

# Developments in Instructional Design

## Scenario

Richard Hoffman is the senior member of the history faculty, and for as long as anyone can remember, he has taught a course on the wars in Korea and Vietnam. Since its inception, the course used a traditional lecture format with a midterm and a final, but Hoffman has decided to redesign it as a blended course. Not knowing how to begin, he turns to Abigail Carson, head of the instructional design group. She begins by giving Hoffman a guide she developed that includes readings about pedagogical theories. They discuss the principles at work and how they apply to Hoffman's course.

Carson asks Hoffman to identify the intended learning outcomes, and she shows him how to work backwards from those goals to learning activities that effectively support them. For example, one of the outcomes is an understanding of the differences in the social climate between the two wars. Carson helps Hoffman design activities that investigate media coverage of the wars, including news stories, music, TV, and poetry. To demonstrate their understanding, students will create multimedia resources—with considerable latitude in what they can include—that feature examples of social responses to current or historical events. Such a structure opens the door to using online resources and technology devices to collect material and craft it into a video, a song, an interactive graphic, or some other artifact. It also requires Hoffman to rethink how he assesses student learning. Carson suggests collaboration with the statistics and theater departments to highlight both the quantifiable nature of social response and various forms of that expression.

Carson and Hoffman discuss the implications of moving certain class sessions and activities into online venues. Carson describes what a student-centered design looks like and recommends open educational resources that are easy to reuse and often more current than printed texts. She shows Hoffman how the course design can accommodate a wider range of student skills and interests while meeting the learning goals. And she assures him that after the course is implemented, she will continue to provide support and help make adjustments along the way.

## 1 What is it?

In recent years, instructional design has been undergoing significant changes resulting from developments in areas including pedagogy, learning science, and technology. Whereas instructional design had often been somewhat circumscribed, almost templated, the complexity of the learning environment is **turning instructional design into a more dynamic activity, responding to changing educational models and expectations**. The science of learning is showing us how people learn, leading to new educational activities, such as active learning and peer learning. Flipped classrooms, makerspaces, and competency-based learning are changing how instructors work with students, how students work with course content, and how mastery is verified. Mobile computing, cloud computing, and data-rich repositories have altered ideas about where and how learning takes place. Now anyone with a mobile device can photograph a leaf, submit the image to a database for matching, and receive prompt plant identification. In this complex climate, instructional designers face unfamiliar challenges and explore new opportunities.

## 2 How does it work?

The goal of instructional design is still to develop compelling and effective instructional activities that target specific learning goals in measurable ways. In today's climate, however, instructional designers work with a broad and growing array of tools and a deeper understanding of learning processes. One consequence of these changes is that **designers can find themselves filling a variety of roles**. They might design large, complex systems or work with faculty and departments to develop courses and curricula. They might migrate traditional resources to mobile or adaptive platforms. They might help administrators understand the value and potential of new learning strategies and tools. Today's instructional designer might work with subject-matter experts, coders, graphic designers, and others. Moreover, the work of an instructional designer increasingly continues throughout the duration of a course rather than taking place upfront.

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## 3 Who's doing it?

The responsibility for designing instruction traditionally fell to the instructor of a course, and in many cases it continues to do so. Given the expanding role and landscape of technology—as well as the growing body of knowledge about learning and about educational activities and assessments—**dedicated instructional designers are increasingly common and often take a stronger role.** A growing base of resources provides guidance about designing (or redesigning) courses based on trends in instructional design and developments in learning science, technology, and assessment. Many of these resources feature toolkits that focus on the role of particular advances, such as analytics, mobile learning, adaptive learning, and backwards design.

## 4 Why is it significant?

Developments in instructional design are part of a changing landscape in the models of higher education. The focus on student-centered learning, for example, has spurred the creation of complex integrated learning environments that comprise multiple instructional modules. Competency-based learning allows students to progress at their own pace and finish assignments, courses, and degree plans as time and skills permit. Data provided by analytics systems can help instructional designers predict which pedagogical approaches might be most effective and tailor learning experiences accordingly. The use of mobile learning continues to grow, enabling new kinds of learning experiences. These and other educational trends benefit from advances in the practice of instructional design. The changing role of instructional designers, as well as the growing range of skills they bring to the position, allow **designers to provide targeted support when and where it is most valuable.**

## 5 What are the downsides?

Even the most skilled instructional designers can find it challenging to build learning experiences that meet the needs of learners with diverse backgrounds, abilities, and needs. While instructional design aims to build well-wrought lessons that keep students engaged, the actual building of these creative, focused learning materials generally takes longer and costs more than developing traditional experiences. Given the range of competencies needed for the position, finding and hiring instructional designers who fit well into

particular institutional cultures can be challenging. Designers also need ongoing training to keep up with the changes and demands of the job. At the same time, to the extent that instructors hand over greater amounts of the design process to instructional designers, **some of those instructors will feel that they are giving up control**, which, in some cases, might appear to be simply the latest threat to faculty authority and autonomy. Institutions and individual designers will need to strike a balance beneficial to all involved.

## 6 Where is it going?

One consequence of the ever-evolving set of choices that instructional designers can offer learners is that students have an opportunity to develop metacognitive skills and become problem solvers with regard to their own education. In some contexts, **instructional designers might work more directly with students**, teaching them lifelong learning skills. Students might begin coursework by choosing from a menu of options, creating their own path through content, making choices about learning options, being more hands-on, and selecting best approaches for demonstrating mastery. Educational models that feature adaptive and personalized learning will increasingly be a focus of instructional design. As new developments in learning science emerge, designers will need to determine how to use them to shape the resources they build.

## 7 What are the implications for teaching and learning?

Developments in the role of the instructional designer in higher education have the potential to benefit both teachers and learners in important ways. By helping align educational activities with a growing understanding of the conditions, tools, and techniques that enable better learning, **instructional designers can help higher education take full advantage of new and emerging models of education.** Instructional designers bring a cross-disciplinary approach to their work, showing faculty how learning activities used in particular subject areas might be effective in others. In this way, instructional designers can cultivate a measure of consistency across courses and disciplines in how educational strategies and techniques are incorporated. Designers can also facilitate the creation of inclusive learning environments that offer choices to students with varying strengths and preferences. In these and other ways, instructional designers are becoming an important part of face-to-face as well as online and blended learning environments.