Chapter XXXVIII
Descriptors of Quality Teachers and Quality Digital Games

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ABSTRACT

Quality teachers and quality digital games (video and computer) are dynamic resources that experience ongoing changes based primarily on their interactions with learners. Characteristics of these resources have been, and will continue to be researched and identified in order to discover ways to improve student learning. This chapter uses the descriptors of one of these resources, quality teachers, to illustrate how the same characteristics are integral to effective digital games. North American youth now spend more time on digital gaming activities than they spend watching TV or reading (Greenberg, 2004; Prensky, 2005), prompting educators to become familiar with the 'quality teacher' traits of digital games that keep learners on task and learning. By using the descriptors of quality teachers to evaluate digital games, educators will gain a better understanding of why digital games are effective learning tools.

INTRODUCTION

Quality teachers know that there is no panacea or magic bullet for excellence in teaching. They know that learning is more than the standard psychological definition of "a change in behavior that results from experience" (Lefrançois, 2006, p. 419). And they know that quality teaching is not just explanation, but rather, "more about expanding the space of the possible and creating the conditions for the emergence of the as-yet unimagined" (Davis, 2004, p. 184). In accordance with the perspectives of psychologists Jerome Bruner and Robert Gagné, quality teachers also know that not just one learning theory underpins quality teaching, but that a combination of theories needs to be integrated into a teaching model that allows "for all the various kinds of learning possible in the wealth of circumstances under which

learning takes place" (Lefrançois, 2006, p. 407). But at the same time, as teachers assimilate various learning theories into their pedagogy for their classrooms, they also understand that substantial learning takes place outside the classroom.

In fact, time spent on *informal learning,* or out-of-school learning, is the largest block of learning time for our children. During recreational or leisure learning time, learners often construct and control their own activities. In particular, technologies such as *digital games* (video and computer) have expanded the potential for informal learning exponentially, and students at all grade levels bring the learning competencies developed through their gaming experiences with them to class. These recreational digital games, for the most part, demand "strategic thinking, technical language, and sophisticated problem solving" (Shaffer, 2006, p. 6). As Richard van Eck (2006) so eloquently points out, those of us who have advocated for decades that digital games are effective learning tools are rather taken aback that others now agree with this assessment, and are now shifting our focus from promoting digital games as effective learning resources to "why and how they are effective" (p. 18).

The intent of this chapter is to illustrate that quality recreational digital games exhibit the descriptors of quality teachers. The identifiers described in this chapter are by no means inclusive of all the characteristics of quality teachers. Teachers possess and evince many, many more characteristics and descriptors than those included in this brief synopsis**.** Most of these others fall under the umbrella of the interpersonal and affective skills (sometimes known as communication skills in the business and corporate world) that will continue to be the crux of successful teachers (Berliner, 1992), and resources such as digital games cannot and will not replace the need for "humanity coupled with intellect" (p. 31). Yet while we recognize that digital games can never possess all the characteristics of quality teachers, many such traits can be used to help identify *quality digital games,* games that reflect high standards of pedagogy and enable learner success. Digital games can, of course, be used in educational settings, and other chapters in this book describe in detail applications and methodologies for doing so, but the primary purpose of this discussion is to promote a better understanding of why digital games are effective learning tools. How then, as educators and researchers, do we acknowledge the similarities between quality teaching and quality digital games, and capitalize on the latter's characteristics that encourage learning? Just why are digital games so successful at getting children, youth, and adults to learn?

WHAT ARE DYNAMIC RESOURCES?

Janette Hill and Michael Hannafin (2001), in their study of the changes in and challenges of *resource-based learning*, categorize resources as either static (e.g., print, video) or dynamic. *Resources* are assets in the environment that can support learning and are as diverse as books, media, humans, models, games, videos, manipulatives, toys, technologies, art works, pictures, and realia (real-life objects). Hill and Hannafin (2001) define *dynamic resources* as those that "undergo frequent, sometimes continual change" (p. 6), and include humans (especially quality teachers) and digital games in this category. I propose that descriptors of one kind of dynamic resource, quality teachers, are also descriptors of quality digital games, another dynamic resource.

WHAT DO WE KNOW ABOUT QUALITY TEACHING?

Quality teachers can be found in every segment of society, including schools, post-secondary institutions, business, industry, health care, and recreation. They may be known by terms as