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Developing and Managing I-O Online: What’s Behind the Virtual Classroom?

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The authors would like to thank Dr. Satoris Culbertson for her support of this paper and her feedback on earlier drafts of this manuscript.

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In recent years there has been an increase in the number of courses and degree programs offered online. This is particularly true in the field of industrial and organizational psychology, wherein many students are working professionals who, while unable to leave their jobs, are seeking convenient ways to supplement their experience with the necessary education. Despite this surge in student interest, many educators lack explicit training in making the transition to online education. Here, a variety of individuals experienced in various aspects of developing online I-O degree programs—both undergraduate and graduate—discuss best practices for such a program as well as discuss its pedagogical challenges. In attempts to guide other institutions developing similar programs in the future, these individuals discuss what has (and has not) worked as they have supplemented their institutions’ traditional on-campus I-O programs with online equivalents.

First Things First: Is a (Successful) Online Program in I-O Possible?

Inevitably, online degrees will be questioned for the foreseeable future, and those institutions offering them have a responsibility to critically consider and respond to such concerns. Institutions should also consider such concerns while developing the program, putting forth only those programs that are justifiable and quality assured. For instance, it is necessary to consider what types of degrees are feasible in an online format. Among the schools represented here, all were emphatic that although bachelors and master’s degrees are possible via distance, the online format is not optimal for doctoral degrees. Specifically, doctoral degrees require a frequent and intense one-on-one student–faculty interaction that would likely be severely compromised in an online format. Bachelors and master’s degrees, on the other hand, require less interaction, particularly for terminal master’s degrees that may be more applied in nature. Therefore, they are more amenable to quality and effective online instruction.
However, the fact that online teaching is more optimal for some degrees than for others should not diminish the value attributed to the online degrees for which such an instructional format is acceptable. Indeed, some content areas—particularly statistics and research methods—are inevitably more challenging to teach in an online format; however, such challenges can be overcome. Some programs overcome these challenges by requiring an on-campus component to the primarily distance program, during which time students take such courses in a face-to-face format. Other programs teach the courses online but make use of innovative technologies (e.g., Jing®) that produce short video clips of an instructor’s computer screen accompanied by a voiceover by the instructor, which can be helpful in teaching SPSS analytics and output interpretation, literature review techniques, surveying software, and the like.

Nevertheless, despite such helpful technologies, some research skills are indeed more difficult to teach in an online format. However, online students can still be exposed to research, for instance by being paired up with PhD students who could use the distance student’s company as a source of data collection, thus benefiting both parties. Another option is to make research projects for distance students more oriented toward solving real-world problems than toward devising testable theoretical models. Such a project may involve solving a problem currently encountered by their employing organization or conducting a job analysis for a new or revised position within that company. Such projects may be particularly useful for the student population attracted to an online program, as these students are more likely than on-campus students to be employed full time in the field. These applied projects are no more difficult to work with in an online environment than they are in an on-campus environment. Rather, the key to their pedagogical value is the instructors’ willingness to invest the necessary time in evaluating them, as doing so effectively requires a substantial time commitment.

**Implications for the Existing On-Campus Program**

Yet another consideration during the development of a distance program is how such a new program will affect the preexisting on-campus program, if one exists. In some cases, the online and on-campus programs may be developed at the same time, allowing for direct attention to be given to how the two programs may be linear in nature and consistent with one another. However, if a reputable on-campus program is already established prior to the introduction of a distance program granting the same degree, discord may develop among the faculty and resentment among the students if the programs are not perceived as similar. It is also crucial to ensure the availability of adequate staffing and resources to fulfill the needs of both the on-campus and online programs. If an online program draws necessary faculty and other resources away from the on-campus program, neither program is likely to thrive, and discord may result because of the negative impact of the online program.

Another option is to map the online program to the preexisting program as closely as possible. Some institutions purport that this is largely possible in today’s society of increased technology, with the same faculty member teaching both the on-campus and online versions of the same course, assisted by an instructional designer who can help the faculty member translate the face-to-face course experience into an online environment using advanced technologies. Other institutions develop programs based upon the consideration that there are inherent differences
between on-campus and online programs, and thus the programs are structured so that each takes a slightly different focus. For instance, the on-campus program may be more methodologically and theoretically rigorous as it may be considered a stepping stone toward the on-campus PhD. The online program, on the other hand, may be framed as a terminal master’s degree offering more of an applied focus, presuming that many students entering such a program will be working professionals looking to move up within their organization.

