CRITICAL REFLECTION OF REVISING THE INSTRUCTOR PRESENCE TECHNIQUE VALUE SCALE

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ABSTRACT

The article is a critical reflection on a study conducted to evaluate the student-perceived value of instructor presence techniques. The study utilized the author-created Instructor Presence Technique Value Scale (IPTVS) in attempts to measure variations in the value of differing instructor presence techniques across communication media. The authors reflected on the data and the presentation of results to determine what key changes were needed to create a more valid and reliable iteration of the IPTVS. This reflective article includes the lessons learned and clarifications of value indicators.

Keywords: instructor presence, instructor presence techniques, online learning, assessment tool, communication mediums, Instructor Presence Technique Value Scale

REVISING THE INSTRUCTOR PRESENCE TECHNIQUE VALUE SCALE: A REFLECTION

While numerous studies offer "best practices" for online teaching, the reality is that online education is so complex that it may defy broad, generalizable best practices that are relevant across discipline, course level, and context. Even attempting to focus on only one element of online teaching (in this case, communication media to foster instructor personalization) has proven challenging. The purpose of this article is to critically reflect on the scholarly process utilized to design and revise a scale to measure the relative value of various forms of communication for fostering instructor personalization in the online classroom. After providing the initial rationale, we reflect on challenges encountered during scale construction, and we offer considerations for the continued development of the Instructor Presence Technique Value Scale (IPTVS).

The literature on best practices offers many suggestions (some complimentary, some contradictory) for incorporating multimedia into the online classroom. Reflecting on the wide variety of recommended strategies, researchers have theorized that inconsistencies in best practice

suggestions might be due to differences in the instructional goal or focus that drives multimedia inclusion (Steele et al., 2017, 2018). As such, it is possible that more clearly defining "multimedia" along with the purpose behind a "best practice" could help to clarify discrepancies in guidelines and pinpoint more consistent, usable best practices.

Initial efforts were focused on better understanding the role of instructor-generated multimedia in fostering instructor presence. Garrison et al.'s (2000) Community of Inquiry (CoI) model features three overlapping presences (teaching, social, and cognitive) that allow for meaningful interactions in an online classroom. An instructor tends to have the most impact on teaching and social presence. The instructor presence integrates the area of overlap found in the Community of Inquiry (CoI) model between teaching and social presence, and instructor presence emphasizes how each instructor integrates their sense of self into the classroom (Collins et al, 2019; Lowenthal, 2016). In the online classroom, instructor presence is not a physical presence, but rather it is the embodiment of the teacher's presence within the learning environment. Online teachers who can "embody" themselves in the online classroom can create a learning environment where students feel more connected to the teacher, course, and/or content (Bollden, 2016; Steele et al., 2017, 2018). Instructor presence is a critical component of the online classroom as it allows the teacher to humanize virtual learning activities and connect with students.

Instructor personalization can positively impact student confidence, performance, social presence, teaching presence, and even student satisfaction (Clark & Mayer, 2011; Mandernach et al., 2018). However, there are many different multimedia options for integrating instructor-personalized content into the online classroom. After reviewing the literature, we found no tool available to address the study's research questions. Thus, we created an assessment scale, the ITPVS) to define and measure first-year online undergraduate students' perceived value of instructor-generated personalization techniques in the online classroom across five multimedia dimensions (i.e., text, image, video, audio, and interactive). Additionally, the scale needed to be able to examine students' perception of the relationship between each type of multimedia and its role in the online classroom (i.e., connects to course content, classmates, instructor; increases the level of interest; provides an outlet for immediate feedback). With a completed ITPVS, data were collected to determine initial scale function. The results of this study were presented at the 2019 SoTL Commons Conference (Steele et al., 2019).

Through presentation, active discussion, and reflection with other experts in the field during the SoTL Commons Conference, several challenges were identified with the ITPVS tool, such as convoluted variables and ambiguous operational definitions. These challenges added to the difficulty of analyzing the results and draw meaningful conclusions. This article provides an overview of the reflective process we utilized to refine and extend the research and revise the ITPVS tool.

