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Faculty Perceptions of the Spring 2020 Transition from Face-to-Face to Online Instruction: A Case Study of American University with Takeaways and Lessons Learned

Erin M. Horan and Kiho Kim

In response to the COVID-19 pandemic, American University (AU) transitioned all of its instruction online. Here, we report on the efforts undertaken to facilitate the transition and faculty perceptions of those actions and online teaching. In preparation for the transition, American University formed the Instructional Continuity (IC) team, comprised of the Center for Teaching, Research & Learning and the Academic Technology office. The IC team was charged with developing and implementing a responsive and comprehensive training and support schedule that began on March 16, 2020. A survey of faculty toward the end of the semester revealed general satisfaction with the support they received in transitioning to online instruction and with student learning outcome attainment. Faculty who had taught online before were more likely to show self-efficacy in online instruction compared to those who had not taught online before, despite similar, high satisfaction with student learning outcomes. We offer insights on key aspects of our efforts and the institutional structure that undergirded the largely successful transition of AU's faculty to online instruction.

Introduction

Faculty perceptions of online instruction have been mixed since the inception of online instruction, with many faculty members being apprehensive about transitioning away from face-to-face instruction (Bacow et al., 2012, Wingo et al., 2017). Apprehension to teaching online is often related to lack of familiarity with online teaching, greater effort required for developing and teaching online courses, and not having control over course content for those courses developed by third parties. The negative perception of online instruction has contributed to the limited participation by faculty despite institutional efforts to increase online offerings (Bacow et al., 2012). However, in the Spring 2020 semester, American University (AU) was part of a widespread transition to online instruction due to isolation measures implemented in response to the COVID-19 pandemic. Thus, this event afforded a unique opportunity to assess faculty perception of (1) teaching support provided at American University during the transition and throughout the Spring semester, and (2) their perception of teaching online.

We offer AU as a case study of a teaching center's role in responding to an unprecedented disruption in teaching and learning. We begin with institutional context by describing all of our institutional resources for faculty development in teaching, and then describe how they were convened to support the rapid transition to online instruction. We then provide brief overview of research-based best practices on how to best support faculty in transitioning from face-to-face to online instruction. Finally, we share the results of a faculty survey and Spring 2020 Student Evaluations of Teaching (SETs) as evidence of the efficacy of AU's faculty support and conclude with discusson of key attributes of our work and the institutional structure that undergirded this effort.

Institutional Context

AU is a four-year, private not-for-profit research university located in Washington, D.C. During the previous academic year (AY2018-2019), AU's student population included 7,441 undergraduate and 5,733 graduate students, as well as 1,137 students in nondegree or certificate programs (total 14,311). AU has a student-faculty ratio of 11:1 and an average undergraduate class size of 24, reflecting an institutional emphasis on in-person teaching and on-campus experience. Of the 3,978 course sections offered during AY18-19, 583 (14.6%) were fully online, of which 522 were at the graduate level and offered through partner programs including 2U, Wiley, and Moodle.

On March 10, 2020, AU (2020; webpage of announcement is listed in references) announced all classes would move fully online, following an extended Spring Break through Monday, March 16, and Tuesday, March 17, due to the COVID-19 pandemic. To facilitate this undertaking, the Deputy Provost and Dean of Faculty tasked the two teaching support units to assess needs and capacity, and to develop plans for ensuring instructional continuity during the pandemic. The units involved were: (1) the Center for Teaching, Research, & Learning (CTRL), a university-level center, established in 1998, which reports to the Deputy Provost and Dean of Faculty; (2) and a team comprised of Academic Technology (AT), which manages the E-Learning (i.e., LMS), and Audio/Visual (AV), which reports to the University Librarian.

Under typical circumstances, CTRL and E-Learning operate as largely independent units on campus, offering year-round faculty support. Broadly, CTRL provided pedagogy-related support while AT provided technologyrelated support. Relevant to the instructional continuity response, each office has several responsibilities that contributed to the success of this collaboration. Located in the Provost's Office, CTRL had access to the university leadership as well as the ability to communicate directly with all university staff and faculty. Thus, CTRL was provided with most up-to-date information on university operations, which was incorporated in developing and sharing of our plans for faculty support widely and quickly. Similarly, E-Learning, which manages the university's LMS, was able to connect directly with faculty through the LMS, point to LMS-specific resources, and quickly address instructional technology needs, including acquiring an additional video conferencing platform in response to broad faculty interest.

