CONQUER & SCORE: A WORD FORMATION GAME FOR LANGUAGE LEARNERS

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Abstract

Engaging students in language activities can sometimes be challenging for language educators. One of the ways to engage students in language activities is through language games. Language games can motivate students to communicate, strengthen their ability to comprehend the language and enhance their problem-solving and cognitive skills. Language games can also increase engagement of the students. This leads to the creation of the Conquer & Score: The Derivational Island. It is a word formation enrichment game catering to students learning lexicology and linguistics. The topic was chosen based on the result of an online quiz on the types of morphemes. The game focuses on the derivational morphemes used to form the English language words. The game requires knowledge of morphology as well as basic lexical analysis skills. The game provides educators a fun and engaging reinforcement activity for the students. Gamification elements used in the game such as rewards, flexible learning path and progress indicator offer a safe environment for competition, which can motivate students to outdo each other to win the game. This paper also highlights some important aspects of games in learning.

Keywords: *Morphology, Lexicology, Linguistics, Derivative, Morphemes, Language Games*

INTRODUCTION

Student engagement is very important in learning as it shows the degree of attention, curiosity, interest, optimism and passion that students have which will lead to the level of motivation to learn and progress in their learning (Great School Partnership, 2016). One of the ways to engage students in language activities is through games. Students' engagement in the game can be observed through their reaction towards the questions, speed of answering the questions and making sure they have the right answer and keeping up with the scoreboard (Nur Hazwani, Nur Afifah, Azura & Adlina, 2018). Learning language through games can also motivate students to communicate, strengthens their ability to comprehend the language and enhance their problem-solving and cognitive skills (Cerqueiro, 2015).

The word "game" is defined as "an entertaining activity or sport, especially one played by children, or the equipment needed for such an activity" (Online Cambridge Dictionary, 2019). The fundamental purpose of games is to increase human experiences through competition and cooperation in a comparatively safe environment where players compete against each other and experience gains and losses (Mahmoud & Tanni, 2012). This paper focuses on "an entertaining activity" through playing a conventional game for language learning. Conventional games are non-digital games that are played by using equipment and tools. With regards to Conquer & Score: A Word Formation Game, a dice, catapult and markers are the tools to play this board game.

PROBLEM STATEMENT

In one of the class activities, students were given an online quiz asking them to determine the types of morphemes used to form words. Out of the four types of morphemes, students received low scores on inflectional and derivational morphemes. The students were confused between the two types of morphemes. Based on this finding, a simple game was created to provide students with more activities related to the topic. It was from this simple game, Conquer & Score: The Derivational Island game was created. The game focuses on derivational morphemes as, unlike inflectional morphemes which have only 8 bound morphemes, derivational morphemes have a large number of affixes that can be combined with free morphemes to form new words. It is important for students to have this morphological knowledge helps them to understand the creation of new words and to analyse the modification of existing words. This knowledge will increase their vocabulary size and enable them to use affixes, to some extent, to predict meaning of other words.

OBJECTIVES OF THE GAME

>To enable students to form new words using morphemes in a fun way.
>To determine students' understanding of the different types of morphemes used with different root
  words.
>To determine students' ability to perform a basic lexical analysis of the words.

LITERATURE REVIEW

Games can be divided by their forms and purposes. There are two forms of games; digital and non-digital games. Digital games are played by using a computer either online or offline. Non-digital games are games that are played by using equipment and tools without using a computer and the Internet. Non-digital games are known as traditional games or conventional games. In terms of purposes, games can be used for entertainment or instructional purposes. Designing games for instructional purposes is different from designing games for entertainment purposes as the later focuses more on the fun aspect while the first focuses more on how it can help players develop new skills and knowledge or reinforcing existing skills and knowledge (Bradbury, 2019). Although players can learn from entertainment games, it is not the main purpose of the game. It is a by-product of the main goal that is enjoyment.

