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# Matching Student Expectations with Instructors' Dispositions: Insight into Quality of Online Teaching

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## Abstract

This paper explores the similarities and differences between student expectations of online instructors and the teaching dispositions of online instructors. Our research goal is to develop insight into factors related to online student success. Although researchers have identified key characteristics of effective teaching in the face-to-face classrooms (e.g., Combs, 1999; Feldman, 1984, 1989), the same cannot be said for the identification and assessment of teaching dispositions in the online classroom. Over a hundred online instructors, who were identified as trained and qualified in online instruction, completed the Virtual Teaching Disposition Scale (VTDS). In addition, over five hundred students responded to a survey asking them to identify instructor characteristics important to their academic success. Results are discussed in terms of student expectations and faculty dispositions, focusing on items relating to faculty expertise, pedagogy, and effective use of technology. Knowledge of these factors may lead to better understanding by instructors of the factors, not related to their specific content, that genuinely influence their students success.

**Keywords:** Student success, teacher dispositions, Virtual Teaching Disposition Scale (VTDS), online instruction.

In 2013, Allen and Seaman reported that more than 7.1 million students took at least one online course, up approximately 1 million from the previous year. Approximately 32% of the students were enrolled in institutions of higher education. As the number of students enrolled in online courses continues to grow, many institutions struggle to produce the same student success rates in their online courses as they have in their traditional face-to-face courses (Allen & Seaman, 2013).

The assumption is often made that good Internet connectivity, high quality equipment, and solid content knowledge are all that is needed for effective teaching in the online classrooms. Yet research has shown that teachers must also possess strong professional teaching dispositions to truly be effective online teachers.

Recently, researchers have begun to identify instructor characteristics that may affect student success in online courses and are most meaningful to student academic success. This

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combined knowledge can lead to increased awareness, professional development, and ultimately increased student achievement.

The purpose of the present study was to explore the similarities and differences between student perceptions of online instructors and the teaching dispositions of online instructors. Over 104 instructors responded to a survey focusing on their self-perception of teaching dispositions. In addition, over 500 students from an east coast community college responded to a survey in which they were asked to identify instructor characteristics that were of importance to their academic success in online courses. Results of the study are discussed in terms of instructor dispositions and student expectations, focusing on items relating to frequency of communication and feedback, compassion, empathy, flexibility, and organization.

Knowledge of these factors may lead to better understanding by instructors of the factors, not related to their specific content, that genuinely influence their students success.

## Background

Four years ago, we wondered about two simple questions: First, what do online students consider outstanding online instruction? Second, does online "outstanding" instruction impact academic success? A comprehensive literature review yielded relatively no helpful answers to either question.

Regarding quality online instruction, most publications were written by online professors or administrators. That literature was not research based, but descriptive suggesting general characteristics educators thought online faculty should manifest. Importantly and significantly, virtually no research evaluated students' perceptions.

Since there is no satisfactory research definition of "outstanding instruction," there is no data available regarding impact on online academic success. Quantitative data is available indicating that student academic success was most likely in the following order: traditional classroom, hybrid classes, and online classes.

In an effort to answer the two fundamental questions of online student perceptions and potential impact on student success, Orso and Doolittle (2012) surveyed 27 online sections of community college students asking: "Name three characteristics of an outstanding online teacher and explain why those characteristics are important." Over 600 students responded offering the following qualitative perceptions of "outstanding online instruction":

1. Communication/availability: 66 percent
2. Compassion: 58 percent
3. Organization: 58 percent
4. Quality feedback: 45 percent
5. Instructor personal information: 18 percent
6. Other (eg, creative course, technical competence): 9 percent

In context of this information, Orso and Doolittle (2012) found five instructors by their department chairs as meeting student parameters for "outstanding online instruction". From these "outstanding instructors" over 2,400 student grades from 137 online sections were evaluated with startling findings. Specifically, academic success rates were 15% higher than traditional classroom and 25% higher than the other online sections.

