



Playtesting a Graded Digital Roleplaying Game for Second Language Learning

[Paul T. Johnson](#) ^{a,b}

^a University of St. Andrews

^b Te Herenga Waka | Victoria University of Wellington

Item Details

History:

Submitted: 2025/09/29

Open peer reviewed: ✓

Published: 2026/08/31

Keywords:

digital game-based language learning

DGBLL

graded readers

extensive reading

extensive RPGing

graded digital roleplaying

games

graded digital RPG

word profiling

RPG Maker MZ

Peer reviewers:

[James York](#)

[Dilay Candan](#)

Key points

- **What is this?** This is a report on the playtesting of a graded digital roleplaying game (RPG) for second language learning which I created using RPG Maker MZ.
- **Why did you make it?** I wanted to provide my students with an alternative form of graded reading which takes advantage of the affordances of game-based language learning.
- **Who is it for?** This is for teachers and students who are interested in digital extensive reading and game-based language learning, in particular, learning through gameplay of a digital RPG.

Tweet synopsis

This is a report on the playtesting of a graded digital roleplaying game (RPG) for second language learning which I created using RPG Maker MZ.

#digital game-based language learning #graded readers #extensive reading
#extensive RPGing #graded digital RPG # RPG Maker MZ

View at the LLP Playground: <https://www.llpjjournal.org/2026/08/31/johnson-graded-rpgs.html>

* Corresponding author. Email address: paul.johnson@vuw.ac.nz or iterativeprocess.ptj@gmail.com (Paul T. Johnson)

1. Introduction

This article seeks to continue and expand on the practice of extensive reading through graded readers, arguing that the same process of systematic simplification of language, aided by corpus linguistics word profiling software, can be applied to the writing of a new kind of graded reader: the digital roleplaying game.

A demo of a graded digital roleplaying game (RPG) was created using the low to no code game engine RPG Maker MZ. The in-game language was levelled using the corpus linguistics word profiling software AntWordProfiler (Anthony, 2022) and the New General Service high-frequency wordlist version 1.01 (NGSL) (Browne et al., 2016).

The game was playtested with first year South Korean university students, CEFR A1-A2, taking compulsory English classes. Playtesting is the act of testing out early versions of a video game with a select group of users to “work out flaws in gameplay, level design, and other basic elements, as well as to discover and resolve bugs and glitches” (Margaret, 2011). These elements were investigated with their gameful and pedagogical values in mind. Observations on the playtesting are reported. Each observation starts with difficulties noticed during playtesting and ends with suggestions for improvement and iteration.

1.1 Playtesting

Game development is an iterative, cyclical process, and playtesting is an integral part of that process (Nicklin, 2022; Salen & Zimmerman, 2004). It is important to test early prototypes, and it is important for game developers to reflect on this process. Therefore, this piece reports on the development of and first-round of playtesting of the game itself, rather than on how the game affected student performance. In their seminal textbook on game design, Salmen and Zimmerman (2004) discuss the iterative nature of the game design process:

Iterative design is a *play-based design process*. Emphasizing playtesting and prototyping, iterative design is a method in which design decisions are made based on the experience of playing a game while it is in development. In an iterative methodology, a rough version of the game is rapidly prototyped *as early in the design process as possible* (emphasis added, p. 11).

It is hoped that the reader may find this report on the *process* rather than the finished *product* (cf. Murray, 1972) interesting, enriching, and motivating, that it may inspire them to share their own reports on games in process. Sharing and discussing the process of game design for second language (L2) learning will help strengthen the critical discourse around digital game-based language learning (DGBLL). A strong critical discourse facilitates a multi-generational conversation between researchers, educational game developers, and teachers who use digital games as part of their L2 teaching. It also helps buffers DGBLL against criticism, as it shows the rigour and critical reflection which goes into the game development process (cf. Jenkins, 2000; Salen & Zimmerman, 2004).

“Game development is an iterative, cyclical process, and playtesting is an integral part of that process.”

