

**George F. Hayhoe**

# **Evaluating Distance Learning in Graduate Programs: Ensuring Rigorous, Rewarding Professional Education**

**Copyright 2001 Gorge Hayhoe Associates**

This paper was presented at the International Professional Communication Conference 98 on 23 September 1998 in Québec City, PQ, Canada.

**Abstract:** Internet-based distance learning programs make it possible for technical communicators located anywhere in the world to participate in graduate courses in their field. But are these graduate programs as rigorous as those offered through traditional educational venues? Do they provide opportunities for participants to learn from professors and their fellow students that are as rewarding as those provided in traditional graduate seminars? This paper reports the responses of students in two such classes to a series of questions probing these issues, and offers conclusions and recommendations that may help others who plan such courses to structure them more effectively.

- Background and Methodology
- Results and Discussion
- Conclusions and Recommendations

## **Background and Methodology**

### **Description of Courses**

This study reports the responses to a course evaluation questionnaire administered in two graduate courses I taught through Utah State University during the 1997-98 academic year. Each course was ten weeks long, and students earned three quarter-hours of credit for successful completion. Fourteen students were enrolled in the fall course, Publications Management, and thirteen completed it successfully. Nine enrolled in the spring course, Usability Studies, and seven completed it successfully. Nearly all the students enrolled in each course were employed full time as technical communicators.

Both courses were conducted as seminars. Students were given a schedule of reading assignments at the beginning of the term, with a due date for completing each of them. During the week after each reading assignments was to be completed, students participated in an online discussion of the material covered in response to questions or scenarios I posed. The discussions used Web-based bulletin-board software residing on Utah State's server. At the end of each week, one student was responsible for summarizing the discussion for the class.

The reading for the publications management course consisted of a book as well as the November 1997 special issue of *Technical Communication* on strategic planning, a total of more than 650 pages. The reading for the usability studies course included two books totaling nearly 800 pages.

In addition to the reading, each course required students to complete a number of written assignments. The publications management course included eight three-page papers, while the usability studies course required two five-page papers and one ten-page paper.

### **The Questionnaire**

At the end of each course, students were asked to respond to a free-form questionnaire that included the following questions.

1. What did you think about the number and quality of the reading assignments?
2. What did you think about the number and quality of the writing assignments?
3. What did you think about the quality of the online discussions?
4. Do you think you got good value for your money?
5. Was this virtual seminar as rigorous and rewarding as a "real" graduate seminar should be?

To avoid the suggestion of any *quid pro quo* for their responses to the questionnaire, students were asked not to return their responses until after course grades had been posted.

### **The Analysis**

In this paper, I analyze the questionnaire responses qualitatively to map general trends of students' perceptions of significant elements of the two courses. Because they represent the views of only two small groups of students enrolled in courses taught by a single instructor, the results cannot be generalized, but they do provide information that may help those who plan such courses to structure online seminars more effectively.

For each of the five questions, I provide a summary of responses from each of the two classes and some representative comments. I have also determined the mean of the individual responses to each question by assigning a holistic score to each student's essay response based on the following scale:

5. Very favorable
4. Mildly favorable
3. Neutral
2. Mildly unfavorable
1. Very unfavorable

To understand how the raters distinguished between responses assigned a score of mildly and very favorable or unfavorable, consider the following examples.

*The reading assignments were challenging yet not overwhelming. The number of reading assignments was sufficient to cover the material and the quality was high.*

*Both texts are excellent. It's a lot to go through in a quarter, but I think that's mostly a factor of being in a position where I now balance work, life, and class ....*

The first response was assigned a score of 4 based on use of positive words and phrases such as "challenging but not overwhelming" and "high," and the absence of superlatives. The second was assigned a score of 5 based on the use of the superlative "excellent."

Because such holistic scoring can be subjective, I compared the score I assigned to each response with that of another scorer. Whenever there was a discrepancy between the two scores, I chose the lower score for averaging with the scores of other responses.

## Results and Discussion

Holistic scoring showed that student responses to four of the five questions were mildly to very favorable. For the remaining question, which asked for perceptions of the value of online discussions, the responses were neutral.

Table 1 provides the mean or average response for each class to each question. Because not every student answered every question, Table 1 also provides the number of responses (N) to each question for each class. Following the table, the student responses to each question are discussed in detail, with excerpts from those responses and my own observations.

