Chapter 14
The Dance of Clark and Kozma:
Perspectives of the ICT Teacher Candidates

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ABSTRACT

The influence of media and method and their recent dramatic impact on learning have been discussed by many researchers in the instructional technology field and spurred the Clark-Kozma debate. This chapter explores the standpoints of preservice information and communication technology teachers attending a state university in Turkey. The findings are presented as a guide to educators and instructional designers, especially in their preservice research and practice. Participants were selected by convenience sampling, and their opinions were obtained following a debate on the topic. A questionnaire was administered for this purpose that had been prepared by the researchers. The results of the survey were augmented by detailed observations of the debate. Most of the participants agree that new media provides and facilitates the emergence of new methods or changes in existing methods, and learning and teaching benefit from approaches that combine the two.

INTRODUCTION

The media and method debate started in 1983, with the question of whether media has any effect on learning, and the scope of this question expanded to cover more in time. This issue was important to the field of instructional technology (IT) in the 80s and continues to be a debatable area of interest for researchers (Yazıcı & Kültür, 2016). On one side are those who hold media to be more influential than

method in instructional design (Kozma's supporters), and those who attest to the primacy of method (Clark's supporters). Clark insists that "media do not influence learning under any circumstances!" (1983, p. 445). Furthermore, "media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition" (p. 445). And a decade later he reiterated his opinion that "instructional methods are the underlying common element of all substitutable media and attributes of media" (1994, p. 7). Many researchers agreed with Clark's argument, and they stated that similar learning results cannot be achieved by replacing instructional method (Reiser, 1994; Shrock, 1994). However, Kozma (1991) claimed that media produce a unique experience, and hence there a close relation must exist between this experience and the method of instruction that deploys it. He went on to propose some new prospects and more powerful and useful methods that facilitate this mutual interaction process (Kozma, 1994). Shrock (1994) objected to their claims, explaining that while both had merit, their views and definitions of learning, media, method and influence were different from each other even although they used the same lexis; for this reason, they appear to challenge each other. Therefore, discussing the definitions of media and method is essential for a more sensible debate.

While media can be defined as technology, that is the mechanical features, it can also be defined as the physical aspects or the symbolic system or even as the process of putting abilities into practice to make a symbolic system function in specific ways (Kozma, 1991; 1994). These definitions portray the common features of a medium such as a television, radio, computer, and so on. According to Salomon (1979), "an instructional method is any way to shape information that activates, supplants or compensates for the cognitive processes necessary for achievement or motivation" (Clark, 1994b, p. 23). Instructional method is necessary to deliver the desired instructional influences on the learning outcomes, motivation, and achievement.

During the design process for any effort at instruction, the method by which it is delivered should be decided on carefully and other items related to the learning environment and context should be arranged accordingly. The content can be delivered using a variety of tools or mediums that serve the same function. The critical point is to select a suitable method for the particular process of instruction. As Schramm (1977) stated, learning is influenced more by the content and instructional strategy in a medium than by the type of that medium. According to Lumsdaine (1963), media reflect an economical concern and are used to support the technology of instructional method (Clark, 1994). On the other hand, media provides many educational benefits and many researchers have reported the impact of media and media attributes on learning. For instance, learning can be fostered at any location, any time. This flexibility is made possible thanks to the Internet, and portable devices such as computers, tablet computers, or mobile phones, and media to access open and distance learning (Alsunbul, 2002; Barcelona, 2009; Webster & Hackley, 1997). Innumerable forms of instructional materials can be created for learners with different media and media attributes, and in this way, learning can be facilitated. With these various forms of multimedia and media, learners' attention and interest can easily be drawn to the topics to be taught (Blumenfeld, Soloway, Marx, Krajcik, Guzdial, Palincsar, 1991). Motivation can also be increased and sustained easily during the learning process (Wall, Higgings, Smith, 2005). Language teaching and learning can be facilitated (Rank, Millium, Warren, 2001), developing especially listening and speaking via the use of online media has become common practice (Al-Mahrooqi, & Troudi, 2014; Balbay & Kilis, 2017), writing skills are enhanced through online media as well (Styati, 2016), and also vocabulary acquisition (Mohsen, 2016; Perez, Peters, Desmet, 2017). Most cooperative and collaborative learning activities in education today make use of technology and media. Creativity skills

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