

# **The use of interactive multi-player games to enhance second language acquisition of both Mandarin and English**

Harbord, Charly

Presentation for the Irish Conference on Game Based Learning 2019, Cork, Ireland, 26<sup>th</sup>-28<sup>th</sup> July 2019

## **Presentation:**

Key areas:

- Social and collaborative aspects of game-based learning
- Motivational aspects of game-based learning
- Serious games and gamification in different sectors (e.g., primary, secondary and higher education, corporate learning, training)

**Title:** "The use of interactive multi-player games to enhance second language acquisition of both Mandarin and English"

MMORPG have become a popular area of language acquisition research (Lee and Pass, 2014; Jabbari and Eslami, 2018; Yasar, 2018). Raising the question of whether games and education can be effectively combined; to create a game based on research that has education within its core yet still presents as an engaging gaming experience and provides a mutual learning platform for two languages.

The current study is longitudinal and focuses on the question: Can interactive RPGs enhance second language acquisition?

For the purposes of the study, the main focus will be on producing and comprehending written language as the Hanyu Shuiping Kaoshi (HSK; Chinese equivalency exam) is primarily reading and writing focused. These will be drawn from the level 1 HSK and from the corresponding words in English (Common European Framework Reference for languages; A1).

The pilot study will apply psycholinguistic and sociolinguistic research to a game which has been designed and developed by. The game is an RPG where the player completes various tasks which are similar for each language. These tasks start with simply getting dressed, eating breakfast and meeting people building up to more complex puzzles using colours, logic and recall. The benefit of this is that the game exactly corresponds the target language needs and negates the need to mod a quest system of another RPG, meaning the design can be carried out from the grass roots upwards.

**Hypothesis:** The research will focus on three hypotheses:

The effectiveness of role playing games for language learning.

The impact of avatar use and perception of other avatars.

The enhanced motivational factors of immersive and cooperative learning.

**Predictions:** It is predicted that the students who have exposure to the game will show a significant increase in word recall and target language in use. Two aspects that are anticipated to become apparent within the result data are:

- The using of Avatars, can help negate the anxiety that a learner may feel within face-to-face conversation in the target language (Hooi and Cho, 2014).
- The target language learners who are involved in the game based

supplementary learning are hypothesized to experience higher levels of motivation for learning the language (Cornillie et al, 2012).

**Methods:** I have created the game in both English and Mandarin with the aim of players cooperating in both target languages via a text chat system. Target language will be taught and then recall tested. Two control groups will also have the target language primed and tested. In order to keep exposure to language one control group will use an app for learning target language through rote-repetition. The secondary control group will not be expected to do any further revision, unless they wish to and that will be recorded. After exposure to the game, recall and comprehension will be retested both in the playing group and the control groups.

**Results:** The data collected will be mainly qualitative, using interviews and questionnaires to explore the experiences of the learners. However, there is also the quantitative element which will be drawn from in class testing.

## References:

- Cornillie, F., Thorne, S. and Desmet, P. (2012). ReCALL special issue: Digital games for language learning: challenges and opportunities. *ReCALL*, [online] 24(03), pp.243-256. Available at: <http://dx.doi.org/10.1017/s0958344012000134>
- Hooi, R. and Cho, H. (2014). Avatar-driven self-disclosure: The virtual me is the actual me. *Computers in Human Behavior*, [online] 39, pp.20-28. Available at: <http://dx.doi.org/10.1016/j.chb.2014.06.019>
- Jabbari, N. and Eslami, Z. (2018). Second language learning in the context of massively multiplayer online games: A scoping review. *ReCALL*, [online] 31(01), pp.92-113. Available at: <http://dx.doi.org/10.1017/s0958344018000058>
- Lee, J. and Pass, C. (2014). Massively multiplayer online gaming and English language learning. In: H. Gerber and S. Schamroth Abrams, ed., *Bridging Literacies with Videogames*, 1st ed. Rotterdam: Sense Publishers, pp.91-101.
- Yasar, S. (2018). The Role of Massively Multiplayer Online Role-Playing Games in Extramural Second Language Learning: A Literature Review. *Journal of Educational Technology and Online Learning*. [online] Available at: <http://dx.doi.org/10.31681/jetol.436100>