


## Chapter 88

# Using Visual Design to Improve the Online Learning Experience: A Synthesis of Research on Aesthetics

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### ABSTRACT

*There is an abundant amount of literature on visual design principles, graphic design theory, and media theory. Yet very little is discussed, at least in a systematic way, about the process of making online courses aesthetically pleasing. A major obstacle to gaining such knowledge is the lack of understanding of applied definitions, conceptual ideas, and methods of creating online learning interfaces. In this chapter, the authors seek to clarify the process of using visual design to improve the online learning experience. The chapter concludes with strategies on how colleges and universities can help faculty and instructional designers learn visual design skills through the creation of a design studio.*

### INTRODUCTION

We see with our brains, and therefore the more visual an input, the more likely something will be recognized and recalled (Medina, 2008). Thus, vision is in many ways the most powerful tool humans have for learning (Medina, 2008). But while a great deal of time goes into designing modern education buildings and classrooms, both in terms of form and function, minimal effort is dedicated to the “look and feel” of online courses. This lack of visual design in online courses exists primarily because most educators, course designers, and developers have no background in visual communication design (Lohr, 2008; Metros, 2008; Braden, 1996). At the same time, though, even trained graphic designers—while

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underrepresented on most college campuses—struggle when designing for online learning environments (Malamed, 2009; Karabeg, 2003) that take place in predesigned or established interfaces, interfaces designed and developed by technologists. The lack of attention to the visual design of online courses is also problematic because students make judgments about an institution or a course based on how a website looks (see Szabo & Kanuka, 1999). Further, aesthetics matter! Traditional practices of design—like architecture, graphic design, industrial design, and digital media design—focus on both the functional and the visual aspects of design. The authors contend that the field of instructional design and technology, and specifically online course design, has largely ignored the importance of aesthetics.<sup>1</sup> Aesthetics are what make creative experiences, inclusive of user-generated content and mass media, unique, personal, and memorable (Manovich, 2017; Margolin & Margolin, 2002).

While research on visual design and learning is nascent (Kimball, 2013; William & Stamitz, 2005), the authors posit that colleges and universities have a responsibility to focus on aesthetics and how online courses are visually designed if they are to improve the overall learning experience. In the following chapter, the authors synthesize literature on visual design, illustrate how these ideas can be used to improve the visual design of online courses, and conclude with strategies on how colleges and universities can help faculty and instructional designers learn visual design skills through the creation of a design studio.

## **PROBLEM**

The first online course was offered over 30 years ago. For decades, though, online learning was just an extension of distance education used by a small minority of teachers and learners. During the past 5–10 years, however, this has all begun to change. Online learning is no longer a fringe activity in education taught only by early adopters. Today, to meet the increased demand, all types of teachers end up designing and teaching courses online, most with minimal technical or design experience. Recognizing this problem, colleges and universities have developed multiple approaches to train and support faculty to design online courses from an instructional perspective, but very little effort has focused on how to help faculty improve the visual design of online courses. Given this, the authors questioned, what are the essential activities and knowledge in graphic design that can be useful for learning skills in online course design? This chapter explores pertinent knowledge to support faculty in the development of visual design awareness for online courses.

## **DESIGN PROBLEMS**

The two most basic components of any visual design are the functionality and the aesthetic of the product. Many designers consider the functionality the primary concern and the visual appeal a secondary concern, while others consider the two intertwined (this is discussed in more detail in the form follows function section), but all designers consider the activity of design as the development of a creative solution for heuristic experiences. In other words, all designers consider visual design as a process of solving ill-defined design problems, otherwise known as wicked problems.

Rittel and Webber (1973) define wicked problems as ill-formulated and complex problems that involve clients and decision makers with conflicting values. In many ways, online course design—especially visual design—involves solving extraordinarily wicked problems. However, adherence to established

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