UPDATING THE INSTRUCTOR PRESENCE TECHNIQUE VALUE SCALE

Discarded the Term "Personalization Techniques"

The term "personalization techniques" was confused with "personalized learning." Many instructional designers and technology professionals regard personalization as something being individualized for each student. During

the conference presentation (Steele et al., 2019), several audience members assumed the term "personalization techniques" referred to techniques used to personalize content and comments. In contrast, "personalization techniques" was intended to mean the content (i.e., additional resources and multimedia) that was developed by the instructor to embody their presence and personality into the online course. With this in mind, we changed the term "personalization techniques" within the Personalization Techniques Value Scale to "instructor presence techniques," and the scale was renamed the Instructor Presence Technique Value Scale (IPTVS).

Differentiation Between Public and Private Communication Models

Of note, some instructor presence techniques were personalized to an individual student, but not all techniques were personalized to the student. Furthermore, the most time-efficient and effective way for the instructor to increase their presence in an online setting is through using techniques that reach multiple students at once (Rios et al., 2018). That said, it was not the study's focus to measure how content was personalized to each student but how much value a student placed on different attempts made by the instructor to embody their presence in class. This reflection brought up the potential need to further differentiate techniques based on whether the instructional techniques were private (for one student) or public (for the whole class).

After additional research into the communication models and computer-mediated communication mediums (Jeremić et al., 2012; Normore & Blaylock, 2011), we determined that the terms "one-to-one (private teaching)" and "one-to-many (public teaching)" would be used to differentiate the two communication models in which the various communication media and techniques could be classified (Shenoy, 2019). An example of one-to-one (private teaching) could be a message sent to the student in the discussion forum that mentions the student's name and/or targets elements of the student's post for discussion, while an example of one-to-many (public teaching) could be a general post that shares personal experience and invites the whole class to discuss the topic. One-to-many (public teaching) in the discussion forum can also address an individual student and the class as a whole. For example, the discussion post might be titled, "Dr. Henderson to Timmy and Class (Perception vs. Reality)." This discussion post responds to the individual student while inviting the rest of the class into the discussion. These two concepts can also be clearly illustrated in the differences between a video lecture that focuses on one concept for a class (public teaching) or video feedback embedded within an individual student's essay and that is accessible only to that particular student (private teaching). While both are effective, it is essential to delve deeper into which instructor presence techniques are of the most value to students. Determining this could help teachers focus their time on the most valuable ways to embody themselves in the online class.

Communication Media are within Communication Models

Garrison et al., (2000, p. 90) define social presence as, "The ability of participants in a community of inquiry to project themselves socially and emotionally as 'real' people (i.e., their full personality), through the medium of communication being used." A communication medium is a means by which messages are transmitted between the instructor and student within a given model (Shenoy, 2019). Instructors use various communication media to incorporate instructor presence techniques. Students may find instructor presence techniques within communication media valuable for different reasons. Most communication media in the online setting are computer-mediated such as typed out classroom announcements, web video, audio lectures, and more, while some, such as phone calls, are not. Though the first version of the IPTVS included differentiating between five communication modes (text, static visual, audio, video, and interactive web), these were not organized by model and one mode (text) was confused with text messaging students via cell phone (such as using the Remind application). The communication mode of "text" was changed to "typed words" within the value scale to clarify that this medium represented instances when communication was completed through typed words in the online classroom.

Teacher-Generated Versus Generic

The original value scale included questions about

both instructor-generated and generalized materials. This was done to be able to compare the values of instructor-generated materials to that of generalized materials; however, this may have been attempting to measure too many different subvariables in one scale. With additional review and discussion of the data collected and the results of the study, we could not guarantee that students knew that certain preset classroom items were not instructor personalized but instead created by a curriculum department. For example, in the online learning environment used in this study, a standardized curriculum is utilized. and the same instructional materials are preloaded into all sections of a given online course. Students may not realize that these instructional materials were neither created nor selected by the instructor.

Further, some students also believe other aspects of the online classroom were also created and/or controlled by the instructor when they are standardized components of the course. In contrast, there were also instances when instructor-generated and/or edited material may have been perceived as standardized content. To mitigate any possible confusion in future studies, we removed questions about generalized materials from the ITPVS so that it focuses only on instructor-generated content.

Updates to Value Indicators

As mentioned before, there may be different kinds of "value" for varying techniques across media and models. The aim of developing the ITPVS was to capture how students' perceptions of value differed between techniques and media. If various instructor presence techniques are found to be more valuable and more straightforward to include than others, instructors can focus efforts to increase their instructor presence by employing the targeted techniques.

