



COMMENTARY

# Keys to effective online I-O master's programs: Ensuring employability

Nancy J. Stone<sup>1\*</sup>, Elizabeth L. Shoenfelt<sup>2</sup>, and Janet L. Kottke<sup>3</sup>

<sup>1</sup>Department of Psychological Science, Missouri University of Science and Technology, Rolla, MO, USA, <sup>2</sup>Department of Psychological Sciences, Western Kentucky University, Bowling Green, KY, USA and <sup>3</sup>Department of Psychology, California State University–San Bernardino, San Bernardino, CA, USA

\*Corresponding author. Email: [nstone@mst.edu](mailto:nstone@mst.edu)

As leaders in industrial-organizational (I-O) master's level education, and with one of our I-O master's programs<sup>1</sup> offered in an online synchronous program along with the face-to-face students, we are grateful that Kraiger et al. (2022) began this discussion of online I-O graduate education. In our opinion, remote delivery is here to stay. Just as with brick-and-mortar (B&M) programs, there will be variability and different emphases in courses and programs offered remotely; however, clarity in what constitutes an appropriate online program is needed. Here, we seek to define the differences and variability within full-program remote delivery. Our focus is on remote delivery of programs where students can complete a master's program completely online; however, much of what we discuss can be applied to blended delivery programs. In addition, we describe more fully how online programs can develop employability.

## What constitutes online delivery?

With advances in technology and an ongoing pandemic, more students, academics, and employers have exposure to remote delivery. It is likely a number of faculty will envision new modes of delivery that will ensure the development of primary competencies in our I-O graduate students. We need to define what it means to have an “online” course or program because there are different delivery methods. A shared understanding of what constitutes online learning will facilitate comparison and contrast when designing, implementing, and evaluating online learning. For the purpose of this paper, we reference Stone and Sanders (2020) who indicated that online programs range from completely asynchronous to completely synchronous; regardless of level of synchronicity, all “online” methods require some form of computer mediation for instructors and learners. Asynchronous delivery methods such as discussion boards or recorded online lectures reduce the media richness (e.g., Daft & Lengel, 1984) and the spontaneity or dynamics of the interaction. At the other extreme, online courses can be offered completely synchronously.

Simply transitioning one's teaching from in-person to a remote delivery medium would not normally be considered to be online or distance education (or, at least not quality online delivery of educational materials). Online teaching cannot be the mere addition of electronic transmission of an in-person class; different delivery methods and teaching techniques are needed. Thus, we agree with Kraiger et al. (2022) that developing online courses is time intensive, requiring great preparation, and it often requires more time for interacting with students, not to mention common frustrations with technical difficulties. To reduce some of the technical frustrations,

---

<sup>1</sup>Missouri University of Science and Technology

distance students are required to have the appropriate technology for participating in the online program. We do not consider blended or hybrid methods, where some requirements are completed through remote delivery and some through B&M delivery, to be the determinant of an online program. For example, one of our universities offers a B&M I-O master's program that also has an online program ("distance") option. Online students may attend synchronously with B&M students but, if needed, distance students also can participate asynchronously through the recording of class lectures and discussions. This delivery option provides the distance students, primarily working professionals who are geographically dispersed, greater flexibility. This flexibility allows for the inclusion of more working students who provide lived experience that adds much richness to course discussions and projects relative to more traditional students who have limited work experience.

Students applying to online programs should investigate these programs just as they would any on-campus program. Online learning is not for everyone, but it is a good alternative for many students who have the motivation to study online. The instructional design may be the most important to student learning (Manwaring et al., 2017), but only if students self-select into online coursework (Stone, 2021). During the pandemic when online learning was mandatory, conscientiousness was positively related to anticipated grades (Stone, 2021). Stone and Sanders (2020) provided information to potential I-O master's students about how different delivery methods could affect various aspects of the program (e.g., demonstrations, testing, applied experiences, mentoring, and advising). Given the flexibility of online delivery and that students were more receptive to online learning after their experiences with mandatory online delivery (Stone, 2021), the delivery of online master's programs should continue to improve, ensuring that I-O students have the competencies that make them highly employable.

