

Narrative at Play: Digital Games in the Language Arts Classroom

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INTRODUCTION

Digital games have been positioned as an alternative to traditional texts that might better capture the attention of 21st century learners (Gee, 2003; Prensky, 2006). In this paper we describe the design and implementation of a 2-week classroom unit that used the iPad game *LostWinds 2: Winter of the Melodias* (Frontier Developments, 2009) to teach the elements of narrative as specified in the learning objectives of the Grade 6 (age 11-12) Language Arts curriculum in Ontario, Canada. Our goal in this paper is twofold: first, we add to the literature on games as classroom texts and second, we build on our earlier work (de Castell et al., 2017; Jenson et al., 2016) that seeks to add empirical evidence and develop replicable study designs in order to better understand where and how digital games can be used in the classroom to support specific curriculum objectives.

Gee (2011) describes how narrative-based learning takes place in games: player actions are understood as “probes”, interrogatory actions inciting fictional outcomes which express cause-and-effect relationships embodied in the rules. Narrative understanding is crucial in this process of identification and transference. As Gee (2011) puts it: “as we [probe], we tell ourselves a story that attempts to make sense of this situation, of how we have decided and acted” (354). He calls this story an “identity story”, and argues that narratives provide us with alternative identity stories which we integrate into our own (355). Through videogames, players are able to safely experiment with other identities and reflect and revise their identity stories in ways that may be difficult or impossible in ‘real life’. Through ongoing probing, the model is gradually reproduced in players’ understanding, ideally leading to an understanding of the overall system (Gee 2008). As Dondlinger (2007) and Rowe et al. (2010) note, it is easy for students to become sidetracked by false leads, distractions, and other narrative “noise”. It is therefore important for the game to be carefully designed (or framed by a teacher) to draw attention

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to its educational content - a delicate management of Jenkins' "narrative architecture" (2004). This can be achieved through explicit identification of narrative elements. Goals are also useful in pointing players in the right direction (Dondlinger 2007); narrative arcs can be used to contextualize goals in the fiction.

STUDY DESIGN

LostWinds 2 is a platform and puzzle game where the player takes on the role of Toku, a young boy searching for his mother, who has disappeared in a land of eternal winter. Of particular interest to our study, most of the information needed to progress in this game must be pieced together by reading letters she has left behind. While the game is also available for PCs and the Nintendo Wii, we decided to use the iOS version on iPads, which allowed students to move around the classroom and ask their peers for help should they get stuck.

Our partner school is located in a low to mid SES inner-suburb. In total, 60 11-12 year olds participated in this study (32 boys and 28 girls). Previously, we have reported on how student participants, and particularly students from this demographic, do not typically reflect the characteristics of the "digital natives" 11 and 12 year olds are too often assumed to be (Jenson, Taylor, & Fisher, 2010).

After all parties involved in the research were given the opportunity to play through *LostWinds 2*, the research team and partner teachers met for a day of curriculum planning. Working in collaboration with a group of classroom and special education teachers, we co-designed a plan for gameplay, homework, in-class activities, and assessment tools to meet teachers' learning objectives while at the same time advancing the research team's goals of contributing to the empirical evidence of the impacts of games as learning tools in formal educational environments.

Students were given a pre- and post-test that evaluated their general understanding of narrative. They were also given a technology-use survey to gauge their familiarity with games outside of the classroom. Students played the game in pairs, where they would take turns either playing the game, or reading from the step-by-step walkthrough to assist their partner's progress through the games.

A second group of students (n=27) who did not participate in the curriculum were given the same pre- and post-tests, serving as a control for this study.

RESULTS

Preliminary analysis found that students generally improved their scores from pre- to post-test having played the game and having had narrative constructs reinforced over the 2-week intervention. As a point of comparison, the control group did not display the same improvement between their pre- and post-test scores. This allows us to rule out the possibility that improved scores were due to students becoming familiar with the test format.

We also found stereotypical gender differences as boys reported having more access to games, playing more and generally reported being more enthusiastic about school curriculum including a game component. In terms of test scores, the overall change in scores from pre- to post-test was significantly higher among male participants. While overall there were increases in scores for both boys and girls, our findings lead us to

conclude that the boys benefited the most from the game-based approach to narrative instruction.

This study demonstrates that video games can be an effective tool for supporting narrative learning in classroom settings. That it was of most benefit to the boys, who as a group normally lag behind girls in language and literacy-based subjects, is likely due to the fact that they were, as a group, more enthusiastically engaged in gameplay and more likely than the girls to complete the game. Collaborating with teachers to co-create this game-based curricular unit on narrative has produced both an educational intervention, and a replicable study design, that can be useful to other teachers and to researchers seeking to better understand and mobilize the capabilities of commercial games to support school-based learning objectives.

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