Chapter 7.6
Inquisitivism:
The Evolution of a Constructivist Approach for Web–Based Instruction

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ABSTRACT

This chapter introduces inquisitivism as an approach for designing and delivering Web-based instruction that shares many of the same principles of minimalism and other constructivist approaches. Inquisitivism is unique in that its two primary or first principles are the removal of fear and the stimulation of an inquisitive nature. The approach evolved during the design and delivery of an online full-credit university course. The results of a quasiexperimental design-based study revealed that online students in the inquisitivism-based course scored significantly higher on their final project scores, showed no significant difference in their satisfaction with their learning experiences from their face-to-face (F2F) counterparts, and had a reduction in fear or anxiety toward technology. Finally, the results revealed that there was no significant difference in final project scores across the personality types tested. The author hopes that inquisitivism will provide a foundation for creating effective constructivist-based online learning environments.

INTRODUCTION

The purpose of this chapter is to support my claim that inquisitivism (my adaptation of minimalism) is an effective constructivist online learning approach for adult learners who are required to learn new information technologies in a Web-based setting. Inquisitivism has emerged from the author's 10 years of experiences in course development and teaching in online and distance learning environments. Since the fall of 1996, over 3,600 University of Alberta students have completed either the full-credit undergraduate online course EDIT 435 or its graduate equivalent EDIT 535. These courses have been, and are still currently, delivered exclusively online with no F2F interaction.

They are officially called The Internet: Communicating, Accessing and Providing Information (Montgomerie & Harapnuik, 1996, 1997), but are colloquially referred to as "Nethowto," which is also the Web name of the course, and subsequently, the nickname that was adopted by students and faculty. In addition, several other courses based on the inquisitive approach have been designed and delivered by the author in both the academic and professional training environment.

This presentation of inquisitivism, its development, its application, and evaluation findings presented here are not based on a single case study or a "one-off," but are based on a body of data and experiences collected over a 10-year period. The inquisitivist approach was first formalized in 1998 (Harapnuik), was updated in 2004 (Harapnuik), and has been continually revised. Inquisitivism, and its application, continues to evolve in response to the needs of the author's primary academic responsibility—his students.

CONSTRUCTIVIST APPROACHES LIKE MINIMALISM ARE EFFECTIVE FOUNDATIONS FOR DESIGNING TECHNOLOGY INSTRUCTION

There is a body of literature that calls for a change in the way we design and deliver educational material: Objectivism vs. constructivism: Do we need a new paradigm? (Jonassen, 1991), Web-based distance learning and teaching: Revolutionary invention or reaction to necessity (Rominiszowki, 1997), The Learning revolution (Dryden & Vos, 1994), Transforming learning with technology: Beyond modernism and post-modernism or whoever controls the technology creates the reality (Jonassen, 2000), and Beyond reckoning: Research priorities for redirecting American higher education (Gumport, Cappelli, Massey, Nettles, Peterson, Shavelson, & Zemsky, 2002). The authors of these works argue that traditional forms

of instruction are no longer effective. There are also claims that the deficiencies in the outcomes of learning are strongly influenced by underlying biases and assumptions in the design of instruction (Rand, Spiro, Feltovich, Jacobson, & Coulson, 1991). The systems approach to instructional design may be the primary factor contributing to the poor outcomes of instruction since it is still the predominant instructional design assumption used throughout most of education (Carroll, 1990; Dryden & Vos, 1994; Hobbs, 2002; Jonassen, 1997; Newman & Scurry, 2001; van der Meij & Carroll, 1995).

The systems approach is based on the assumption that learners are passive receptacles for information that the instructor (teacher or instructional media) relays. Educators are beginning to recognize:

…that our dominant paradigm mistakes a means for an end. It takes the means or method called 'instruction' or 'teaching' and makes it the end or purpose…. We now see that our mission is not instruction but rather that of producing learning with every student by whatever means work best. (Barr, & Tagg, 1995, p. 14)

Similarly, Carroll (1990) argued against the notion that learners are passive receptacles, and made a case against the systematic approach to learning, in his book the *Nurnberg Funnel*. The title refers to the legendary funnel of Nurnberg that was said to make people wise very quickly by simply pouring knowledge into them. The title is also a somewhat sarcastic accusation against traditional forms of instruction.

In the *Nurnberg Funnel,* Carroll presented minimalism as the culmination of 10 years of empirical research that showed that newer methods of instruction, based on constructivism and other cognitive theories or approaches, perform much better than the commonly used systems approach to instruction. Constructivists posit that

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