

Helping students navigate the PhD experience: A PhD seminar model used at the University of Washington

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Abstract

Graduate education is challenging. In this paper, we report on a PhD seminar model we have used to help enhance the PhD experience of graduate students in the College of Engineering at the University of Washington. Specifically, we provide detail on the model underlying the seminar, talk about how we instantiated the model during two different academic terms, and present results that shed light on the efficiency and effectiveness of the model. We offer this information for faculty or even graduate students who are interested in creating a similar experience on their campus.

Introduction

Graduate education is challenging. Some suggest that the national attrition rate from PhD programs may be as high 50%. Studies of PhD students suggest that students may perceive their programs as failing to provide sufficient information, feedback and monitoring, and attention to understanding the range of possible careers¹⁻². Advisors and department administrators can feel frustrated when students ask questions that they have answered repeatedly and/or when students do not proceed as quickly through milestones as would be desired. As a result, educators are often looking for strategies that are both efficient and effective in enhancing the PhD experience. However, little information may be available to help such educators. In a review of research on graduate education, Galf suggests, "Because doctoral education is decentralized, it resembles a 'cottage industry' in which each faculty member establishes his/her own rules, little collective learning occurs, and minimal centralized standards or guidelines are available."³

In the Department of Technical Communication at the University of Washington, these issues are quite salient as we work to make our PhD program successful. Our PhD program is still relatively new, with our most advanced students just starting their third year. During the first two years of the program, we admitted three and two students respectively. As a result, the program had an intimate quality, and much of the PhD student support was informal and one-on-one. With the admittance of an additional five student cohort during the autumn of 2004, we are increasingly looking for efficient and effective ways to support our PhD students. A key issue is to find strategies that complement other types of support already offered. For example, we have a very active set of research groups. Our students regularly participate in two or more of them, thus receiving research experience and training. Helping the students to develop *their own* research idea, however, is another matter.

In the spring of 2004, we began offering a voluntary PhD seminar to address this need for additional support. Due to student interest, the seminar continued into the autumn 2004 term. In this paper, we describe the seminar approach and talk about how we instantiated the seminar

during the two different academic terms. In addition, we present a sampling of the insights we have gained from running the seminar during these two terms and also talk about the direction we are taking with the seminar. We offer this information for faculty or even graduate students who are interested in creating a similar experience on their campus.

Overview of the Seminar Model

The general idea of this specific PhD seminar is to provide a regularly scheduled venue during which the PhD students can come together and address the wide variety of issues that are not covered directly in classes, research experiences or other existing aspects of their PhD experience. Such issues include professional development, navigation of the PhD program, and advancement of their personal dissertation topics. The seminar has been envisioned as a weekly venue for students to share information, grapple with challenges, solve problems, define problems, talk, and learn from each other. Underlying the design of the seminar is a goal of helping the collection of PhD students develop into a community of practice⁴.

The general design of the seminar has been simple: have the students collectively identify topics that they would like to discuss and then have them use simple group facilitation exercises in order to discuss the topic. Because the PhD process is complex, the space of possible topics is large. Such topics include issues such as succeeding with PhD program milestones, choosing good elective courses and selecting advisors, defining effective research questions, authorship, and managing citations.

In planning the sessions, the idea has been to focus on strategies that minimize individual preparation and maximize the benefit of the session to participants. For example, the “think-pair-share” instructional strategy was offered as a way to help the group stimulate discussion and hear from each participant. Other strategies that have been suggested to the students include sharing of relevant experiences (e.g., a student describing their experiences with a PhD related issue), group problem solving of challenges that the students are facing, artifact sharing (individual members of the group presenting and describing artifacts related to a specific issue), and discussions of readings.

To date, the seminar has not been associated with either grades or required attendance. The key has been to design something that the students find intrinsically valuable because it addresses a true need.

Results and Discussion

At this writing, the seminar has been offered twice, once in the spring of 2004 and again in the fall of 2004. This section provides an overview of the two offerings, presents details on selected topics from the offerings, and discusses the general response of the students each term.

