

Designing with Instructional Continuity in Mind

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This chapter provides instructional designers working in institutions of higher education (IHEs) with an introduction to the complexities of supporting instructional continuity amid the numerous and varied realities that make it challenging for students or faculty to complete a course as designed. From pandemics to hurricanes and unexpected illnesses to terrorism, there are many events that can interrupt instruction. Instructional designers can help minimize the impacts of such disruptions by employing a variety of tactics. In this chapter we define instructional continuity, explore the role of instructional designers in cultivating it, highlight some best practices, outline major implications for instructional designers, and share several resources to prepare for if/when there are events that interrupt the teaching-learning process.

What is Instructional Continuity?

Life does not always go as planned. *Instructional continuity*, sometimes referred to as academic continuity or continuity of teaching and learning, is the capacity to maintain course schedules

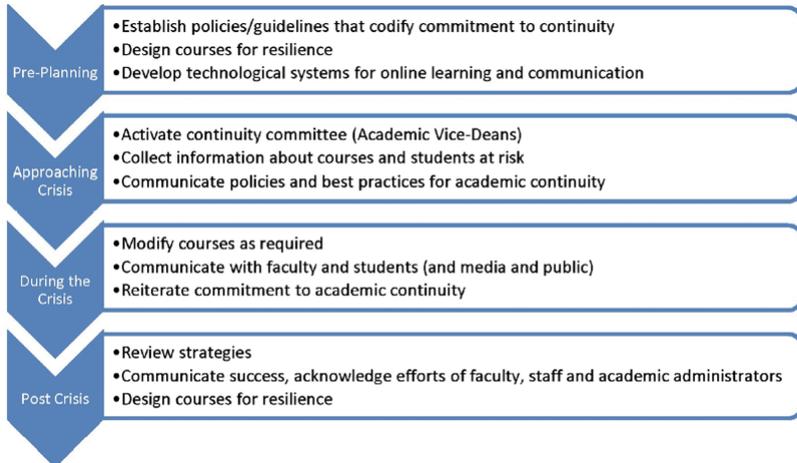
when plans are disrupted, typically by unanticipated events beyond anyone's control. Unexpected events leading to short-term or extended closures of campuses or course cancellations can occur for a variety of reasons: inclement weather, widespread illness, family emergencies, terrorist attacks, etc. Mitroff et al. (2006) developed a comprehensive list of the different types of crises that might occur in IHEs, as well as "ticking timebombs" (p. 6) that IHE stakeholders should be aware of and prepare for in case any occur. Mitroff et al. (2006) also noted that "most major crises do not consist of a single, isolated event but instead involve a complex chain of crises that the originating catastrophe sets off" (p. 62). Keeping this in mind when designing for instructional continuity is critical because there will likely be both expected *and* unanticipated effects resulting from any crisis that will need to be addressed or considered.

What is the Role of Instructional Designers in Supporting Instructional Continuity in Institutions of Higher Education?

Instructional designers in IHEs have varied tasks and responsibilities (Beirne, & Romanoski, 2018; Halupa, 2019; Hart, 2020; Intentional Futures, 2016; Ritzhaupt & Kumar, 2015; Rubley, 2016; Sugar et. al., 2011; Xie & Rice, 2021). Since many designers support course design and implementation, as well as faculty professional development, they play significant roles in helping faculty develop and implement plans for instructional continuity. Regehr et. al.'s (2017) academic continuity model (see Figure 1) shows four phases of instructional continuity where instructional designers might concentrate their efforts. For instance, they might develop and lead training to teach faculty strategies and tools for instructional continuity, as well as incorporate instructional continuity strategies in curricula they help to develop or redesign. Instructional designers can use this model to help them develop, evaluate, and revise instructional continuity plans.

Figure 1

Regehr, Nelson, and Hildyard's Academic Continuity Model (2017, p. 82) Used with permission.



Visual outlining the steps in the Academic Continuity Model

Why is Instructional Continuity Important?