2. Videogames and Language Learning

Videogames are popular globally and are played by people of all ages for a variety of benefits (ESA, 2025; NewZoo, 2024). Projections from 2024 estimated 3.42B videogame players worldwide (NewZoo, 2024, p. 17), or approximately 40% of the world’s total population (UN, 2024). In 2024, the global games market generated a projected \$187.7B (NewZoo, 2024, p. 19). The global gaming industry generates more revenue than the global film and global music industries *combined* (Arora, 2023).

However, that many people find videogames engaging and beneficial generally does not mean that they will be engaging or beneficial for use in acquiring a second language specifically. Yet, the affordances provided by DGBLL (see Reinhardt, 2019, 2021) and the continued growth of the popularity of games in general has attracted attention from educators who seek to employ their potential for the aims of language learning and teaching.

2.1 Videogames and Flow

Many of the benefits associated with gaming may be tied to what Csikszentmihalyi (1990) refers to as flow, or optimal experience. Csikszentmihalyi (1990) argues there are eight major components to flow:

- (1) A challenging and achievable task requiring skill.
- (2) Deep concentration made possible through
- (3) clear goals and
- (4) immediate feedback.
- (5) "Deep but effortless involvement." (p.49).
- (6) Control over actions.
- (7) A merging of "action and awareness" (p.53), resulting in a "loss of self-consciousness" (p.62) and an
- (8) altered perception of time.

Both video games and reading can be powerful sources of flow (Csikszentmihalyi, 1990; Khoshnoud et al., 2020; Salen & Zimmerman, 2004). Khoshnoud et al. (2020) observed that, "Video games are effective tools for inducing flow, and keeping players in this state is considered to be one of the central goals of game design" (p. 1). Salen and Zimmerman (2004) note that "games are one of the best kinds of activities to produce flow" and that "there is an intrinsic connection between gameplay and flow" (p. 338).

Flow may also be a state conducive for language acquisition. Krashen (2009) argues that for linguistic input to become uptake, the input must first pass through the affective filters, the gates of motivation, self-confidence, and anxiety, and hypothesizes that the flow state achieved through reading may partially explain the effectiveness of extensive reading (Krashen, 2011). Egbert (2003) found that flow does exist in the foreign language classroom and proposed a model of flow in L2 learning which posits that flow emerges from the interaction between the learner and the task. A systematic review by Aubrey et al. (2025) found that by incorporating elements of gameplay, flow states can be achieved during pedagogic task performance. A graded digital RPG may be able to capitalize on these two opportunities for flow, *gameplay of digital games* and *reading*, to create an exceptional learning environment for those interested in games.

2.3 Gaps in Digital Game-based Language Learning

There is a lack of studies in DGBLL focused on reading and extensive reading. In a scoping review of DGBLL by Hung et. al (2018), which investigated 50 studies, no study focused solely on reading (p.99). In their systematic review of digital games and SLA, which examined 49 studies from 2012-2017, Poole and Clarke-Midura (2020) note that only 2% of studies focused on reading (p.6, see figure 1). In contrast, 63.3% of studies examined student perspectives, 36.7% vocabulary, and 14.3% affordances (p.6). That studies on grammar, speaking, reading, and listening make up only 2% each, may be indicative of the nascent state of the field.

