AC 2011-2554: PERCEPTION AND PREFERENCES OF FACULTY FOR ONLINE LEARNING

Ertunga C Ozelkan, University of North Carolina, Charlotte

Ertunga C. Ozelkan, Ph.D., is an Associate Professor of Engineering Management and the Associate Director of the Center for Lean Logistics and Engineered Systems at the University of North Carolina at Charlotte. Before joining academia, Dr. Ozelkan worked for i2 Technologies, a leading supply chain software vendor and for Tefen USA, a systems design and industrial engineering consulting firm. Dr. Ozelkan holds a Ph.D. degree in Systems and Industrial Engineering from the University of Arizona. He teaches courses on supply chain management, lean systems, decision analysis, and systems design and optimization. His current research interests are the modeling of supply chains and production planning systems, and their applications in different industries.

Agnes Galambosi, University of North Carolina at Charlotte

Agnes Galambosi has a PhD in Systems and Industrial Engineering from the University of Arizona in Tucson, AZ. She is currently employed at the University of North Carolina at Charlotte teaching several engineering courses.

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Perception and Preferences of Faculty for Online Learning

Abstract

“Online learning now depends more on the ability of educators and trainers to tutor and support learners online than on the technology itself.” Dr. Ian Heywood, 2000 World Open Learning Conference and Exhibition, Birmingham, England.

Online learning has been widely accepted as a growth strategy for degree programs since it can also attract working adults by providing convenience and flexibility both in terms of location and scheduling. As in the design of any system, customers’ (i.e. students’) needs should come first for a successful program implementation. On the other hand, often a secondary or neglected aspect is the needs and preferences of faculty for teaching online classes.

The purpose of this study is to assess the perception of faculty towards online courses compared to the traditional on-campus courses, and to understand their preferences for different online course delivery techniques. Differences between different disciplines, including Engineering Management, are also investigated. The results of a survey study conducted among faculty are presented here to answer these research questions. The results show that there are variations among disciplines, thus an online learning program needs to be designed to address not only the needs of different types of learners from different disciplines but also preferences of faculty. We are going to also report some of the initial experiences of a recent Online MS Degree in Engineering Management that was established as a strategic growth initiative at the University of North Carolina at Charlotte.

Introduction

Motivation:

Distance education seems to be an innovative and educationally progressive idea with many benefits. So no wonder that more and more universities try to be part of this trend. With the advances in technology, the possibilities to create great online classes have multiplied. According to the Sloan Consortium (A Consortium of Institutions and Organizations Committed to Quality Online Education) website[11]: “For the past several years, online enrollments have been growing substantially faster than overall higher education enrollments” They also give some numbers to prove this statement:

- During Fall 2006, e.g. there were almost 3.5 million students taking at least one online course, which is almost 20% of all US higher education students. This number is almost a 10% increase from the year before.
- The overall growth rate for higher education student population is about 1.5%, while for online enrollments it is 9.7%.

A more recent analysis of the twenty leading Engineering Management (EMGT) Programs by Ozelkan and Galambosi[8] have shown that EMGT enrollment in universities deploying distance education is 53% higher than the ones not deploying distance education. Also these programs
that leverage distance education grant 78% more degrees per year compared to the programs without distance education. Seeing these numbers gives a definite strong motivation for institutions to join in the online learning and teaching experience.

Recently, The University of North Carolina at Charlotte (UNC Charlotte) has made a major move towards online learning by investing in online learning information technology infrastructure and giving out competitive research grants. Several departments in colleges of Arts and Architecture, Computing and Informatics, Education, Engineering, Health and Human Services and Liberal Arts and Sciences have started offering online courses and online programs. Accordingly, the Systems Engineering and Engineering Management (SEEM) Program has also decided to jump on the online bandwagon. Online delivery has been selected as a strategic initiative, which resulted in the establishment of an Online MS in Engineering Management that started during the Fall of 2009.

