

DISCORANDO: A Language Game for Compositional Fluency

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Abstract: Among the reasons for students' lack of participation in an English language classroom are the fear and the anxiety of learning the language. Boring and passive teaching methods could also reduce students' performance which leads to poor language production. By applying certain gaming concepts and principles for in-class lessons, the challenges could be reduced, if not overcome. Based on the idea of moving from conventional learning to game-based learning, the team proposes a language board game called "DISCORANDO" that promotes active learning and compositional fluency (the ability to write compositions easily and quickly) through the dynamics of obtaining word prompts. This board game can be played in and outside a classroom as it highly encourages independent learning among students. For its commercial potential, apart from producing it into a conventional portable board game, technology can be incorporated for improvement. In doing so, different themes can be used and more words can be updated to maintain relevancy and interactive values of the game.

Keywords: *Compositional fluency, game-based learning, language game, writing.*

Introduction

Learners in a language classroom often display reluctance when they are required to produce language output. In a second language learning context, writing anxiety is suggested to be language-specific anxiety (Cheng et al., 1999). Studies have shown that fear of language output, specifically writing, can be attributed to somatic, cognitive and avoidance behaviour with other elements stemming from these, namely "the writer" (decision-making), "the classroom" (setting) and the perceived difficulties (Cheng, 2004; Rahmat, 2019). These can pose a great deal of challenges to instructors in a language classroom where learners are required to exhibit written production as an indicator of language mastery. Following the Output Hypothesis, language production is regarded as part of the learning process rather than an outcome of it; therefore, interactions can be a means towards mastering a language (Swain & Lapkin, 1995; Schwarz et al., 2020). Challenges are further exacerbated by teaching methods that are perceived to be non-interactive and passive which can lead to reduced performance and language production among learners. All these factors combined, instructors are at the crossroads to implement an effective way to achieve learning objectives without jeopardising students' affective domain.

Many instructors have opted for using various avenues to encourage students of different backgrounds to participate and produce language output. Recent instances of activities employed to teach writing include using brain writing and long-form writing methods (Guetler et al., 2023), Facebook group (Pertiwi, 2023), Google Docs (Purwaningtyas et al., 2023) and fanfiction from social media (Hadi & Karyadi, 2023). At the same time, gamification has also gained traction in language learning where promising results have been shown to affective

dimensions and engagement (Howard-Jones et al., 2011; Slussareff et al., 2016). Considering the challenges as well as the potentials gamification offers in teaching language, this paper suggests a language game called DISCORANDO (a portmanteau word formed from “discourse” and “random”) that promotes compositional fluency as a manifestation of language output. While many studies have presented the application of gamification in education, this paper attempts to propose a game that specifies the writing skill. Following this brief overview, this paper will briefly review the literature before presenting the methodology that explains the game design and method. The paper will then present findings based on the feedback from learners who played the game as well as observations from instructors who were involved in monitoring the learners. The paper closes with a discussion and a conclusion comprising recommendations and limitations for future improvements.

Literature Review

According to Hudson and colleagues (2005), compositional fluency refers to the quick and effective ability to generate and organise ideas during the writing process. It encompasses the writer's proficiency in constructing coherent and cohesive texts while demonstrating a strong command of language and rhetorical strategies. While the speed at which ideas are generated is at heart of the concept, the writer's ability to select vocabulary, employ varied sentence structures, and create a seamless and appropriate flow of information is also underscored.

Encouraging language output in the classroom can be a challenging task for educators. By conducting a study that explores factors hindering speaking performance between urban and rural students, Anjaniputra (2021) provided insightful findings on these challenges. One significant challenge is the fear of making mistakes where the hesitance to speak up or express themselves in a foreign language is to avoid being embarrassed or laughed at by others. Anjaniputra also indicated the importance of observing teacher's activities that may trigger students' anxiety such as “speaking before others, direct oral questions from the teacher, and fear of their teachers' anger” (p. 260). Ergo, teachers are responsible to build a non-judgmental and supportive classroom ambience where every participant embraces errors and mistakes as a natural learning process.

