Developing Soft Skills the Hard Way:
International Student Game Projects

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Abstract

Assassin's Creed III is a blockbuster videogame published by *Ubisoft*. While most of its development was done by Ubisoft Montreal in Canada, significant portions were entrusted to five teams located in four other countries [1]. This game is not an exception. In recent years, videogame production, or software development in general, is increasingly becoming distributed and globalized [2,3]. As the global game production progresses, the demand for developers with inter-cultural skills and knowledge has grown and will continue to do so. To prepare students for such a globalized industry, it is imperative to provide opportunities where students interact with people from other culture(s) in developing games. This paper describes some of the issues observed and the experiences learned during two international collaborative student projects between two schools: one in the U.S. and the other in Japan.

Both projects were conducted between *DePaul University* (a university in Chicago, U.S.; http://www.cdm.depaul.edu/) and *Trident College of Computing* (トライデントコンピュータ専門学校, a technical college in Nagoya, Japan; http://computer.trident.ac.jp/), but at different times (2011 and 2013) and by different groups of students. Also the format and the scale differed as well. But in both projects, the students did not speak each other's language.

The first project was relatively large: a group of 16 students (8 from each school) worked together as a team over one year creating a game for submission to a game competition (*Independent Game Festival* (IGF)). The students in this project collaborated remotely over the internet using various tools (e.g. Skype). During regular scheduled project meetings, a human translator helped guarantee that accurate translation was made between the two sides. Figure 1 shows a scene from a regular remote meeting, and the splash screen of the game created (called "Matsuri"). The second project was a 2-day game jam event, conducted during a study abroad trip with the U.S. students visiting their counterparts in Japan. A total of 28 students (14 from each school) formed four teams (thus one team consisted of 6-7 students together) and worked side-by-side to create playable prototypes. To communicate, they used automatic translation tools and pointed the screen to each other. When they had difficulty verbalizing what they want to say (especially for detailed explanations), a human translator was called in to facilitate the communication. Figure 2 shows some pictures from the event.

In observing the students' behavior in the two projects, several interaction patterns emerged. A general observation was that students tried to follow the game design and development approach taught in each school, as was expected. But the differences in the two approaches, although similar in essence, made the collaboration between the schools quite unique. Whether or not, or how much, those interaction patterns were attributed to cultural differences is yet inconclusive, since we have observed only two projects. However based on the cultural background and the academic/professional experiences of the authors of this paper, most of the observed behavior patterns were culturally based.

One notable observation was team organization and the form of team work. There were three specializations/roles in the U.S. students (programmer, designer and artist), while there were only two (programmer and artist) in the Japanese students. In most Japanese gaming schools, students are either a programmer or an artist, and they design a game together by considering every member's opinions and coming to consensus. Whereas in most U.S. schools, designers take a lead in designing games and give directions to other members [4]. This difference between the two models (horizontal, consensus-based vs. hierarchical, leadership-based) brought out interesting interaction patterns between students in both projects.

Our projects also experienced unique difficulties. Apart from the obvious language barrier, one notable difficulty observed was cultural dynamics. Since Japanese people are in general reserved while Americans are used to speaking out, group discussions were often dominated by the U.S. side. To ensure opinions from both

sides were considered, one of the projects used a voting process in most decision-making. However, this scheme prolonged the development time significantly and ended up delaying the completion of the game. Problems related to cultural differences have been observed and discussed in the broader context of software development as well (e.g. [5]).

The outcome of the projects was quite positive and encouraging. For both projects, not only was the feedback from the students extremely positive, the quality of the game(s) produced was also higher than expected. Looking back, we think there were two key factors which brought the success: involvement of the faculty (on both sides) who understood both cultures, and the students who were open-minded and respectful to other cultures. Now going forward, we are discussing ideas to manage and possibly prevent the kind of difficulties we experienced in the previous projects, to plan for the potential next project.

Figure 1. Regular remote virtual meeting and the game created by the first project (Matsuri)

Figure 2. Collaborative work, final presentation and group photo of the second project (Game Jam)

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