Though 2020 will go down in history as a year of worldwide disruption of our everyday lives and functioning, disruption is not unusual and preparedness is important as natural and human-made disasters have demonstrated, such as the [9-11 terrorist attacks](#), [Beltway Snipers](#), [Hurricane Katrina](#), [Virginia Polytechnic Institute and State University shooting](#), [H1N1 pandemic](#), [Snowmageddon](#), [Christchurch earthquake](#), and more (see Mitroff et al., 2006). Frequently, disruptions are expected and occur with advanced notice, though often they do not. Some might only involve a few students and others will affect everyone within an entire university and/or geographic region. For example, a weather event in a local area may disrupt the ability for students to meet for classes on-campus, whereas a weather event in a distant area may impact the ability of students living in that area to

access/participate in their courses online while the institution in which they study operates business as usual. Therefore, as instructional designers help faculty design and/or implement their courses, they can/should also incorporate instructional continuity strategies. These strategies could be as simple as including emergency contact information in syllabi, or more comprehensive, such as applying a modular design of courses to provide flexibility if/when there is disruption.

What are Best Practices for Instructional Designers to Support Instructional Continuity?

For instructional designers in higher education, successful instructional continuity during disruptions comes from being prepared at the institutional (see U.S. Department of Education, 2013) and course level. This often involves communicating and working with a variety of stakeholders within IHEs such as deans, department chairs, and information technology support staff, as well as developing continuity readiness and contingency plans - and more.

Although IHE administrators are responsible for preparing and coordinating with many stakeholders on and off campuses (e.g., financial impact, staffing, housing, etc.) when disruption occurs, there are several preparations that instructional designers should consider in relation to instructional continuity. By aligning continuity plans with various other plans (e.g., communication, resource prioritization, and assessment plans), instructional designers can be prepared for transitions during unexpected events. Moreover, instructional designers should be aware of emergency preparedness and evacuation plans in place that might impact the whole IHE.

Institutional Level Best Practices

Contingency Plans

Although many, if not most, disrupting events are unexpected, having contingency plans in place is beneficial, even if they are generic and not tailored for each type of disruptive event. For instructional designers, contingency plans can be based on general risk assessments for impactful events. For example, instructional designers who work near the Gulf of Mexico should have contingency plans for hurricanes. Unfortunately, IHEs should now have contingency plans for terrorist and shooting attacks which may close a campus for substantial periods. A necessary first step in contingency planning is conducting a *risk assessment* (or identify one already created for the institution) to determine the likely impacts of various disruptive events.

The contents of contingency plans will vary among IHEs, but their authors should be aware of the *diverse impacts* an event can have on IHEs: safety, physical space, finances, student housing, commuting patterns, and so forth. Many of these will have direct or indirect, influence on the appropriate instructional resources and responses. It is important to remember that many disruptive events can impact the *whole community*. Contingency plans should include alternative approaches for maintaining continuity for instructional designers, other staff, the teaching faculty, and students. These communities should know that contingency plans exist, as well as where to find additional information if/when a disruption occurs. Instructional designers should be proactive and share links to these resources with instructors and in course syllabi when appropriate. For example, if a natural disaster occurs everyone should know where to find necessary information (i.e., a website, a phone number, a Twitter account) and resources that will inform them on the steps necessary for maintaining instructional continuity.

Communications Plans

As highlighted during the COVID-19 pandemic, instructional designers can be considered “first responders” who provide critical support services to instructors when disruptions occur ([Koenig, 2020](#), para. 1). Just as students should know how to contact their instructors, instructors should also be aware of the institution’s plans for how to communicate with instructional design support services. For example, if there is a weather event and classes shift online for a short period of time, should instructors email requests for help, submit a “ticket,” or call the office number? Regardless of the correct answer, this information should be shared with instructors so they are prepared because it cannot be assumed that Internet access will be readily available during the disruption.

Resource Prioritization Plans

During disruptions there are typically competing demands for instructional designers’ help. Therefore, it is best to develop policies for instructional designers’ time before any disruption. For instance, do courses with lab components get higher priority for assistance than those that are lecture-based? Do instructors with large enrollments receive assistance before those teaching small courses? There are numerous considerations unique to the institution, but having procedures in place prior to disruptions will make it easier for instructional designers to schedule their time and avoid potential conflicts with instructors – especially if they are using established rather than ad-hoc protocols.