Offering 1: Spring 2005

The first offering of the seminar took place during the spring 2005 academic term. Five students (all of the students in the program at the time) participated in the seminar. Three of these students were finishing their second year of the program, while the other two students were finishing their first year. The group met weekly for 1 hour, with meetings taking place in a departmental conference room. The primary author of this paper served as the primary facilitator

of the sessions. Table 1 provides an overview of the topics covered during the seminar and the strategies used to cover the topics.

Table 1. Overview of topics addressed during the spring 2004 offering of the seminar

1.	Getting to know each other: Students shared their interests within the discipline of technical communication and their ideas about post-PhD careers.
2.	Preliminary exam preparation: The students identified questions related to the first PhD milestone (the preliminary exam) and then one student who had completed the preliminary exam described his experiences, using the questions as an advance organizer.
3.	Preliminary exam follow-up: The group revisited the questions generated during the previous session, with the department chair and the PhD advisor providing authoritative answers to some of the questions.
4.	Research questions I: Prior to the session, each student generated two example research questions. During the session, all participants rated the questions for quality, and then the group used the discussion of the collective ratings to identify properties of effective research questions.
5.	Managing citations: Each student shared one artifact associated with managing citations. The sharing of these artifacts spurred a wide ranging conversation about strategies and logistics for managing citations.
6.	Managing the PhD process: The group read and discussed three articles related to PhD education, including an article on the history of the PhD degree and an article on skills useful for PhD students.
7.	Example PhDs: Each participant identified one dissertation within the field of technical communication and then shared the title and abstract of the dissertation with the group.
8.	Research questions II: This session was similar to the first research question session, except that participants provided a single question along with an explanation and the group rated the questions on multiple dimensions.
9.	Designing next PhD seminar, topics/goals: The group used a think/share structure to generate a variety of potential topics for future seminars, and then organized these topics into an affinity diagram.
10.	Designing next PhD seminar, alternatives/features: The group used an open discussion to explore structures for the subsequent seminar.

The students' response to this first offering was very enthusiastic. For example, attendance was virtually 100% across the term, and the conversations during the sessions were lively. Moreover, the group produced several artifacts of ongoing value to the current and future students and the department (e.g., a master list of questions related to the first PhD milestone -- the preliminary exam, two collections of example research questions, a set of example dissertations). Finally, when the group discussed the plans for the following term (the autumn 2004 term), they decided that the current seminar approach was preferable to any other model considered.

Offering 2: Autumn 2004

The second offering of the seminar took place during the autumn 2004 academic term. Ten students participated in the seminar (all ten students enrolled in the PhD seminar at that point). This number included all five pre-existing PhD students and five students who had just entered the program that autumn. Because of the larger number of students and the varied level of experience in the PhD program, the group decided to interweave full group sessions with sessions in which the two cohorts met separately. Table 2 provides an overview of the topics covered and strategies used during the seminar. In the table, weeks 3, 5, and 7 were weeks in which the group split into two smaller groups. In these cases, the first topic in the table is the topic covered by the incoming students, while the second topic was the one covered by the more experienced cohort.

In addition to the increased number of participants, the second offering had one additional change. In this offering, students were asked to sign up to serve as session facilitators. This was

done for two reasons: to promote increased student ownership of the process and to provide the participants with an additional professional development experience (i.e., PhD graduates will be called upon to facilitate such group sessions in a wide variety of situations). Facilitators were asked to be responsible for the following: a) reminding participants of upcoming sessions, b) providing an agenda, and c) ensuring balanced participation during the sessions.

