Educational Games to Support Caring and Compassion Among Youth:
A Design Narrative

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ABSTRACT

In this paper, the authors argue that video games offer unique and pervasive opportunities for children to develop social dispositions that are necessary to succeed in the 21st century. To this end, they discuss the design of TavCats—a virtual role-playing game that aimed to engage children (ages 9 to 13) in understanding, acting upon, and coming to value being caring and compassionate. The authors' discussion takes the form of a design narrative through which they explain the connections between their theoretical commitments and design decisions. Specifically, they review four design elements they utilized in their design work: identity claims, boundary objects, profession trajectories, and cyclic gameplay. The authors briefly share their observations from a pilot study with children in an afterschool setting to illustrate how their design work might be realized in the world. They conclude their paper with a discussion of the implications of their work for designing educational video games for supporting social dispositions as well as academic learning, and future directions.

KEYWORDS

Design Narrative, Educational Games, Game-Based Learning, Game Design, Serious Games, Social Dispositions, Social Learning, Teaching Caring and Compassion

INTRODUCTION

Citizens of the 21st century need to work, communicate, and collaborate effectively with diverse groups to find solutions to the social, environmental, economic, and political challenges that are facing the world. Today's job market demands interaction with people and collective intelligence to solve complex problems (Jenkins, Clinton, Purushotma, Robinson, & Weigel, 2006; Thomas & Brown, 2011). Students need to understand and develop empathy towards others to successfully participate in this global community (Poppo, 2006). Despite the increasing importance of these social skills and dispositions in the workplace, schools continue to focus on content knowledge and increasing children's scores on high-stakes tests, and struggle to actively support the development of social values, behaviors, and dispositions among children (Elias, 2006; Hoffman, 2009; Kohn, 1991).

The field of educational video game research and development also favors academic learning over the development of social values, behaviors, and dispositions (Connolly et al., 2012). Since the release of *Oregon Trail* in 1971, the field has mainly focused on designing video games that intentionally support children's content learning in the subject areas (i.e. math, science, language arts, history, and

physical education), and understanding the impact of video games that aim to entertain (i.e. SimCity and Civilization) on children's academic outcomes (Ke, 2016; Young et al., 2012).

In this paper, we argue that video games offer unique and pervasive opportunities for children to develop social dispositions that are necessary for children to succeed in the 21st century. We discuss how one might design a theoretically informed educational game that supports the development of children's social dispositions as opposed to academic content learning. The design is often treated as a black box in the field of educational video game research and development. The theoretical underpinnings of design and the way in which the design of an educational game came about are less frequently shared and made public for other researcher-designers to reflect and draw connections between their own practice and others in the field (Gaydos, 2015). In line with this observation and critique of the field, our discussion takes the form of a design narrative through which we explain the connections between our theoretical commitments and design decisions.

Specifically, we detail the design elements of TavCats, an educational game about compassion and caring developed and released within Quest Atlantis (QA). QA is an international learning and teaching project that uses a 3D multi-user environment to immerse children, ages 9 through 13, in educational tasks (see Figure 1). As part of QA participation, each child is given an online persona (avatar) with which she can move around a number of different 3D virtual worlds, talk to different Non-Player Characters (NPCs), and collect and analyze artifacts to solve problems they encounter as part of their Missions—list of tasks designed around a narrative that requires children to draw upon academic subjects. Missions are embedded within a meta-game context that serves the functions of providing a motivating context to stimulate student engagement with academic content and instilling values in member behaviors (Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005).

The meta-game context involves children completing activities related to seven social commitments: Creative Expression, Diversity Affirmation, Personal Agency, Social Responsibility, Environmental Awareness, Healthy Communities and Compassionate Wisdom. The TavCats game was designed to provide children an opportunity to advance on the Compassionate Wisdom social

Figure 1. Screenshot of the Quest Atlantis Interface
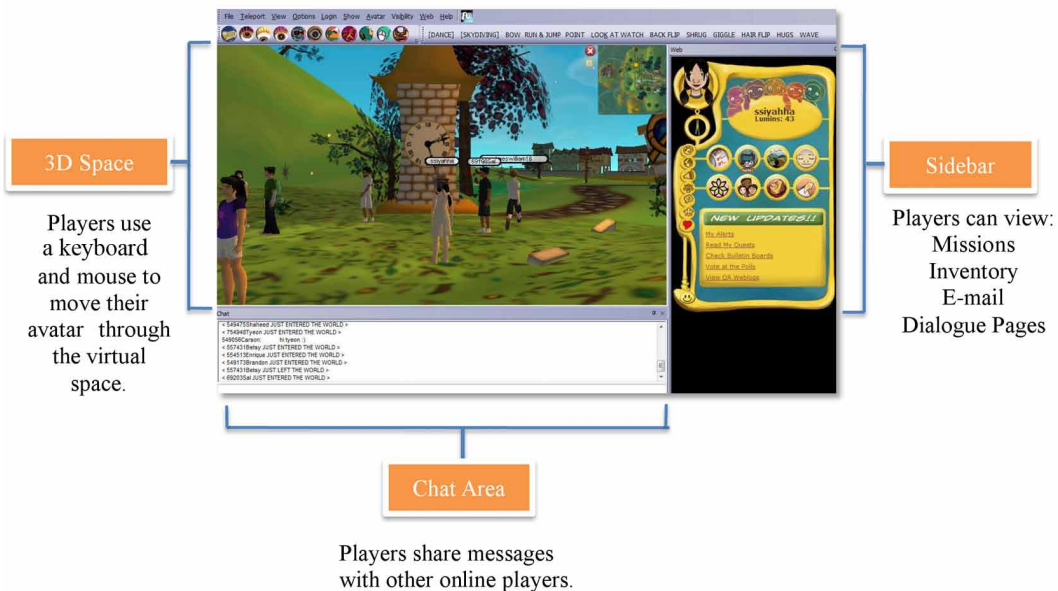
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