Game Elements

Games comprise organised activities (Klopfer, Osterweil, & Salen, 2009; Butler, 2014). Activities in games are designed systematically where players need to complete several tasks in sequence to achieve certain goals and outcomes. For example, tasks in games are arranged according to cognitive levels of difficulty (Hamari et al., 2016) and for achieving certain learning objectives according the syllabus or curriculum (Tuan Sarifah Aini & Anealka, 2017).

Garris, Ahlers and Driskell (2002) state that games have six elements. First, games have fantasy whereby the contexts, themes or characters are only imaginary that are made up to influence players to believe the created contexts, themes or characters exist. Second, games have specific rules/ goals to govern the games and keep players' engagement. Third, games have sensory stimuli such as remarkable visual / audio in order to grab players' attention. Fourth, games have challenges that consists of the optimal difficulty level which are meaningful, specific, but uncertain, not too easy and too difficult to be achieved, and the difficulty levels are in the progressive manner. Fifth, games should have elements of mystery. Players are provided with information at an optimal complexity level in order to promote curiosity. Finally, games provide control that allow players to regulate, direct or command something in order to control the games.

Juul (2003) also describes that games have six elements. First, games have rules that determine how players interact with the games by following certain rules. Second, games have varied measurable outcomes. Third, games have positive and negatives values of outcomes that will generate the possible outcomes. Fourth, games have challenges where players have to put efforts to get the desired outcome. Fifth, players have an attachment to games as the game outcomes can make players either happy for positive outcomes or disappointed for negative outcomes. Seventh, games have unfixed effects such as players who play the same game may play the game with or without real-life effects.

Whitton (2010) explains that games have ten elements. First, games make the players compete among each other to achieve the highest outcome. Second, games challenge players to put efforts to complete the tasks. Third, games allow players to explore the environment that is context sensitive. Fourth, games contain fantasy that make players believe the environment, character or narrative exist. Fifth, games have goals which are stated clearly. Sixth, games involve interactions among players. Seventh, games have outcomes that are can be measured in term of results. Eighth, games involve people as players of the games. Ninth, games have rules where players are provided with limitations that are artificially created. Finally, games offer safety environment as the task in a game does not affect the real world.

Dicheva et al. (2015) categorises gamification elements into two categories: gamification design principles and game mechanisms. The game elements in the gamification design principles are goals / challenges, personalisation, rapid feedback, visible status, unlocking content, freedom to fail, storyline/ new identities, onboarding, time restriction and social engagement. While game elements for game mechanics are points, badges, levels, leaderboards, virtual goods and avatars. The Conquer & Score game uses some of the game elements in designing and developing the game.

The Effectiveness of Using Conventional Games in Learning

There are numerous studies on the effectiveness of using conventional games in learning. The effectiveness of using games can be measured by the improvement in students' engagement, knowledge, skills and performance.

A study by Whisenand and Dunphy (2010) on the use of crossword puzzles in learning technological terms in business information systems showed positive findings. Students believed that the game helped them recall definitions and terms, besides enhancing their understanding and knowledge on technology terms. Similar study on crossword puzzles by Raines (2010) and Nur Fatin Fatihah and Albadri (2014) also showed positive outcomes. Raines (2010) used crossword puzzles for a nursing course. It was found that the crossword puzzles increased students' engagement in the learning process. Nur Fatin Fatihah and Albadri (2014) reported that students could improve their spelling after the games were implemented as a part of the learning activities.

Najdi and Sheikh (2012) found that games could create fun and comfortable learning environment, besides being able to practice the soft-skills such as cooperative learning, leadership skills and respecting people's opinions. Tengku Nazatul Shima and Rahmah (2013) proved that the use of the boardgame could reduce the anxiety of learning grammar and increase students' confidence in using new words and structures in the unconscious way. Metom, Tom and Joe (2013) also revealed a positive outcome that confirmed games could make learning grammar fun and effective.

These findings also suggest that conventional games are suitable for all students regardless of age and subjects or courses. Games make learning fun, meaningful and effective. Games can also turn the threatening learning environment into a comfortable one. Thus, games should be encouraged to be incorporated in learning any subjects at any levels of education.