Table 2. Overview of topics addressed during the Autumn 2004 offering of the seminar

1.	Overview and topic generation: The group used a think/share structure to generate a variety of potential topics for the Autumn 2004 seminar.
2.	Getting to know each other: Each participant described their interests within the field of technical communication. The students then generated a map of their interests and also their “nearest neighbor” in terms of interests.
3.	a) Overview of the Technical Communication PhD program: Participants shared artifacts associated with the TC PhD program (webpages, brochures, student guide), and discussed varied aspects of the program. b) Comprehensive exam discussion: The PhD program coordinator attended the seminar and provided answers to a wide ranging set of questions related to the second PhD program milestone (the general exam).
4.	Finalize seminar planning: The participants worked together to set the schedule and identify facilitators for the remainder of the term.
5.	a) Time management: Participants discussed various strategies for coping with the time demands of being a PhD student. b) Dissertation topics: Participants discussed strategies and challenges for choosing a dissertation topic.
6.	Exploration of TC as a field: The chair of the department shared her thoughts on the current direction of the field of technical communication. The chair presented a diagram illustrating the scope of activity in the field, and invited participants to comment on how the diagram was consistent with (or different from) their prior understanding.
7.	a) Preliminary exam: Participants met with the PhD advisor and discussed varied questions and issues related to the first PhD program milestone, the preliminary exam. b) Creating curriculum vitas: Participants reviewed guidelines for helping graduate students generate curriculum vitas, and discussed strategies and challenges for getting their own curriculum vita started.
8.	Authorship: The facilitator and an invited faculty member from the department shared a set of articles associated with authorship and authorship order, specifically in situations in which students and faculty members are co-authoring papers. Participants discussed
9.	(Holiday – no seminar)
10.	Post PhD Career: The facilitator shared resources showing the career paths of recent graduates of technical communication programs, and then invited discussion from each participant on the directions that they plan to pursue.
11.	Seminar Evaluation: Participants used the session to synthesize and interpret evaluation data, and then discuss the themes and their implications for the next offering of the seminar.

Generally, the response to the second offering was also promising. Conversation during the sessions was lively, several sessions were attended by all participants, and all sessions had a critical mass of the participants. However, the results were not as promising as the first offering. For example, attendance tapered off significantly during second half of the term offering. Moreover, when asked about planning for the subsequent PhD seminar, the students had a wide variety of alternatives.

In the case of the second offering, a structured evaluation provided opportunity for more focused insight into the effectiveness of the seminar. Students were asked to do two things: rate the extent to which the seminar met (or failed to meet) a long list of “successful seminar” criteria and provide answers to two open ended questions (favorite session and why, suggestions for improvement). Analysis of this evaluation data is on-going.

Discussion

Here we reflect on a sample of the insights we have gained through this work. For example, concerning the student themselves, we have found them to be very able to identify topics and eager for a venue for discussing issues related to their PhD experience.

Concerning the topics chosen, we found reaction to the specific topics to range from positive to mixed (but never actually negative). For example, when students during the second offering were asked about favorite topics, there was little commonality in what they identified. There was, however, more commonality in their suggestions for improving topics. For example, students suggested that topics would be more effective if the group could find a way to delve further and also get a sense of the development of their ideas/knowledge relative to the topic.

Moving beyond the individual topics, the different levels of enthusiasm for the two offerings (i.e., the reduced enthusiasm during the autumn 2004 term) is something that we believe will be important for us to reflect on and understand, particularly as our PhD program continues to grow and evolve. For example, was the group during the second offering simply too big? Were the participants too diverse or not yet sufficiently familiar with each other? Another possible explanation is that the students simply needed different things from the seminar. Student comments during the evaluation discussion of the second offering suggested that some of the students wanted the seminar to be primarily a social support environment while other students wanted the seminar to be primarily an information sharing environment.

Concluding Remarks

This paper has focused on describing the design, implementation, and evaluation of a PhD seminar model at the University of Washington. As we move forward, we are grappling with issues such as whether the seminar should be required and how it meshes with other opportunities currently available to the PhD students. In the meantime, we are currently working on getting the seminar approved as a course and planning to offer the seminar during winter and spring 2005 terms. We look forward to sharing the insights that these future efforts generate.

Acknowledgements

This material is based on work supported by the National Science Foundation under the following grants: ESI-0227558, which funds the Center for the Advancement of Engineering Education (CAEE) and REC-0238392 (Using portfolios to promote knowledge integration in engineering education). The authors wish to thank all of the participants in the seminar for their contributions to the seminar.

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