**Scope:**

This study is an extension of the work presented in Ozelkan and Galambosi\[^9,10\], who studied preferences of engineering and EMGT students towards online learning techniques. They have shown that student preferences vary depending on the engineering discipline, and EMGT graduate students are one of the most interested in online learning. The current paper focuses on the faculty perspectives instead, and tries to answer the following three research questions: 1. What are faculty’s preferences for different online teaching techniques?; 2. What is the perception of faculty towards online courses compared to the traditional on-campus courses?; 3. How do factors such as department or discipline affect the online teaching preferences? In order to address these research questions, a survey has been conducted at UNC Charlotte among the online teaching faculty, and the results of this survey are analyzed and presented here.

The rest of the paper is organized as follows: after presenting a brief literature review about some basic findings and challenges of online learning, the survey study and analysis is presented. Then we share some Online teaching experiences from an Engineering Management Program. The final section summarizes the main findings of our analysis.

**Literature Review**

As the demand increases towards global online programs and courses, many guidelines and papers have been published on how to efficiently create an online learning environment (see e.g. Bender\[^11\]). Since a good literature review can be found in Ozelkan and Galambosi\[^9,10\], here we will provide a very brief glance at some relevant literature. Importance of proper online learning infrastructure is described by Tserenjav\[^12\] and LaPraire and Hinson\[^5\]. Some guidelines on how to conduct better online classes and creation of an effective online learning environment are discussed for example, by Caron et al.\[^2\], Durrington et al.\[^4\] and Wang\[^14\]. Attitudes toward online education are examined by Uzunboylu\[^13\], McMahon et al.\[^6\] and Ropp\[^10\]. Dennen et al.\[^3\] summarizes their findings as some “tips” for instructors to adopt best practices: 1. instructors need to reply questions and give feedback in a timely manner; 2. instructors need to show that they are present in the online classrooms on a regular basis; 3. instructors need to communicate their expectations clearly.
As the literature review shows above, online learning can be an effective learning approach but needs to be carefully planned and adopted to ensure success. It also requires strategies, preparations and techniques different from the on-campus classrooms. The study presented here compliments the previous studies as it answers additional related questions about online learning related to the perception of faculty towards online teaching and online teaching tools and techniques.

**Survey Analysis**

The survey that is provided in the Appendix is composed of four parts to address the research questions stated earlier:

- Part 1: Consent (question 1)
- Part 2: General Questions about the Participants (questions 2-8),
- Part 3: Questions Related to Online Learning Background (questions 9-14),
- Part 4: Questions Related to Online Teaching Preferences (questions 15-30),

This survey has been implemented online using SurveyShare.com. Next, we are going to describe the main parts of the survey and the corresponding findings.

**Survey Part 2: General Questions about the Participants - Demographics**

In this part of the survey, the faculty participants begin by answering a series of general questions about their gender, age group, race, department, full time/part time work, tenure status and position they hold. UNC Charlotte has currently 118 faculty members teaching online courses in six colleges: Arts & Architecture, Computing & Informatics, Education, Engineering, Health & Human Services, and Liberal Arts & Sciences. 62 of them replied to the survey yielding a 53% response rate. Based on the survey results, the demographics of the participating faculty shown in Figure 1 indicate that the majority of the respondents were female (67%), ages 41-50 (33%), dominantly Caucasian (90%), mostly from the College of Education (37%, Engineering faculty was 15% of the respondents), most of them work full-time (62%), most are tenure-track or tenured (58%), and most are Assistant Professors (26%) and Associate Professors (24%).
Figure 1. Demographics of the Faculty Participants

Survey Part 3: Questions Related to Online Learning Background

The results of the faculty online learning background are shown on Figure 2. It seems that most faculty did not take an online course as a student (53%) but most of them completed a training on online learning (74%). Majority of the faculty has 3-4 years of online teaching experience (44%). The faculty mostly teaches on-campus courses with some online courses (48%). Most of them teach graduate online courses (74%).
Survey Part 4: Questions Related to Online Teaching Preferences

This is the main part of the survey where we aim to answer several important research questions:

1. What are the preferred online teaching techniques?
2. Does the faculty prefer teaching online to on-campus courses?
3. What are some tools/practices that are important for online teaching success?