**Table 1: Mean Responses to Questions**

Question	Mean Response Publications Management Course	Mean Response Usability Studies Course
Perception of reading assignments	3.7 (N = 9)	3.9 (N = 7)
Perception of written assignments	4.3 (N = 8)	4.1 (N = 7)
Perception of online discussions	3.1 (N = 10)	3.1 (N = 7)
Perception of return on financial investment	4.6 (N = 5)	4.4 (N = 7)
Perception of rigor and return on intellectual investment	4.0 (N = 5)	4.2 (N = 5)

### Perception of Reading Assignments

Students in the publications management course tended to be moderately pleased with the number and quality of the reading assignments. Although most complained that the amount of reading was heavy, especially with a written assignment due almost every week in addition to the reading, their major dissatisfaction was that the textbook tended to be rambling and repetitive in its presentation of information. The following are some representative comments.

*I know there was a lot of grumbling about the book ... , but I was so grateful to finally have some concrete instructions and explanations that I wouldn't mind rereading it.*

*I found the reading assignments to be valuable to class discussions. They were also applicable to what one may encounter in the work place.... I still feel that I could have applied the principles a little better if reading selections had been shorter and more concise....*

*I liked all of the reading assignments and I thought they were extremely appropriate for the course. The reading took more time than I had expected, but I still think the amount of reading was appropriate for a graduate course.*

Students in the usability studies course had an almost identical overall response to the reading. Some found the amount of reading required was more than they could easily complete in a week, especially while balancing the course demands with their family and job responsibilities. The following are sample comments.

*The reading assignments were challenging yet not overwhelming. The number of reading assignments was sufficient to cover the material and the quality was high....*

*... I realize that in a cloistered academic setting, reading 100 pages or so a week is no big deal (at least it wasn't when I was a full-time student), and I realize the significance of the background information required for this type of course, **but** the nature of the reading assignments was such that ... I was forced to block out significant chunks of time just to do the reading....*

*Both texts are excellent. It's a lot to go through in a quarter, but I think that's mostly a factor of being in a position where I now balance work, life, and class, and I can't spread the reading out as much as I'd like. It wouldn't feel like so much if I were a full-time graduate student.*

### **Perception of Written Assignments**

The Publications Management students were moderately pleased with the number and quality of the written assignments. The assignments' real-world orientation helped students learn to apply the concepts, but one student objected that the assignments were not sufficiently theoretical in themselves, and another found that revisiting a completed project to produce the required course deliverables difficult. (Assignments included writing an audience analysis, content specifications, and other documents for a project they had recently completed but for which they had not prepared these planning documents.) The following are representative comments.

*They were much more like assignments I would expect in an advanced undergraduate class rather than a graduate seminar. The seminars I've taken have usually had report-style assignments .... I think the assignments are appropriate to the textbook material, but they don't encourage students to explore topics in the depth I'd expect in a graduate class.*

*Our assignments... targeted our everyday work as technical writers/publication managers — it doesn't get much better than that. This*

*was my first graduate level class; it reminded me nothing of my undergraduate classes.*

*The assignment schedule was rigorous, but it's what I expected from a graduate level course. To me, lessening the pressure would also lessen the class value.*

Similarly, the Usability Studies students were moderately pleased with the written assignments, which were based on a current project on their jobs. The following are sample comments.

*The writing assignments were just right. They required understanding as well as knowledge of the material, and were sufficient in number to provide opportunities to explore ideas developed throughout the course.*

*The writing assignments provided a good experience for me. By working through the test plan from design to implementation, I got a sense of closure about the work, as well as gaining some very important insights for my own work. By doing the reading for task analysis, I wasn't left feeling I had missed out on that part of the work by not doing a written assignment in that area.*

*Formal assignments ... very cool. I haven't worked that hard for quite some time—the experience was fun, yet it forced me to re-read and check my info constantly (a work technique which I had let atrophy over the years)....*

### **Perception of Online Discussions**

Responses to this question were difficult to score holistically. Many students made positive statements and then qualified them with negative comments. The scorers agreed that if a student's response included both positive and negative components and if the positive and negative comments were of approximately the same strength and length, they essentially neutralized one another. In these cases, the comment was assigned a holistic score of 3.

Students in the publications management course were decidedly neutral on the question of the value of online discussions. Although they generally agreed that the topics were challenging, they often thought that the follow-through on the part of both the students and the instructor left something to be desired. The following excerpts contain more negative than positive comments and are thus not representative of the overall content of responses to this question, but they do shed light on the students' perceptions.