Gamification has emerged as an effective strategy for promoting writing skills in educational settings. By incorporating game elements and mechanics into writing activities, educators can motivate students to develop their writing abilities, assist classroom management as well as develop creativity and collaboration among learners (Bal, 2019). A study done by Lam and colleagues (2018) found that learners' writing achievement improved with the intervention of gamification in argumentative writing tasks. As widely known, immediate feedback is vital towards the improvement of writing skills, and this is possible with gamification's reward, score and evaluation system. Leader boards, badges, or virtual currencies are instances of fun elements that can be incorporated to the writing process. Students will feel rewarded for their effort in producing written output repeatedly.

It is important to note that while gamification can be a powerful concept to promote writing skills, it should be implemented thoughtfully and purposefully, aligning with specific learning objectives. It is also important to consider the balance between enjoyment and academic rigor. The following section will describe the methodology of the language game “DISCORANDO” in terms of its design and elements.

Methodology

Game design

Depending on players'/students' abilities or levels of proficiency, the language game "DISCORANDO" can be played by individuals or in groups. While the game is proposed to be played in a classroom setting, players may also play it independently once familiarity of the rules has been achieved. The game consists of the following materials (See Appendix for samples):

1. A wheel containing parts of speech (verbs, adjectives and nouns of different values) with its base containing alphabets (A-Z).
2. 2 stacks of 25 cards containing low-frequency and high-frequency verbs.
3. 2 stacks of 25 cards containing low-frequency and high-frequency adjectives.
4. 2 stacks of 25 cards containing low-frequency and high-frequency nouns.
5. 1 stack of power cards.
6. Cue cards for writing.
7. Pencils for writing.
8. Hourglass or game timer (5 seconds).

Game method

Players will take turns to spin the wheel and purchase words so that they will eventually obtain five words each. Each word will be a key word for one sentence. This means that there will be five sentences that a player has to produce at the end of the game based on these five words. Players are tested in the way they produce five sentences based on the five random words purchased earlier. Not only that, these sentences will form a five-line story that is cohesive and coherent. The game is challenging in such a way that players have to strategise their purchases and they will also be able to incapacitate other players to their advantage.

At each turn, a player is able to choose between three actions: (1) spin the wheel to earn money; (2) purchase a card containing a word; or (3) purchase a card containing a power move. However, a certain amount of money is implied for a player to do (2) or (3). This means that during the first few rounds, players need to first spin the wheel to collect sufficient money.

To earn money, a player has to spin the wheel which contains different parts of speech (verb, adjective or noun) until it stops at a particular alphabet (A-Z). Within five seconds, the player has to produce a word based on the part of speech indicated by the wheel and it must begin with the alphabet at which the wheel stops. If the player is able to do so, s/he will earn the money stated on the wheel. If the player fails to do so, s/he will lose the turn.

To purchase a word, a player has to have sufficient money as different stacks of words have different price tags. Word price is categorised based on the frequency usage of the word, i.e. a low-frequency (less common) word will be more expensive than a high-frequency (more common) one. This is a trick because the amount of money spent later on will determine the amount of money returned to the player depending on the success of their composition. That is to say, the more money they invest in constructing a composition, the more money they will rake in. The expensive price tag is also due to the possibility of learners being challenged to know the meaning of the word, with which comes the risk of using the word incorrectly in the composition later on. This is where players have to plan out their strategies: Will they spend more on more difficult words to earn more at the end, or vice versa?

To introduce the concept of luck and risk in the game, power cards are also introduced. With the money under their belt, players may also choose to purchase cards that will give them advantage as the game progresses, e.g. lose turn, shuffle stack, steal card, reveal card, refer meaning and so on. This will present additional challenges or advantages to players as they have to make good decisions, adapt based on their own capabilities, and think on their feet for their next move. This is to resemble the dynamic process of writing where writers have to always be adaptable to changes that may come in abruptly.

Once a player obtains five words under his/her belt, the player may start constructing his/her story. This is an advantage for the player who has strategised their gameplay well. They may also continue playing to obtain more options for their words; however, this may come at the expense of their composition time or the exposure to other players' sabotages. Once the last player has obtained the five cards, s/he will be given 10 minutes to construct a complete story (which is a setback for completing last – lack time for a neat composition and writing under pressure).