Because of the inherent problems with qualitative research, the next needed step was quantitative research toward defining "outstanding" online instruction. This paper presents results from that research and adds research on online teacher dispositions.

## Teaching Dispositions

Teaching dispositions involve more than effective pedagogy and alignment to content standards. Teaching extends to the behaviors and beliefs of the teacher. These dispositions manifest into actions and behaviors in the classroom affecting not only their performance as an educator, but also the performance of their students. Dispositions are an enactment of a person's personal traits, values, and behaviors in a consistent manner within particular contexts (Carroll, 2012).

Studies have shown an interconnectedness between teacher dispositions and effective teachers (e.g., Giovannelli, 2010; Good & Brophy, 1994; Leithwood, 1990; Noddings, 1992). One may think of the term dispositions as the process of developing a repertoire and identity of educational practice, what Blythe and associates (1998) term *performances of understanding*. It is the process in which instructors engage in the intellectual, cultural, ethical, social, and practices necessary to become effective instructors.

Researchers have been able to identify key characteristics of effective teaching in the face-to-face classroom. Regrettably, the same cannot be said for the identification and assessment of the teaching dispositions in the online classroom. Teacher quality has been shown to be an important factor in online education (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004). The little data that exists on the influence of online teacher quality revealed several competences needed for effective online instruction, including organization, verbal and nonverbal communication skills, and the ability to use meaningful questioning strategies (e.g., Cyrs, 1997; Easton, 2003; Roblyer & McKenzie, 2000). Bonk, Kirkley, Hara and Dennen (2001) identified four major areas of roles of online instructors including pedagogical, social, managerial, and, technological. One may also seek references on competencies and roles of effective online instruction (Avgerinou & Anderson, 2007; Baran, Correia, & Thompson, 2011; Bawane & Spector, 2009; Bonk, Kirkley, Hara, & Dennen, 2001; Chua & Lam, 2007; Copolla, 2005; Edwards, Perry, & Janzen, 2011; Jelfs, Richardson, & Price, 2009; Kouzes & Posner, 2003; Oliver, Osborne, & Brady, 2009; Spangle, Hodne, & Schierling, 2002; Young, 2006; Young, Cantrell, & Shaw, 2001), finding an array of viewpoints.

Several studies have been conducted exploring factors related to student expectations of instructors in the virtual classroom. In one study, students identified seven items as necessary for effective online instruction: adapting to student needs, using meaningful exam-

ples, motivating students to do their best, facilitating the course effectively, delivering a valuable course, communicating effectively, and showing concern for student learning (Young, 2006). The same students also believed that instructors should be flexible and able to adapt to the needs of the students. Given the diversity of the students who enroll in online courses, the expectations gleaned from these studies vary considerably (Stevenson, MacKeogh, & Sander, 2006), but we do know that students create their expectations of online instructors from prior experience with online instructors, communication with peers who have taken online courses, or from their own previous educational experiences (Forrester & Parkinson, 2006).

Orso and Doolittle (2012) found that the ability of an online instructor to meet students' needs significantly influenced student academic success. Increases in success rates ranged from 5% to 15%. In addition, they found that students enrolled in online courses expected quick response from instructors. In a study designed to identify personality types and instructors' willingness to embrace technology, Chambers, Hardy, Smith, and Sienty (2003) used the Myers-Briggs Type Indicator and found that intuitive/thinking types were more prone to using technology in teaching while sensory/feeling types were least likely to use technology in the classroom. This research infers that various educator dispositions may also perform differently in the virtual learning environment.

In context of the above research, we researched online instruction from both student and faculty perspectives. Students were asked to evaluate what they considered important characteristics of quality online teaching, while instructors were asked to rate their teaching dispositions. We discuss both their similarities and differences.