The following is a list of online teaching methods analyzed here:

- **Asynchronous Online Teaching**: None of the course activities (including lectures, office hours and student presentations) are delivered live in real time. Lectures are posted either as Lecture notes, presentation slides or pre-recorded presentations with audio and/or video. Interactions take place only online through e-mails, and discussion groups.

- **Synchronous Online Teaching**: Lectures/presentations are delivered live in real time on the web. Online live lectures are scheduled every week similar to a traditional on-campus class. The lecture is interactive where students can ask questions in real time. The instructor and the students may use computer microphones/speakers/headphones or a phone line for real-time live communication. The students listen and view a presentation online. There can be web-cameras showing students and/or instructor presenting.
• **Mixed Online Teaching:** This method mixes Asynchronous with several Synchronous learning components to deliver the lectures. e.g. instructor conducts a live web session at the beginning of the semester to get to know the students and their expectations better, and during the last class students present term projects.

• **Online Blended with On-Campus Teaching:** incorporates some on-campus sessions as in the traditional sense depending on the location of students. For example in-person office hours, on-campus first and last classes, or periodic on-campus class meetings (e.g. once a month) can be scheduled.

Note that traditional or On-Campus courses can use support tools such as Moodle/WebCT/Blackboard solely for posting materials or announcements for the on-campus students, but here they are not considered as “online” learning.

The average scores and ranking for different online teaching techniques are shown in Figure 3. The following is the scale used for scoring the preferences: 5 – very much preferred, 4-preferred, 3-neutral, 2-not preferred and 1-not preferred at all. As seen here, in general Asynchronous or Mixed techniques are preferred among the faculty. The blended approaches where the online class is supported with on-campus activities come next. The faculty seems to be indifferent in the usage of prerecorded video lectures to support the asynchronous courses. What is clear is that the synchronous methods are not preferred as they received a score less than 3, perhaps related to the loss of time flexibility with the synchronous approach. This may be also because of the fact that synchronous delivery requires the faculty to be the most technical savvy, as the recording of these lectures requires using new methods and software that were not used before in on-campus courses. It is surprising to see that faculty does not prefer prerecorded audio lectures, either but perhaps it is for the same technology reasons.

![Ranking of Online Teaching Techniques](figure3.png)

Figure 3. Ranking of Online Teaching Techniques.
When asked whether they would prefer to teach a course in an online or on-campus format, the faculty responded as in Figure 4. What is interesting is while Blended, Asynchronous, and Mixed Techniques received almost a neutral score, Blended slightly edged the other two techniques. The results also show that faculty would prefer to teach an on-campus course rather than teaching a Synchronous online course, which again can probably be explained by the fact that teaching a Synchronous course looses the advantage of time flexibility with more or different course preparation work, so there is really no incentive for the faculty to go in that direction.

![Preference of Online Teaching to On-Campus](image)

Figure 4. Preference of Online Teaching to On-Campus.

We also listed a number of specific teaching tools and techniques and asked faculty to score their importance for delivering a successful online course (See Figure 5). Except for the live lectures with audio and proctored exams all other teaching tools received an average score higher than 3 meaning they would be preferred. The top of the list included practices such as Confirming Understanding of Syllabus, usage of Emails, Tracking student activities, Self Introductions at the beginning of a semester, HW assignments, Discussion Questions, usage of course Calendar, Q/A Forum, term Projects, posting Slides, conducting Quizzes, showing Industry Videos (or software demonstrations) and usage of Chat, which all received scores 4 or higher.
One of our research hypotheses is that online teaching techniques would be applied differently in different programs. To verify this we have made a finer analysis where each department’s responses are analyzed separately.

While the average response indicated that Asynchronous and Mixed Online teaching techniques are more favorable, the results presented in Figure 6 show that there are programs such as Psychology where synchronous techniques are preferred and other techniques are not preferred at all. Similarly, in Counseling, Blended Online with periodic On-campus interactions are the most preferred whereas asynchronous techniques are not preferred. In other programs such as Kinesiology both synchronous and asynchronous techniques are very much preferred. In other programs such as Music, Blended Online Learning with on-Campus office hours seems to rank highest. There are also departments such as Geography & Earth Sciences where synchronous and asynchronous teaching are equally preferred. Similarly, for Math Asynchronous, Mixed and Blended Online Learning approaches are equally preferred as well. Note that one caution with these assessments is that the number of responses. While in some cases we had multiple responses from departments in some cases only one faculty responded which make the results difficult to generalize.