The original ITPVS included nine indicators of value. They were as follows:

- Provides immediate feedback to foster understanding.
- I like using it.
- Makes me feel connected to the instructor.
- Makes me feel more connected to the content.
- Makes me feel more connected to my classmates.
- Makes learning easier for me.

- I have access to it at any time.
- It is how I am used to learning.
- It is easy for me to print out and have on hand.

The nine indicators of value were not well defined. Reflecting on these values and additional research helped us to clarify and pare the indicators down from nine to six within the revised ITPVS. The current value indicators are (1) enjoyment, (2) self-efficacy, (3) ease of use, (4) familiarity/comfort, (5) efficiency, and (6) connection. Each value is operationally defined as follows:

- Enjoyment (Is it fun?)—Enjoyment is an essential value for students in the online modality because if a student enjoys doing a learning activity, they are more likely to be engaged in it. Cameron and Bizo (2019) noted that enjoyment is an important factor within adult learning in order to sustain a higher level of achievement. Students who have fun with instructor presence techniques are more likely to engage in them. While enjoyment does not predict academic success, it can lead to a higher level of student engagement (which is linked to learning outcomes).
- Self-Efficacy (Do I believe it improves my learning?)—Self-efficacy refers to whether or not students believe that something helps their learning. Online learning self-efficacy can be defined as "an individual's perceptions of his or her abilities to successfully complete specific tasks required of online learners" (Zimmerman & Kulikowich, 2016, p. 181). The research shows that online learning self-efficacy is one of the most powerful predictors of student perceived learning (Alqurashi, 2019). Self-efficacy is important as students only place value on tools they deem useful.
- Ease of Use (Is it easy to use?)—Ease of use focuses on how easy it is for the student to be able to use a tool. Instructors can design high caliber instructor presence techniques but if students are not able to easily access them or they are hard to use, then students are unlikely to find value in them. Nagy (2018) noted that a student's

- perceived ease of use impacts video usage. In the online environment, engaging in instructor presence techniques using various communication media is the choice that a student makes. Students will typically utilize what is easiest to use or access.
- Familiarity/Comfort (Am I familiar or comfortable with it?)—Students also prefer using things that they are comfortable or familiar with. For example, a student who is familiar with watching video lectures may prefer this option. Similarly, a student may not find value in an instructor presence technique that they have experienced. For example, if a student has never used audio lectures, the student may not find the same value in the audio lectures as another student who has experienced them.
- Efficiency (Does it fit into your life **situation?)**—Students value instructional strategies that are amenable to their busy lives and schedules. Mandernach et al. (2018) found that many students preferred audio lectures to text or video lectures because of the flexibility it allowed them because students were able to download audio files that could be listened to while driving on their commute or while completing other activities. The flexibility element of the audio lectures allowed students the convenience to fit the lectures into their busy lives, which means that efficiency and convenience may play a role in how much students value certain instructor presence techniques.
- Connection (Does it allow me to connect with others?)—Connection emphasizes the social nature of learning and the ability for a tool to connect learners with the instructor, other students, or the course content.

 Law and Law (2018) determined that connectedness was an important value in the sense of the instructors having genuine interest in their students. Perhaps, the most intriguing finding was that the instructor is crucial to the delivery of the content and student learning (Law & Law, 2018).

CONCLUSIONS AND NEXT STEPS

When we first set out to conduct a study and create a tool (IPTVS) to measure instructor personalization techniques, we underestimated the magnitude of the endeavor. Creating a scale or tool from scratch is a process that requires adjustments, patience, and even failure along the way. When creating something to this extent, it can be hard or even impossible to plan for the problems that may be encountered. For example, we had not thought about the confusion that would be caused by using the term "personalization techniques" instead of "instructor presence techniques." We also realized how important it is to take a step back after the results are in to reflect on what went well and not so well, and how the results can be used to point out issues with tool design. In the end, each edit, revision, and application of the tool helps to shape the ITPVS into a reliable and valid instrument that hopefully one day can and will be utilized in future research.

Consequently, we will revise the ITPVS with the needed changes noted from this reflection. Keeping the big picture in mind, the point of developing this scale is to find a tool that could extract student's perceived values of the different instructor presence techniques that could be streamlined across other universities, content areas, and settings. Thus, the goal is to develop a tool that could determine what students value the most across these different areas or targeted to specific areas. With the revisions as mentioned above in place, the revised IPTVS can be piloted, and researchers may be able to begin running analysis on tool validity and reliability.