Similar to other institutions with this separation of pedagogy and LMS supports, the two offices collaborate on many programs throughout the year. Particularly notable is the Online Instructor Course, developed by Instructional Designers in CTRL and AT, which would become an essential element of the support provided by the Instructional Continuity (IC) Team.

AU Online Instructor Course

The AU Online Instructor Course is a five-week course, offered each Fall, Spring, and Summer semester. This course formed the basis for much of the instructional continuity support—i.e., content, modes of delivery, and collaborative structure—with additional iterations offered and record enrollments in the course during the Spring and Summer 2020 semesters. The course has been offered at AU since 2003 as a hybrid course with both asynchronous content and synchronous, two-hour face-to-face meetings once a week. The course is designed for faculty participants to be able to teach a course completely online the following semester. The focus of four of the five weeks is on online pedagogy; only one of the five weeks (week 4) is dedicated to learning about the university learning management system (LMS). Summative course assessments include a syllabus and course check using rubrics adapted from Quality Matters (2018), an organization focused on best practices for online instruction and effectively assessing courses.

The Online Instructor Course has gone through several re-design iterations, but remained in the original structure (i.e., hybrid, five weeks, face-toface meetings once a week) until Fall 2019, when CTRL and E-Learning Support collaborated to redesign the course to be facilitated as an online, asynchronous course (i.e., no face-to-face sessions) for the Fall 2019 semester. This new, online section was offered Fall 2019 and Spring 2020. The course redesign from face-to-face to online was fortunate, given the unknown but impending move to online instruction during the Spring semester.

The course reflects research-based findings for teaching online. For instance, best practices for professional development of online teaching skills include starting instruction with pedagogical principles and moving to technology only when absolutely necessary, as specified by the Technological Pedagogical Content Knowledge (TPACK) model. The TPACK model provides some parameters for implementing faculty professional development for online instruction, including the key advice to focus on pedagogy and content, with the technology being ancillary to instructional design decisionmaking (Mishra & Kohler, 2006). AU's Online Instructor Course adheres to this principle as the course focuses four of the five weeks on pedagogy, and only week four of five focuses on technology and the LMS. By following these conceptual guidelines, the course instructors ensure an emphasis on pedagogy that results in intentionality in technology choices.

Overview of Spring 2020 Support by IC Team

During the Spring 2020 transition to online instruction, the IC Team provided the following services to faculty:

- Continuous workshops on both the LMS (Blackboard) and online pedagogy (during Spring Break, then continuing throughout the semester).
- Live, on-demand Blackboard Technical Support from 8:30 AM 6:30 PM, Monday through Friday, for the first two weeks after classes restarted and then shorter hours thereafter.

- An IC website with resources and information on upcoming workshops, recordings of past workshops, and how-to's for addressing commonly encountered issues.
- Creation of the Online Course Design Intensive intended for faculty who could not commit to the five-week Online Instructor Course during the emergency transition to online instruction. This two-day workshop included asynchronous work (six hours a day) and synchronous sessions (two, two-hour sessions each day).

Like other institutions at the time, AU's goal was to provide as much and as high a level of support possible, especially during the first two weeks of transition to online instruction. We began with workshops on how to use the LMS, and to stream, record, and upload lectures. Over the course of the semester, we expanded the number of pedagogy-related workshop offerings and other resources requested by faculty, while also introducing more advanced technology workshops. For instance, coincident with mid-semester assessments, we offered workshops on how to use testing and grading features, as well as a remote test proctoring feature available with our LMS. We also held workshops during evening hours and on weekends so that adjunct faculty could participate synchronously.

Much of the IC work was coordinated by CTRL, including communicating with the faculty, primarily by email, and managing the IC website. An important piece in our efforts was creating a platform—i.e., Microsoft Teams—for sharing information and knowledge among the 25 members of the IC Team. This was critical for ensuring that all members of the team were aware of on-going activities and emerging issues so that they could offer consistent messaging and support to faculty and administrators.