Assessment Plans

As accredited institutions, instruction in IHEs involves assessing student learning. When disruptions occur, assessing student learning becomes challenging. For instance, in-class exams often used during normal operations may not be feasible during a disruption. Instructional designers should be aware of available

strategies and resources for designing diverse types of assessments that instructors might use (e.g., see [Darby, 2020](#)). From proctoring tools to recorded presentations and team collaboration tools, being prepared to offer alternatives for assessing student learning during disruptions is key to success.

Course-Level Design Best Practices

As noted previously, instructional designers often work directly with instructors to create robust designs (and re-designs) for their individual courses. There are several steps instructional designers can take when designing or redesigning courses to address any disruptions that might occur. The following includes recommendations for instructional designers when designing courses with instructional continuity in mind. Instructional designers should:

1. **Develop and share [communications plan](#):** Include a detailed communications plan for all courses consisting of contact information for the instructor and alternative communication methods (if available). Do not assume that email services will be available during a disruption or that all students will have access to internet to locate contact information. For example, it is good practice to emphasize that students should download/keep course contact information for communicating with instructors and other institutional support services (i.e., email, phone, and website information). Likewise, students should also be strongly encouraged to contact the instructor with information about their status as soon as it is safe following a disruption.
2. **Prioritize and differentiate objectives:** Instructors should identify the most important objectives and determine which are most flexible to move to alternative delivery formats such as asynchronous online. This will enable instructors to more easily and readily teach in an alternate format. Unfortunately, if instructors do not know which objectives are essential, the

transition will often be harder for them and more confusing for their students.

3. **Clearly describe assignments:** Good instructional design involves explicit articulation of expectations. Clearly described assignments not only help students understand what is expected, but in times of disruption, will also ensure they know what to do (e.g., consider using the [Transparent Framework](#) by Winkelmes, 2014 detailing how to access, complete, and submit assignments).
4. **Diversify assessment strategies:** When course designs already include a variety of instructional strategies (e.g., project-based learning, direct instruction) then the transition to an alternative format will often be less disruptive to the routines that students have established. For example, if students only experienced traditional lectures with little peer interaction during most of a term and then after a disrupting event the course moves to asynchronous online learning, students will be less prepared for independent learning, online engagement, or collaboration with peers than if they had already engaged in these before the disruption.
5. **Use digital feedback strategies:** Communicating and providing feedback to students is an essential element of quality instruction. Instructional designers should help faculty develop robust alternatives for providing feedback. For example, if an instructor is only providing written feedback on paper assignments submitted in-person during class, then the shift to a digital format could lead to substantial challenges. Whereas if the course was already designed to utilize digital assignments, then the change would likely be easier for the instructor and students.
6. **Modularize instruction:** Creating flexible instruction routinely involves modularizing instruction into semi-independent chunks. With modular designs, updates or changes can be made to smaller units of instruction without affecting other units. For example, if a course design includes 10 units

(modules) of instruction and a disruptive event occurs during unit 4, then changes can be made to units 5 - 7 without requiring re-design of the whole course.

7. **Incorporate a variety of instructional strategies:** As an instructional designer it is valuable to have a diverse and long list of instructional strategies to recommend to instructors as they create contingency plans. Hirumi (2014) offers detailed descriptions of numerous instructional strategies that are grounded in research. This list can be supplemented with other unique strategies that are considered effective in one's institutional context.
8. **Design for equity, access, and care:** When developing flexible design for courses, it is important to reflect on equity and access challenges students and instructors may encounter. Creating contingency plans that address instructional objectives, equity, and accessibility for all students is the goal. Throughout the [course design](#), instructional designers should apply [universal design for learning](#) (UDL) guidelines (CAST, 2018) and [design justice principles](#) (Design Justice Network, 2018). Incorporating human-centered design (Karakaya, 2021) which fosters a pedagogy of care is critical as students and instructors might need emotional support in addition to the course design practices described in this chapter. Instructional designers should also remind faculty to note individual student equity, access, accessibility, and emotional needs to tailor accommodations as needed and connect students with the necessary resources to address their needs.
9. **Practice:** Instructors should prepare students to use course conventions and technology tools to support instructional continuity. The time to help students prepare is *before the disruption* and this can be done early in courses by integrating student success skills such as time management or note taking (while watching online lectures incorporating course content, exercises, and assignments) and practicing using course technologies and protocols.