## Methods

### *Instruments*

*Student Survey*

A 14-item survey (see Appendix A) was constructed to elicit those items that students perceived as being critically important to their success in an online course. The survey was designed by consultants from two large east coast community colleges. Student opinion forms used at both colleges were revised into one survey instrument designed to assess student perceptions of online instruction, consisting of four categories: expertise, pedagogy, technology, assessment. The survey was screened and approved by the Institutional Review Board (IRB). The survey was measured on a 4-point Likert scale (1 = *not important* to 4 = *critically important*).

*Faculty Survey*

The Virtual Teaching Dispositions Scale (VTDS) (see Appendix B) was used in this study to assess the characteristics and competencies of online faculty. The VTDS, developed by Welch, Napoleon, Hill, and Roumell (2014), is a multidimensional instrument to assess the professional teaching dispositions that are associated with effective online instruction. It consists of 25 items which measure four distinct dispositional categories:

social presence, virtual/technological presence, pedagogical presence, and expert/cognitive presence. The survey is measured on a 4-point Likert scale (1 = *very untrue of me* to 4 = *very true of me*).

### *Participants*

*Students*

Over 1,480 students enrolled in online courses at a community college were invited to complete the student survey. A total of 518 completed the survey: 399 female (77.0%), 113 male (21.8%), and 6 preferred not to identify gender (1.2 %). The ages of the participants ranged from 18 to over 45 years: 233 aged 18-24 (45.0%), 149 aged 25-34 (28.8), 78 aged 35-45 (15.1%), 54 aged over 45 (10.4%), and 4 preferred not to respond (.8%). The majority of the students identified themselves as Caucasian (*n* = 347, 67.0%).

*Faculty*

Faculty who conducted their courses in an online format, either fully or partially, were invited to complete the VTDS. All faculty had been identified by college officials as fully qualified online instructors. Each instructor completed training in online instruction and use of appropriate technology. A total of 103 responded.

## Data Analysis and Results

The purpose of this study was to explore the similarities and differences between student and faculty perceptions of quality online teaching. Therefore, both descriptive and inferential statistics were used to examine the data. Given that both instruments had three similar subscales, comparisons were examined between the following: Expertise and Expert/Cognitive Presence; Pedagogy and Pedagogical Presence; Technology and Virtual/Technological Presence.

### *Student Perceptions*

Descriptive statistics were computed on each of the items of the student survey. Results are provided in Appendix A. Table 1 provides the descriptive statistics for the four subscales. The alpha coefficient for the entire instrument (all 14 items) was .673.

**Table 1. Student Perceptions Subscale Reliabilities.**

| Subscale | N | Mean | Standard Deviation | Cronbach's Alpha |
|---|---|---|---|---|
| Expertise | 514 | 3.423 | .555 | .709 |
| Pedagogy | 514 | 3.969 | .125 | .632 |
| Technology | 514 | 3.795 | .303 | .689 |
| Assessment | 514 | 3.962 | .165 | .590 |

An ANOVA was conducted to determine if significant differences between age groups and gender existed. Within the 18-24 age range, there was a significance difference between genders related to perceptions of pedagogy, $F(1, 229) = 10.265$, $p = .002$ and technology, $F(1, 229) = 5.698$, $p = .018$. In addition, within the 25-34 age range, there was a significance difference between genders related to perceptions of pedagogy, $F(1, 146) = 5.505$, $p = .020$.

### *Faculty Perceptions*

The Cronbach's alpha was computed for each subscale of the VTDS (see Table 2). All four subscales showed good internal consistency and were consistent with the findings from Welch et al. (2014). The alpha coefficient for the entire instrument (all 25 items) was.798.

**Table 2. Faculty Perceptions Subscale Reliabilities.**

| Subscale | N | Mean | Standard Deviation | Cronbach's Alpha |
|---|---|---|---|---|
| Expert/Cognitive Presence | 103 | 3.680 | .382 | .746 |
| Pedagogical Presence | 103 | 3.469 | .452 | .754 |
| Virtual/Technological Presence | 103 | 3.667 | .340 | .816 |
| Social Presence | 103 | 3.778 | .294 | .774 |

Descriptive statistics were computed on each item of the VTDS individually. Results are provided in Appendix B.

