Chapter 6 The Teacher as Information Designer: Blending with Confidence

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ABSTRACT

It is not possible to develop firm design rules advising teachers and designers on exactly how to best design entire courses, course activities, and different kinds of instruction sets and experiences. However, based on existing research from various disciplines (Cognitive Psychology, Information Design, Instructional Design, Multimedia Design) it is possible to formulate principles and develop guidelines and recommendations for the design of effective and efficient courses, course activities and instruction sets that facilitate, enhance and extend good teaching, and are also highly conducive to student learning. In this chapter, we focus on teachers in their role as information designers in print, and digital environments. With the 21st Century classroom in mind, guidelines based on information, and multimedia research design assist the teacher-designer to confidently blend content, modalities, and media, and design information and instruction sets that are well suited for the intended receivers thus optimizing their potential for learning.

INTRODUCTION

The term *instruction design* (InD) is an umbrella term used in order to bring several related instruction areas and disciplines together (Pettersson, 2002). Instruction design is partially grounded on audio-visual instruction, educational technology, instructional technology, visual literacy, technology of instruction, instructional design, instructional message design, and design of instructional materials. According to Wurman et al. (2001):

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Every successful communication is really an instruction in disguise–from love letters to company brochures. ... Only teachers and trainers think of themselves as instructors, yet we are all instructors every time we communicate. And, the more we think of communicating as instructing versus informing, the more satisfaction we're likely to find in the process (p. 199).

According to De Vaney and Butler (1996) the objects of study, the basic concepts of audio-visual instruction, and the notion of audience had been circumscribed already in the period between 1918 and 1941. Since then, audio-visual instruction has evolved into educational technology and further into instructional technology. The main objective for instruction design is to provide courses, lessons and materials intended for learning. In instruction design, the receiver is to (usually) *learn* from a specific message.

A closely related message design area is *information design* (ID). In order to satisfy the information needs of the intended receivers, information design comprises analysis, planning, presentation and understanding of a message— its content, language and form. Regardless of the selected medium, a well-designed information material will satisfy aesthetic, economic, ergonomic, as well as subject matter requirements (Pettersson, 1998). The main objective for information design is to provide information materials needed by the interpreter in order to perform specific tasks. Obviously this may also result in learning.

In this chapter *we focus on teachers in their roles primarily as information designers*. Guidelines based on design (including multimedia research) principles assist teachers and instructional designers to create courses, course activities and instruction sets that are well-suited for the intended audience (students). As a result, these students are more likely to benefit from engagement with effective and efficient courses, course activities and instruction sets, which is turn improves understanding, and retention.

INFORMATION DESIGN

Information design has its origin and roots in:

- 1. Graphic design,
- 2. Education and teaching, and in
- 3. Architecture and engineering, or rather construction and production (Pettersson, 1998).

More than fifty established academic disciplines and practices (Figure 1) provide information design with facts, influences, methods, practices, principles, processes, strategies, theoretical approaches, and tools. The term Information design is also used interchangeably with such terms as *communication design, document design, and presentation design*.

Figure 1. Information design (ID) has contributions from more than fifty established disciplines and professions (here represented by D1 and D2)



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