
Designing Card Games for Learning the Pragmatics of a Second Language

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Abstract

Many language-learning games teach either grammar, vocabulary or phonology. However, there are possibly neither digital nor non-digital games that teach the pragmatics of the language. Pragmatics is the study of how a language is conveyed and interpreted between speaker and hearer during spoken discourse. Learning pragmatics is essential for engaging in conversation with native speakers and interpreting their intentions within their speech. The outcomes of this PhD research project will include a card game for learning the pragmatics in English and a framework for designing the game. This “research through design” project involved case studies that examined how language-learning card games engage learners prior to conceptualisation of the first prototype iteration of the card game.

CCS Concepts

•**General and reference** → *Cross-computing tools and techniques; Design;*

Author Keywords

Game design; educational games; card games; language learning; oral communication; serious games; games for learning.

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Motivation and Background

Due to the status of English as the “world’s lingua franca”, learners learn English as a Second Language (ESL) to gain various opportunities including employment, education, travel and improved livelihoods [12]. Many teaching pedagogies, books and games were also produced to provide English-language education. However, most ESL teaching pedagogies are based on “rule memorisation” and translation exercises [4] thus provide insufficient exposure to the spoken language. Therefore, learners still have trouble communicating in the target language [10]. Furthermore, there is also insufficient teaching materials, teacher training and emphasis on learning pragmatics in ESL courses [3].

Attaining communicative competence in English includes knowledge in pragmatics [6]. Pragmatics is the study of how language is conveyed and interpreted between speaker and hearer during spoken discourse [14]. There are various studies on pragmatics, however, this research project specifically focuses on *pragmatic markers*. The most common characteristics of *pragmatic markers* include short forms, no effect on grammar, multiple functions depending on the context of the speech and mostly spoken than written [2]. Knowledge of the pragmatics could enable learners to engage with the native speakers and interpret their intentions, feelings and thoughts during conversations [13]. Despite the importance of pragmatics, there has been insufficient teaching materials, teacher training and emphasis on the teaching of pragmatics.

There is high emphasis on *input* and *interpretation* in teaching pragmatics. *Input* for learners can include watching or listening to samples of spoken pragmatics [1]. When learners receive *input*, they begin to understand how “sociolinguistic features” including social distance, power and “degree of imposition” provide different functions of a speaker’s

intentions. Then they produce their own *interpretation* to demonstrate their understanding of pragmatics [1] in “production activities” such as role-playing. Performance feedback is given by teachers so learners can modify their *interpretation* of the pragmatics [9].

Games can create safe, engaging learning environments by providing problem-solving activities that generate fantasy, curiosity and challenge [8]. Problem-solving in games allow players to make and learn from mistakes within the game space. When learners actively participate in social interaction in games, they engage in “deep learning” where they develop deeper “understanding of the material, ideas and themes” and critical thinking skills used for problem-solving [15]. These skills can also be used to solve different “problems and learning situations”. However, studies on the effectiveness of non-digital games for foreign language learning including those that teach pragmatics are still limited.

“Face-to-face human interactions” are emphasised as part of the enjoyment of non-digital games which is created when players sit physically close to each other to strategise with each other [11]. Although video games provide multiplayer gameplay and “indirect communication” between players, players are still “physically alone” and they only interact with the game system and its equipment thus diminishing “human communication” [11]. The social interaction created by non-digital games could potentially develop the deep learning needed for players to develop critical thinking skills for solving problems.

The background review demonstrates the effectiveness of games for learning and the necessity for learning pragmatics of a foreign language. Deep learning can be developed when players socially interact with each other when they play non-digital games. Not only is deep learning a neces-

sity for enjoyment but for the development of critical thinking skills [15]. A game that teaches English pragmatics must provide *input* and opportunities for creating *interpretation* of pragmatic markers through social interaction between learners [1].

Research Questions and Outcomes

This research project is guided by the following research questions:

1. How can language pragmatics, specifically English pragmatic markers be taught?
2. How can card games create enjoyment in language learning?
3. How can card games be designed effectively to teach language pragmatics?

Answering the research questions will lead to the production of two outcomes for this research project: a card game for learning English pragmatics markers and a design framework for such card games. These outcomes will inform language educators and education game designers about game elements for designing games to provide engaging pragmatics education to ESL learners. The research aims to demonstrate the game for teaching language pragmatics on a non-digital platform before possible adaptation into digital formats.

Research Approach

This research uses a *research through design* approach because the findings inform the development of the card game and its design framework. The methods of the research included case studies and iterative design.

Case Studies

Because of the inability to find card games that teach pragmatics, the case studies investigated how three different educational card games for English oral communication development engage learners. The studies consisted of three separate observation sessions, each with five participants playing one of the three games and practising their communication skills for 30 minutes. The 15 participants were ESL learners aged 18 or older (N = 15). I acted as both the language teacher and facilitator in each session and provided performance feedback, addressed any misunderstandings of the game and observed the play and learning of the participants.

After playing the game, the participants were interviewed as a group for another 30 minutes. Interview questions related to the participants' views on the game's goals and instructions and their experiences in improving their oral communication skills while playing the game.

The observations and interviews were video and audio recorded for data analysis. They were reviewed for information relating to the efficacy of the games' card aesthetic design, goals and instructions as well as signs of participants' enjoyment when they practised their English oral communication skills.

Iterative Design

Research through design also focuses on prototyping and iterative design [7]. The findings from the case studies and the background review will inform the design of the first iteration of the card game. After building the first iteration, it will be analysed by experts in the game industry to identify areas needed for improvement. These changes will be modified for the next design iteration. The card game will undergo at least three design iterations. All the evaluations

of the iterations will inform the design framework for designing a card game for learning pragmatics.

Current Situation in Research

I have recently completed my Second Milestone Review at RMIT University in Melbourne, Australia. During the Second Milestone Review, I presented the results from the case studies, its data collection, analysis and how the findings will inform the design of the card game.

Case Study Findings

One finding from the case studies reinforces the importance of social interaction between learners while playing the card games for language learning. Social interaction in the card games provided opportunities for the participants to practise various language skills including speaking, listening, vocabulary and grammar without fear of errors.

Feedback from language teachers was also integral to the participants' language improvement and understanding of the games. Grammatical feedback must be given while maintaining the learners' self-esteem [8]. Teachers can give feedback during or after the learners play the game and must allow them to re-assess their own language output and make improvements.

Dissertation Progress

The dissertation currently has four out of the planned eight chapters. The first three chapters are the introduction, literature review and the methods. The fourth chapter is a report of the findings of the case studies and provides design implications for the first iteration of the card game. The next four chapters will record the iterative design process of the card game including its conceptualisations, testing, evaluation and modification for the next iteration.

Future Direction of Research

After background review on language pragmatics and second language learning, the challenge the research currently faces is selecting a design framework as the basis of the card game design. Further investigation of the case studies findings including social interaction and collaboration in games for learning may be a solution. Another solution is holding brainstorming workshops [5] where participants assist with the brainstorming of design ideas for the card game. The main goal of the card game and this research project is to train English learners in pragmatics competence in a safe and engaging environment and prepare them for communication with other speakers outside the game environment.

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