Current Study: Faculty Survey and Student Evaluation of Teaching

To better understanding the impact of our professional development offerings for transition to online instruction, we administered a survey to faculty near the end of the Spring 2020 semester. The survey consisted of 12 questions, including demographic questions, Likert questions (with choices of Strongly Agree, Agree, Disagree, and Strongly Disagree), and open-ended questions (the full survey is available in the Appendix). The survey was first emailed on April 16 to all faculty (*N*=936) with reminder emails sent on 4/29/20 and 5/15/20. The survey was available for responses from 4/16/20 to 5/17/20. Results of closed-ended questions (e.g., Likert and multiple-choice questions) are presented as is (i.e., no statistical manipulation). For openended questions, a total of three different readings of the responses were completed by a single rater.

In addition, we compared AU's Student Evaluation of Teaching (SET) scores (Likert Scale from 1 - 7, 11 questions) for the Spring 2019 to Spring 2020. Although SETs are problematic as a measure of teaching effectiveness or student learning (Uttl et al., 2017), we used these data as an additional line of evidence of student experience in the classroom between the two semesters. We compared the university's mean scores for the 11 questions (see Table 1) using the Wilcoxon Signed-Rank Test.

Results

A total of 529 faculty responded to the survey; not all respondents answered all questions. This represented 56% of the 936 faculty at AU. Of those surveyed, 34% indicated they had taught online prior to the Spring 2020 semester.

Responses to Likert Questions: Faculty Preparedness and Experience

Most faculty responded that they were prepared and had positive experiences teaching online (Figure 1). For instance, 99% of faculty respondents agreed or strongly agreed to a statement about being aware of workshops and additional support, and indeed, felt supported (93% strongly agreed + agreed) by the institution. The faculty reported that they were generally happy with the learning outcomes (79% strongly agree + agree) and confident teaching online (86% strongly agree + agree).

We disaggregated the data to compare overall response distributions to the Likert statements between faculty who had taught online before and those who had not. There were no significant differences for the first three statements; all were aware of workshops and programming, felt supported, and were happy with the learning outcomes students attained. However, there was a significantly different distribution of responses to the question of confidence in ability to teach online (χ^2 [3,489] = 45.6, *p* < .001). Faculty who had taught online previously were much more confident (49% strongly

Table 1							
Institutional results of Student Evaluations of Teaching for Spring							
2019 and Spring 2020							
	Student Evaluation of	Likert	2019	2020			
	Teaching Questions	Scale	mean (N)	mean (N)			
		1 = Almost					
1.	The instructor used class	Never	6.31	6.33			
	time productively.	7 = Almost	(25,851)	(19,097)			
		Always					
		1 = Almost					
2.	The instructor was open to	Never	6.55	6.56			
	questions and comments.	7 = Almost	(25,941)	(19,210)			
		Always					
3.	The instructor provided useful feedback on tests, papers, discussions, etc.	1 = Almost					
		Never	6.11	6.11			
		7 = Almost	(25,551)	(18,898)			
		Always					
		1 = Almost					
4.	The instructor returned	Never	6.20	6.18			
	work in a timely manner.	7 = Almost	(25,357)	(18,764)			
		Always					
		1 = Almost					
5.	The instructor required	Never	6.29	6.31			
	high levels of performance.	7 = Almost	(25,734)	(19,047)			
		Always					
6.	On a scale of one to seven, overall this instructor was	1 = One of	6.07	6.08			
		the Worst 7 =	(25,941)	(19,235)			
		One of the Best		(19,200)			
7.	The learning objectives for this course were clear.	1= Not	6.25	6.33			
		Clear at All	(25,950)	(19,228)			
		7 = Very Clear	(20,900)	(17,220)			
8.	Activities/assignments re-	1 = Almost					
	quired for class contributed	Never	6.25	6.34			
	to meeting the learning ob-	7 = Almost	(25,828)	(19,129)			
	jectives for this course.	Always					

agree; 47% agree) than those who had not taught online before (22% strongly agreed + 58% agreed).

9. Materials required for this course contributed to meeting the learning objectives.	1 = Almost Never 7 = Almost Always	6.22 (25,344)	6.32 (18,758)
10. I am satisfied with what I learned in this course.	1 = Not Sat- isfied 7 = Very Satisfied	5.99 (25,892)	6. 06 (19,212)
11. On a scale of one to seven, overall this course was	1 = One of the Worst 7 = One of the Best	5.82 (25,904)	5.89 (19,215)

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We disaggregated the data to compare overall response distributions to the Likert statements between faculty who had taught online before and those who had not. There were no significant differences for the first three statements; all were aware of workshops and programming, felt supported, and were happy with the learning outcomes students attained. However, there was a significantly different distribution of responses to the question of confidence in ability to teach online (χ^2 [3,489] = 45.6, *p* < .001). Faculty who had taught online previously were much more confident (49% strongly agree; 47% agree) than those who had not taught online before (22% strongly agreed + 58% agreed).