How does the SEEM program compare? As shown in Figure 6, the SEEM faculty indicated that the asynchronous techniques are the most desirable and supporting the lecture with pre-recorded video recording is desirable. They also indicated that some blending with on-campus activities would work. The synchronous techniques were not preferred, receiving scores less than 3.
### Figure 6. Ranking of Online Teaching Techniques for different Departments.

Analysis of Online versus On-Campus courses for different departments showed us similar variations as shown in Figure 7. It seems that the SEEM faculty in general prefers teaching the asynchronous and blended courses over the on-campus courses but on-campus courses were preferred strongly compared to the synchronous ones.

### Figure 7. Preference of Online Teaching to On-Campus for different Departments
Similar departmental analysis for the ranking of online tools and practices is shown in Figure 8. For example, while the take-home exams and recorded lecture videos are highly preferred by the SEEM faculty, many other programs did not rate these practices as highly. Also it is interesting to see that while many programs did not prefer using proctored exams, faculty from math and psychology seems to think it is very important for online course delivery. It is worth noting that there are significant differences within colleges as well. For example Engineering Technology and SEEM have big differences in opinion in the usage of industry videos, projects, and take home exams. While the SEEM program strongly prefers asynchronous techniques, the Engineering Technology program seems to like synchronous techniques.

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Education</th>
<th>Engineering</th>
<th>Health and Human Services</th>
<th>Liberal Arts &amp; Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirm Syllabus</td>
<td>3.5</td>
<td>5.0</td>
<td>4.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Emails</td>
<td>5.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Tracking</td>
<td>5.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Self Intro</td>
<td>3.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>HW</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>DQs</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
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</tr>
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<tr>
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</tr>
<tr>
<td>Project</td>
<td>3.5</td>
<td>5.0</td>
<td>4.5</td>
<td>4.5</td>
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<tr>
<td>Quiz</td>
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<tr>
<td>Industry Videos</td>
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<td>4.5</td>
</tr>
<tr>
<td>Chat</td>
<td>3.5</td>
<td>4.5</td>
<td>4.3</td>
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<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Survey</td>
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<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Rec Audio Lecture</td>
<td>2.5</td>
<td>2.5</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Take-Home</td>
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<td>4.0</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Ph</td>
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<td>3.5</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Live project presentation</td>
<td>1.5</td>
<td>2.0</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Live lecture w/Video</td>
<td>1.5</td>
<td>2.0</td>
<td>3.5</td>
<td>2.8</td>
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<tr>
<td>Rec Video Lecture</td>
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<td>2.5</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Live lecture w/Audio</td>
<td>1.5</td>
<td>2.5</td>
<td>4.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Proctored</td>
<td>4.0</td>
<td>4.0</td>
<td>2.5</td>
<td>2.9</td>
</tr>
</tbody>
</table>

| Number of responses               | 2         | 2           | 4                         | 12                      |

Figure 8. Ranking of Online Tools and Practices for different Departments
Early Experiences in the University of North Carolina at Charlotte Systems Engineering & Engineering Management Program

The SEEM Program at UNC Charlotte grants a M.S. Degree in Engineering Management. 80% of the MS program’s students are working professionals whereas the rest are full time students. It is a relatively small program with about 25-30 graduate students. Online learning has been selected as one of the major strategies to grow the M.S. program. During the Spring of 2008, the M.S. program has piloted two online courses. Based on the findings of an initial survey study presented in Ozelkan and Galambosi[9], for the pilot implementation of the online courses, the program faculty has adopted a blended online learning approach in which the first and last classes are conducted in class and the rest of the activities to take online. Office hours were flexible either on the phone or in person, by appointment. The first class was used for introductions, to expedite team formations (for assignments and course project) and to play some manual business simulation games. On the other hand, during the last class the students presented their project work. The pilot courses used Blackboard as the online learning system. The lecture notes were in the form of PowerPoint slides with notes. Every week lectures were posted along with discussion questions that the students were expected to reply. The students were also required to complete homework assignments both individually and in groups. Further blending with on-campus delivery occurred with the usage of university library’s reserves where a set of course related books, DVDs and videotapes were placed for students to learn the materials further. Some of the challenges with the blended learning were mainly related to the scheduling of the first and last classes.