### Developing employability

Any program, whether online, on campus, or hybrid, needs to develop the competencies specified in the *Guidelines for Education and Training in Industrial-Organizational Psychology* from the Society for Industrial and Organizational Psychology (SIOP, 2016). The *Guidelines*, though, do not indicate *how* specific competencies should be developed. We believe that with the proper technology and teaching support, it is possible to develop an online master's program that provides the necessary characteristics of employability (Hogan et al., 2013). According to Hogan et al. (2013), employability is the ability to acquire and maintain a job, which requires a person to be (a) Rewarding to work with, (b) Able to do the job, and (c) Willing to do the job (i.e., RAW).

Shoenfelt et al. (2013) reported that internships help develop employability, especially R; thus, Kraiger et al. (2022) suggested that online programs needed to offer internships to develop R. Although we strongly support the notion of students having internships whether required or optional, other activities can contribute to the development of R. For example, it is possible to develop human interactions and quality mentoring sessions that appropriately and effectively develop professional interpersonal skills.

We agree with Kraiger et al. (2022) that it is important to provide "live" interactions among peers and faculty, but we argue that simulating face-to-face or in-class interactions within the virtual environment is not as challenging as it was even just a few years ago. With Zoom and other similar and advancing technologies, the faculty and students can see (assuming the camera is on), hear, and interact with each other. In the program example cited above, distance students frequently opt for the synchronous sessions, suggesting a desire for the simulated classroom experience.

It is important to develop a culture for synchronous instruction that students should be present "in class" with their cameras on.<sup>2</sup> Especially when speaking, "cameras on" creates a better

<sup>2</sup>The need to be visible to develop "community" needs to be balanced against the known effects of "Zoom fatigue" (Shockley et al., 2021).

classroom experience. Most students are willing to turn on their cameras as long as they have the bandwidth to do so. Some students with their cameras off may not be in class (i.e., not present virtually). Furthermore, the requirement to keep cameras on helps the students develop stronger relationships with their peers. This sense of community is important because they all are participating in the same program, with the same entrance and graduation requirements.

It is possible to have other synchronous online class activities (e.g., using Google docs) that distance and on-campus students complete and asynchronous students can access at a later time. This is similar to distributing handouts in class that students complete individually and then use for discussion. These activities foster in-class interactions, as does the use of “break-out” rooms.

Similarly, it is possible to simulate face-to-face advising or mentoring sessions. The most important requirement is the ability to see each other during the discussion. With current technology, it is possible to have everyone present with active cameras. Although spontaneous meetings are not as common virtually, it is possible to schedule meetings or provide virtual office hours for anyone to join, which can facilitate impromptu interactions.

Regarding student ability, “A,” the same expectations should be set for on-campus and distance students based on the *Guidelines* (SIOP, 2016); likewise, the criteria for assessment of student performance should be the same. For example, in the program mentioned earlier, the distance program has individual and group applied projects (groups often composed of a mix of on-campus and distance students), exams, papers, and so forth. The synchronous interaction with the students during class helps build understanding and support student learning. Similarly, online/virtual office hours provide additional assistance for students who need it. An activity that develops evaluation skills is requiring students to critique previously recorded peer presentations. In addition, it is possible to have master’s students involved in research, performing literature searches and reviews, writing, and data collection for online projects.

The Willing component of the RAW model is addressed through student motivation to learn online. Without adequate motivation, even a well-designed online program will not lend itself to effective learning. However, online learning is a good alternative for many motivated students who cannot attend B&M programs.

### Concerns and considerations for online instruction

Relative to doctoral programs, there has been rapid growth in online master’s programs. Zelin *et al.* (2015) indicated that practitioners working in industry represented the largest employment category for master’s graduates; accordingly, it is important to the integrity of our field that our online master’s programs are as rigorous as the B&M programs. We have witnessed online programs that are well staffed with full-time and adjunct faculty with degrees and extensive experience in I-O psychology. Unfortunately, we also have witnessed online “I-O” programs where few if any faculty are trained in I-O psychology and where the student–faculty ratio is extremely high.<sup>3</sup>

Thus, as Kraiger *et al.* (2022) noted, it is critical to maintain a reasonable class and program size. As the demand for online programs grows, I-O faculty must resist the demands of some university administrators who might view online I-O programs as an opportunity to generate revenue and, as such, apply pressure to admit an unreasonably large number of students without regard for the integrity of the program.