REFERENCES

- Alqurashi, E. (2019). Predicting student satisfaction and perceived learning within online learning environments. Distance Education, 40(1), 133–148. https://doi.org/10.1080/01587919. 2018.1553562
- Bolldén, K. (2016). Teachers' embodied presence in online teaching practices. Studies in Continuing Education, 38(1), 1–15. https://doi.org/10.1080/0158037X.2014.988701
- Cameron, K. E., & Bizo, L. A., (2019). Use of the game-based learning platform KAHOOT! to facilitate learner engagement in Animal Science students. Research in Learning Technology, 27. https://doi.org/10.25304/rlt.v27.2225
- Clark, R. C., & Mayer, R. E. (2011). E-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning (3rd ed.). John Wiley & Sons.
- Collins, K., Groff, S., Mathena, C., & Kupczynski, L. (2019). Asynchronous video and the development of instructor social presence and student engagement. Turkish Online Journal of Distance Education, 20(1). 53–70.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. The Internet and Higher Education, 2(2-3), 87–105. http://dx.doi.org/10.1016/S1096-7516(00)00016-6
- Jeremić, Z., Milikić, N., Jovanović, J., Brković, M., & Radulović, F. (2012). Using online presence to improve online collaborative learning. International Journal of Emerging Technologies in Learning, 7, 28–35.
- Law, M., & Law, M. (2018). Assessing connectedness in an online MBA course. Journal of Instructional Pedagogies, 21. https://www.aabri.com/manuscripts/182786.pdf
- Lowenthal, P. R. (2016). A mixed methods examination of instructor social presence in accelerated online courses. In L. Kyei-Blankson, J. Blankson, E. Ntuli, & C. Agyeman (Eds.), Handbook of research on strategic management of interaction, presence, and participation in online courses (pp. 147–159). IGI Global. https://doi.org/10.4018/978-1-4666-9582-5.ch006
- Mandernach, B., Robertson, S., & Steele, J. (2018). Beyond content: The value of instructor-student connections in the online classroom. Journal of the Scholarship of Teaching and Learning, 18(4). https://doi.org/10.14434/josotl.v18i4.23430
- Nagy, J. T. (2018). Evaluation of online video usage and learning satisfaction: An extension of the technology acceptance model. International Review of Research in Open and Distributed Learning, 19(1), 160–185. https://doi.org/10.19173/ irrodl.v19i1.2886

- Normore, L. F., & Blaylock. B. N. (2011). Effects of communication medium on class participation: Comparing face-to-face and discussion board communication rates. Journal of Education for Library and Information Science, 52(3), 198–211. https://www.jstor.org/stable/41308896
- Rios, T., Elliott, M., & Mandernach, B. J. (2018). Efficient instructional strategies for maximizing online student satisfaction. Journal of Educators Online, 15(3), n3. https://www.thejeo.com/archive/archive/2018_153/rios_elliott__ mandernachpdf
- Shenoy, S. (2019). Basic communication model. PM Exam Smartnotes. https://www.pmexamsmartnotes.com/basic-communication-model/
- Steele, J. P., Robertson, S. N., & Mandernach, B. J. (2017).

 Fostering first year students' perceptions of teacher presence in the online classroom via video lectures. Journal of the First-Year Experience & Students in Transition, 29(2), 79–92.
- Steele, J. P., Robertson, S. N., & Mandernach, B. J. (2018).

 Beyond content: The value of instructor-student connections in the online classroom. Journal of Scholarship of Teaching and Learning, 18(4), 12–17. https://doi.org/10.14434/josotl. v18i4.23430
- Steele, J. P., Robertson, S. N., & Mandernach, B. J. (2019). The Underlying Pedagogy of Online Instruction. Paper presented at SoTL Commons Conference. 38 (January 25, 2019). https://digitalcommons.georgiasouthern.edu/sotlcommons/SoTL/2019/38
- Zimmerman, W. A., & Kulikowich, J. M. (2016). Online learning self-efficacy in students with and without online learning experience. American Journal of Distance Education, 30(3), 180–191. https://doi.org/10.1080/08923647.2016.1193801