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A profile of MPA students' perceptions of online learning: What MPA students value in online education and what they think would improve online learning experiences

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ABSTRACT

What do MPA students value in online education and what do they think would improve online learning experiences in an MPA program? Ironically, few studies have tried to derive more than a couple of factors in a single study. Integrating the key concepts from across the literature, the perceptions about an array of quality factors were identified and studied both quantitatively and qualitatively with a survey of 160 MPA students. The results distinguish and rank seven factors affecting students' perceptions of quality online education in a theoretically coherent framework. Those factors are: basic online modality, teaching presence, instructional support, interactive online modality, social presence, cognitive presence, and trust in the online teaching system. The overall impressions of online learning examined include the degree of online acceptance, the likelihood of taking online classes, and the effects of instructional skill.

KEYWORDS

MPA; online learning; quality of online education; online acceptance

Introduction

Over time online education continues to increase in higher education in general as well as in MPA programs. One recent study looking at trends noted that the level of increase in online education over the last 15 years has varied year by year, but over time has been inexorable, affecting all categories in all economic periods (Seaman et al., 2018). The National Center for Education Statistics reports that for 2017, one-third of all students in higher education were taking at least one distance education class, with graduate student enrollments proportionately higher than undergraduate (National Center for Education Statistics, 2019). A recent study of accredited MPA programs found that the proportion of programs in which online classes were not available was only 24%, but did not report the percentage of students taking an online class at a given time (Ni & Van Wart, 2019). That same study also reported that a quarter of all accredited programs were primarily or completely online.

Recent comprehensive surveys of faculty perceptions provide indications of increasing adoption by faculty, some significant spillover benefits, but also some significant concerns (Inside Higher Ed, 2019). Forty-six percent of higher education faculty members report having taught an online class for credit. More than three-quarters report that the experience of teaching online has improved their teaching in general. Some of the more important



spillover effects are increased critical engagement of students, better use of multimedia, greater experimentation, better use of the learning management system, and tighter alignment of learning objectives with content and activities. However, only about one-third think that student learning outcomes of face-to-face versus online courses are fully equivalent, one-third that they are nearly equivalent, but one-third think that online experiences are substantially inferior for students. According to Van Wart et al. (2019), that gap can be substantially reduced and the beneficial effects can be increased by improving institutional support in training and providing helpful guidelines (among others), which in turn enhance the actual delivery of online classes.

Improving training and setting quality guidelines for online classes is a challenge that MPA programs around the country have been coping with for some time. Ideally, programs should base guidelines and training on best practices derived from the literature, departmental expectations of rigor and quality, and student perceptions of quality and effectiveness. This article addresses the third aspect, student perceptions. It addresses the questions, what do MPA students value in online education and what do they think would improve online teaching experiences in an MPA program? The perceptions of MPA students were identified and studied both quantitatively and qualitatively. The results distinguish and rank seven factors affecting students' perceptions of quality online education in a theoretically coherent framework. The results also provide overall MPA student perceptions of online classes, which are generally quite favorable, despite a small preference for online classes when disregarding convenience. The article provides a literature review, methods section, results, discussion, and conclusion/limitations.

Literature review

The literature specifically addressing MPA programs and online teaching is not extensive. We found 18 relevant articles, primarily, but not solely, found in the *Journal of Public Affairs Education*. Half of the articles were qualitative, theory-only, or academic essays. Some of those articles addressed concerns and challenges about online education such as issues related to socialization (Austin, 2009; Brower & Klay, 2000), cheating (Campbell, 2006), and generic challenges (Rahm et al., 1999). A couple of articles addressed the online learning community and how to build it in online environments (Gigliotti, 2016; Mingus, 1999). Some addressed the use of specific tools such as computer conferencing (Stowers, 1999) and shared multimedia e-cases and e-studies (Kilonzo et al., 2016). Gibson and Dunning (2012) discussed setting up and using a peer-review process of courses based on Quality Matters principles.

In terms of the empirical/quantitative articles, two look at online education from an institutional perspective examining program rationales and challenges (Ginn & Hammond, 2012) or using learning platform statistics to target at-risk students more effectively (Bainbridge et al., 2015). A handful of articles examine various aspects of the learning achievement debate related to the three modes of instruction: face-to-face, blended, and online. Scheer (2001) reported that while face-to-face instruction was more satisfying to students, learning achievement had no significant difference. In a study using research methods courses, Ni (2013) found no significant difference in learning achievement. Harris and Nikitenko (2014) found that online students actually did better than face-to-face

students because of increased time-on-task activities, and that older students did better than younger students. Ho et al. (2006) argue that a blended approach may be the most effective by taking a best-of-both worlds approach. Miller (2011) recommends an eclectic or “mode-neutral” approach in which there is as much influence of online tools and learning objects on face-to-face classes as there is from face-to-face classes to the online mode. Butz et al. (2016) examine the impact of emotions on student achievement in terms of enjoyment, anxiety, and boredom. The only article targeting student perceptions of quality related to design was by Shea et al. (2016); it used three variables related to structure, dialogue, and learner autonomy to assess the ideal balance from an MPA student’s perspective, recommending low structure and high dialogue and autonomy for maximum satisfaction. However, in order to get a more in-depth perspective of the elements of quality from a student’s perspective, one must turn to the mainstream online literature.

Seven instructional and design factors are commonly discussed in terms of students’ perceptions of online quality (for overviews see Asoodar et al., 2016; Green et al., 2015; Hong, 2002; Sun et al., 2008). *Basic online modality* refers to student perceptions about the competence in use of basic tools by instructors in online classes – online grading, navigation methods, grade book, and mechanical rehearsal opportunities (Eom et al., 2006; Sun et al., 2008). Instructor input, frequently discussed as *teaching presence*, refers to student perceptions about the quality of communication in lectures, directions, and individual feedback (Al-Gahtani, 2016; Artino, 2010; Joo et al., 2011; Kuo et al., 2013; Marks et al., 2005; McGowan & Graham, 2009; S.S. Jaggars & Xu, 2016). Do students feel the communication is clear, timely, and encouraging? Are instructions clear and does communication keep students on task? Is feedback individualized? *Instructional support* refers to the students’ overall perceptions of the organization of techniques used to provide input, rehearsal, feedback, and evaluation (Artino, 2010; Lee & Rha, 2009; Mohammadi, 2015; Paechter et al., 2010). A prime example of the effect of instructional design in online education is the use of the so-called flipped classroom (Maycock, 2018; McGowan & Graham, 2009) in which students move to rehearsal activities faster and more frequently than in traditional classrooms, generally with less instructor lecture (Jung, 2011; Martin et al., 2018). An overlapping but nonetheless distinctive factor with instructional support is the use of *interactive online modality* (Bolliger & Martindale, 2004; Clayton et al., 2018; Liaw & Huang, 2013). It refers to the use of specific, high-interaction, technological tools of online classes – video lectures, videoconferencing, and small group discussions. While many online classes in the past tended to rely primarily on small groups for interaction, the relative ease of making videos and teleconferencing has increased their utilization and student expectations in recent years. *Cognitive presence* refers to the engagement of students in such a way that they perceive they are stimulated by the material and instructor to reflect more deeply and critically, and seek to understand different perspectives. Cognitive presence is also associated with the perceived applicability of material (Arbaugh et al. 2008; Al-Gahtani, 2016; Garrison & Cleveland-Innes, 2005; Joo et al., 2011). *Social presence* is the term used to refer to students’ perceptions of the quality of student-to-student interaction. Social presence focuses on the quality of shared learning and collaboration among students, such as in threaded discussions responding to a challenge question (Arbaugh et al. 2008; Clayton et al., 2018; Garrison et al., 2003; Kehrwald, 2008; Richardson et al., 2017; So & Brush, 2008; Zhu, 2012). *Trust in the system* refers to ensuring the learners perceive that the system is technologically reliable, and the grading system is

fair (Bolliger & Martindale, 2004; Jung, 2011; Palmer and Holt 2010; Wilkinson, 2009). Table 1 summarizes these concepts.