To maintain program quality and to ensure students can focus on learning the material and skill development activities, it is beneficial to assist with navigating the technology used for online delivery prior to and throughout the term. When prepping the online course, it is helpful to seek input from colleagues and from students who have taken other online courses who can give insightful suggestions for improvement (e.g., what was confusing, unclear).

<sup>3</sup>Kraiger *et al.* (2022) suggest course caps of 10 for online doctoral programs and 15 for online master’s programs.

## Conclusion

As advancing technologies make remote interactions more feasible and faculty become more adept at using technology, the number of online I-O programs is likely to grow. Improvements in technology, likely to increase ease of use, will make the ability to deliver remotely more effective. With appropriate design of online programs and courses, criteria to assess student competencies, and course and program activities/projects, it is possible for I-O master's students to develop the SIOP core competencies and a high level of employability.

## References

- Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organization design. *Research in Organizational Behavior*, *6*, 191–233.
- Hogan, R., Chamorro-Premuzic, T., & Kaiser, R. B. (2013). Employability and career success: Bridging the gap between theory and reality. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *6*, 3–16.
- Kraiger, K., Fisher, S., Grossman, R., Mills, M. J., & Stizmann, T. (2022). Online I-O graduate education: Where are we and where should we go? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *15*(2), 151–171.
- Manwaring, K. C., Larsen, R., Graham, C. R., Henrie, C. R., & Halverson, L. R. (2017). Investigating student engagement in blended learning settings using experience sampling and structural equation modeling. *Internet and Higher Education*, *35*(October), 3521–3533. doi: [10.1016/j.iheduc.2017.06.002](https://doi.org/10.1016/j.iheduc.2017.06.002)
- Shockley, K. M., Gabriel, A. S., Robertson, D., Rosen, C. C., Chawla, N., Ganster, M. L., & Ezerins, M. E. (2021). The fatiguing effects of camera use in virtual meetings: A within-person field experiment. *Journal of Applied Psychology*, *106*(8), 1137–1155. <http://dx.doi.org/10.1037/apl0000948>
- Shoenfelt, E. L., Stone, N. J., & Kottke, J. L. (2013). Internships: An established mechanism for increasing employability. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *6*(1), 24–27. doi: [10.1111/iops.12004](https://doi.org/10.1111/iops.12004)
- Society for Industrial and Organizational Psychology, Inc. (2016). *Guidelines for education and training in industrial-organizational psychology*. <https://www.siop.org/Events-Education/Graduate-Training-Program/Guidelines-for-Education-and-Training>
- Stone, N. J. (2021). Understanding learning environments, personality, and proctoring during mandatory remote delivery. *Proceedings of the Human Factors and Ergonomics Society 65th Annual Meeting*, *65*(1), 767–770.
- Stone, N. J., & Sanders, A. M. F. (2020). Applying to I-O master's programs: Program selection, undergraduate preparation, and application process. In E. L. Shoenfelt (Ed.), *Mastering industrial-organizational psychology: Training issues for master's level I-O psychologists* (pp. 17–37). Oxford University Press.
- Zelin, A., Lider, M., & Doverspike, D. (2015, December). *SIOP career study executive report*. Center for Organizational Research, The University of Akron. [https://www.siop.org/Portals/84/PDFs/Professionals/SIOP\\_Careers\\_Study\\_Executive\\_Report\\_FINAL-Revised\\_031116.pdf?ver=2019-06-26-075622-550](https://www.siop.org/Portals/84/PDFs/Professionals/SIOP_Careers_Study_Executive_Report_FINAL-Revised_031116.pdf?ver=2019-06-26-075622-550)

---

**Cite this article:** Stone, N. J., Shoenfelt, E. L., and Kottke, J. L. (2022). Keys to effective online I-O master's programs: Ensuring employability. *Industrial and Organizational Psychology* *15*, 186–189. <https://doi.org/10.1017/iop.2022.6>