After the pilot, the program has decided to go for a truly online program to increase the reach of the online courses beyond the local community. It has been decided that the new Online MS in Engineering Management program would be using primarily asynchronous delivery to provide time flexibility. Currently, faculty teaches an online and an on-campus section for the same course simultaneously. To deal with this situation, on-campus classes are scheduled in a studio classroom where the lectures can be video recorded using Panopto for the online students. A link to the lecture video is posted in Moodle by the faculty along with other course materials to carry an asynchronous delivery. Moodle is also integrated with Wimba (a synchronous teaching tool similar to Centra), which is used to conduct live sessions for term project presentations. The program faculty has been also experimenting with several different approaches e.g. combining an on-campus section with the distance education section in Moodle. This combined section functions in a Blended Online format where periodic on-campus classes take place (primarily for the on-campus students). We have seen that mixing of on-campus and distance education students can save the faculty time for posting materials in a single Moodle section instead of two, but the differences in course expectations from on-campus students might create negative effects. Some on-campus students simply do not believe in online learning thus they will create resistance in many ways they can and create a negative learning environment for their classmates and their team members. To provide students the best learning environment that they signed up to, sometimes it might be the best to just keep two separate course sections.
Summary and Conclusions

A survey study of online teaching faculty has been conducted at UNC Charlotte, and the results of this survey are analyzed and presented here. The first goal of the study was to understand the faculty preferences for different online teaching techniques, such as asynchronous, synchronous, mixed and blended methods. The second was to assess the perception of faculty towards teaching online courses as opposed to the traditional on-campus courses. Finally, we wanted to understand the priority of the online tools and practices for online teaching success.

Some of the main conclusions of the study can be summarized as follows:

• In general Asynchronous or Mixed techniques are preferred among the faculty. The blended approaches where the online class is supported with on-campus activities come next, and the faculty seems to be indifferent in the usage of prerecorded video lectures to support the asynchronous courses. It is also clear that the synchronous methods are not preferred.

• About the preference of teaching an online or on-campus course, the faculty responded with Blended preferred most, then almost at the same level, Asynchronous, and Mixed Techniques received almost a neutral score. Faculty would prefer to teach an on-campus course rather than teaching a Synchronous online course.

• Faculty preference for the importance for delivering a successful online course shows that the mostly preferred methods include practices such as Confirming Understanding of Syllabus, usage of Emails, Tracking student activities, Self Introductions at the beginning of a semester, HW assignments, Discussion Questions, usage of course Calendar, Q/A Forum, term Projects, posting Slides, conducting Quizzes, showing Industry Videos (or software demonstrations) and usage of Chat, which all received scores 4 or higher. It seems that live lectures with audio and proctored exams are the least preferred teaching tools in online courses.

• There are no universal online teaching preferences, different departments may have significantly different teaching preferences. For example, the majority of departments did not prefer using proctored exams but faculty from math and psychology seems to think it is very important for online course delivery. Or the SEEM program strongly prefers asynchronous techniques, while the Engineering Technology program seems to like synchronous techniques.

While online learning seems to be a pathway to the future, and it seems to be beneficial to the students in many situations, many new educational challenges may exist as well. Additional requirements for online may include special infrastructure, student connectivity, and availability of technical support and help desk. In comparison to traditional on campus courses, in an online environment the students have to have high motivation and self-discipline to participate in these online classes. There might be also an issue with online assessment, and some students might also find it challenging because of the lack of personal interaction. Because of the lack of body language and tone of voice, it is probably easier to misinterpret things in writing than face-to-face. It is also important that all the participants are aware, understand and follow the rules of “netiquette”. Another possible drawback of online classes is that some students might have a fear of technology, which probably stems from not completely understanding how the material
can be efficiently delivered online or from not considering themselves a technologically savvy person.