At the end of the game, all players will present their stories. In a case where students play independently, they may assess each other's composition. They will comment on aspects such as correct usage of words, grammatical construction, coherence and cohesiveness of sentences. One player will be determined as the winner and his money will be returned. Losers will not have their money returned. A tie is also possible where players will get their money returned. Alternatively, in a case where the game is assisted by an instructor, s/he will do the assessment and decide on the winner. Players will then start a new round and the player with the most money at the end will be declared the overall winner.

Observations and feedback

A prototype of the game was played twice to two groups comprising of four students (n=8). Each time the game was played, an instructor with five-year experience teaching English was present to monitor and observe the process taking place. The instructor then reported the observation in terms of the game mechanics, the smoothness and pace as well as limitations and improvements to the researchers. Students who participated in the game were later interviewed at the end of the game to collect their responses in terms of their feelings after playing the game as well as limitations and improvements to the researchers.

Findings

Commercial potential

The learners indicated several commercial potentials which can be described into three categories, namely (1) unlimited possibilities; (2) honing soft skills; and (3) improved affective domain. The first category is explained by way of story composition. As players obtained randomised sets of words at each round of game, they produced different sentences to form a different story. As they would also be judged by their story composition, they were expected to form a different story to win the hearts of the other players. As for honing their soft skills, they learned decision making as they had to strategise their word selection and narrative that would entice the attention of other players. They also had to adapt to a different strategy when they were sabotaged by a power card. When the game was played in groups, players employed tolerance and peer support from the collaborative approach used to lay out their strategies. In which case, a more confident student will help a student with less confidence in choosing a strategic word, or even construct an effective sentence for the story. Last but not least, improved affective domain is described by learners who found that felt more confident and comfortable to use the language. This is especially true when they could see immediate goal and purpose in

using the language, i.e. to win the game. This indirectly contributed to an increase in participation by the learners to produce the language.

As for the instructors, three categories are also indicated, namely (1) alternative teaching aid; (2) promoting scaffolding; and (3) increased adaptability. The instructors who participated in the game believed that the game could be an effective alternative aid for teaching writing. Instructors expressed the common challenge in encouraging students to write freely and independently to expand their compositional fluency. Gamifying the lesson was seen as a good inculcate motivation to write without the fear or the shame in making errors. They also observed the effectiveness of the game as a way to promote scaffolding among students as the instructors' presence was only to provide necessary tools from which minimal feedback and reinforcement were given. Lastly, instructors viewed the game with the potential to be adapted as an independent learning tool for learners as they can use it outside of the classroom. Furthermore, they also suggested for the game to be digitised so that the word decks can be expanded, interface animated and themes introduced.

Sample written output

Samples from several runs have shown promising outcomes where learners were able to produce compositions of various types (e.g. descriptive and narrative) and themes (e.g. humorous and philosophical). The following are several samples authentically produced by the learners (bold words indicate words used from the game while asterisks indicate ungrammatical construction):

1. Type: Narrative (humorous)
 - i. A country girl named Hannah Baker is naturally a [**lackadaisical**] girl.
 - ii. She dreams to be a [**glamorous**] person like her other socially active friends.
 - iii. Thus, she decided to step out of her comfort zone and *goes to her high school [**party**].
 - iv. At the party, she *goes [**berserk**].
 - v. Out of the blue, she *become [**asthmatic**] and *goes unconscious.
2. Type: Descriptive (philosophical)
 - i. These days some theories about time [**travel**] is completely ancient and needed to be improvised.
 - ii. One of the science fictional theories define that we can shrink to [**microscopic**] particles to travel to the future.
 - iii. Therefore, this theory could be used or tested so that we can [**learn**] something that we think we are not capable of and adapt it.
 - iv. We must learn to [**control**] the usage.
 - v. So, we can escape from things that bother us to whatever want, whenever we like to fix things or to [**demolish**] things.

