elizabeth’s different teaching presence structures, using the Anderson et al. [1] teaching presence framework. By modeling, scaffolding, and coaching [3], we both encourage constructivist learning. In order to conduct the research in a comparative manner, we had to satisfy ourselves that there were not too many variables at play. The length of experience of the two instructors in teaching with computer conferencing is similar, approximately 10 years for each. Both student groups are postgraduate students in education; both groups are comprised of people from the corporate sector as well as the formal schooling and higher education sectors; the gender distribution of the student groups is similar. The age distributions are slightly different, with the US students typically in their late 20s and 30s, and the Australian students typically in their 30s and early 40s. The US students meet face-to-face or via streaming video once at the beginning of the semester, whereas the students in Australia do not.

Additionally, there is the matter of our research being conducted across two cultures. Although discernible differences exist between US and Australian cultures, Hofstede’s research [4] shows both countries as being very similarly placed on each of his four dimensions of cultural difference. Our respective teaching methods use the teaching functions of design, facilitation, and direction differently within the Anderson et al. [1] category of Teaching Presence. We suggest that this differential engagement with these functions defines our teaching approaches within the Anderson et al. model. The two teaching presence case studies follow.
2. Karen’s Teaching Presence

2.1: Instructional Design

Karen in the United States engages in the design function by setting the curriculum - publishing the syllabus, calendar, modules, grades, and resources on a class web page and arranging the FirstClass environment. In her courses the students are responsible for completing independent, interactive, and collaborative project-based learning activities. Independent activities typically include reading assignments, online resources, and a paper. Interactive activities are co-facilitating and participating in discussion conferences based on the required readings. Project-based learning activities are semester-long team activities such as conducting needs analyses for clients, or developing web sites based along a theme. Karen’s style is to provide short articulated steps at the beginning of a semester to help students get accustomed to both technology and the process and content of learning online. Karen uses the FirstClass medium by creating public and private single- and multi-level conferences as well as collaborative documents. Each discussion conference is public, containing sub-conferences for the threaded discussions and collaborative documents as needed, and private conferences with collaborative documents for student co-facilitators. She encourages students to use the chat function regularly for planning and brainstorming group work and for editing each other’s work in their collaborative documents.

2.2: Facilitating Discourse

Karen uses two different approaches for facilitating discourse. She engages with the full student group at the beginning of the semester through two ‘getting to know each other’ activities and content-related discussions, and she continues to facilitate discourse with the large group in several conference spaces throughout the semester. With discussion conferences, however, she acts as a coach to subgroups of students who take turns facilitating discussions with the total group. Each subgroup develops a group-learning contract to establish common behavior guidelines and communication protocols, identify member roles, and develop contingency plans [5]. Karen first splits the total group into four subgroups. As an example, a class of 24 students is split into four groups of six students each. Each of these four subgroups then takes responsibility over a two-week period to facilitate the discussion among the total student group. At the end of the first two-week student facilitation period, responsibility for facilitation over the next two weeks shifts to the second of the four subgroups. This process repeats itself for each subsequent two-week period until all four of the student subgroups have facilitated a discussion for the total group. At that end point, all students have acted as a co-facilitator, along with the other members of their subgroups. She meets with the co-facilitators in a FirstClass chat and monitors the private facilitator conference space, interjecting both substantive and supportive comments. She also monitors the progress of all discussion conferences.

2.3: Direct Instruction

Like facilitating discourse, Karen’s application of direct instruction with the full student group is related to conference spaces outside of the discussion conferences. She also provides direct instruction in technical aspects of CMC. In the private facilitator conference space, Karen suggests issues and resources for the co-facilitators to introduce in the discussion conferences, and she suggests ways for the facilitators to focus the discussion and to confirm participant understanding.

3: Elizabeth’s Teaching Presence

3.1: Instructional Design

Elizabeth in Australia applies the design function by establishing a FirstClass conference with sub-conferences provided for the online tasks, by providing a web site for tasks, timelines and resource links and by print guides and audio CDs of relevant discussion and interviews of online experts. In the first weeks of semester her role in establishing and explaining the course process is intensive, and at points of task change when small group discussions are scheduled and when collaborative groups are set up, she again explains tasks and organizes the class. The sub-conference organization is designed to respond to the interests, contexts and needs of each new class, with the result that the students define issues for discussion, gather appropriate resources from the links provided by Elizabeth and from their own research, and work on their own choice of focus projects in small collaborative groups.

3.2: Facilitating Discourse

Elizabeth’s role in facilitating discourse is intensive at the beginning of the semester as she models social presence and helps develop the online community and climate for learning through encouraging all newcomers and through setting up discussions [6]. As students take responsibility for small group discussions and share moderator roles, her role is less intensive, but through monitoring discussion she provides this form of
teaching presence when the discussion slows and there is need for her intervention. She continues in this role through monitoring collaborative group discussions and maintaining points of discussion with the whole class throughout the semester as they reflect on their small group learning.

3.3: Direct Instruction

Direct instruction often takes the form of Elizabeth’s reflection on current reading or attaching articles that fit an appropriate discussion. She raises new questions, especially if discussions are tackling an issue superficially, and she makes links between discussion topics and the resources provided in print, audio and web site. Because of students’ diverse levels of online skills and experience, Elizabeth continues direct instruction in technical aspects of CMC. The use of components of the conferencing software to facilitate the small group processes such as synchronous chat and shared documents or spaces are often taught directly and more effectively at points of need.