Online education is not without challenges from the educator point of view either. Teachers in an online learning environment not only have to understand the material very well but in addition they need to have some technical expertise on the tools available in an online environment to enhance their material delivery methods. The teacher “toolbox” for efficient teaching needs to be modified for the online environment, which requires extra time and effort for the instructor at the beginning and possibly throughout the entire course. In addition, on-line learning requires a significant amount of preparation, organization, and additional communication, especially when a new course is developed, thus brings additional work burden to the instructors.

We believe that the results presented here can be used as preliminary guidelines to aid the decision how an effective online program should be introduced in a particular program. An interesting but challenging future research direction would be the analysis of student and faculty performance with respect to the different online teaching techniques. It would also help to expand this research to include other online teaching institutions.

References

[1] Bender, T.,(2003)  Discussion-Based Online Teaching to Enhance Student Learning, Theory, Practice and Assessment, Stylus Publishing, Sterling, VA
Appendix: Online Teaching Survey – Faculty Perception

1. If you are 18 years of age or older, understand the statements above, and freely consent to participate in the study, click on the "I Agree" button to begin the experiment.
   a) I agree  b) I do not agree

General Questions About You:

2. What is your gender?
   b) Female  b) Male

3. What is your age?
   a) 30 or under  b) 31-40  d) 41-50  e) 51-60  f) 61 or above

4. How do you describe yourself? (Select one or more responses.)
   a) Asian  b) African American  c) Hispanic or Latino  d) Caucasian  e) Other

5. What is your college/department or program?
   a) Business - Accounting  
   b) Business - Business Information Systems & Operations Management  
   c) Business - Economics  
   d) Business - Finance  
   e) Business - Management  
   f) Business - Marketing  
   g) Arts + Architecture - School of Architecture  
   h) Arts + Architecture - Art & Art History  
   i) Arts + Architecture - Dance  
   j) Arts + Architecture - Music  
   k) Arts + Architecture - Theatre  
   l) Computing and Informatics - Bioinformatics and Genomics  
   m) Computing and Informatics - Computer Science  
   n) Computing and Informatics - Software and Information Systems  
   o) Education - Counseling  
   p) Education - Educational Leadership  
   q) Education -Middle, Secondary and K-12 Education  
   r) Education -Reading and Elementary Education  
   s) Education -Special Education and Child Development  
   t) Health and Human Services - Kinesiology  
   u) Health and Human Services - Public Health Sciences  
   v) Health and Human Services - Social Work  
   w) Health and Human Services - School of Nursing  
   x) Liberal Arts & Sciences - Africana Studies  
   y) Liberal Arts & Sciences - Anthropology
z) Liberal Arts & Sciences - Biology
aa) Liberal Arts & Sciences - Chemistry
bb) Liberal Arts & Sciences - Communication Studies
cc) Liberal Arts & Sciences - Criminal Justice and Criminology
dd) Liberal Arts & Sciences - English
ee) Liberal Arts & Sciences - Geography / Earth Sciences
ff) Liberal Arts & Sciences - Global, International & Area Studies
gg) Liberal Arts & Sciences - History
hh) Liberal Arts & Sciences - Languages & Culture Studies
ii) Liberal Arts & Sciences - Mathematics & Statistics
jj) Liberal Arts & Sciences - Philosophy
kk) Liberal Arts & Sciences - Physics & Optical Science
ll) Liberal Arts & Sciences - Political Science
mm) Liberal Arts & Sciences - Psychology
nn) Liberal Arts & Sciences - Religious Studies
oo) Liberal Arts & Sciences - Sociology
pp) Engineering - Mechanical Engineering and Engineering Science
qq) Engineering - Civil and Environmental Engineering
rr) Engineering - Electrical and Computer Engineering
ss) Engineering - Engineering Technology
tt) Engineering - Systems Engineering & Engineering Management
uu) Other (specify)____________________

6. Are you a full or a part-time faculty?
   a) Full-Time  b) Part-Time

7. Do you hold a Tenured or Tenure Track or a non-Tenure position?
   a) Tenured  b) Tenure-Track  c) non-Tenure Track

8. What is your position?
   a) Assistant Professor  b) Associate Professor  c) Full Professor  d) Full-time Lecturer or Instructor  e) Part-Time Faculty/Adjunct  f) Full-time Faculty Associate  g) Other (specify)