Discussion

Conducting a lesson with the objective to inspire learners to produce written out in a language classroom is often challenged by affective hindrances and conventional teaching strategies that decrease learners' motivation. DISCORANDO as a proposed language game aims at providing an avenue to deal with these challenges. Findings based on the feedback and

observations from learners and instructors have shown the potentials DISCORANDO can offer in a classroom setting.

DISCORANDO presents itself as a language game with unlimited possibilities. This is an important characteristic for a board game to be effective and especially considering the dynamic nature of writing (or language) that forms infinite possibilities from a set of finite elements. Studies have shown that board games which provide for unlimited possibilities encourage students to explore repetitively and bring about outcome that is not easily predicted or manipulated (Nicholson, 2011; Shanklin & Ehlen, 2017; Utaminingsih, 2013). As rote learning is implied for its effectiveness in overcoming writing difficulties (Siddiqui, 2020), this feature of DISCORANDO that promotes repetitive games will be instrumental.

Conclusion

The study on the use of DISCORANDO has been a preliminary one but it being an interactive language game has been positively received by learners and instructors alike. Since DISCORANDO was only produced in physical form, a lot of the game elements had functioned in a limited manner. For instance, the number of words in the decks was limited and the wheel was susceptible to wear and tear over time. DISCORANDO was a small board game made in a simplistic manner using recyclable items. While the small size might present DISCORANDO as a portable game, it might not work well in a big classroom. Therefore, there are still plenty of considerations that have to be made to further refine the game. Firstly, improvements in terms of the mechanics of the game where better decisions can be made on certain elements in the game (e.g. choice of words, values and prices of words, types of power cards) are necessary. This may include systematic research on lexical database to select words suitable for the target learners, and proper calculations on the values and prices of words so that a sustainable pace of game can be achieved. In the future, testing the game repeatedly with different learner groups and in different settings will reveal more gaps to fill. The authors are also optimistic that with the help of technology, digitising the game will further expand the potentials of the game (e.g. ability to occasionally update word decks, options for thematic stories, turning it into a multiplayer online (MMO), etc.). While games for educational purpose might serve as an appealing alternative teaching aid, designing it requires many careful considerations.

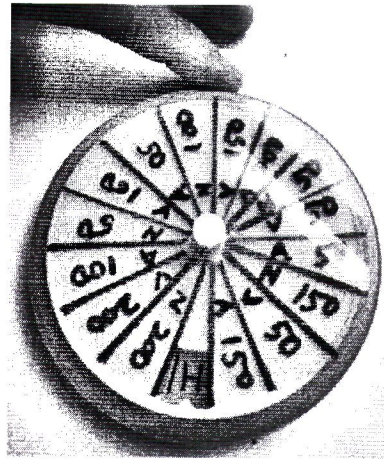
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Appendix

Wheel



Sample words from deck

SWAP

SEARCH/CHECK
DICTIONARY

SWITCH
CARDS

VERB (EASY)
AGREE

VERB (EASY)
BEG

VERB (EASY)
CARRY

GET 5\$

STEAL

SKIP

VERB (EASY)
COLLECT

VERB (EASY)
COMPARE

VERB (EASY)
MARK

STOP
OPPONENTS
TURN

CHANCE TO
LOOK AT
OTHERS CARD

REVERSE

VERB (EASY)
IMAGINE

VERB (HARD)
ACQUIRE

VERB (HARD)
SPRAWL

ADJECTIVE (EASY)
ABUNDANT

ADJECTIVE (EASY)
ADVENTUROUS

ADJECTIVE (EASY)
BROAD

VERB (HARD)
FLED

VERB (HARD)
WRING

VERB (HARD)
SUE

ADJECTIVE (EASY)
CONCERNED

ADJECTIVE (EASY)
DETERMINED

ADJECTIVE (EASY)
ENTHUSIASTIC

VERB (HARD)
SCRUTINIZE

VERB (HARD)
WAYLAY

VERB (HARD)
SIDETRACK

ADJECTIVE (EASY)
FANTASTIC

ADJECTIVE (EASY)
GREEDY

ADJECTIVE (EASY)
HILARIOUS

VERB (HARD)
PERAMBULATE

VERB (HARD)
DWELL

VERB (HARD)
FLING