Table 1. Factors, and their descriptions, typically identified with student satisfaction.

Factors	Descriptions
Basic online modality	The instructor uses the basic tools of online classes – online grading, navigation methods, online grade book, and online quizzes – well.
Teaching presence	Instructor communication is clear, focused, and encouraging, and instructor feedback is customized and timely.
Instructional support	The design of the course provides clear structure, opportunities for rehearsal and feedback, a variety of techniques, and an appropriate sense of the class as a learning community.
Interactive online modality	The instructor uses the interactive tools of online classes – video lectures, videoconferencing, and small group discussions – well.
Social presence	The instructor provides mechanisms for student-to-student interaction and collaboration, and students feel comfortable engaging in robust discussions with each other.
Cognitive presence	The instructor provides a variety of instructional materials and facilitates an environment that is stimulating, reflective, and inclusive of different perspectives.
Trust in the system	The university ensures that online course delivery is reliable and glitch-free, and the instructor ensures that cheating is minimized and the overall administration of grading is fair.

The bulk of the literature reports that there are no significant differences in learning achievement no matter whether considering an undergraduate or graduate students (Bernard et al., 2004; Hsu, 2003; Nguyen, 2015; Ni, 2013; Sitzmann et al., 2006; Zhao et al., 2005). However, there are significant intergroup differences, making a focused analysis of MPA students an important undertaking. For example, S. Jaggars and Bailey (2010) point out that previous meta-analysis tend to use results based on students who complete fully online courses. They find this is problematic with low-income and academically underprepared students which are concentrated in the undergraduate level. In terms of student satisfaction, there are heterodox findings related to all students, and little that specifically differentiates graduate and undergraduate students. Macon (2011) does report higher satisfaction by graduate students over undergraduate students. Most studies simply focus on comparisons of face-to-face and online modes, and report the same levels of satisfaction (e.g., Billings et al., 2005; Clayton et al., 2018), or less satisfaction (e.g., Kim et al., 2016). In a blended qualitative-quantitative study, Holzweiss et al. (2014, p. 311) found that graduate students “desired a deeper level of learning that requires more instructional forethought and planning.”

Research questions

While there are many factors that affect student perceptions of online quality, they are likely to affect different audiences differently. Student perceptions about online quality have only been broadly articulated in a single study using three factors to date. Specifically, we examine:

- (1) What are the most important factors in determining quality of online instruction for MPA students?
- (2) Based on their experiences or preconceived notions, what are the students' impressions of online classes? Specifically, how do typical MPA students rate their

online acceptance, face-to-face (F2F) preferences, and the instructional skills of those teaching online classes?

Research methods

During Academic Year (AY) 2018–2019, the online teaching quality research team at the Jack H. Brown College of Business and Public Administration (JHBC), California State University San Bernardino (CSUSB) conducted a series of research surveys on online education. Drawing from the literature as well as a beta survey completed in early 2018, an instrument of 70 items (available upon request) was created to measure what students value, and their rationale in taking online classes. Only the students in the MPA subset (160) were used in creating the profile reported below. MPA students were prompted to take the survey by three different instructors. They were asked to take the survey only once. Of the 160 MPA students, 145 had taken online classes.

The quantitative questions asked what was important to students, not how they evaluated their concrete experience. Questions were asked, such as how important is/are the quality of online navigation, online quizzes, instructor feedback, teaching method variety, etc., using a 5-point Likert scale. In contrast and in addition to quantitative questions, qualitative questions at the end of the survey allowed students to comment on what would improve their concrete online experience in an open-ended format. Qualitative remarks were analyzed and grouped into 28 categories which were further constructed into 10 factors in agreement with the instructional and design factors as well as general impressions discussed before (see Table 6). Data regarding their priorities for improvement were based on 113 open-ended commenters making 174 remarks.

The categories (mainly instructional and design factors) used here were derived from the literature as discussed above and identified in Table 1. The impressions, which include online acceptance, likelihood of taking online classes, and perceptions of instructional skill, are described in Table 2 below.

The JHBC offers a fully online program that parallels the traditional MPA program. All MPA core courses are offered in two modes, either online or face-to-face. The program requires all online courses to be comparable to their in-class counterparts. All MPA courses are capped at 30 students and it is typical that online classes are more likely to fill up and have more students than their face-to-face sessions. MPA students, based on their own needs, have the option to enroll in a course either online or face-to-face. They may complete the program with all online courses or all face-to-face classes; or they may take some classes online and others face-to-face. Approximately 80% of the students take a combination of both face-to-face and on-line classes during their programs of study, but online courses are approximately twice as popular despite an auxiliary fee for taking online MPA classes. All students are required to pass a rigorous, proctored, on-campus comprehensive exam. As of AY 2018–19, 274 students were enrolled in the MPA program, with respondents representing 58% of the program.

Table 2. Student impressions of online classes and their descriptions.

Impression	Descriptions
Online acceptance	The quality of the online course provides students with a sense of overall learning effectiveness, comfort in the learning environment, instructor responsiveness, and enjoyment.
Likelihood of taking online classes	Students are more likely to take online classes because they perceive them to be high quality and effective, assuming they are available.

Perceptions of instructional skill Instructor training and experience in delivering online classes is perceived by students, leading them to believe that the instructor makes a difference.

The program from which the sample was derived focuses on leadership, management, financial management, and cybersecurity, rather than policy studies. It is also a Hispanic-serving institution. The type of program and institutional characteristics are reflected in the demographic profile of the survey respondents.

While 43% of respondents are younger than 29 years old and thus pre-service or early in their service careers, 35% are 35 or older and generally in or ready to move up to management positions. The bulk of the students (84%) works at least part-time. Twelve percent of the respondents reported not having (yet) taken an online or hybrid class when responding to the survey. The bulk of the students identifies as minority (71%). Relatively few (9%) had taken online classes in high school. On average, students lived 20 miles from the campus, and had taken 5 online classes. See [Table 3](#) for the demographic data.

The quality of online classes is not the only reason for taking them. Therefore, in addition to traditional demographic data, the survey included information about reasons for taking and not taking online classes to provide a fuller context. Convenience (e.g., distance, flexibility, etc.) is by far the largest reason for taking online classes (81%), with scheduling being a distant second (43%). Given the context of MPA program at CSUSB, most MPA students, around 70% of which are full-time working professionals, must commute to campus. MPA face-to-face classes are all scheduled in the evenings of weekdays. Therefore, in the context of the program, Convenience mainly refers to overcoming the challenges of commuting, whereas scheduling implies dealing with the issues of conflicting evening class times. Only 21% of the respondents noted that they take online classes because they like the style of teaching. On the other hand, the most cited reason for not taking online classes by those who had never taken online classes – a small number – was learning better in traditional classroom (79% of the 14 students) followed distantly by cost (36%), and lack of availability (29%). See [Table 4](#) for demographic preferences.

