Chapter 14
Game–Making in a Fourth Grade Art Classroom Using Gamestar Mechanic

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EXECUTIVE SUMMARY

Making a game can be a creative act for students—much like writing a novel, making artwork, or designing a science experiment, it is a way to "play" with ideas. Game making is a creative and iterative process, and it may help students develop the ability to think non-linearly, create and understand systems, and hone such 21st century skills as critical and analytical thinking skills, while allowing deeper explorations of social issues that afford avenues for storytelling, allowing both game players and game makers to engage in meaning-making experiences. In the art classroom, students can explore design considerations, such as color, shape, balance, composition, rhythm, and meaning making. Game making is an iterative, multi-disciplinary mode of self-expression and communication, and it is a demonstrable example of student learning.

OVERALL DESCRIPTION

The computer is the new tool, the new medium which links the concept of information and art together.... Due to the computer's complexity and its capability of being used for such diverse possibilities, it is a tool and a medium with its own built-in agenda. Electronic tools have a hidden point of view far more complex than that built into a brush, printing press, or a camera (Lovejoy, 1992, p. 139, 142, as cited in Rogers, 1995, p. 17).

This chapter discusses how this researcher used the free, online video game *Gamestar Mechanic* (http://gamestarmechanic.com/) in an elementary art classroom and supported the art teacher in learning how to use this tool. Through this professional development experience (done as part of graduate research), the art teacher learned how to use *Gamestar Mechanic* and how game design and art can be integrated. Players (fourth-grade students in a low-income, urban school) learned basic game design principles and how to design games by playing and fixing them. Students can use *Gamestar Mechanic* to make their own games, post them online, receive feedback from classmates, teachers, and other players, and then revise and repost. Because game making is an iterative process, it is like the scientific method of stating a hypothesis, creating an experiment, testing, reworking, and retesting. It is also the method used by professional game designers.

Students spent time making a comic strip prior to using *Gamestar Mechanic*. Each student made a three-panel comic that functioned as a storyboard, helping them grasp the concept of avatar, obstacle, and goal. This experience gave both the researcher and the teacher feedback allowing for formative assessment so that future lessons could be redesigned. An alternative practice that could enhance lessons and learning outside the art classroom might occur if teachers collaborated in using *Gamestar Mechanic* to support learning math, science, reading, writing, spelling, and story composition.

Literature Review

In 1938, Dutch sociologist Johan Huizinga put forward the idea that playing games evokes a "Magic Circle." Interpreting Huizinga, Brown (2008) describes this phenomenon:

All play moves and has its being within a playground marked off beforehand either materially or ideally… All are temporary worlds within the ordinary world, dedicated to the performance of an act apart (p. 97).

Brown explains that "play is something outside the province of moral reasoning, neither moral nor amoral." Provoking contemplation, Salen and Zimmerman (2003) ask, "Does the magic circle enframe a reality completely separated from the real world? Is a game somehow an extension of regular life? Or is a game just a special case of ordinary life?" (p. 96). Salen and Zimmerman (2003) assert that games encompass agreed-upon rules, a common understanding of the game system, and identification with the representation of oneself within the game as a token or avatar. These rules and the immersion within the game are what create the magic circle.

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