Chapter 18

Developing a Research Method to Analyze Visual Literacy Based on Cross-Cultural Characteristics

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ABSTRACT

This chapter presents a new approach of a quantitative analysis used to research the understanding of visual literacy issues. The objective of the research is to find common patterns, opinions, and behaviors between different people regarding the use of visual communication and people's state of visual literacy, while also considering the possible cultural differences related. To explain visual literacy and its implications, the theoretical background about the visual literacy research field is presented first. Then, also within the section on background, the chapter presents the main concepts related to culture, and how it and visual literacy can be analyzed together to enable cross-cultural analysis. To conduct these cross-cultural analyses, this chapter proposes a new kind of quantitative questionnaire-based instrument that includes a section to measure the cultural characteristics of the individual and their level of literacy. This instrument proposal is the main result, since the research field of visual literacy lacks this kind of quantitative approach.

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1. INTRODUCTION

The concept of "visual literacy" is not a brand-new term. Visual literacy as a term and a field of study was introduced in 1969 by the authors Fransecky & Debes (1972). They define, within their role steering the International Visual Literacy Association, visual literacy in the following way:

"a group of vision competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visual actions, objects, and/or symbols, natural or man-made, that are [encountered] in [the] environment. Through the creative use of these competencies, [we are] able to communicate with others. Through the appreciative use of these competencies, [we are] able to comprehend and enjoy the masterworks of visual communications" (Fransecky & Debes, 1972; International Visual Literacy Association, 2003).

The fact that the individuals of the new generations have greater access to information does not imply that such access is relevant or significant. In order to achieve this, it is necessary to have an intentional intervention of the different educational agents in the different fields, who must ensure that this intervention is not done from an optics contrary to their culture (Hernández Serrano & González Sánchez, 2011).

Prensky (2001) discusses how digital "natives", who grow and develop around new technologies, think differently than "digital emigrants" (those who come from a handwriting-based culture). The author argues that, while the minds of the migrants are linear, those of the natives can be considered hypertextual, which means that they can read in a discontinuous, global and interconnected way. The natives are capable of processing up to three different information screens simultaneously, and have multidimensional spatial-visual abilities for the processing of images and three-dimensional representations, mental maps or interactive figures, responding quickly to both expected and unexpected stimuli with very surprising selective attention dimensions. All of these notes on different kind of consumptions and productions of images, and different levels of visual literacy gathered in literature, support the main idea of this paper and the goals and research work presented in the following sections.

There are many approaches and theories in the literature that highlight the importance of using visual literacy and related aspects and competencies in education, communication, etc. Despite of that, the authors of this paper consider that this field of research lacks (at least partly) proper research methods and quantitative/qualitative approaches. This is the aim of this paper, to contribute to the visual literacy knowledge field by proposing a quantitative instrument that could help researchers to measure people's understanding level and state of visual literacy, allowing them to compare this state among different people. The main result of this paper is the proposal of a questionnaire that: measures different aspects related to understanding and visual literacy and measures some cultural aspects of people. These cultural aspects in the questionnaire can be used as a lever to establish different categories of visual literacy depending on the people that respond, or to investigate about cultural factors and their relationship to visual communication or other visual aspects (that could help to support many of these theoretical approaches detected in the literature).

The paper is structured as follows: the second section presents the background that supports this research work. The third section presents the different hypotheses and goals (both specific and general ones) for this research and future research based on the experiment proposed in this paper. The fourth section outlines the methodology used to build the research. The fifth section shows the results achieved. Finally, the last section (sixth) finalizes the paper with some conclusions and future work.

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