Results

Each of the online teaching factors is discussed in order of importance to MPA students overall and by subgroups, followed by a discussion of factors related to overall impressions of online courses.

Table 3. Respondent demographics (n = 160).

Question	%	Question	%
<i>What is your age range?</i>		<i>What is your ethnicity?</i>	
17–22	3	White	29
23–28	43	African American	11
29–34	20	Asian & Pacific Islander	3
35–40	12	Latino	42
41 or older	23	Other	15
<i>What is your work status?</i>		<i>Did you ever take hybrid or online classes in high school?</i>	
Not working	27	Yes	9
Part-time	16	No	91
Full-time	68		



<i>Have you ever taken any hybrid or fully online classes at university level?</i>	Question	Median
Yes	91 <i>How far do you live from the University?</i>	20 miles (3.1 ~ 485)
No	9 <i>How many hybrid/online classes have you taken at the university level?</i>	5 (0 ~ 20)

Table**4. Auxiliary demographic data: Reasons for taking online classes.**

Question (check all that apply)	%	Count
<i>I take hybrid/online classes because: n = 145 (students who have taken online classes)</i>		
It's convenient (e.g., distance, flexibility)	80.7%	117
It helps with challenges in face-to-face scheduling	42.8%	62
Other, please specify:	22.8%	33
I like the style of teaching	21.4%	31
<i>Reasons for not taking hybrid/online classes: n = 14 (students who have never taken an online class)</i>		
I learn better in a classroom	78.6%	11
They cost more	35.7%	5
Not available	28.6%	4
Other	21.4%	3
Not well taught	7.1%	1

Basic online modality

Included in this factor, the instructor uses the basic tools of online classes – online grading, navigation methods, grade book, and online quizzes – well. This is the single most important factor for students in evaluating online classes. Over 90% of MPA students responded that these elements are very or somewhat important: clear navigation, online grade book, and online grading. Somewhat surprisingly, online quizzes, which also fall into this category, are considered important by over 70% of the MPA respondents.

As noted above, the qualitative question did not ask about importance but rather improvement. Because areas for improvement are likely to be influenced by a host of local factors, the qualitative findings are only illustrative, but nonetheless are quite useful for comparison purposes by practitioners. In terms of areas of improvement from students' perspectives with courses they have experienced, 14% of the comments were related to this area: 22 of the open-ended comments reflected concerns about basic course organization and two requested more weekly quizzes (because of the practice and immediate feedback it provides). This result agrees with past studies' findings on the importance of basic modality (Eom et al., 2006; Sun et al., 2008).

The descriptive findings for all these instructional and design factors can be viewed in [Appendix I](#). A summary of the qualitative findings for all the factors is displayed in [Table 5](#).

Teaching presence

In teaching presence, instructor communication is clear, focused, and encouraging, and instructor feedback is customized and timely. Over 90% of the students' designated clear communications, clear instructions, and timely feedback was important. Over 80% felt that focusing discussion, clear course goals, and time-on-task was important. Over 70% felt that having online instructors encourage students to explore new concepts was important.

Seventeen percent of the qualitative remarks focused on teaching presence. Sixteen students commented that customized feedback on assignments and the timeliness of assignment feedback were an area in which improvement could occur. Eleven comments suggested that instructor responsiveness to questions and student outreach could improve significantly.

Table

5. Qualitative comment responses.

What would most improve online teaching experiences for you?	
Based on 113 commenters out of 160 respondents (145 who had taken online classes) allowing for multiple categories from each commenter (a total of 174 entries)	
Note that some categories could be placed in several areas (e.g., professor enthusiasm)	
Category/Topic	Count
<i>Interactive Online Modality:</i>	40
Zoom (none to some, some to more)/some but less	20
More flexibility with Zoom (not making Zoom mandatory)	2
More use of video/succinct video lectures	8
More interactive applications or sessions	10
Video transcripts	2
[see social presence for small group comments which overlap]	
<i>Teaching Presence:</i>	27
Feedback on assignments/timely feedback	16
Response time/availability/reaching out to students	11
<i>Instructional support:</i>	25
Variety of activities	6
Professor enthusiasm/engagement	8
Problems with group projects/papers	2
Variety of testing formats/less time restrictions on tests	3
Too many assignments/too much work/too much busywork	4
<i>Social Presence:</i>	25
Improve discussions	8
Too much group work	5
More group work	4
Create a learning community	5
<i>Basic Online Course Design:</i>	24
Organization/clarity	22
Weekly quizzes (more)	2
<i>Cognitive Presence:</i>	14
More intellectual stimulation	3
Applicability	7
Variety of sources	2
Lecture monotone	2
<i>Trust In System:</i>	1
Reliability & glitches	1
<i>Online Acceptance:</i>	13
No comment/very good as is/has already improved	10
Offer more online classes	3
<i>Face To Face Preference:</i>	4
Prefer face-to-face	1
Hybrid better	3
<i>Instructional Skill:</i>	4
Instructor training	2
Better microphones for professors	2

Table

Instructional support

This factor includes the design of the course in providing clear structure, opportunities for rehearsal and feedback as they are built into the course itself, using a variety of teaching techniques, and an appropriate sense of the class as a learning community. While distinguishable, there is inevitably some overlap with teaching and social presence. Building in feedback as a major component of the class and a detailed syllabus was viewed as important by over 90% of the respondents. Over 80% considered instructor enthusiasm and using a variety of methods as important. Integrating student goals came in over 60%, and under 60% were instructor-created community and student interaction.

6. Online class impressions.

Questions	N	Mean	Very High	Somewhat Medium	Somewhat Low	High	Very Low
Online Acceptance							
I am comfortable with online learning technologies.	145	1.58	56%	34%	6%	4%	0%
My overall impression of online/hybrid learning is very good.	145	1.82	39%	46%	7%	6%	0%
The instructors of online/hybrid classes are generally responsive.	145	1.83	33%	54%	8%	3%	0%
I enjoy online learning.	145	1.98	40%	31%	16%	11%	0%
I often speak or communicate to others in online classes.	145	2.63	17%	33%	24%	20%	4%
Face to Face Preference							
I often speak or communicate to others in face-to-face classes.	145	2.19	17%	33%	24%	20%	4%
I enjoy face-to-face classes more.	145	2.50	28%	21%	27%	15%	6%
I learn more in face-to-face classes.	145	2.57	24%	23%	28%	19%	4%
Instructional Skill							
The instructor(s) make a difference in my enjoyment of an online class.	145	1.54	63%	23%	9%	2%	1%
The instructor's general teaching skills make a large difference when they teach online classes.	145	1.58	57%	27%	13%	1%	0%
The instructor's training in online teaching makes a large difference when they teach online classes.	145	1.59	56%	29%	11%	2%	0%
If hybrid/online classes are well taught and available, how much would online education make up your entire course selections going forward?	159	66%				Median = 72%	

Sixteen percent (25) of the qualitative comments were about instructional support. The greatest weakness, with eight comments, was divergent levels of professor enthusiasm and engagement in online classes. Other students were concerned with the use of a variety of methods (6), too many assignments or too great a workload (4), insufficient test alternatives (3), and group projects and papers (unwieldy, unfair) (2).

