# Chapter 17 Preparing Pre–Service Teachers for Game–Based Learning in Schools

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#### **EXECUTIVE SUMMARY**

This chapter describes the pre-service teacher's preparation of teaching consumption education to middle school students when using Farmville, a social network-based game. Consumption education is a complex topic, involving principals such as consumers, producers, governments, etc., as well as related abstract concepts such as resource type, the management and distribution of resources, use of consumer information, consumer decision-making, et cetera. Consumer satisfaction varies based on interaction types between each factor. Because of the abstract nature of this discussion, there are many limits to teaching this topic using only theoretical classes. However, students reported that using Farmville was helpful in learning on consumption and related contents, specifically because of its ability to confirm specific results, including stream of resources management, consumption pattern by decision-making process, etc. through the process of giving and receiving resources with peers who participate in a game. Also, students understood the stream of actual market economy and realized the importance of shared consumption as an environmental factor.

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#### OVERALL DESCRIPTION

Consumption behavior is very sensitive to domestic and foreign market economy. They change from time to time and the variables related to it are very diverse. Particularly, goals and types of consumption behaviors vary on based on the demographic location of the consumer, producer (company), government, etc. However, highest rate of consumer satisfaction can be maximized using interactions between each principal. Accordingly, by combining the game of *Farmville*, where various consumption principals and situation can be experienced, with a conversation on consumption, students can experience decision-making as a principal related with actual consumption, unlike in theoretical classes, and then evaluate the results.

In Korea, the topic of consumption education focuses on developing 'consumer' capabilities. Ideally, these skills will enable their user to cope with a rapidly changing the market economy in the modern society and to practice sustainable consumption behaviors. In order to accomplish this goal, it helps to learn related knowledge, understand the interactions between the consumer and the market economy, and to find opportunities for students to practice consumption-related behaviors. Further, teachers' own ability to deliver consumption education concepts must be developed, particularly for home economics pre-service teachers.

This chapter analyzes the consumption education in middle school textbooks. These textbooks are in accordance with the 2007 revised curriculum now being applied to current school fields. This chapter also describes the possibilities of a student-oriented classroom model using *Farmville* to teach on consumption, and the ways in which consumption lives are affected by domestic and foreign market economy changes, by the goals and types of consumption behaviors, and by the demographics of the consumer, producer (company), and government. Further, by allowing early career teachers to experience each stage of course design (from session design, lesson plans, and metric design) when using a social network game as a keystone of the course, teachers can experience with new types of classroom environments incorporating smart-learning, student-oriented class, etc.

### Practicalities and Preparation for Game-Based Learning

The lecture is designed in 5 stages over the course of the semester of a pre-service teacher training course. In the 1<sup>st</sup> stage, pre-service teachers are asked to analyze contents of consumption education in the revised textbook which adopted revised curriculum standards in 2007. In the 2<sup>nd</sup> stage, pre-service teachers are asked to prepare a report on related factors using the analyzed textbook contents and *Farmville*. In the

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