Chapter 11 Serious Cooperative Board Games as an Innovative Approach in a Study Abroad Course in Peru

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ABSTRACT

The chapter describes how creating and playing a serious cooperative board game to address energy sustainability in a study abroad course provides an opportunity for students to collaborate in culturally diverse teams and develop intercultural competence. Learning leadership skills through the method of Agile Game Play, including team building, communication, and cooperative interaction for a global benefit, is shown to be effective. The serious cooperative board game can be seen as not merely an interactive support tool, but as a method to generate innovative, people-centered, approaches that can be applied to efforts in global energy sustainability and policy making. Creating and playing a serious cooperative board game offers a new approach for a student in any field of study to learn cooperative leadership skills for global benefit in a short amount of time.

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INTRODUCTION

Globalization has motivated the higher education sector to integrate international initiatives to meet growing demand. In the 5th International Association of Universities (IAU) Global Survey on Internationalization of Higher Education, internationalization was found to be in the strategic plans of 900 institutions in a total of 126 countries. According to the latest U.S. study abroad data conducted in 2018, over 300,000 U.S. students studied abroad for academic credit in the 2016-2017 academic year ("U.S. Study Abroad Continues to Increase and Diversify," 2018). Many intercultural benefits can be realized from joining a study abroad program. The international experience of seeing the world from a different viewpoint can be life-changing. It is hoped that working across borders with other students and faculty will better prepare a student to communicate at a global level and instill a desire to build cooperative relationships with others in a world that is ever-changing.

The purpose of this chapter is to describe how developing and playing a serious cooperative board game in a study abroad course provides an opportunity to students to collaborate in culturally diverse teams and develop intercultural competence. Creating a serious cooperative game can be a useful innovative tool and approach to international education in a study abroad, because the cognition involved in designing and developing focuses the learner on relevant skills.

This chapter focuses mainly on a study abroad course in Peru between 2019 and 2020. The title of the course is Serious Cooperative Board Game Development for Energy Sustainability in Peru. It is a 3-credit, 8-day course in the university Polytechnic Institute. The learning objective is that students design, develop, and play a serious cooperative board game for energy sustainability to be used in Lima, Peru to promote teaching and learning opportunities. The students take a collaborative hands-on approach with students from the University of Engineering and Technology (UTEC) in Peru to create a serious cooperative game that engages users by applying the design thinking method throughout game development. The first author plays dual roles as the instructor and the researcher, which enables him to collect data derived from how the game is played, providing information for educators to create teaching and learning tools and providing a learning platform for players/students.

Intergroup Contact Theory (Allport,1954) is used as the theoretical framework to illustrate the ways in which developing a serious cooperative game in the study abroad program in Peru improves student learning. The theory suggests that positive contact experiences occur in contact situations characterized by four conditions. The required conditions for optimal intergroup contact are for the groups to have equal status (peer group members), common goals (for energy sustainability), intergroup cooperation (teamwork) and authority support (faculty-led debriefing).

BACKGROUND AND SIGNIFICANCE

By incorporating a method where the learners create a game together, they are placed in a learning environment that would not have occurred by only playing a game. Design and development are processes that allow the learners to think together as they begin to make decisions together. One of the significant reasons for using a serious cooperative board game design and development as a teaching tool during a study abroad program is that cultural differences become evident as the learners build their relationships and start to place effort on cooperation.

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