Interactive online modality

Interactive online modality considers how the instructor uses the interactive tools of online classes – video lectures, videoconferencing, and small group discussions. The most important type of interactive tool for MPA students is video lectures, rated as important by

Table

86% of respondents. The second most important tool is videoconferencing (i.e., Zoom in this case), rated highly by 79% of students. However, small group discussions are only important to 64% of students.

The most qualitative comments were received about interactive online modality – 26% (40 comments), probably because of the dramatic increase of videoconferencing by some by not all faculty. Twenty students expressed opinions about the opportunities to take advantage of videoconferencing, seemingly primarily rating use from none to some, but also a number seeming to indicate some to more use. The desire for more prerecorded videos was expressed by eight respondents and two mentioned the additional value of including video transcripts. Two students did not want mandatory Zoom sessions. Widely used small group interactions came in for considerable critique as often producing weak discussions or being overly relied upon (see social presence). Ten comments were also made about the possibility of using additional interactive methods or tools without specifying which methods or tools.

Social presence

With social presence, the instructor provides mechanisms for student-to-student interaction and collaboration, and students feel comfortable engaging in robust discussions with each other. This is the least important of the “input” factors by a substantial margin. Sixty-seven percent of MPA students feel that their comfort in disagreeing, the sense of collaboration, and sense of belonging are important in online classes. Seventy-six percent highlight importance of comfort in participating, distinct impressions of other students, and social interaction (for its own sake).

Sixteen percent of the qualitative comments (25) were about social presence. While eight students reference improving discussions, which has a social presence element or impact, it is unclear how much of the critique is about social presence rather than other factors (instructional support, interactive online modality, and even teaching presence). Four students wanted more group work and five students wanted a stronger sense of a learning community.

Cognitive presence

In cognitive presence, the instructor provides a variety of instructional materials and facilitates an environment that is stimulating, reflective, and inclusive of different perspectives. The most important elements of cognitive presence for MPA students are providing education that has applicability to their work and which provides solutions that are functional. Eighty-five percent agreed that knowledge applicability and providing a variety of sources (e.g., say beyond the textbook) were important. Over 70% rated appreciating different perspectives, meaningful reflection, stimulating curiosity, and identifying student strengths and weaknesses as important. In the 50% range was posing problems of a more theoretical kind.

In terms of the qualitative comments about concrete improvement opportunities, comments about cognitive presence constituted 9% of the total. Increased faculty enthusiasm/ intellectual stimulation was mentioned three times (these vaguely worded comments possibly being related to several categories). Increased applicability was mentioned seven times. Also mentioned several times were improvements in the variety of sources of information and faculty monotone in online lectures.

Trust in the system

The factor trust-in-system refers to the university ensuring that online course delivery is reliable and glitch-free, and the instructor ensures that cheating is minimized, and the overall administration of grading is fair. This was not found to be an important factor today, using a 50% threshold. While students reported reliability to be a concern in the 40% range, that dropped to the 30% range for cheating, and the 20% range for fairness.

Only one student commented on reliability and glitches being a concern in the open-ended comments, and no one commented on cheating or fairness as issues.

Online acceptance

Online acceptance refers to providing students with a sense of overall learning effectiveness, comfort in the learning environment, instructor responsiveness, and enjoyment. Their own online learning-technology acceptance is rated as good/very good in the 80% range as is instructor responsiveness. Comfort with online learning technologies is very high (90%) and stays high when asking students about their overall impression of online learning and instructor responsiveness. However, it should be noted that there were 27 comments on responsiveness and feedback in the teaching presence factor, suggesting high levels of inconsistency from one class to the next. Enjoyment of online learning is in the 70% range, but level of communication falls to just 50%. Thus, overall acceptance is quite high.

This is reflected in 10 comments that state that online courses are already well taught or sufficiently well taught, and 3 comments wanting more online classes offered. The combination of online acceptance and high levels of interest in convenience (81%) and scheduling (43%) helps explain the overall enrollment in online classes in the MPA program, despite their added expense. See [Table 6](#) for a display of these impression factors.

Face-to-face preference

A face-to-face preference affects the taking of online courses and is balanced by convenience and scheduling needs. Students are more likely to take online classes because they perceive them to be high quality and effective, assuming they are available, but less so the more they prefer face-to-face classes. About 50% of them frequently communicate in face-to-face classes. Slightly less than half of the students in the survey felt that enjoy face-to-face courses more or they learn more in face-to-face classes.

Only one open-ended comment reflected a preference for face-to-face because that was not really the thrust of the question, but three expressed a preference for hybrid classes. However, 21% reported preferring the online teaching style (see [Table 4](#)).

Perceptions of instructional skill

Student perceptions of instructional skill have to do with their sense of instructor training and experience in delivering online classes, leading them to believe that the instructor makes a difference. General instructional skill, online instructional skill, and the instructor making a difference in online learning all rated in the 80% range in terms of making a “large difference.”

Three students called for more or better instructor training, and two recommended better microphones.

Ranking of factor importance and subgroup comparison of means

[Table 7](#) reports the ranking of the seven instructional and design factors based on average mean students’ rating of their importance with basic online modality as the most important while trust in the system as the least important (see [Table 7](#)). To ensure the reliability of the factors, a Cronbach’s α is reported for each of the factors. All of the seven instructional

and design factors and the three impression factors have an α of 0.7 or greater, indicating the grouping of survey items is consistent and reliable, except Trust in the System ($\alpha = 0.16$), which suggests the three items included in the factor are inconsistent.

Subgroup comparison of means is also reported in [Tables 7](#) and [8](#). The relatively small sample size does not facilitate meaningful statistical test; therefore, we only report the

Table 7. Ranking of factor importance* and subgroup comparison of means.

	All MPA students n = 145		Rank	Below 30 n = 70		Above 30 n = 75		Work n = 125		Not Work n = 20		URM n = 75		Non- URM n = 70		In 50 Miles n = 117		Over 50 Miles n = 28	
	Mean	α		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Basic online modality (4 items)	1.36	0.80	1	1.21	1.50	1.30	1.69	1.30	1.69	1.30	1.36	1.42	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Teaching presence (7 items)	1.58	0.90	2	1.51	1.64	1.53	1.87	1.53	1.87	1.53	1.59	1.93	1.59	1.59	1.59	1.59	1.59	1.59	1.51
Instructional support (7 items)	1.84	0.83	3	1.75	1.93	1.79	2.16	1.79	2.16	1.76	1.84	1.94	1.76	1.84	1.84	1.84	1.84	1.84	1.87
Interactive online modality (3 items)	1.86	0.76	4	1.82	1.89	1.84	1.97	1.84	1.97	1.74	1.86	1.99	1.74	1.86	1.86	1.86	1.86	1.86	1.84
Cognitive presence (7 items)	1.95	0.88	5	1.93	1.97	1.85	2.53	1.85	2.53	1.96	1.95	1.94	1.96	1.95	1.95	1.95	1.95	1.95	1.93
Social presence	2.46	0.86	6	2.38	2.53	2.43	2.59	2.43	2.59	2.35	2.46	2.57	2.35	2.46	2.46	2.46	2.46	2.46	2.44
Trust in the system** (3 items)	2.63	0.16***	7	2.66	2.61	2.58	2.93	2.58	2.93	2.56	2.67	2.70	2.56	2.67	2.67	2.67	2.67	2.67	2.46

*Ranking is based on the average mean of students' ranking of survey items: 1 = Very High/Strongly Agree, 2 = High/Agree, 3 = Neutral, 4 = Somewhat Low/Disagree, and 5 = Very Low/Strongly Disagree; Lower averages indicate greater importance or agreement.

