

Implementing Video Games to Improve English Grammar Skills: Scribblenauts Unlimited

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This qualitative research study investigates the effectiveness of using the video game Scribblenauts Unlimited as a technique for improving English grammar abilities. The participants of the study were students of basic grammar level learners. Semi-structured interviews and participant observations were used to gather the data. The participants played Scribblenauts Unlimited for a predetermined amount of time, during which time their experiences, reasons for playing, and effects on their language abilities were examined. The results show how using Scribblenauts Unlimited improved the participants' command of English grammar. Their grasp and application of grammatical ideas were said to have been improved by the interactive nature of the game and the opportunity for contextual language exercise. While playing the game, participants demonstrated enjoyment and motivation, demonstrating improved engagement and willingness to practice grammar. The qualitative study exposes a number of themes, including the game's capacity to enhance problem-solving abilities, fast feedback, and autonomous learning. Participants also cited the game's vivid and varied virtual world as important in retaining their interest and participation in grammar drills. Overall, the evidence from this study indicates that including video games like Scribblenauts Unlimited have a considerable positive impact on improving English grammar abilities. The findings offer insightful information for educators and game designers looking to apply gamified methods to language training. It is advised to conduct more research to examine the long-term benefits and potential scalability of grammar training interventions based on video games.

Keyword(s) : scribblenauts unlimited, grammar, grammar skills, video game

Introduction

Played by an ever-increasing number of children, teens, and adults on game consoles, computers, smartphones, and tablets, video games are one of the most popular kinds of entertainment in the modern world. According to Statista (2016), the global population of people who play video games was predicted to be 1.8 billion in 2015. In addition, the video game sector has experienced substantial expansion, as evidenced by the fact that the value of this market was estimated to be 996 million euros in Europe. The global market is expected to reach 99.6 billion dollars (91.7 billion euros) in 2016, as stated by Newzoo (2016), and it is anticipated that it will reach 118.6 billion dollars (109.2 billion euros) by 2019.

In recent years, there has been a notable shift in the field of language learning, with educators investigating novel and interesting methods to improve second language (L2) acquisition. One strategy like this that is gaining popularity is the use of video games as a form of educational medium. The traditional approaches of teaching a language have traditionally relied on things like textbooks, lectures, and grammatical exercises that repeat themselves, all of which have the potential to fail to capture and encourage L2 students. As a reaction to this difficulty, academics and educators have started using video games as an alternative way of training. They do this by utilizing the interactive and immersive element of gaming to help people learn new languages (Bayeck, 2020). The purpose of this research is to make a contribution to the expanding body of knowledge in this field by shedding light on the possible advantages of introducing video games into the process of learning a language.

The ability to correctly use English grammar is an essential component of language acquisition, particularly for individuals who are not native speakers of the language. The traditional approaches to teaching grammar typically involve the use of textbooks, lectures, and written exercises, all of which have the potential to fail to properly engage pupils. In recent years, there has been an increasing interest in the incorporation of technologies that are both interactive and entertaining, such as video games, into contexts that are dedicated to the study of languages. The purpose of this qualitative research study is to explore the efficacy of utilizing the video game *Scribblenauts Unlimited* as a method for developing English grammatical abilities among students enrolled in classes at Dian Nuswantoro University.

The participants in this research project are comprised of thirty students from Dian Nuswantoro University's English Literature program who are currently enrolled in a fundamental grammar course at the same institution. These students were chosen as the target group because they had similar experiences in terms of receiving education regarding grammar and because of their familiarity with the English language. It is possible to acquire significant insights into the potential benefits of introducing video games into grammar training through an analysis of the users' experiences with utilizing the video game *Scribblenauts Unlimited* as an aid for language learning.

This investigation makes use of a qualitative research methodology to collect data; specifically, it conducts interviews that are only partially structured and relies on participant

observations. These methodologies make it possible to conduct an in-depth investigation into the experiences of the participants, their motivations for playing, and the influence that playing *Scribblenauts Unlimited* has had on their linguistic capabilities. The purpose of the study is to shed light on the impact of the interactive character of the game and the chances it gives for contextual language workouts by analyzing the data obtained through interviews and observations.