Finally, another way in which the implementation of an online program may affect an on-campus program is that, in some cases, on-campus students may request to take a particular subset of their courses online. This could, of course, pose a problem for the enrollment numbers in on-campus courses if it became widespread. Such an issue can be circumvented by not permitting any cross-pollination between the on-campus and online programs, considering them separate tracks, one of which must be chosen by the student at the outset of his or her degree.

**The On-Campus Requirement: To Be or Not to Be?**

Although it is certainly necessary to distinguish between on-campus and distance programs in order to avoid any possible conflict, unfortunately the issue rarely remains so clearly dichotomous. That is, distance programs vary widely on their sentiment regarding whether or not to mandate an on-campus requirement for their distance program. On one hand, incorporating an on-campus requirement can provide a program with a unique “edge” that most other distance programs fail to offer. It increases the ease with which students form a sense of identification with the school itself, enhances access to and affiliation with faculty members, and increases a sense of community with one another. This is particularly important in the case of I-O distance programs, wherein many students are employed full time and the on-campus option provides an important forum for networking and information exchange.

On the other hand, mandating such an on-campus component necessarily limits student recruitment. Because one of the greatest benefits of online education is the flexibility that it affords the students, for some students an on-campus requirement limits that benefit to the extent that an online degree no longer becomes feasible. For instance, it limits the ability to recruit internationally, as such students would incur an added expense of mandated international travel. It may also limit the appeal of the program to individuals who are employed full time or who have families and therefore may lack the resources (time, money) to travel to campus as mandated. Finally, incorporating an on-campus requirement into an otherwise-distance program is likely to involve a great expense of both time and money. This can prove to be particularly problematic for institutions that do not have an external administrative office managing such aspects of the program. In such cases, the thought of the academic department finding the resources with which to arrange such a requirement (without neglecting in-house, on-campus programs and needs) might be altogether overwhelming.

**Challenges Posed by the Online Student Body**

When considering such questions as whether to require any on-campus components to the distance-based program, it is necessary to have a clear understanding of the target population for the program and how well the requirements of the program would serve that population. The
most obvious characteristic of online education is convenience for the student. Beyond that, different target populations have different needs. Graduate programs, if serious, cannot be “one size fits all,” and choices must be made during the initial planning of a program that will constrain how the program develops over time. For instance, a program targeted at working professionals will not look like one targeted at newly minted college graduates. Maximizing the utility of the program for either group would likely make it less useful for (and attractive to) the other, whereas striving for a middle ground would make the program less valuable to both groups.

As such, it is crucial to consider the likely differences in the specific populations seeking out on-campus versus online degrees and the educational mechanisms through which each will be optimally served. Oftentimes, a challenge for online programs is the nature of the students applying to such programs. Specifically, online education creates interest from a large number of individuals who would not otherwise be pursuing a traditional graduate education. Although this is indeed positive, the wide diversity of prospective applicants—and, ultimately, students in the program itself—adds an additional challenge to the already difficult process of teaching (and advising) online. This begins with the application process, including successfully managing inquiries into the program and filtering applications, and continues into the classroom, often creating a cohort with widely varied ability and experience. This is in contrast to what is generally experienced by on-campus programs, to which the majority of applicants are relatively homogeneous in motivation, background, and aptitude.

Related to this is the concern that some online students, regardless of their general ability, may lack extensive academic background knowledge of psychology because many of the students who are attracted to online I-O programs are human resources professionals, business management consultants, and the like, who often come with business degrees. This brings an interesting perspective to the table and broadens opportunities for classroom discussion but also challenges faculty to supplement the introductory courses in the program with some relatively basic knowledge of psychology. This can be further complicated by the fact that a department’s ability to offer career and research advising to online students is rarely considered to the extent that it is for on-campus students. This has spurred some programs to attempt to involve online students in their research and provide them with more extensive career advising, as they might for their on-campus students.

Finally, regardless of ability or experience, the online student body poses one additional challenge that is difficult to overcome in such a nontraditional format: (lack of) face-to-face contact with faculty and classmates. Nevertheless, technology allows for substantial interaction between individuals, including virtual office hours, group discussion boards, synchronous and asynchronous chats, group projects completed via distance, and the usage of software such as Tokbox©, which is similar to Skype™ but allows visual group meetings. Institutions wanting to offer the opportunity for further interaction can offer optional or mandatory on-campus sessions, as discussed previously.