** The survey questions – "The reliability of online technology itself (e.g., outages, glitches, etc.) is a concern." and "I think that fairness and equity is better in face-to-face classes." – were coded in reversed order to be in alignment with the other questions in meaning.

*** The low Cronbach's α indicates the three items grouped are inconsistent in constructing the factor of "Trust in the System."

Table 8. Subgroup comparison of student impressions of online classes*.

		All MPA students n = 145			Not Work n = 20		Non-URM n = 70	In 50 Miles n = 117	Over 50 Miles n = 28	
	α	Below 30 n = 70	Above 30 n = 75	Work n = 125	URM n = 75					
Perceptions of instructional skill (3 items)	0.79	1.57	1.53	1.61	1.49	2.07	1.65	1.49	1.63	1.34
Online acceptance (5 items)	0.79	1.97	1.83	2.09	1.94	2.16	1.95	1.98	1.99	1.89
F2F preference (3 items)	0.78	2.43	2.50	2.36	2.45	2.27	2.54	2.30	2.33	2.83

* Report is based on the average mean of students' ranking of survey items: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, and 5 = Strongly Disagree; Lower averages indicate greater agreement.

subgroup means of those factors based on age, race, working status, and distance to campus to offer insights for future research. Younger students (below age 30) rate basic online modality, teaching presence, instructional support, and social presence more important than elder students (over 30). They also have higher online acceptance (less face-to-face preference) and rating of instructor skills.

Working students, including both part-timers and full-time employees, tend to rate all the factors more important than non-working students. They also have higher rating of their instructors and online acceptance, while full-time students have higher preference to face-to-face classes.

Under-represented minorities (URM), mainly Latinos and African Americans in this analysis, rate all the instructional and design factors, except cognitive presence, more important than non-URM students. They tend to rate their online instructors lower. Although both groups have similar level of online acceptance, non-URM students have a slightly higher preference to face-to-face classes.

Distance to campus does not affect students' rating of instructional and design factors notably. However, students who live closer to campus (within 50 miles) have a stronger preference for face-to-face classes and are more critical to their online instructors.

Discussion

The empirical and qualitative data tell the story of what students value. Specifically, the empirical data give us a story of what students want as fundamental teaching practices. Of the seven variables leading to quality, six were rated as important by over 50% of the students. The qualitative data not only reinforce what faculty need to do to have excellent classes from student perceptions (discussed below first), but also give additional insights about how these principles should be implemented.

Basic online modality, or the use of basic online functionality, was the highest. While a critical element in providing a platform for quality from a students' perspective, qualitative comments suggest that it is considered a "given" until not present. This points to the need for faculty training in online technology because small lapses in this area are very aggravating to students.

Teaching presence, related to communication and individualized responsiveness, is also extremely important to students. Because of the ease with which alienation and aloneness can be felt by students in online classes, faculty probably have to be more self-conscious of

frequent and personal communications than in face-to-face classes. Qualitatively, slow or otherwise poor responsiveness was easily the single biggest area of complaint from students.

The data did not reveal whether this was a typical problem, or whether it was a variable problem in which some instructors were perceived as negligent.

A strong interactive online modality – instructor-generated videos, teleconferencing, small groups – was also very important to students. However, the types of lecture input, videos, and teleconferencing were substantially more important than small group methods. The qualitative remarks reflected massive interest in teleconferencing which has experienced an enormous uptick in some classes but is still unused in others. The comments reflected the interest in more teleconferencing, except for concerns about enforced synchronous sessions limiting flexibility and convenience. More and better instructor videos were desirable to a handful of students. While the comments on small groups are discussed under social presence (they relate to both categories), to the degree that small groups are instructional tools there was some sentiment that small groups are frequently over-used or poorly implemented. That is, many students felt that discussions, no matter whether in oral or written formats, could be improved through a wide range of strategies such as: more faculty intervention and guidance to maintain focus and high-quality student responses, better-structured activities, richer alternatives in discussions, and moving some discussions to synchronous formats. It is important to note that there was little interest in more discussion; the interest was in higher quality and more application-oriented discussion.

Cognitive presence – primarily focused on intellectual stimulation on one hand and applicability on the other – was also important to students. The low amount of comments on this factor seemed to signify that it was either not a significant problem, or not a priority in terms of targets for improvement. That is, weakness in cognitive presence could be tolerated more than basic online modality, but basic online modality could not contribute as much as cognitive presence in assisting a class to improve from good to great.

Instructional support is related to clear structure, opportunities for rehearsal and feedback, a variety of techniques, and an appropriate sense of the class as a learning community. The most important elements for students were feedback and a detailed syllabus. Professor enthusiasm/engagement was also a concern for students; that is, the course was too mechanical which was also reflected in concern for a variety of techniques. Other comments focused on the need for more activity variety to mitigate staleness and boredom, rather than a single challenge question each week. Examples offered here included providing a variety of challenge questions to choose from and mixing other types of activities, such as analysis of case studies or online research projects.

Social presence is surprisingly low given its strong prominence in the community-of-inquiry literature. Numerous comments in this area reflect that small groups can be better facilitated or are overused. However, if interactive online modality and social presence are merged as a broader concept of interaction (despite the inclusion of more instructor-led elements in the former), then the community-of-inquiry notion of the importance of human – rather than just student-to-student – presence is better supported.

Trust in the system (reliability and instructional integrity) falls lowest. This conglomerate factor may have been more prominent in the past but seems to have been fading in importance as technological systems and instructional strategies have matured.

The usual approach to setting standards about student perceptions is to focus on all elements perceived as important. However, another, more targeted – or problem solving – approach is to focus on those areas that suffer from the greatest performance gaps (e.g., Song et al., 2004) which was best captured in this case in the qualitative comments. Five of the 28 categories had 10 or more comments: organizational clarity (22), use of Zoom (20), feedback on assignments (16), response time (11), and interactive applications (10). Organizational clarity aligns with basic online modality, which was identified as the single most important item as well. What seems clear to instructors is not always clear to students in an online environment. Interestingly, the use of Zoom in terms of importance is less than prerecorded videos (86% to 79%). However, video only got eight comments. This would seem to indicate that the use of Zoom has the greatest potential to improve classes in order to meet student concerns; that is, while more important to students, prerecorded video is on average better done, while Zoom, though less important, is not used/done well in many cases since it has only recently become easily available in the case context. However, comments covered a range of opinions, so student sentiments are not necessarily simply for more Zoom, but also for the strategic use of Zoom (to maximize flexibility). The clear indication was that all instructors should use some Zoom, but it could vary between voluntary attendance at any/all sessions (recorded) and mandatory attendance at some/all sessions (with small incentives or disincentives for attending). Issues about feedback on assignments and reaching out to students were very clear: students want more customized feedback and they want it faster in many classes. Finally, graduate students want and expect more interaction in online classes as the technology evolves because of bandwidth expansion and learning platform performance enhancements.