The results of this research indicate that the use of *Scribblenauts Unlimited* has resulted in improvements in the participants' command of English grammar. These findings are preliminary, but they indicate that these changes have occurred. It appears that the interactive component of the game improved both their understanding and application of grammatical ideas, providing a learning experience that was both dynamic and interesting for the student. In addition, participants have reported improved levels of enjoyment, desire, and willingness to practice grammar, which lends further credence to the idea that the game has the potential to be used as an aid for language acquisition.

This study also investigates many recurring patterns that have become apparent as a result of examining the data. The ability of the game to improve problem-solving skills, to provide instant feedback, and to stimulate autonomous learning were identified as key aspects contributing to the progress made by the participants. In addition, it was discovered that the vibrant and diverse virtual environment of *Scribblenauts Unlimited* was an important factor in retaining the participants' interest in the grammar drills and ensuring that they actively participated in them.

In a nutshell, the purpose of this research is to evaluate whether or not playing the video game *Scribblenauts Unlimited* may effectively help students improve their English grammar skills when they are enrolled in a basic grammar course at Dian Nuswantoro University. In this study, qualitative research methodologies are used to investigate the participants' past experiences, motives, and the influence those experiences had on their linguistic ability. According to the first findings, there was a favorable influence on grammatical ability, as well as increased interest and motivation. While the findings of this study have the potential to advise educators and game designers regarding the incorporation of gamified approaches into language learning, they also emphasize the need for additional research to be conducted in this sector.

Literature Review

Video Games

Recent years have seen a major increase in interest in the use of video games as educational tools, with researchers looking into how they might improve learning outcomes in a number of areas, including second language (L2) acquisition. Video games offer an immersive and dynamic learning environment that has been shown to boost student motivation and engagement. (Gee, 2007) asserts that video games provide a sense of autonomy, a sense of challenge, and quick feedback, all of which boost motivation and actively engage players in the learning process. For L2 learners who might find conventional language learning techniques less interesting, this high degree of engagement might be especially helpful.

Video games have the potential to aid in the development of language abilities in the context of language learning. Video games offer contextualized language practice, enabling players to use grammatical rules and vocabulary in significant and realistic contexts, according to studies by Granic et al. (2014) and (Manero et al., 2017). Video games' interactive features also promote the growth of thinking critically, making decisions, and solving problems all of which are essential for learning a language.

Video games have been shown to be especially effective when it comes to enhancing language skills. When L2 learners played a video game with a grammar theme, (Mifsud et al., 2013) reported significant gains in both grammatical accuracy and fluency. These improvements were attributed in large part to the game's instant feedback system and frequent exposure to grammatical rules. This implies that a valuable platform for specialized grammar training can be provided by video games.

The effectiveness of video games for language learning depends heavily on their design. (Hwang et al., 2014) highlights the significance of integrating educational principles such as specific learning objectives, scaffolding, and meaningful tasks into game design. It has been demonstrated that games that offer adaptive difficulty levels, encourage reflection, and allow chances for collaboration and communication improve language learning results (Mifsud et al., 2013). However, it's crucial to take into account how well gaming-specific language skills translate to real-world language use. While there is evidence that playing video games can help

with grammar education, there needs to be more encouragement and support for the transfer of gaming skills to real-world language use (Cole et al., 2023). As a result, it's essential to consider video games as aids to language learning rather than as substitutes.

Research on video games as a language learning tool highlights its potential to help L2 students become more proficient in English grammar. Video games provide a fun and interactive learning environment that fosters independence, drive, and skill growth. For video games to be as educationally effective as possible, pedagogical principles must be integrated into their design. The applicability of gaming skills to real-world language use should be the subject of future study, along with the sustainability and long-term advantages of video game-based interventions in language learning environments.

English Grammar

Understanding English grammar is a key component of learning a language, and it is essential for productive communication. Numerous research has investigated numerous strategies and methods to enhance second language (L2) learners' English grammatical abilities.