Implications for Instructional Designers in Higher Education

Instructional continuity and its associated challenges have a variety of implications for instructional designers in IHEs. First, it is critical for instructional designers (and those who prepare and support them) to acknowledge the value of instructional continuity in IHEs. Second, it is equally important for instructional design-related competencies and standards, as well as professional development, to incorporate instructional continuity planning. For example, IHEs offering instructional design workshops to faculty should include instructional continuity planning in that curriculum or if the IHE has a syllabus template for instructors, continuity planning elements should be integrated into the template.

Third, instructional designers should identify areas for self-improvement and professional growth related to instructional continuity planning. For instance, as disruptions occur, instructional designers should reflect on, document, and share lessons learned and determine areas for skills development and growth. Fourth, instructional designers should consider how they can capitalize on existing professional networks and how they might expand them via social media and professional associations to determine ways to improve instructional continuity planning and implementation. Since the onset of the COVID-19 pandemic, the topic of instructional continuity planning has appeared in many professional forums. Hopefully instructional continuity will continue as a focus area or topic of interest since the time to plan for future disruptions is before they happen. Finally, better understanding of the evolving roles of instructional designers within IHEs will likely result in better coordination among various stakeholders (e.g., IT departments, deans, department chairs) to address the many challenges associated with being prepared for the disruptions that will, unfortunately, happen.

Conclusion

Though IHEs can often feel like isolated islands, the truth is that education takes place within the larger context of our world - much of which we have no control over. When disruptive events occur, and they will, it is crucial to maintain instructional continuity as best as is possible given the circumstances. It is not always feasible, but in most situations teaching and learning will continue and allow students to progress towards achieving their educational goals. This chapter highlights many important factors that instructional designers should consider as they work within IHEs to create courses that are flexible and adaptable to changing, uncertain circumstances.

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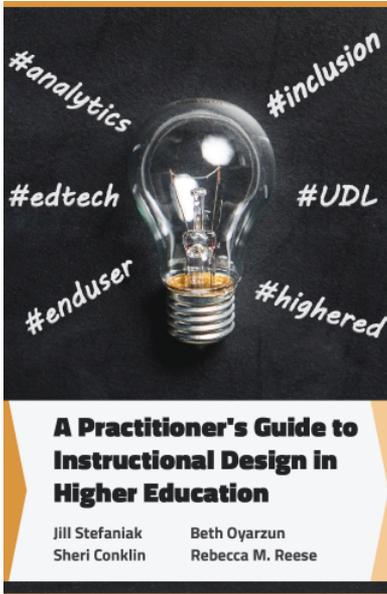
Appendix A

Examples and Resources

There are many resources available for instructional continuity planning in IHEs. These can be used with faculty for collaborative design efforts and/or to determine the most appropriate applications in their courses. For example, EDUCAUSE (2020) has many [Instructional Continuity Plans](#) in their resource library and Stanford at DePaul University collected over 400 university contingency plans in an open access [Google Spreadsheet](#). Also, the [Institute for Business](#)

[Continuity Training](#) (IBCT) has free [continuity planning templates](#).

For instructional designers and instructors, there are also numerous resources for making transitions during disruptive events with many of these being updated and expanded recently in response to the COVID-19 pandemic. For example, The Online Learning Consortium (OLC) curated resources for educators and administrators on its [Continuity Planning and Emergency Preparedness](#) website which includes a “[Playbook](#)” (O’Keefe et. al., 2020) and [Padlet](#). Similarly, there is an [open-source collection of resources](#) (in an editable Google Document) created by Florence Martin at the University of North Carolina, Charlotte. The journal [Information and Learning Sciences](#) also dedicated two special issues in 2020 to instructional responses to the pandemic. Two professional development opportunities involve taking a course such as [Resilient Teaching Through Times of Crisis and Change](#), or volunteering for the [Instructional Design Emergency Response Network](#) (ID-ER).



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