Conclusion

Student perceptions are not the only factor to consider in setting online teaching standards, but certainly, they should be a primary pillar along with best practices (e.g., QM standards), and the faculty's responsibility to balance faculty concerns, rigor, and administrative realities. Good standards can provide helpful guidelines to new and continuing instructors, higher levels of quality consistency, and can nonetheless provide alternatives in meeting standards. In turn, good standards are more likely to be derived from good data. The data provided here (a study itself based on several previous studies) offer detailed information about statistically important categories related to student perceptions that should have broad applicability for all programs. The literature focuses on an array of factors, from different types of presence and instructional design, to basic online competence and trust in the online system, to interactive techniques. This research supports the literature but provides a comprehensive and comparative perspective on those areas that lead to quality in the MPA context. The data presented here also provide an example of overall student experiences in one setting, and a profile of improvement possibilities based on concrete student experiences.

While it would be redundant to try to list all the practitioner takeaways derived from the study, at least five seem particularly generalizable and salient. First, it is very useful to ensure faculty training so that faculty are comfortable and knowledgeable in online technology. Second, it is important to provide more communications – both generic and customized – than faculty commonly do in online classes. Instructor communication in face-to-face classes is extensive (and sometimes excessive) because it is so easy, while online communication takes more effort and discipline. Third, high-quality interactions in online classes take a lot of faculty energy, no matter whether it is in creating engaging videos, organizing video-conferencing, or providing feedback on extensive small group discussions. Nonetheless, this area is very important for students and their perceptions of online classes. Fourth, while students like learning routines, they also like teaching variety within structured patterns and overlapping ways to absorb information. For example, some students only watch video lectures, others only read the transcript of the lecture, and still others like to follow the transcript while the lecture is playing. While this is more work for instructors, if additional methods and variety are introduced into classes over time, students' will likely notice the enhanced learning environment. Finally, somewhat surprisingly, a number of faculty often seem to over-rely on large or small group discussions, which if unmonitored by the faculty member are generally considered low-quality busywork by students. Requiring structured outcomes in small groups often provides a higher quality of response from students and increases student evaluation of such activities.

The study has several limitations. Although the sample size is larger than most other studies in the field, it is a convenience sample. While our study provides two sets of data (i.e., both quantitative and qualitative data) in order to triangulate a richer, more comprehensive picture of student perceptions, the complexity of the findings requires more interpretation to amalgamate. Future studies can fruitfully examine these important instructional and design factors across multiple institutions or focus more narrowly on student adoption factors.

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References

- Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. *Applied Computing and Information*, 12(1), 27–50. <https://doi.org/10.1016/j.aci.2014.09.001>
- Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample. *Internet and Higher Education*, 11(3–4), 133–136. <https://doi.org/10.1016/j.iheduc.2008.06.003>
- Artino, A. R. (2010). Online or face-to-face learning? Exploring the personal factors that predict students' choice of instructional format. *Internet and Higher Education*, 13(4), 272–276. <https://doi.org/10.1016/j.iheduc.2010.07.005>
- Asoodar, M., Vaezi, S., & Izanloo, B. (2016). Framework to improve e-learner satisfaction and further strengthen e-learning implementation. *Computers in Human Behavior*, 63, 704–716. <https://doi.org/10.1016/j.chb.2016.05.060>
- Austin, E. K. (2009). Limits to technology-based distance education MPA curricula. *Journal of Public Affairs Education*, 15(2), 161–176. <https://doi.org/10.1080/15236803.2009.12001551>
- Bainbridge, J., Melitski, J., Zahradnik, A., Lauria, E., Jayaprakash, S., & Baron, J. (2015). Using learning analytics to predict at-risk students in online graduate public affairs and administration education. *Journal of Public Affairs Education*, 21(2), 247–262. <https://doi.org/10.1080/15236803.2015.12001831>
- Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Walseth, P. A., Fiset, M., & Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, 74(3), 379–439. <https://doi.org/10.3102/00346543074003379>
- Billings, D. M., Skiba, D., & Connors, H. (2005). Best practices in web-based courses: Generational differences across undergraduate and graduate nursing students. *Journal of Professional Nursing*, 21(2), 126–133. <https://doi.org/10.1016/j.profnurs.2005.01.002>
- Bolliger, D., & Martindale, T. (2004). Key factors for determining student satisfaction in online courses. *International Journal on E-learning*, 3(1), 61–67. Retrieved October 7, 2020 from <https://www.semanticscholar.org/paper/Key-Factors-for-Determining-Student-Satisfaction-in-Bolliger/2be9f3cf41f5bc6a95710f6b347363a344f0b922?p2df>
- Brower, R., & Klay, W. E. (2000). Distance learning: Some fundamental questions for public affairs education. *Journal of Public Affairs Education*, 6(4), 215–231. <https://doi.org/10.1080/15236803.2000.12023480>
- Butz, N., Stupnisky, R. H., Pekrun, R., Jenson, J., & Marsell, D. (2016). The impact of emotions on student achievement in synchronous hybrid business and public administration programs: A longitudinal test of control-value theory. *Decision Sciences: Journal of Innovation Education*, 14(4), 441–474. <https://doi.org/10.1111/dsji.12110>
- Campbell, H. E. (2006). Cheating, public administration education, and online courses: An essay and call to arms. *Journal of Public Affairs Education*, 12(1), 33–47. <https://doi.org/10.1080/15236803.2006.12001411>
- Clayton, K. E., Blumberg, F. C., & Anthony, J. A. (2018). Linkages between course status, perceived course value, and students' preferences for traditional versus non-traditional learning environments. *Computers & Education*, 125, 175–181. <https://doi.org/10.1016/j.compedu.2018.06.002>
- Eom, S. B., Wen, H. J., & Ashill, N. (2006). The determinants of students' perceived learning outcomes and satisfaction in university online education: An empirical investigation. *Decision Sciences Journal of Innovative Education*, 4(2), 215–235. <https://doi.org/10.1111/j.1540-4609.2006.00114.x>
- Garrison, D. R., Anderson, T., & Archer, W. (2003). A theory of critical inquiry in online distance education. In M. G. Moore and W. G. Anderson (eds.), *Handbook of Distance Education* (pp. 113–127). Routledge.

- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education*, 19(3), 133–148. https://doi.org/10.1207/s15389286ajde1903_2
- Gibson, P. A., & Dunning, P. (2012). Creating quality online course design through a peer-reviewed assessment. *Journal of Public Affairs Education*, 18(1), 209–228. <https://doi.org/10.1080/15236803.2012.12001678>
- Gigliotti, R. A. (2016). Institutional identification and sense of community: Analysis of a new online graduate public administration program. *Journal of Public Affairs Education*, 22(3), 399–414. <https://doi.org/10.1080/15236803.2016.12002255>
- Ginn, M. H., & Hammond, A. (2012). Online education in public affairs: Current state and emerging issues. *Journal of Public Affairs Education*, 18(2), 242–270. <https://doi.org/10.1080/15236803.2012.12001683>
- Green, H. J., Hood, M., & Neumann, D. L. (2015). Predictors of student satisfaction with university psychology courses: A review. *Psychology Learning & Teaching*, 14(2), 131–146. <https://doi.org/10.1177/1475725715590959>
- Harris, R. A., & Nikitenko, G. (2014). Comparing online with brick and mortar course learning outcomes: An analysis of quantitative methods curriculum in public administration. *Teaching Public Administration*, 32(1), 95–107. <https://doi.org/10.1177/0144739414523284>
- Ho, A., Lu, L., & Thurmaier, K. (2006). Testing the reluctant professor's hypothesis: Evaluating a blended-learning approach to distance education. *Journal of Public Affairs Education*, 12(1), 81–102. <https://doi.org/10.1080/15236803.2006.12001414>
- Holzweiss, P., Joyner, S. A., Fuller, M., Henderson, S., & Young, R. (2014). Online graduate students' perceptions of best learning experiences. *Distance Education*, 35(3), 311–323. <https://doi.org/10.1080/01587919.2015.955262>
- Hong, K.-S. (2002). Relationships between students' instructional variables with satisfaction and learning from a web-based course. *The Internet and Higher Education*, 5, 267–281. Retrieved October 7, 2020 from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.555.3518&rep=rep1&type=pdf>
- Hsu, W.-Y. (2003). *Online education on campus: A technological frames perspective on the process of technology appropriation*. Diss. London School of Economics and Political Science (United Kingdom). Retrieved October 7, 2020 from <http://etheses.lse.ac.uk/id/eprint/2657>
- Inside Higher Ed. (2019). *The 2019 survey of faculty attitudes on technology: A study by Inside Higher Ed and Gallup*. Author.
- Jaggars, S., & Bailey, T. R. (2010). *Response to a Department of Education meta-analysis*. Retrieved October 7, 2020 from <https://ccrc.tc.columbia.edu/publications/effectiveness-fully-online-courses.html>
- Jaggars, S. S., & Xu, D. (2016). How do online course design features influence student performance? *Computers & Education*, 95(April), 270–284. <https://doi.org/10.1016/j.compedu.2016.01.014>
- Joo, Y. J., Lim, K. Y., & Kim, E. K. (2011). Online university students' satisfaction and persistence: Examining perceived level of presence, usefulness and ease of use as predictor in a structural model. *Computers & Education*, 57(2), 1654–1664. <https://doi.org/10.1016/j.compedu.2011.02.008>
- Jung, I. (2011). The dimensions of e-learning quality: From the learner's perspective. *Educational Technology Research and Development*, 59(4), 445–464. <https://doi.org/10.1007/s11423-010-9171-4>
- Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. *Distance Education*, 29(1), 89–106. <https://doi.org/10.1080/01587910802004860>
- Kilonzo, S. M., Sandfort, J., & Liu, H. (2016). Using multimedia learning objects in public affairs classrooms: Global experiences with Hubert project e-cases and e-studies. *Journal of Public Affairs Education*, 22(3), 345–362. <https://doi.org/10.1080/15236803.2016.12002252>
- Kim, T., Welch, S., & Nam, S. (2016). Examining graduate students' perceptions of preferences for online courses. *International Journal of E-Learning*, 15(2), 179–194. Retrieved October 7, 2020 from <https://www.learntechlib.org/primary/p/129807/>

- Kuo, Y.-C., Walker, A. E., Schroder, K. E., & Belland, B. R. (2013). Interaction, internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *Internet and Education*, 20, 35–50. <https://doi.org/10.1016/j.iheduc.2013.10.001>
- Lee, H.-J., & Rha, I. (2009). Influence of structure and interaction on student achievement and satisfaction in Web-based distance learning. *Educational Technology & Society*, 12(4), 372–382. Retrieved October 7, 2020 from <http://www.jstor.org/stable/jeductechsoci.12.4.372>
- Liaw, -S.-S., & Huang, H.-M. (2013). Perceived satisfaction, perceived usefulness and interactive learning environments as predictors of self-regulation in e-learning environments. *Computers & Education*, 60(1), 14–24. <https://doi.org/10.1016/j.compedu.2012.07.015>
- Macon, D. K. (2011). *Student satisfaction with online courses versus traditional courses: A meta-analysis*. Northcentral University.
- Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of Management Education*, 29(4), 531–563. <https://doi.org/10.1177/1052562904271199>
- Martin, F., Wang, C., & Sadaf, A. (2018). Student perception of facilitation strategies that enhance instructor presence, connectedness, engagement and learning in online courses. *Internet and Higher Education*, 37, 52–65. <https://doi.org/10.1016/j.iheduc.2018.01.003>
- Maycock, K. W. (2018). Chalk and talk versus flipped learning: A case study. *Journal of Computer Assisted Learning*, 35(1), 121–126. <https://doi.org/10.1111/jcal.12317>
- McGowan, W. R., & Graham, C. R. (2009). Factors contributing to improved teaching performance. *Innovative Higher Education*, 34(3), 161–171. <https://doi.org/10.1007/s10755-009-9103-6>
- Miller, W. (2011). Mode-neutral and the need to transform teaching. *Public Administration Quarterly*, 35(4), 446–465. Retrieved October 7, 2020 from <https://www.questia.com/library/journal/1G1-303894964/mode-neutral-and-the-need-to-transform-teaching>
- Mingus, M. S. (1999). Toward understanding the culture of internet-mediated learning. *Journal of Public Affairs Education*, 5(3), 225–235. <https://doi.org/10.1080/15236803.1999.12022073>
- Mohammadi, H. (2015). Investigating users' perspectives on e-learning: An integration of TAM and IS success model. *Computers in Human Behavior*, 45, 359–374. <https://doi.org/10.1016/j.chb.2014.07.044>
- National Center for Education Statistics. (2019). *Fast facts: Distant learning*. In the digest of education statistics. U.S. Department of Education.
- Nguyen, T. (2015). The effectiveness of online learning: Beyond no significant difference and future horizons. *Merlot Journal of Online Learning and Teaching*, 11(2), 309–319. Retrieved October 7, 2020 from https://jolt.merlot.org/Vol11no2/Nguyen_0615.pdf
- Ni, A. N. (2013). Comparing the effectiveness of classroom and online learning: Teaching research methods. *Journal of Public Affairs Education*, 19(2), 199–215. <https://doi.org/10.1080/15236803.2013.12001730>
- Ni, A. N., & Van Wart, M. (2019). Exploring ways to enhance public administration online quality and NASPAA's potential roles. *2019 NASPAA Conference*, Los Angeles, CA.
- Otter, R. R., Seipel, S., Graef, T., Alexander, B., Boraiko, C., Gray, J., Perersen, K., & Sadler, K. (2013). Comparing student and faculty perceptions of online and traditional courses. *Internet and Higher Education*, 19, 27–35. <https://doi.org/10.1016/j.iheduc.2013.08.001>
- Paechter, M., Maier, B., & Macher, D. (2010). Online or face-to-face? Students' experiences and preferences in e-learning. *Internet and Higher Education*, 13(4), 292–329. <https://doi.org/10.1016/j.iheduc.2010.09.004>
- Palmer, S., & Holt, D. (2010). Students' perceptions of the value of the elements of an online learning environment: Looking back in moving forward. *Interactive Learning Environments*, 18(2), 135–151. <https://doi.org/10.1080/09539960802364592>
- Rahm, D., Reed, B. J., & Rydl, T. (1999). Internet-mediated learning in public affairs programs: Issues and implications. *Journal of Public Affairs Education*, 5(3), 213–223. <https://doi.org/10.1080/15236803.1999.12022072>