Traditional grammar training has frequently focused on mechanical drills, rule-based explanations, and memorization. However, studies suggest that these approaches might not necessarily result in a thorough comprehension of and application of grammatical principles (Celce & Diane, 1999). More participatory and communicative methods of teaching grammar have gained popularity recently, with the goal of giving students access to meaningful language use and context.

Utilizing technology to teach grammar is one strategy that has gained popularity. Interactive exercises, multimedia content, and quick feedback are all features of computer-assisted language learning (CALL) programs and online resources, which offer personalized and interesting learning opportunities to students (Egbert, 2018). The benefit of using these digital tools is that students can practice grammar alone and at their own pace, allowing them to customize their learning to meet their specific needs.

The incorporation of real-world language use into grammar lessons is another component of this discipline. The use of grammar in authentic situations is emphasized in Communicative Language Teaching (CLT), which fosters meaningful interaction and communication. Grammar

is learned in a purposeful and practical approach by involving students in real-world communicative tasks like debates, role-plays, and problem-solving exercises. In addition, task-based language teaching (TBLT) has arisen as a pedagogical strategy that incorporates grammar education into pertinent tasks and activities (Hakim, 2015; Tavakoli et al., 2019). In TBLT, learners are given assignments that call for the usage of grammatical structures in order to accomplish a particular communicative purpose. With the help of this method, learners can improve their grammar knowledge while taking part in communicative activities while maintaining a focus on form in a meaningful and realistic language context.

Furthermore, the application of form-focused education has demonstrated promise in grammar learning. Form-focused education entails highlighting grammatical structures for learners, as well as providing clear explanations and practice opportunities (Celce & Diane, 1999; Nassaji & Fotos, 2011). Explicit grammar instruction, error correction, or specifically targeted grammar-focused activities can all be utilized to apply this strategy. Form-focused training attempts to improve learners' grammatical accuracy and competency by offering them with specific instruction and practice.

In short research on English grammar, training emphasizes the importance of a balanced and learner-centered approach. While communicative approaches like CLT and TBLT emphasize the meaningful use of language in real-world contexts, integrating technology, such as CALL programs, offers interactive and personalized learning experiences. In addition, specific explanations and focused practice can be provided through form-centered instruction. Combining these strategies enables teachers to develop a thorough and efficient grammar instruction framework that meets the different demands of L2 students and advances their overall language ability.

Video Games in English Grammar

Video games as educational resources have drawn a lot of attention recently as educators look for creative and fun ways to improve language learning experiences. With an emphasis on second language (L2) acquisition, this research review investigates the efficacy of employing video games in teaching and learning English grammar.

The advantages of integrating video games into environments for language learning have been emphasized in numerous research. Video games offer an immersive and dynamic learning environment that can hold students' interest and encourage engagement (NamazianDost et al., 2017). Video games provide a dynamic and interesting alternative to conventional educational approaches since language acquisition frequently necessitates repetitive practice and interaction with grammar principles (Cole et al., 2023; Hwang et al., 2014; NamazianDost et al., 2017; Yildiz & Senel, 2017).

The capacity of video games to produce genuine language settings is one of its main advantages. Many video games feature narratives, conversations, and interactive settings that mirror real-world scenarios, giving players the chance to practice the language in relevant contexts (Granic et al., 2014). The use of language abilities in real-world contexts is encouraged and grammatical rules are better understood by learners as a result of this authenticity.

Instantaneous feedback is another feature of video games that is crucial for efficient language learning. Instant feedback from their activities allows learners to rectify errors and practice using proper grammar (Granic et al., 2014). This instant feedback encourages a deeper comprehension of grammar ideas and aids learners' internalization of grammatical structures.

Additionally, video games frequently offer scaffolded learning experiences that get harder as players advance. This scaffolding enables students to develop their grammar knowledge gradually while assuring an appropriate degree of difficulty and avoiding overly complex material. Video games can accommodate players of different skill levels and deliver individualized learning experiences thanks to this progressive evolution (Granic et al., 2014; Manero et al., 2017).