Open-Ended Question: Was It Helpful?

Faculty were asked "What support and/or information from AU was most helpful for your transition to online teaching?" Responses were coded, and common themes with the number of responses assigned to each theme are



shown in Figure 2. The most common theme, with 96 instances, was the IC workshops. The second most common response (67) included specific AU personnel from across campus, including CTRL, E-Learning Support and other units of the University Library, faculty, and instructional designers in specific schools and departments. Next, 64 faculty members cited the emails, website, and other IC resources. Responses coded as Blackboard phone support included responses in which faculty recognized and/or appreciated the additional staff assigned to Blackboard phone and chat support. Technology available referred to technological resources the university has, especially the acquisition of a university Zoom license, which was made available shortly after the transition to online teaching. AU administration and leadership contact responses referred to the university emails sent to the AU community and AU faculty to provide updates as they occurred. Finally, colleagues referred to comments about relying on faculty and departmental



colleagues (rather than specific colleagues identified in the Specific personnel theme).

What Was Missing?

The second open-ended question asked, "What support and/or information from AU was missing and would have been helpful?" Responses were coded, and common themes with the number of responses assigned to each theme are shown in Figure 3. The most common response, with 83 instances, were issues with the workshop and research content, specifically a desire for all content to focus on pedagogy, even workshops that focused on a specific LMS tool (e.g., Blackboard Collaborate). The second most common response was a need for more resources for Zoom, which, as we mentioned in open-ended question one, was recently acquired. Faculty asked for a common location for all Zoom and technology resources. While in the previous question 30 faculty members referred to the AU administration emails and contact as helpful, 29 respondents cited these as not helpful and burdensome. The fourth most common responses (24) were about student well-being, with faculty expressing needs for resources for food and housing insecurity and other issues their students were facing. Twenty-five faculty members cited the LMS (Blackboard) as a hinderance to their success. Fifteen faculty asked for additional workshop times outside of typical, 9:00-5:00 business hours, especially for adjunct faculty, and asked that workshops be recorded and shared. Finally, 14 faculty members cited a need for additional LMS/Blackboard support.



Open-Ended Question: Anything Else?

In the final open-ended question, respondents were asked: "Is there anything else you would like to share with CTRL and E-Learning Support Services?" Responses are shown in Figure 4. Seventy-four respondents thanked the IC Team specifically and AU generally for their work and support this semester. The second most common responses (27) related to problems faculty faced and viewed with online instruction, including extra work and distrust of the efficacy of online teaching compared to face-to-face teaching. The third most common response, labeled "Pedagogy support," included responses requesting all existing and future workshops be focused on pedagogy rather than focused on technology. One new response theme in this question was a request for technology stipends or tools (11), such as laptops and other resources. The other responses were familiar from the previous two questions (i.e., concern for students, 23; LMS/Blackboard issues, 22; helpdesk support for using technology, 14; and AU administration emails and contact, 10).



Student Evaluation of Teaching

Student Evaluation of Teaching (SET) scores were higher in 2020 than in 2019 (mean difference = 0.41, N =10, p < 0.05; Table 1). Scores were higher in 2020 in nine of the 11 questions, no change in one (Question 3: The instructor provided useful feedback), and lower in one (Question #4: The instructor returned work in a timely manner). We did note that there was, on average, a 26% reduction in the number of responses to each of the questions. However, given the absolute number of responses for the 2019 SET (i.e., between 18,758 and 19, 235), we assumed that the scores are representative of student experiences in the classroom.