### *Comparison of Student and Faculty Perceptions*

Classic theoretical model for higher education classrooms suggests that student success is related to instruction that encourages: 1) student-faculty contact; 2) cooperation among students; 3) active learning; 4) prompt feedback; 5) time on task; 6) high expectations; and 7) respect for diverse ways of learning (Chickering & Gameson, 1987). The COI model (Rourke, Anderson, Garrison, & Archer, 2001) defined three core dimensions of importance for learners in online learning environments, including cognitive presence, teacher presence, and social presence. Pelz (2004) found that individuals who become exemplary online educators tended to create carefully designed online courses that promote presence, and more specifically educators who actively work to address cognitive, teacher, and social presence. In addition, work by Welch et al. (2014) identified a factor related to virtual/technological presence, which included virtual appearance, online communication, and technology-mediated skills.

Therefore, for the purpose of this study, comparisons were examined between the following subscales of the student survey and the VTDS: Expertise and Expert/Cognitive Pres-

ence; Pedagogy and Pedagogical Presence; Technology and Virtual/Technological Presence.

## Faculty Expertise

In the student survey, the subscale *Expertise* contains items related to the importance of the academic qualifications of the instructor and the recognition of the instructor as being an expert in his or her field. In the VTDS, the *Expert/Cognitive Presence* subscale contains items related to the instructor's knowledge in their content area, commitment to academic expertise, and passion for education and is manifested by the instructor through the use of scholarly references and resources, clear and concise writing, and providing clarification and disambiguates content (Welch et. al., 2014).

Analysis of the results indicates that students and faculty have very different perceptions regarding the importance of faculty expertise (see Figure 1). Although both groups value the expertise of instructors, faculty place more value on this attribute. This difference, -0.257, 95% CI [-0.368, -0.145], was significant $t(615) = 4.530$, $p < .000$.

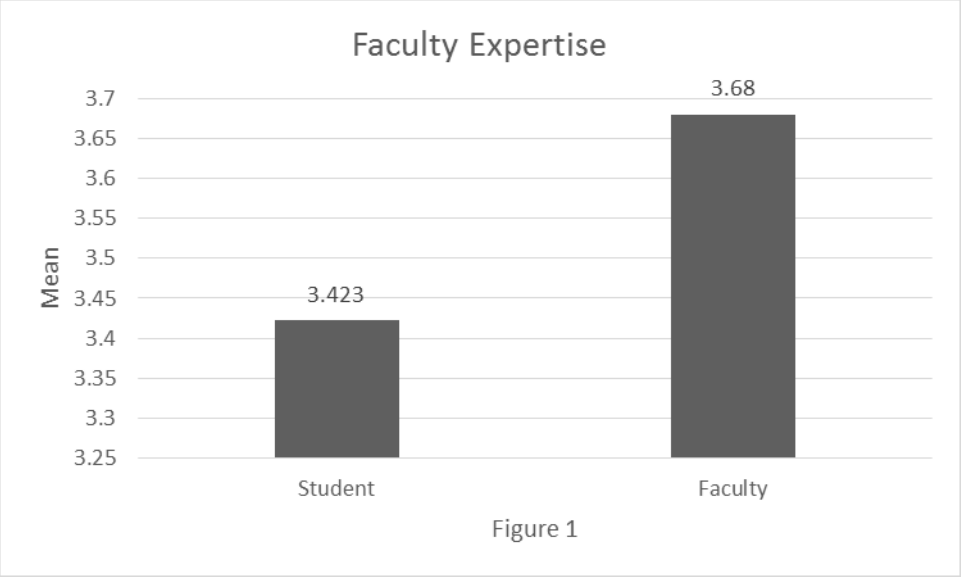


**Figure 1: Mean Values for Faculty Expertise.**

The disparity between student perceptions of the importance of the expertise of their instructors and the instructors' content knowledge and reputation in their profession is unclear, thus the issue invites additional investigation. Specifically, it would be important to know the degree to which credentials of the instructor, such as type of degree, type of degree granting institution, and number of publications, impacts online student academic success, motivation, and course satisfaction.