Researchers have also looked into the cognitive advantages of video games for learning languages. Problem-solving, critical thinking, and decision-making are frequently required in video games, which might improve players' cognitive abilities (Gee, 2007; Granic et al., 2014; Whitton & Maclure, 2017). With the help of these cognitive abilities, students can examine grammar patterns, spot mistakes, and apply grammar rules in a variety of situations (Bourgonjon, 2014; Coleman & Money, 2020).

The use of video games in teaching English grammar is supported by a growing body of research, however, some studies have also identified potential drawbacks. Limited technological availability, worries about excessive screen time, and the demand for suitable game design that fits with language learning objectives have all been brought up. These difficulties highlight the significance of judicious incorporation of video games into language curricula as well as the requirement for efficient pedagogical approaches to fully realize their instructional potential.

Scribblenauts Unlimited

A well-known video game called Scribblenauts Unlimited has drawn interest in the fields of education and language learning because of its distinctive elements and ability to improve language abilities. Scribblenauts Unlimited stands out for its interactive and immersive design, which offers players a lively and interesting gaming experience. By calling up characters and items by merely typing their names, the game enables players to solve puzzles and finish tasks. With the help of this function, players are encouraged to actively interact with the language, thereby increasing their vocabulary and solidifying their grasp of grammatical concepts.

Although there is little research on the effects of Scribblenauts Unlimited on grammatical skills, the results point to positive consequences. The dynamic and engaging design of the game seems to encourage involvement in grammar practice by encouraging interest and motivation. The game's capacity to improve problem-solving abilities, deliver quick feedback, and provide contextual language workouts also helps players' general language development.

The potential of adopting Scribblenauts Unlimited as a tool for language learning should be further explored, it is vital to remark. Future studies might look into the long-term impact of games on grammar learning as well as the game's scalability and applicability to a larger group of language learners.

Methodology

This study used a qualitative research technique to investigate the efficacy of utilizing Scribblenauts Unlimited as a tool for developing L2 learners' English grammar skills. When participants' experiences, reasons for participating, and effects are thoroughly examined, rich and complex insights into the phenomena under study can be gained.

Thirty English Literature majors at Dian Nuswantoro University who were taking a basic grammar course participated in this study. Participants from a certain course were chosen to ensure that the study concentrated on people with comparable levels of language proficiency and a similar educational background. This made it possible to examine the effects of playing *Scribblenauts Unlimited* on their English grammatical abilities with more precision.

Two main strategies were used to obtain the data for this study: semi-structured interviews and participant observations. Semi-structured interviews gave researchers the chance to learn in-depth details about participants' experiences with playing *Scribblenauts Unlimited*, their motivations for doing so, and how the game affected their language skills. Participants were given free rein to share their thoughts and opinions during these conversational interviews.

Participant observations were done in addition to interviews to watch the participants as they played *Scribblenauts Unlimited*. Using this technique, the researcher was able to see firsthand how the participants engaged in the gaming and dealt with interactions and problems. Participant views provide important insights into how the game affected players' experiences learning grammar in real-time.

For the duration of the trial, participants played *Scribblenauts Unlimited* for a predefined period of time. This amount of time was deemed adequate for allowing participants to interact with the game and potentially feel the effects on their command of English grammar. Thematic analysis was used to do the data analysis. To find recurring themes and patterns relating to the experiences, motives, and impacts of the participants, the interview transcripts and field notes were meticulously reviewed and coded. In order to allow for a thorough examination of the results, this method entailed categorizing the data into pertinent categories and subcategories.

Despite the fact that the rich and in-depth insights into the participant experiences provided by the qualitative methodology utilized in this study, it is vital to recognize that the findings are context-specific and may not apply to all L2 learners or circumstances for language learning. It would be advantageous to do additional research with larger and more varied samples in order to improve the generalizability of the results.