*... I gained much from the discussions we had .... I often found myself simply echoing what others had said, however.... I found myself learning a lot from my peers and from the instructor. There are no easy answers to any question, but sometimes there are very good solutions.*

*The class discussion never really had the give and take that one might expect. It wasn't as connected as, say, a news group.... I kept waiting for you to jump in on the discussions. Your presence might have picked things up a bit, or given more direction to the discussions.*

*I have never been in an online discussion ... before and found it foreign—very different than the in-person class discussion I'm accustomed to. On the one hand, it was great because I could go back and reread people's comments several times .... On the other hand, this same luxury of time inclined people (myself included) to pontificate, to make little speeches instead of responding fully to other people's comments....*

*I found this to be one of the pleasant surprises of the course.... I thought the postings were excellent. No (or very little) rambling thoughts, repetition, or the "me too's" so common in many online forums. What I really missed in the online discussions, however, was the instructor's participation.... I would have liked to know what George Hayhoe thought of points being made in the discussions. Were there any assumptions that needed to be challenged? What factors were we overlooking? Could the scenario be changed in a subtle way to make us re-evaluate our responses?*

*I felt the discussion was productive, for the most part. It's easy to get sidetracked in cyberspace with no "live" prof to guide the discussion, but I think our class did pretty well staying focused on the topics. The asynchronous organization worked very well across the time zones and hectic schedules—I usually found myself reading and posting past 11:00 p.m....*

In response to the requests from the fall term students for more intervention by the instructor during discussions, I contributed much more frequently to the online discussion during the spring term usability studies course. This change, however, had no effect on the spring students' perceptions of the value of those discussions. The mean holistic score of their responses to this question was identical to that for the fall course. Again, combined positive and negative comments neutralized one another, and the following excerpts, while not entirely representative of their comments, do reflect students' attempts to account for their overall perceptions.

*There was a higher quality of online discussions in this course than a previous course I took. I believe this is because many of the participants had experience with online discussions and have found the "technique" for interacting in this way....*

*I'm learning to adjust my expectations of online classes. Online classes provide a different experience than regular classes.... the asynchronous mode that is so advantageous for our schedules makes the discussions even harder.... I think providing a high-quality discussion is the biggest challenge for online education. That said, I was certainly pleased with the quality of the posts. The flip side of not having an extensive, dynamic discussion is that everyone has time to consider other thoughts and ideas before responding. This encourages everyone to make new, well-thought-out contributions to the discussion. It may sometimes be sparser than we'd like, but it's all substance and no fluff.*

*At times [the discussions were] disappointing ....*

## **Perception of Return on Financial Investment**

Students in the publications management course tended to agree strongly that the course provided good value for their money. The strength of these comments may be mitigated by the fact that the tuition was less than \$270 for three quarter credits. Even a mediocre course might be perceived as a good value at that price. The following comments are a sampling of student responses.

*The course provided a good value for the money. It produced new insights for me.*

*... I've looked at some of the other distance learning options on the Internet, and most are much more expensive than this course.... I do feel as though I put in 3-credits worth of effort, and got 3-credits worth of value, and certainly more value than the last 3-credit course I took at my local university.*

*... The course did wonders for me. It gave me lots of new ideas for approaching project planning, and it gave me confidence to try these new ideas. The course also gave me the "research" or "authority" behind the ideas/approaches I want to try....*

Students in the usability studies course had a similar reaction to this question, though one thought that the course provided little that students could not have acquired by doing the assignments on their own. The following are samples of their responses.

*... I learned a great deal of new information, and was able to fit things I already knew into a broader context. All of this will help me in my work. Since my company has been paying for these courses, I am pleased that their financial investment will pay off on their behalf....*

*... Not only do I think I got good quality, but my employer thinks so. I really liked this course because it was very practical in nature. It forced me to conduct a usability test of a product at my company. Conducting the test brought to life many of the topics that were in the textbooks. Not only that, but I had a report at the end of the class to give to my employer, which was well received.*

*... At times I was a little concerned that I could have done this course myself with just a purchase of the books.*

## **Perception of Rigor and Return on Intellectual Investment**

Overall, the Publications Management students responded positively to the question of whether the virtual seminar was as rigorous and rewarding as a "real" graduate seminar should be. One student, however, thought it was more like an advanced undergraduate course than a master's-level seminar. The following responses are representative.