Questions Related to Online Learning Background:

9. Have you taken an online class before as a student?
   a) Yes
   b) No

10. Have you taught an online class before?
    a) Yes
    b) No

11. How long have you been teaching online?
    a) Less than 1 year
    b) 1-2 years
    c) 3-4 years
    d) 5-6 years
    e) 7-8 years
    f) 9-10 years
    g) More than 10 years
12. Did you receive training on teaching an online class?
   a) Yes
   b) No

13. Which of the following describes you the best currently?
   a) My teaching is all online
   b) My teaching is mostly online with some on-campus courses
   c) My teaching is balanced between online and on-campus courses
   d) My teaching is mostly on-campus with some online courses
   e) My teaching is all on-campus

14. Which of the following describes you the best currently?
   a) I teach only undergraduate courses online
   b) I teach only graduate courses online
   c) I teach both undergraduate and graduate courses online
   d) I do not teach online

Questions Related to Online Learning Preferences:

Clarifying statements on terms used here:

- **Asynchronous Online Teaching**: None of the course activities (including lectures, office hours and student presentations) are delivered live in real time. Lectures are posted either as Lecture notes, presentation slides or pre-recorded presentations with audio and/or video. Interactions take place only online through e-mails, and discussion groups.

- **Synchronous Online Teaching**: Lectures/presentations are delivered live in real time on the web. Online live lectures are scheduled every week similar to a traditional on-campus class. The lecture is interactive where students can ask questions in real time. The instructor and the students may use computer microphones/speakers/headphones or a phone line for real-time live communication. The students listen and view a presentation online. There can be web-cameras showing students and/or instructor presenting.

- **Mixed Online Teaching**: This method mixes Asynchronous and Synchronous learning components to deliver the lectures. e.g. instructor conducts a live web session at the beginning of the semester to get to know the students and their expectations better, and during the last class students present term projects

- **On-Campus Teaching**: a traditional course that meets in a physical classroom for lectures. Traditional or On-Campus courses can use support tools such as Moodle/WebCT/Blackboard solely for posting materials or announcements for the on-campus students, but here they are not considered as “online” learning.

- **Online Blended with On-Campus Teaching**: incorporates some on-campus sessions as in the traditional sense depending on the location of students. For example in-person office hours, on-campus first and last classes, or periodic on-campus class meetings (e.g. once a month) can be scheduled.
15. Please score the following according to how much you prefer or would prefer using them (5 – very much preferred, …, 1 - not preferred at all):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Score: 5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Asynchronous Online Teaching: Course activities (including lectures, office hours and student presentations) are <strong>NOT delivered live</strong> in real time.</td>
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<td>b.</td>
<td>Asynchronous Online Teaching with <strong>Pre-recorded lecture presentation with Audio</strong> (voice-over) only</td>
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<td>c.</td>
<td>Asynchronous Online Teaching with <strong>Pre-recorded lecture presentation with Video</strong> (and audio)</td>
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<td>d.</td>
<td>Synchronous Online Teaching: Online <strong>live lectures</strong> are scheduled every week similar to a traditional on-campus class.</td>
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<td>e.</td>
<td>Synchronous Online Teaching with Option to Record Session for future viewing.</td>
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<tr>
<td>f.</td>
<td>Synchronous Online Teaching with Option to Stream Live Video of Faculty Presenter.</td>
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<td>g.</td>
<td>Synchronous Online Teaching with Option to Stream Live Video of Students.</td>
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<td>h.</td>
<td>Mixed Online Teaching: Asynchronous with several Live Synchronous Sessions and presentations, e.g. a live web session at the beginning of the semester to get to know the students, and during the last class for students to present term projects.</td>
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<tr>
<td>i.</td>
<td>Online Blended with On-Campus Office Hours/Meetings.</td>
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<td>j.</td>
<td>Online Blended with On-Campus first and last classes.</td>
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<td>k.</td>
<td>Online Blended with On-Campus periodic classes (e.g. once a month).</td>
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</tbody>
</table>

16. Please tell us if you have any additional remarks/comments on the question above, or if you would recommend considering other online teaching formats.