***Pedagogy***

The subscale *Pedagogy* of the student survey contains items related to effective and timely communication by the instructor and overall organization of the course material. Similarly, items in the *Pedagogical presence* subscale of the VTDS address issues of organization, management, effective communication and feedback, and facilitation of active learning. The disposition of *Pedagogical presence* has been shown to be manifested by the instructor providing rejoinders and prompts to further discussion, opportunities for student-to-student interaction and peer learning opportunities, and prompt responds and meaningful conversations on threaded discussion boards (Welch et. al., 2014).

While both groups identify issues related to pedagogy as important elements of instuction, analysis of the results indicates that students place a far greater importance of these factors (see Figure 2). The difference, 0.500, 95% CI [0.454, 0.546], was significvant $t(615) = 21.382$, $p < .000$.

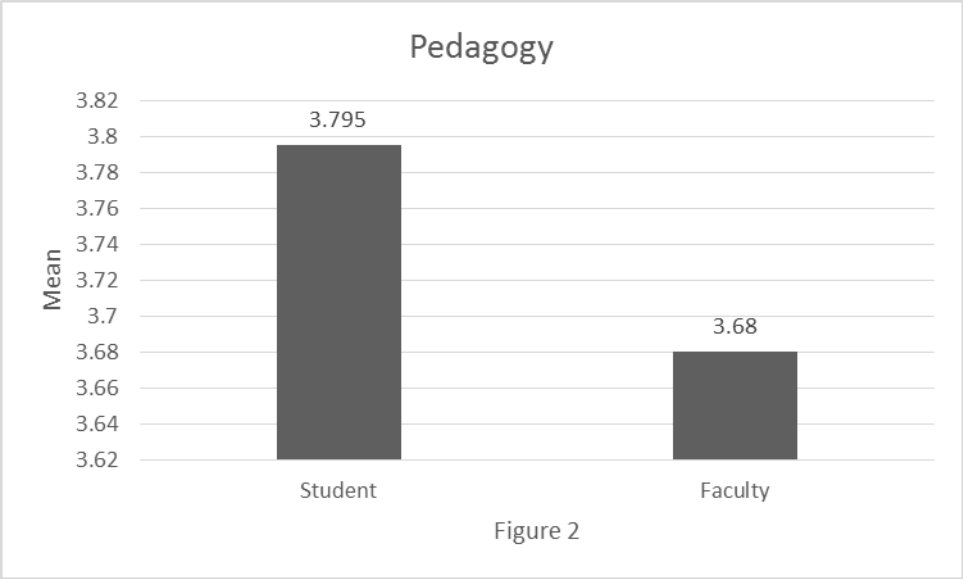


**Figure 2: Mean Values for Pedagogy.**

***Technology***

The student survey included items related to prompt communication in online formats and effective use of technology in the delivery of online course material. The VTDS subscale, *Virtual presence,* identified items related to the dispositional need of instructors to possess an innate desire and motivation for continual improvement in their ability to deliver high quality content in the online classroom environment. *Virtual presence* has less to do with personality and behavior than with competence. It is manifested through the effective use of technology and online formats to enhance learning and provide a meaningful instructional environment (Welch et. al., 2014).

There is contrast between student and faculty perceptions of effective use of technology in online instruction (see Figure 4). The difference, 0.128, 95% CI [0.0624, 0.194], was significant $t(615) = 3.832$, $p < .000$.