Discussion

The transition to online instruction in response to COVID-19 required unprecedented institution-wide effort and responsiveness. Since the transition to online instruction in March, 2020, two studies documented the faculty experience during the transition: an institutional survey of faculty at George Washington University and a nationwide survey carried out by a higher education-focused organization. In their survey, George Washington University (2020) asked faculty about their experiences moving to online between April 15, 2020, and May 1, 2020. They reported that 71% of the 870 respondents were satisfied with the support provided by their institution in revising their classes for online instruction, support that included training in pedagogy and in the use of Blackboard and its various tools. When asked about their ability to conduct remote learning, those who rated themselves as either very good or excellent, increased from 27% (based a survey prior to March 23, 2020) to 57%.

Time for Class, published by *Every Learner Everywhere* (Fox et al., 2020), reported on a series of surveys and focus groups of faculty, staff, students, and administrators conducted between May 11 and May 20, 2020. The study yielded 4,798 respondents from over 1,500 two- and four-year, and private and public institutions. Given AU's context, we focus on findings for four-year institutions. Of those surveyed, 43% of the faculty reported that they had prior experience teaching online, and when moving online, mostly relied on resources provided by their home institutions. For instance, most institutions represented in the survey had either instructional technology support staff (85%), a center for teaching and learning (82%), and/or instructional design staff (55%). Indeed, the report found that the presence of these resources at an institution resulted in faculty having a more favorable view of online instruction than those without.

At AU, the CTRL and AT collaborated to provide robust faculty support and the results of the Faculty Survey (Figure 1) and Student Evaluation of Teaching suggest that our efforts were largely successful. Below, we discuss these results and highlight key attributes of our work and the institutional structure that contributed to the outcome.

Understanding Insitutional Culture of Teaching

An important consideration in planning for the transition was the institutional culture of teaching. AU places a high value on in-person teaching, reflected in the low student-faculty ratio (11:1) and small class sizes. Moreover, AU's online classes made up less than 15% of the total and thus, our expectations were that: (1) most faculty would be new to online teaching, and; (2) many faculty would be new to accessing resources digitally.

Leading up to and in the first few weeks of class, our workshops and resources focused on the use of technology and the synchronous delivery of instruction. These workshops were supplemented with extended hours of live phone support, rather than web-based resources only. The phone support was in high demand initially, especially in the first two weeks after the transition. As faculty became more comfortable with the LMS and other digital resources we were offering, the number of calls declined and we were able to shift resources dedicated to phone support to other support functions.

Accomodating the Range of Faculty Experience in Online Instruction

When asked what was missing, the most common responses were related to the content of the IC workshops and resources (Figure 3). Specifically, most faculty stated that workshops related to Blackboard and other tools were helpful, but they were looking for more advanced technology advice or specific information on best pedagogical practices when using these tools. Because our support focused on emergency online teaching, much of our effort was on technology more than pedagogy. Learning that faculty were interested in more pedagogy-focused support was welcomed information and reflected in subsequent work by the IC Team.

An important takeaway moving forward is to ensure that workshops and resources encompass the range of faculty experiences in online instruction. To that end, data on prior experience teaching online is essential. Indeed, the survey revealed that 34% indicated they had taught online prior to the Spring 2020 semester. This is less than the 43% for 4-year institutions as reported by Fox et al. (2020) but unexpectedly high given that only about 15% of course sections offered during AY18-19 at AU were fully online. However, because the survey did not specifically define prior experience, the finding

likely includes faculty who taught entire courses online as well as one or more lectures, or had taught online at a prior institution.

The importance of prior online teaching experience was most evident in responses to the statement, "I am confident in my abilities to teach online." Faculty with prior experience were more likely to strongly agree and agree (96%) than those who had not taught online before (80%). It is interesting to note, however, that prior experience did not impact faculty satisfaction with learning outcomes. Although more research is needed to better understand these results, this finding may be indicative of the importance of multiple experiences teaching online. Self-efficacy describes a person's belief that they will be successful in a task. Successful experiences engaging in a task increase self-efficacy for that task, and our faculty survey results suggest faculty who had taught online before the Spring 2020 semester were confident in how the semester went and the learning outcomes their students achieved. Thus, we recommend there should be a sustained effort to promote online teaching — whether an entire course or select number of lectures — to support faculty development not only in online teaching but also teaching in general.