*Principles Supporting the Design and Development of the Game*

The core principle guiding the design and development of the game is motivation as it is a measure of students' engagement in an activity. Keller (2010) explains that engagement can be measured by motivation and motivation is generally defined as "what people desire, what they choose to do, and what they commit to do" (p.3).

Keller (2010) establishes ARCS Model to measure motivation based on four dimensions namely Attention, Relevance, Confidence and Satisfaction. Keller (2010) defines Attention as gaining students' interest and arouse students' curiosity to learn; Relevance as matching with students' personal and learning needs that result in a positive attitude; Confidence as facilitating students to believe that they can succeed and control their success; and Satisfaction as strengthening achievement with rewards either internally or externally.

METHODOLOGY

Conquer & Score: The Derivational Island is a word-formation enhancement game, catering to students learning Language and Linguistics, and Lexicology classes. The focus of this game is on the derivational morphemes used to form the English language words. The game requires knowledge of morphology as well as basic lexical analysis skills.

The game consists of 2 dice, 32 root word cards, 40 derivational morpheme cards, a map of Derivational Island, a mini catapult, coloured flag pins and a guidebook on the list of lands in the island, some examples on how to request politely and a mini lesson on word formation using derivatives. Figure 1 shows the components of the Conquer & Score: The Derivational Island game set.
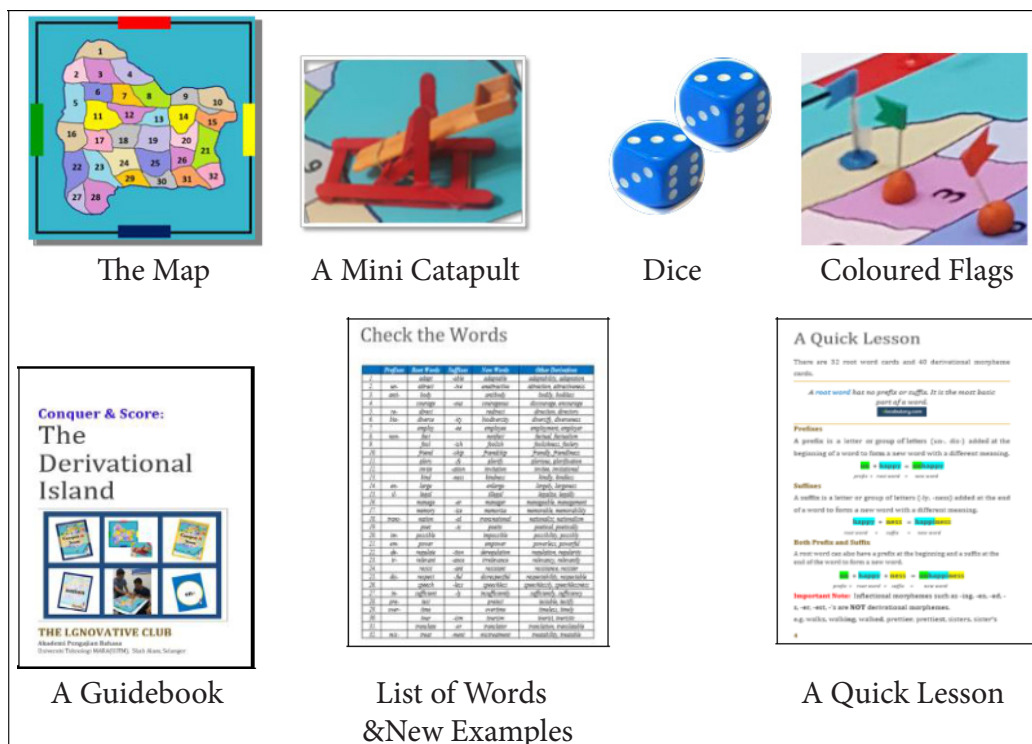

