

## Chapter 8

# Learning as Becoming: Values, Identity, and Performance in the Enaction of Citizenship Education through Game Play

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### ABSTRACT

*In this chapter, we share a model of game-based learning for use in the context of classroom learning in school. The model is based on the dialectic interaction between game play and dialogic engagement with peers and teacher on one hand and a developmental trajectory of competence-through-performance on the other. It is instantiated in the context of a learning program related to citizenship education using the computer game Space Station Leonis. We argue for the importance of values in all learning, based upon a theory of becoming citizens that is founded on process philosophy. We relate values to dispositions as articulated manifestations of values and describe how the Leonis learning program helps to achieve dispositional shifts befitting citizenship education in a globalized and multi-cultural world.*

### INTRODUCTION

Educators face an increasingly difficult challenge in nurturing students who will develop to become civic-minded, active, and productive citizens. Effective citizenship education is particularly

vital today due to the forces of globalization and multiculturalism that impact the lives of citizens worldwide (Banks, 2008). As societies become more cosmopolitan (Appiah, 2007), better understanding between nations and cultures is urgently needed in order to avoid ideological, racial, and cultural conflicts.

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In the context of schools, citizenship education is the usual means through which students' values, dispositions, beliefs, and attitudes are nurtured to realize the goals of active rather than passive citizenship. According to Selwyn (2002), passive citizenship is the product of an education that seeks to develop knowledge, understandings, and behaviors of citizenship, while active citizenship augments the passive model with an ability to critique, debate, and propose alternative models of the structures and processes of democracy.

Effective education for becoming citizens does not consist merely of being told what one ought to do and to be. Neither does it primarily revolve around learning *about* the birth of a nation and its consequent development. Rather, effective citizenship education needs to focus on students' *being* and *becoming*: on how they understand themselves as persons—their identity and being—and on their developmental trajectories of becoming, projected into the future.

In this chapter, we report on a pedagogical innovation involving the use of a computer game, *Space Station Leonis*, to foster values and dispositions that, we hope, will help lead to beliefs, attitudes, and actions that are more inclusive, thoughtful, and critically considered. We argue for the centrality of values in all human knowing. We also adopt a process worldview in framing our theoretical approach to understanding and to influencing the developmental trajectory of human learning. Key to this process perspective is the element of experience that arises out of “that which is lived” (Mesle, 2008, p.43). This perspective, grounded in process philosophy (Rescher, 2000; Whitehead, 1978), avoids the dualism of Descartes: namely, that minds think and do not exist in space, while bodies do not think and exist in space. Instead, it posits that in as much as we cannot understand ourselves (including our minds) without understanding the world of which we are a part, neither can we understand the world without understanding ourselves as a part of it (Bateson, 1979; Mesle, 2008).

In the next section of this chapter, we make the argument that values are central to all human knowing, and we make the connection between values and values education. We then locate the importance of values within the broader context of the metaphysics of process philosophy. Next, we describe the background and context of the research study that revolves around the Leonis learning program, comprising the use of the computer game *Space Station Leonis*, associated curriculum materials, and classroom activity structures and participation frameworks. We then focus on our survey data of student dispositions gathered from a pre-test and post-test survey instrument. We present the data analysis and results on dispositional shifts arising from participation in the Leonis learning program, then discuss our findings and conclude the chapter.

## **CENTRALITY OF VALUES**

There is widespread belief, especially amongst laypersons, that facts and values are fundamentally separate from and independent of each other. Given the influence of modernism and the advent of the physical sciences, “facts” are seen as “real,” “objective,” and “proven,” and hence are universal. “Facts” are esteemed above “values,” which are often viewed as “fuzzy,” “subjective,” and “unprovable.” Consequently, it is common to find many schoolteachers, students, and parents esteeming factual learning as a concrete accomplishment on the part of students while according values education second place, treating it as something desirable but less important. This difference in valuation is reflected, for example, in the different number of curricular hours committed to “hard” subjects such as science and mathematics compared to “soft” subjects such as civics, citizenship education, and literature. The situation is exacerbated in schools by the teaching of subjects, such as science and mathematics, in a manner that strongly assumes, or implies, that the

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