17. Given that you have the option to teach the **same course either Online or in a traditional on-campus classroom setting, which one would you prefer?** Score between 1 and 5 depending on how much you would prefer (5 – very much preferred, …, 1 – not preferred at all):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Score: 5</th>
<th>4</th>
<th>3</th>
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<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Asynchronous Online format as opposed to the <strong>On-Campus</strong> format?</td>
<td></td>
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<tr>
<td>b.</td>
<td>Synchronous Online format as opposed to the <strong>On-Campus</strong> format?</td>
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<tr>
<td>c.</td>
<td>Mixed Online (asynchronous with several synchronous sessions) format as opposed to the <strong>On-Campus</strong> format?</td>
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<tr>
<td>b.</td>
<td>Blended Online (online with several on-campus components) format as opposed to the <strong>On-Campus</strong> format?</td>
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</tbody>
</table>
18. Please score the following learning components/practices according to how much you think they are important for a successful online learning (5 – very important, …, 1 - not important at all):

<table>
<thead>
<tr>
<th>Lecture</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>a. posting detailed lecture notes</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>b. posting presentation slides</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>c. posting lecture presentation with voice over (e.g. pre-recorded using Camtasia or Panopto or Windows Media Encoder)</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>d. posting pre-recorded lecture video (e.g. using Panopto)</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>e. delivering live lectures online with audio only</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>f. delivering live lectures online with video</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>g. posting other academic/industrial/commercial videos e.g. software demos, industry best practice videos</td>
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<td>4</td>
<td>3</td>
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<tr>
<th>Assignments/Examinations</th>
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<tbody>
<tr>
<td>h. lecture discussion questions</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>i. hw assignments</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>j. term project</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>k. live-synchronous project or assignment presentations (e.g. over the phone or using Wimba/Centra)</td>
<td>5</td>
<td>4</td>
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<tr>
<td>l. online quizzes</td>
<td>5</td>
<td>4</td>
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<td>1</td>
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<tr>
<td>m. take-home exams</td>
<td>5</td>
<td>4</td>
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<tr>
<td>n. proctored exams</td>
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<th>Communication</th>
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<tr>
<td>o. emails</td>
<td>5</td>
<td>4</td>
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<td>p. phone</td>
<td>5</td>
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<tr>
<td>q. online chat</td>
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<tr>
<td>r. Q/A discussion forums</td>
<td>5</td>
<td>4</td>
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<tr>
<td>s. surveys</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>t. calendar of events</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<thead>
<tr>
<th>Starting a Class</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>u. self-introductions</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>v confirming syllabus understanding</td>
<td>5</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Attendance &amp; Participation</th>
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</thead>
<tbody>
<tr>
<td>w. tracking student online activities</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

19. What other practices/tools you would recommend utilizing for the success of your online teaching?

20. For the same course, do you teach an online section and an on-campus section simultaneously during the same semester?
   a) yes
   b) no
21. (if you answered no to the previous question you can skip this question) When you teach online and on-campus sections simultaneously do these two sections count as two separate courses or as a single course towards your teaching requirement?
   a) counts as two courses
   b) counts as a single course

22. Do you get additional compensation for teaching online courses?
   a) yes, I do.
   b) no, I don’t.

23. How did online courses affect the
   a. overall enrollment in your program?
   b. your course evaluations?
   c. your effort/time spent for teaching activities?

24. How do online students compared to the on-campus students based on
   a. average performance?
   b. average quality?

25. What is your perception on the average difficulty of your online course(s) compared to the on-campus course(s)?
   a) less difficult
   b) same difficult
   c) more difficult

26. Please tell us the top 3-5 challenges with online teaching.

27. Please tell us the top 3-5 challenges for students learning online.

28. Please tell us top 3-5 things that would create your ideal online-teaching environment.

29. Tell us top 3-5 reasons why you like teaching online.

30. Please let us know if you have any additional remarks or feedback about Online Teaching and/or the survey above.