*Over all, I am very satisfied with what I learned from this course. I feel like we had a very good class and that I was fortunate to be able to listen in on their collective wisdom.... I do not feel that what I have learned is in any way less valuable than what I would have learned by sitting in a traditional classroom one night a week.*

*... When I compare this course to other graduate courses I have taken, I can definitely say that it was as rigorous and rewarding . . . as other graduate courses.*

*... I think this course was more work than most seminars I've taken. What was missing was the depth. There was a lot to cover and not much time to do it in. In my experience, a seminar usually lets students explore more specific subjects in greater depth, focusing on current research results, etc....*

The Usability Studies students were slightly more positive in their assessments, as the following samples indicate.

*... Compared to other classes I have taken online and in graduate school, this class was quite demanding and intense. I liked it very much.*

*I think that this virtual seminar was more rigorous than a "real" graduate seminar. In a "real" graduate seminar, students participate in class discussions only two or three nights each week with additional reading assignments. In a virtual class, students must participate more often.*

*... I've felt there was a distinction between a graduate "seminar" and a graduate "class." The former centers on reading and discussing relevant research whereas the latter is more concerned with "how to" aspects of a field. The usability course feels more like a class than a seminar to me, but I think that the nature of the topic and the assignments definitely place it in the graduate rather than undergraduate realm.*

## **Conclusions and Recommendations**

### **Reading Assignments**

I believe that the major problem any online graduate course poses is that not all students—and perhaps not all instructors (as in my own case)—have access to a research library. Therefore, readings must be chosen based on their availability through booksellers or online sources. Based on the student feedback, I also believe that the amount of reading required in both of these courses would have been more appropriate for a semester course rather than a quarter course.

**Recommendation:** Instructors of distance learning courses need to identify the textbooks and other required reading for such courses well in advance of the term, and explore the availability of materials on the Internet to supplement or replace textbooks. They should also carefully balance the course's reading, writing, and discussion requirements in light of the time they can reasonably expect students to spend on the course.

### **Written Assignments**

The very practical nature of these two courses lent itself more to practical written assignments than to theoretical or analytical assignments. However, to be successful in completing these practical assignments, students needed a thorough understanding of the underlying theory and also needed to be able to analyze real situations based on that understanding.

**Recommendation:** Instructors should carefully design assignments to provide experience in both theory and practice. Because students may not always perceive the conceptual underpinnings of practical assignments, instructors should be sure to emphasize that connection in online discussions, lectures, and readings.

### **Online Discussion**

During the fall term, I consciously refrained from commenting during most online discussions because I didn't want to dominate or discourage student response. In retrospect, my not participating as often as I would have liked was probably a mistake, and I modified my approach during the spring term. I believe that both courses would have been more successful had I been able to ensure that the discussion of some topics and issues went beyond the superficial, that some students participated more actively, and that both instructor and students had more effectively engaged themselves in the discussions.

**Recommendation:** Instructors need to discover the appropriate balance for their participation in online discussions, especially for courses that have no lecture component. They must also observe the group dynamics carefully to ensure that some don't dominate and others don't dominate the conversation.

### **Return on Financial Investment**

Despite their reservations about the online discussions and the fact that several of those enrolled in the seminars had limited prior experience as technical communicators, the students strongly agreed that the courses provided good value. The very practical nature of both of these courses and tuition rates that would have been considered a bargain twenty-five years ago are probably largely accountable for this response.

**Recommendation:** To ensure positive response to more theoretical seminars in a master's program in technical communication, instructors should be certain to emphasize practical applications of the theory. Institutions may also do well to examine the fee structure and instructor compensation for their online distance learning courses to ensure that they are in line with the value delivered to students and the work required of instructors.

### **Intellectual Rigors and Rewards**

Although the students were mildly positive in their perceptions of the rigors and rewards of these two virtual seminars, like several of them, I don't think the courses were as rigorous as they would have been had I taught them in the traditional manner. Most students were not able to pursue supplemental library research. The online discussions lacked the continuity and expansiveness one expects in a traditional seminar, where one contributor's comments tend to lead to amplifications or extensions by others. Furthermore, both seminars tended to end with a whimper rather than a bang in the last week or so of the term when other course assignments distracted students from participating in the discussions.

**Recommendation:** Instructors should explore alternatives to traditional library research as information technology continues to evolve. Instructors must also identify ways of making asynchronous seminar discussions more like those of traditional seminars.