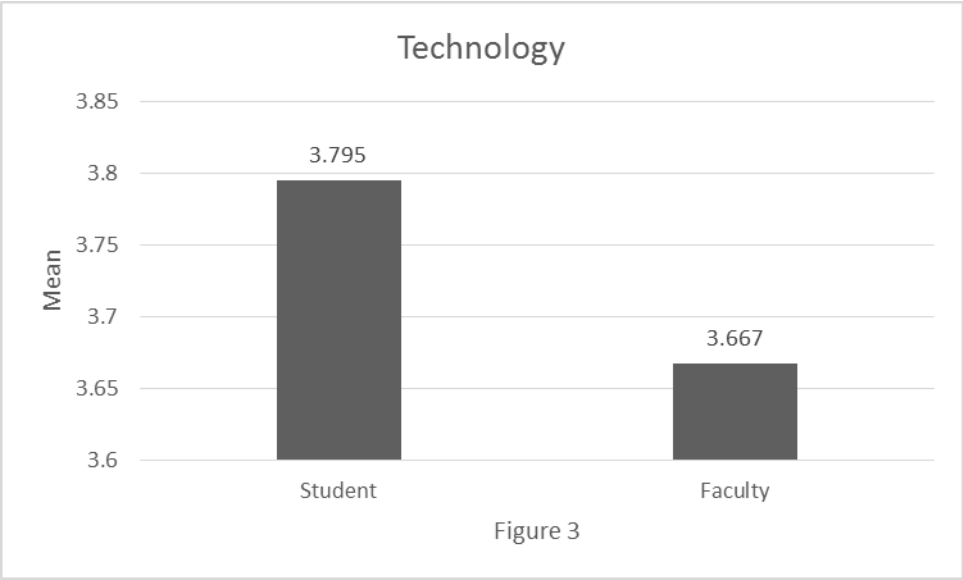


**Figure 3: Mean Values for Technology.**

## Conclusion

This paper has considered online teaching perceptions from perspective of both students and faculty. As noted throughout this paper, these two groups have marked similarities and differences in what is quality online teaching.

As the proliferation of online courses continues, a different research perspective is needed. At present, there is a wealth of quantitative data regarding such variables as number of students, numbers of courses, student demographics, types of courses and curriculum. In contrast to this information, additional research is needed dealing with the following:

1. What is "quality online" instruction? Although a lot has been written on this topic, the vast majority has been from the perspective of faculty or administrators. Importantly, those writings are generally not research based but opinion offerings.
2. How does "quality online" instruction impact student academic success? Most data concludes that student success occurs in the following order: tradition classroom (about 75%), hybrid course (about 70%), online course (about 65%). There has been no good research explanation for these differences.
3. Do different online teacher characteristics impact different student demographics? For example, are there more effective teaching styles on the basis of student gender, age, ethnic group?

4. Are there online faculty hiring implications? This question is particularly relevant for higher education. In contrast to K-12 education where training and certification are required, college level teaching usually requires only a graduate degree. Simply having a graduate degree certainly does not guarantee classroom or online teaching competence.
5. How important is meeting online students' needs of "outstanding online teaching"? Additional research would be helpful toward determining how much (if at all) "outstanding online teaching" influences online students for the following: course satisfaction, motivation, and taking additional online courses.

This study presented quantified data regarding quality online teaching perceptions. Those perceptions were from both a student and faculty perspective. As noted above, much more research is needed to validate quality online instruction and its impact on student academic success.

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# Appendix A

### Student Survey

| Subscale | Item | N | Mean | Standard Deviation |
|---|---|---|---|---|
| Expertise | Provide creative and innovative course material (e.g., YouTube, online simulations, and web-based content) | 512 | 3.541 | .726 |
| Expertise | Be recognized as an expert in their content area or discipline | 509 | 3.751 | .516 |
| Expertise | Provide information on his or her qualifications, experience, and academic credentials | 509 | 3.338 | .788 |
| Expertise | Get to know me as an individual | 511 | 3.059 | .939 |
| Pedagogy | Clearly communicate course expectations and requirements | 514 | 3.990 | .098 |