**International Implications: Easier Said Than Done?**
Given the extended use of technology in online programs, initial assumptions might presume that such programs could easily generalize across international boundaries. This is true to some degree, and online programs do indeed increase an institution’s ability to include foreign students living abroad. However, these students’ incorporation into the program may not be as seamless as one might imagine. Specifically, American colleges and universities have various stipulations regarding international students (e.g., TOEFL score requirements, financial support documentation, etc.), and these will likely need to be satisfied prior to such students being accepted. Matters can be further complicated if the program has an on-campus component, which can (a) limit international students’ interest in the program, (b) increase their financial burden, and (c) threaten their likelihood of completing the program once admitted. Finally, accepting international students can be particularly problematic for online I-O programs specifically because most I-O programs will, to some extent, instruct students in the basics of business law and legal issues. Given that these are likely to vary widely across international boundaries, attending to international students’ concerns as well as attempting to keep their discussion posts relevant to the material at hand can be a challenge and can divert the focus away from legal issues in the U.S.

Incorporating and Managing Appropriate Technologies

As technology is continually evolving, attention to technology in online courses must likewise be almost constantly changing and adapting to the times. As such, technologies have moved from tools such as PowerPoint®, videos, and message boards to supplementing these with newer technologies such as embedded narration and voice threads (e.g., with Jing®), visual group meetings (e.g., with Tokbox©), and Adobe® Captivate®, which enables students to watch and hear ideas in the making. Most schools have struggled with synchronous options such as real-time chats. Although beneficial in theory, they become challenging to implement when students are dispersed across multiple, oft-competing, time zones. This is an unfortunate reality of online education as it excludes the possibility of regular real-time interaction among students and faculty.

It is important to keep in mind that the technology available in an online program essentially defines the classroom. Despite the many options available for the delivery of online content and the facilitation of online participation, any given institution is likely to have a particular set of tools available for distance learning. These tools set the parameters of the courses and thus define how programs can be designed. The critical task in using online technology is to understand how it works, from both the perspective of the instructor and the perspective of the student. It is also important to realize that the online classroom is really an online university and that as such the student must feel part of the online community of the university. This includes having unrestricted access to journals and other library resources, thereby making it possible for distance students to take advantage of most campus assets. Instructors must be aware of relevant resources, both through the university and via the broader Internet (e.g., O*Net), and be sure that distance students have ready knowledge of, and access to, these resources.

Program Administration
Once the program is developed, with all of the aforementioned considerations in mind, attention must turn to the long-term administration of the program. To whom should this grand task fall? Institutions answer this question in varying ways. Some believe that the integrity of the program is best maintained when program administration remains within the department. Others feel as though that model taxes current faculty too heavily and draws too many resources from the department itself. Therefore, an alternative option is to permit another department, such as the division of continuing education, to manage the administrative aspects of the program. Nevertheless, although an external department may be capable of handling administrative concerns, the most crucial consideration in opting to involve another department is to ensure that the responsibility for the academic substance of the program must always, without fail, fall to the department.

Author Note: The contributors represent a wide breadth of experience in addition to a variety of institutions, from large to small, public to private, and locations across the United States. Dr. Maura Mills is currently an assistant professor of Industrial-Organizational Psychology at Hofstra University. Prior to her current position at Hofstra, Dr. Mills taught, among other courses, online undergraduate Personnel Psychology courses for Northern Arizona University. She also spent 4 years in an administrative position for Kansas State University’s distance-based master’s in Industrial-Organizational Psychology. Dr. Patrick Knight is an associate professor of Industrial-Organizational Psychology at Kansas State University. As director of Graduate Industrial-Organizational Programs, Dr. Knight serves as an instructor and advisor in Kansas State University’s distance-based master’s program in Industrial-Organizational Psychology. Dr. Kurt Kraiger is a professor of Psychology at Colorado State University, and a Fellow and past president of the Society for Industrial and Organizational Psychology (SIOP). At Colorado State University, he is director of both the PhD program in Industrial-Organizational Psychology and also of the online master’s program in Applied Industrial-Organizational Psychology. Dr. William Mayer is an assistant professor of Psychology Sacred Heart University in Connecticut. He is also director of their online master’s program in Applied Psychology with an optional concentration in Industrial-Organizational Psychology. Dr. Kathryn LaFontana is a professor and chair of the Psychology Department at Sacred Heart University. She was integral in the recent inception of this institution’s online master’s program.