32 Root Word Cards   40 Derivational Morpheme Cards

The Map

A Mini Catapult

Dice

Coloured Flags

A Guidebook

List of Words
&New Examples

A Quick Lesson
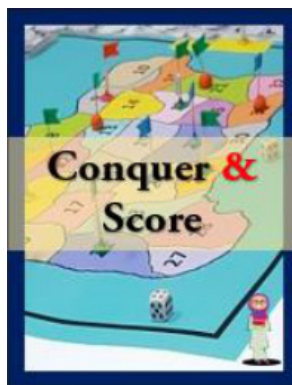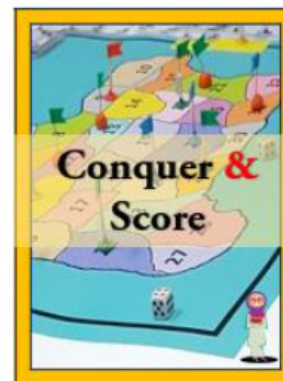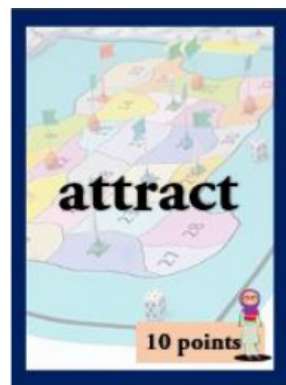
The game can be played by 2-4 players and can be up to 8 players in a pair game setting. Each player is given 5 root word cards, 5 derivational morpheme cards and flag pins of a selected colour. All players are required to check the cards in hand to see whether they own any of the lands on the Derivational Island. Place their flag on the land. Else, they can start the game by rolling both dice.

A total score of 6 and above enables the player to take one derivational card from the deck. Form a new word by combining a root word and the affixes. The words to be created are listed on the map. The player needs to provide one new example of the same root word within 30 seconds. For example, for the word plant, students can form several words such as plantation, replant, planter. A coloured pin will be placed on the map if the example is correct. If no word can be formed, the next player will continue. The card will be returned and placed at the bottom of the deck.

If a total score is less than 6, the player misses the turn. However, if the player scores a double digit, the player can conquer any land on the Derivational Island. Use the mini catapult to determine which part of the land to be conquered. The player needs to provide one new example of the same root word to complete the process. The owner of the land must surrender the land deed if the land is conquered. Failing to do so, the player cannot claim the land.

If the decks run out of cards, the player can obtain the cards from any players. The player needs to roll the dice and get a minimum score of 6 to enable the player to request a card either a root word card or the morpheme card from any of the players. If the word has three parts, the player can request 2 cards from any of the players. The request needs to be made appropriately using a polite English language or the game handler will reject the request. The list of polite requests is provided in the game kit. The player needs to provide one new example using the same root word within 30 seconds. If the player could not think of a word, the next player will continue. The card will be returned to the owner. Players with no remaining cards can still continue playing the game by following the same steps. Play until the Derivational Island is conquered. The winner is determined by the number of points collected.

REPORT RESULT

Novelty

Conquer and Score: The Derivational Island is a new game. It is rich with gamification elements such as reward, punishment, score board, points, end-goal, rules, etc. It is a fun approach to study morphology. A mini lesson is also included in the game kit to assist players in the game. The game is not restricted to be played in the classroom as it can also be played during the break or at any time. The minimum time required to play the game is 30 minutes, however, the time may vary depending on the players. This game can be played by 2-4 players / 2 players in a team, making a total of 8 players altogether.

Usefulness

The game can grab the students' attention and make them actively engaged in the learning activity. Students who are not taking the course in lexicology or linguistics can also play the game as there is a mini lesson that will guide new players on how to play the game.

Commercialisation Potential

This game is not limited to be used by students taking related courses in this institution. The game can also be commercialized as teaching tool for language learning. The potential buyers of the game can be universities,- schools, parents and students. Universities and schools can purchase the board games as a teaching tool for teachers in teaching derivatives through the fun way. While parents can have one for their children, and students can also buy it for themselves. Children and students can play it outside the classroom in order to reinforce the learning of derivatives without the need of instructor to guide them in learning.

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