4: Conclusions and Implications

Table 1 compares aspects of the three teaching presence functional areas (instructional design and organization, facilitating discourse, and direct instruction) followed by the indicators suggested by Anderson et al. [1]. The table includes specific examples of the ways that the two instructors carry out their teaching presence functions.

4.1: Implications for Research

For research, we suggest that the Anderson et al model [1] is a useful framework for the analysis of online teaching presence. We were able to interpret our research findings within the model, suggesting that the model has considerable validity. However, we also recommend that the model be expanded to include more complete analysis of different approaches to CMC, particularly approaches in which the instructor is not present in all student discussion spaces, as suggested by the instructional strategies of the US and Australian instructors in this study. We also suggest that the model may be expanded to include closer consideration of the management issues that surround limiting the instructor’s engagement with all student discussion spaces. As increasing demands are placed on instructor engagement with CMC, there is a growing need for the development of teaching approaches that are more efficient of instructor time. The model as it stands currently is focused more on the encouragement and development of student participation than it is on the management of participation, and we suggest the model is robust enough to enable development to include these emerging management issues. Finally, we propose that future investigations identify the importance of teaching presence as an influence on the development of cognitive and social presence, the other two categories within the Anderson et al. [1] community of inquiry model.

4.2: Implications for Practice

The major implication for practitioners, we believe, derives from the implications for research that we have noted above. In this paper we have provided an analysis and some insight into two approaches to CMC that can enhance the efficient use of instructor time. By changing our instructor roles from Direct Instruction to coaching or facilitating roles, we were opening up to constructivist approaches to online teaching. These approaches focus much more on the Design function of the model, and on the development within the Design function of ways to encourage the Facilitating Discourse function that do not require the constant engagement of teaching presence of the instructor with all students. For instance, the use of student co-facilitators as in the US model and volunteer facilitators as in the Australian model are examples of instructor coaching roles that help students engage in active learning. Additionally, these approaches limit instructor involvement with the Direct Instruction function by careful attention to the Instructional Design function and the very strategic use of the Facilitating Discourse and Direct Instruction functions.

5: References


<table>
<thead>
<tr>
<th>Functions</th>
<th>Indicators</th>
<th>Karen’s Examples (United States)</th>
<th>Elizabeth’s Examples (Australia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Design and Organization</td>
<td>Set curriculum</td>
<td>Establishes activity groups for students to rank order</td>
<td>Allows students to identify specialized discussion topics</td>
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<tr>
<td></td>
<td>Design methods</td>
<td>Expects students to participate on a regular and defined basis</td>
<td>Expects students to participate on a regular and defined basis</td>
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<tr>
<td></td>
<td>Set time frames</td>
<td>Provides syllabus on the web; textbook and readings pack are sent to students. Uses FirstClass</td>
<td>Provides printed study guide and readings pack, which are sent to students. Uses FirstClass</td>
</tr>
<tr>
<td></td>
<td>Utilize medium effectively</td>
<td>Models netiquette; interjects guidance as needed</td>
<td>Models netiquette; interjects guidance as needed</td>
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<tr>
<td></td>
<td>Establish netiquette</td>
<td>Comments in all student spaces other than student-led discussions</td>
<td>Comments in all student spaces other than student-led discussions</td>
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<tr>
<td></td>
<td>Comment at macro-level</td>
<td></td>
<td></td>
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<tr>
<td>Facilitating Discourse</td>
<td>Set climate for learning</td>
<td>Each student co-facilitates an activity over two weeks</td>
<td>Students take turns voluntarily leading discussions</td>
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<td></td>
<td>Identify areas of agreement/disagreement</td>
<td>Engages constantly in all student spaces other than student-led discussions; advises co-facilitators in a private facilitator conference space</td>
<td>Engages constantly in all student spaces until specialized student discussions begin</td>
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<tr>
<td></td>
<td>Seek to reach consensus</td>
<td>Meets face-to-face or via streaming video for orientation and then online in FirstClass</td>
<td>Meets online in FirstClass</td>
</tr>
<tr>
<td></td>
<td>Encourage student contributions</td>
<td>Assesses online participation and provides for peer assessment through students’ assigned reflection; assesses individual and/or group tasks</td>
<td>Assesses online participation only through students’ assigned reflection on conference issues; assesses individual and/or group tasks</td>
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<tr>
<td></td>
<td>Draw in participants</td>
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<td></td>
<td>Assess the efficacy of the process</td>
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<tr>
<td>Direct Instruction</td>
<td>Present content/questions</td>
<td>Takes a “hands-off” approach within each specialized student discussion/activity</td>
<td>Takes a “hands-off” approach once specialized student discussions begin</td>
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<td></td>
<td>Focus discussion</td>
<td>Coaches the co-facilitators in a private FirstClass conference separate from the other student spaces</td>
<td>Has no separate engagement with student facilitators in a private conference</td>
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<td></td>
<td>Inject knowledge</td>
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<td>Summarize discussion</td>
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<td>Confirm understanding through feedback</td>
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<td></td>
<td>Respond to technical concerns</td>
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</tbody>
</table>

**Table 1. Comparison of Teaching Presence of Two Instructors**