- Richardson, J. C., Maeda, Y., Lv, J., & Caskurlu, S. (2017). Social presence in relation to students' satisfaction and learning in the online environment: A meta-analysis. *Computers in Human Behavior, 71*, 402–417. <https://doi.org/10.1016/j.chb.2017.02.001>
- Scheer, T. J. (2001). Exploring the impact of distance learning on MPA students. *Journal of Public Affairs Education, 7*(1), 101–115. <https://doi.org/10.1080/15236803.2001.12023503>
- Seaman, J. E., Allen, E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States*. Babson Survey. Research Group.
- Shea, J., Joaguin, M. E., & Wang, J. Q. (2016). Pedagogical design factors that enhance learning in hybrid courses: A contribution to design-based instructional theory. *Journal of Public Affairs Education, 22*(3), 381–397. <https://doi.org/10.1080/15236803.2016.12002254>
- Sitzmann, T., Kraiger, K., Stewart, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology, 59*(3), 623–664. <https://doi.org/10.1111/j.1744-6570.2006.00049.x>
- So, H. J., & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers & Education, 51*(1), 318–336. <https://doi.org/10.1016/j.compedu.2007.05.009>
- song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education, 7*(1), 59–70. <https://doi.org/10.1016/j.iheduc.2003.11.003>
- Stowers, G. N. L. (1999). Computer conferencing in the public affairs classroom. *Journal of Public Affairs Education, 5*(1), 57–66. <https://doi.org/10.1080/15236803.1999.12022052>
- Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education, 50*(4), 1183–1202. <https://doi.org/10.1016/j.compedu.2006.11.007>
- Van Wart, M., Ni, A., Rose, L., McWeeney, T., & Worrell, R. (2019). A literature review and model of online teaching effectiveness integrating concerns for learning achievement, student satisfaction, faculty satisfaction, and institutional results. *Pan-Pacific Journal of Business Research, 10*(1), 1–22. Retrieved October 7, 2020 from <http://ppbri.org/a-literature-review-and-model-of-online-teaching-effectiveness-integrating-concerns-for-learning-achievement-student-satisfaction-faculty-satisfaction-and-institutional-results>
- Wilkinson, J. (2009). Staff and student perceptions of plagiarism and cheating. *International Journal of Teaching and Learning in Higher Education, 20*(2), 98–105. Retrieved October 7, 2020 from <https://eric.ed.gov/?id=EJ864328>
- Zhao, Y., Lei, J., Yan, B., Lai, C., & Tan, H. S. (2005). What makes the difference? A practical analysis of research on the effectiveness of distance education. *Teachers College Record, 107*(8), 1836–1884. <https://doi.org/10.1111/j.1467-9620.2005.00544.x>
- Zhu, C. (2012). Student satisfaction, performance, and knowledge construction in online collaborative learning. *Journal of Educational Technology & Society, 15*(1), 127–136. Retrieved October 7, 2020 from <https://eric.ed.gov/?id=EJ979456>

Appendix I: MPA Student Perception of Important Factors to Online Classes

Questions	N	Mean	Very High	Somewhat High	Medium	Somewhat Low	Very Low
Basic Online Modality							
Navigation (e.g., being able to find what you want).	144	1.21	84%	11%	4%	1%	0%
Online grade book.	145	1.26	80%	13%	5%	1%	0%
Online grading of assignments by instructors.	145	1.26	80%	13%	5%	1%	0%
Online quizzes.	145	1.77	50%	28%	16%	3%	1%
Teaching Presence							
Online instructors clearly communicate important due dates/time frames for learning activities.	142	1.31	74%	20%	4%	1%	0%
Online instructors provide clear instructions on how to participate in course learning activities.	143	1.37	71%	23%	4%	1%	1%
Online instructors provide feedback in a timely fashion.	143	1.48	66%	24%	6%	5%	1%
Online instructors clearly communicate important course goals.	143	1.51	61%	28%	8%	2%	0%
Online instructor provides feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.	143	1.63	60%	25%	8%	6%	1%
Online instructors help keep students on task in a way that helps them learn efficiently.	143	1.73	49%	34%	14%	2%	1%
Online instructors encourage students to explore new concepts.	142	1.86	44%	33%	15%	5%	2%
Instructional support							
Instructor providing feedback.	144	1.35	74%	19%	3%	2%	0%
Syllabus (more detailed than in a face-to-face class).	144	1.45	66%	24%	7%	1%	1%
Instructor having enthusiasm.	144	1.59	60%	25%	10%	2%	1%
The use of a variety of techniques to communicate and learn.	144	1.72	47%	36%	12%	2%	1%
Including student goals.	144	2.16	34%	30%	23%	8%	3%
A sense of community in the class [includes instructor].	144	2.32	32%	25%	25%	9%	6%
Interaction with other students.	144	2.38	39%	18%	24%	12%	3%
Interactive Online Modality							
Video lectures.	145	1.36	55%	31%	9%	2%	2%
Zoom or other video-conference methods.	145	1.75	51%	28%	15%	3%	1%
Small group discussions (chat rooms).	145	2.18	35%	29%	19%	10%	4%
Social Presence							
I feel comfortable participating in online course discussions.	143	1.95	41%	35%	15%	4%	4%
I feel comfortable disagreeing with other classmates in online courses while still maintaining a sense of trust.	143	2.17	36%	31%	20%	9%	5%
Online discussions help me develop a sense of collaboration.	143	2.39	27%	30%	27%	11%	6%
Getting to know other classmates gives me a sense of belonging in online courses [does not include the instructor].	143	2.69	26%	27%	30%	14%	10%
I am able to form distinct impressions of some classmates in online courses. [does not include the instructor.]	143	2.71	13%	30%	37%	11%	8%
Online or web-based communication is an excellent medium for social interaction.	143	2.82	16%	22%	34%	16%	10%

Cognitive Presence

I can apply the knowledge created in online courses to 142 my work or other non-class related activities.	1.61	57%	28%	10%	2%	1%
I can utilize a variety of information sources to explore 141 problems.	1.78	43%	39%	14%	2%	1%
Online discussions are valuable in helping me appreciate 143 different perspectives.	1.98	39%	38%	10%	6%	4%
Online learning activities help me construct explanations/ 143 solutions.	1.95	35%	44%	13%	3%	3%
Online courses have activities that stimulate my curiosity. 143	1.97	37%	37%	19%	2%	3%
Online courses provide opportunities for meaningful 143 reflection on course content.	1.99	35%	39%	18%	3%	2%

(Continued)

(Continued).

Questions	N	Mean	Very High	Somewhat High	Medium	Somewhat Low	Very Low
Online instructors pose problems that increase my interest in course issues.	143	2.36	24%	34%	26%	8%	5%
Trust of System							
Instructors reduce and catch cheating effectively in hybrid/online classes.	144	2.70	9%	26%	52%	8%	3%
The reliability of online technology itself (e.g., outages, glitches, etc.) is a concern.	159	2.82	22%	25%	13%	23%	15%
I think that fairness and equity is better in face-to-face classes.	144	2.97	11%	15%	43%	22%	6%