Leveraging Organizational Structure

AU's CTRL is situated within the Office of the Provost as direct report to the University Deputy Provost and Dean of Faculty. As the main universitylevel faculty development center, CTRL receives strong institutional support, which has allowed us to create resources and programming that classify CTRL as a well-developed center according to standards developed by higher education organizations (ACE, 2018). Faculty regard for CTRL is also very high as reflected in faculty engagement. For instance, the annual conference on teaching and scholarship hosted by CTRL is routinely attended by 400+ faculty and staff. During the academic year 2018-2019, CTRL hosted a total of 89 events that attracted 2,116 attendees; during 2019-2020, CTRL hosted 140 events, the increase largely reflecting IC-related workshops, that attracted 4,312 total attendees.

The benefits of CTRL's situation in the Office of the Provost in the context of this study were two-fold: ability to reach all faculty across the institution and to collaborate with partners across the institution. The ability to reach and to communicate with all faculty on matters of teaching support allowed timely and consistent messaging about faculty support. The communications, emails primarily, also included a link to the IC webpage, hosted by CTRL, where workshop schedules, recordings of past workshops, and other resources were consolidated and updated. By the end of the first week of online instruction, the IC web page had 998 views, nearly seven times more than CTRL's main landing page. The faculty survey results suggested the IC resources were clear and useful, as nearly all faculty (99%) responded that they were aware of the supports being offering (Figure 1).

As a unit that serves the entire institution, CTRL works with many other units—Centers, Programs, Schools, College, etc.—to promote and support excellence in teaching and scholarship. A particularly long-standing collaboration has been with the University Library's Academic Technology group, which oversees the university's LMS. One exemplar of our work together is the aforementioned Online Instructor Course where an Instructional Designer from CTRL and an Instructional Designer from AT co-developed and co-teach the course, with additional staff members from the two groups assisting with grading. The resulting familiarity and trust that was established were foundational to the success of the IC Team's efforts that continue even to this day.

Next Steps

With the completion of the Spring 2020 semester, the IC Team continued to develop and deliver faculty support, including sustained support for online teaching on an as-needed basis, and managing the eventual institutional transition back to face-to-face. However, with the announcement of the plan for an online Fall 2020 semester, the IC Team returned its focus on supporting faculty, especially on issues of creating a more engaging and inclusive online environment, and on increasing focus on adjunct faculty and graduate student instructors and assistants. Although many faculty continue to find online teaching challenging, some have embraced it as an effective and convenient modality for teaching and learning. When AU returns to inperson teaching, we expect most faculty to return to the classroom, though we also expect that the number of faculty who would choose to teach online to increase from that number before the COVID-19 pandemic. With appropriate support, incentives, and strategy, there is an opportunity for AU to increase its online offerings, increasing its ability to serve non-traditional populations, improve learning outcomes, and grow revenue (Bacow et al., 2012). Finally, the events of this past spring precipitated faculty's greater engagement with and awareness of the range of services provided by CTRL.

The survey results suggest that faculty's experiences with instructional support were very positive and, thus, an important next step will be to ensure that we continue to offer compelling and timely faculty support.

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Appendix

Full Survey: AU Faculty Perceptions of the 2020 Transition from Face-To-Face Instruction to Online Instruction

- 1. Had you taught online before the spring 2020 semester?
 - o Yes
 - o No
 - o Other
- 2. Please select all of the technologies you used for teaching online during spring 2020.
 - o Blackboard or other Learning Management System (LMS)
 - o Zoom
 - o Voicethread
 - o Skype
 - o Microsoft Teams
 - Social media (e.g., Twitter, Facebook)
 - Other (please describe)
- 3. Which technologies did you find particularly useful this semester, if any?

- 4. Likert Questions: Rate your level of agreement keeping the spring 2020 semester and transition to online teaching in mind. Response choices were: Strongly Agree, Agree, Disagree, Strongly Disagree, and Not Applicable.
 - 4a. I was aware of workshops and additional support CTRL and E-Learning Support provided.
 - 4b. I felt supported by CTRL and E-Learning Support during the spring 2020 transition.

- 4c. I am happy with the learning outcomes my students attained this semester.
- 4d. I am confident in my abilities to teach online.
- 5. What support and/or information from AU was most helpful for your transition to online teaching?

6. What support and/or information from AU was missing and would have been helpful?

7. Is there anything else you would like to share with CTRL and E-Learning Support Services?

- *The following demographic questions are optional but would be helpful for us to better understand your experiences and future needs for online teaching.*
 - 8. Where is your primary appointment?
 - 9. What is your status.

Please click the button below to submit your responses.