Result & Discussion

The study's findings suggest that using *Scribblenauts Unlimited* improved the participants' command of English grammar. The participants demonstrated progress in their comprehension and application of grammatical principles thanks to the game's interactive and dynamic design. They had the chance to practice their grammar in context thanks to the immersive gaming environment, which helped them. While playing the game, participants demonstrated improved involvement and a readiness to practice grammar by expressing delight and motivation.

The game's capacity to enhance players' problem-solving abilities was one noteworthy discovery. Players had to use their critical thinking skills and creativity to solve the problems in *Scribblenauts Unlimited*, which frequently involved using the right grammar. This element of the game engaged players' ability to apply grammatical principles in various settings and encouraged cognitive engagement. Participants were able to learn from their errors and make quick fixes because to the game's quick feedback, which strengthened their comprehension of English grammar.

The participants' autonomy in learning was a key theme that came out of the data. The participants might explore and experiment with the English language at their own pace in a self-directed learning environment. The sense of ownership and control they felt over their learning process as a result of this autonomy had a favorable impact on their motivation and readiness to engage in grammar practice. The game's open-ended design and flexibility to interact with different characters and items encouraged active engagement and self-directed grammatical idea study.

The participants also cited that the game was colorful and varied virtual world as a major contributor to keeping their interest and level of participation in grammar exercises high. They were intrigued by the images, which were colorful and appealing, the characters, which were vibrant, and the inventive settings, which made learning fun. Participants were encouraged to continue practicing their grammar because of the game's immersive environment, which sparked their sense of excitement and adventure.

These results are consistent with earlier studies on the advantages of gamified learning in language instruction. Video games offer a dynamic and engaging platform for language acquisition because of its interactive and experiential nature, encouraging active participation

and cognitive engagement. The results of this study provide credence to the idea that video games might be useful instruments for improving language abilities, particularly in the context of grammar instruction.

Both instructors and game creators can learn from the study's findings. To improve grammar training and encourage active language learning, educators might use gamified learning techniques. One such method is the use of video games like *Scribblenauts Unlimited*. Teachers can create engaging and inspiring learning environments for L2 learners by including interactive and immersive aspects in language lessons. Insights from this study can also be used by game developers to create instructional games that are specifically targeted at achieving language learning objectives.

Although the results of this study are encouraging, it is crucial to recognize their limitations. The study's results might not be completely generalizable to other demographics or educational situations because it was only done with a specific sample of English Literature students at Dian Nuswantoro University. To confirm and build upon these findings, additional research involving bigger and more varied samples is required. Long-term research may also examine the viability and applicability of the learned grammar abilities outside of the context of games.

The findings of this study show that utilizing *Scribblenauts Unlimited* has a good effect on L2 learners' English grammatical skills. The players' grammar abilities and motivation are enhanced as a result of the game's dynamic and immersive design and opportunities for contextual language practice. These results add to the growing body of evidence that video games are useful tools for language learning. For L2 learners, instructors and game designers can build engaging and successful language learning experiences by utilizing the potential of gamified learning methodologies.

Conclusion

According to the findings, using *Scribblenauts Unlimited* significantly improved the participants' command of English grammar. Their grasp and application of grammatical ideas were improved by the game's interactive and dynamic design. Video games have the ability to

promote active participation and independent learning since the participants showed increased engagement, motivation, and willingness to practice grammar.

The study also found a number of important themes that emerged from the data. The players' growth was greatly aided by the game's capacity to develop problem-solving abilities, deliver quick feedback, and offer contextual language exercises. The participants' enduring interest and active participation in grammar drills were further aided by the visually appealing and immersive Scribblenauts Unlimited virtual world.

In the area of language learning, these findings have significant ramifications for educators and game designers. To develop environments that are effective and interesting for learning languages, educators can use gamified techniques, such as playing video games. The interactive and immersive aspects of video games can be used by teachers to improve grammar lessons and encourage language learning through active participation.

Although the results of this study offer insightful information, it is important to recognize several limitations. The study's generalizability to other demographics and situations may be constrained because it was done with a specific sample of English Literature students at Dian Nuswantoro University. Further investigation is required to examine the long-term advantages and scalability of video game-based grammar instruction interventions because the study only examined short-term impacts.

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