| | | | | |
|---|---|---|---|---|
| Pedagogy | Provide a well-organized course syllabus | 513 | 3.985 | .131 |
| Pedagogy | Provide course content easy to follow and navigate | 512 | 3.973 | .163 |
| Pedagogy | Provide timely feedback on assignments and exams | 512 | 3.932 | .275 |
| Technology | Be sensitive to student needs (e.g., extend due dates for illness, modify assignments for military deployment) | 513 | 3.688 | .569 |
| Technology | Provide multiple means to establish and maintain contact (e.g., email, office phone, cell phone) | 508 | 3.730 | .562 |
| Technology | Be skilled and proficient at using technology | 510 | 3.833 | .399 |
| Technology | Promptly respond to questions, emails, phone calls, and other contacts | 512 | 3.926 | .262 |
| Assessment | Provide clear and meaningful feedback on assignments and exams | 511 | 3.951 | .233 |
| Assessment | Grade assignments and exams fairly and consistently | 512 | 3.975 | .157 |

# Appendix B

## Virtual Teaching Dispositions Scale (VTDS)

| Subscale | Item | N | Mean | Standard Deviation |
|---|---|---|---|---|
| Expert/Cognitive Presence | I demonstrate commitment to academic expertise. | 103 | 3.86 | .38 |
| Expert/Cognitive Presence | I have a passion for education. | 101 | 3.90 | .36 |
| Expert/Cognitive Presence | I make content meaningful for the learner. | 102 | 3.75 | .46 |
| Expert/Cognitive Presence | I anchor learning strategies in the context of my subject matter. | 102 | 3.61 | .58 |
| Expert/Cognitive Presence | I adapt learning strategies within the context of my subject matter. | 103 | 3.62 | .52 |
| Expert/Cognitive Presence | I am very knowledgeable in my content area. | 103 | 3.90 | .33 |
| Pedagogical Presence | I respond to student inquiries in a timely manner. | 103 | 3.87 | .37 |
| Pedagogical Presence | I return work to students promptly. | 103 | 3.65 | .56 |
| Pedagogical Presence | I create a schedule and stick to it. | 103 | 3.53 | .64 |
| Pedagogical Presence | I am organized. | 103 | 3.59 | .62 |
| Pedagogical Presence | I communicate clearly and effectively in writing. | 103 | 3.77 | .46 |
| Virtual/Technological Presence | I adapt well in online delivery formats. | 103 | 3.51 | .70 |
| Virtual/Technological Presence | I maintain genuine and meaningful contact in online formats. | 103 | 3.51 | .61 |
| Virtual/Technological | I project interpersonal skills in the | 103 | 3.48 | .67 |

| | | | | |
|---|---|---|---|---|
| Presence | online environment. | | | |
| Virtual/Technological Presence | I strive to continually improve performance in the online classroom. | 103 | 3.78 | .47 |
| Virtual/Technological Presence | I maintain genuine and meaningful contact in online formats. | 103 | 3.45 | .70 |
| Virtual/Technological Presence | I am intrinsically motivated to master new information technology. | 103 | 3.37 | .76 |
| Virtual/Technological Presence | I utilize new technologies to enhance learning. | 103 | 3.30 | .65 |
| Virtual/Technological Presence | I communicate comfortably almost entirely through writing. | 102 | 3.35 | .69 |
| Social Presence | I am empathetic to the needs of my students. | 103 | 3.73 | .47 |
| Social Presence | I relate with students as people. | 103 | 3.83 | .48 |
| Social Presence | I am tactful with students in emotionally stressful situations. | 103 | 3.79 | .44 |
| Social Presence | I am flexible in dealing with students' needs (due dates, absences, etc.). | 103 | 3.29 | .62 |
| Social Presence | I try to establish a welcoming learning environment. | 103 | 3.89 | .37 |
| Social Presence | I understand the needs of my students. | 103 | 3.48 | .58 |