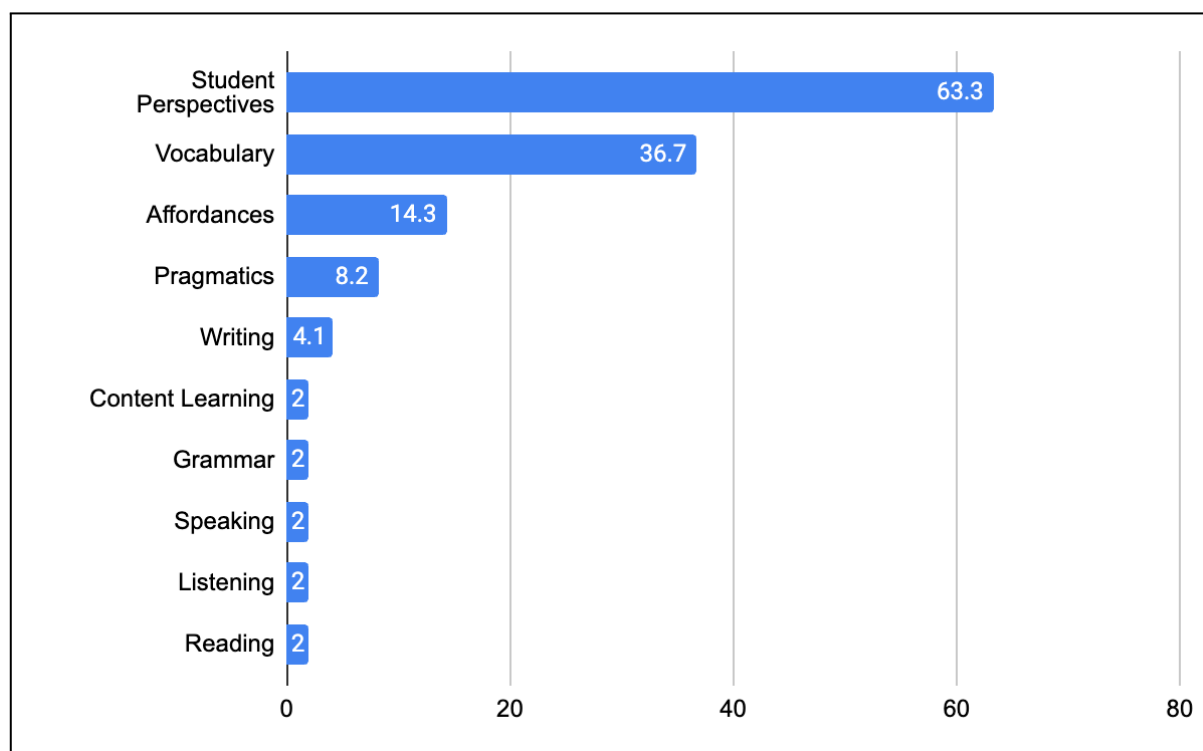


Figure 1. Focus of DGBLL studies in Poole and Clarke-Midura (2020, p. 6).

A dearth of studies focusing on reading may be related to the dominance of studies investigating SLA and Massively Multiplayer Online RPGs (MMORPGs). In a systematic review of video games for SLA, investigating 27 articles from 2009-2019, 52% of studies in Li (2019) examined MMORPGs. Moreover, 29% of studies in Poole and Clarke-Midura's (2020) systematic review and 30% of studies in Hung et. al.'s scoping review (2018) focused on MMORPGs. None of the studies examined in the above secondary research articles, covering a span of 12 years, investigated either extensive reading or use of a graded digital roleplaying game. It seems that a digital roleplaying game, viewed as a graded reader, is yet unexplored terrain.

Furthermore, while MMORPGs present opportunities for interaction, negotiation of meaning, and receiving authentic input (Li, 2019), these benefits are tempered by the probability of experiencing online bullying (ADL, 2020), the difficulty of authentic texts for many learners (Krashen, 2009), and the cognitive demands of real-time communication (Dixon et al., 2022). While 95% of online gamers surveyed reported positive social experiences (ADL, 2020, p. 17), 81% also reported being harassed, 53% being discriminated against, 48% reported experiencing sustained harassment, and 41% sexual harassment (p.22). A discussion of the SLA benefits of online gaming from interactionist and sociocultural perspectives must include a warning on the probability of learners experiencing bullying and harassment. One possible solution to the problems of bullying, the difficulty of authentic texts, and the cognitive demands of real-time communication, is the use of a single player graded digital roleplaying game (Johnson, 2023). With a graded digital RPG, lexis and syntax can be controlled, players have sufficient time to process and review language, and the single-player nature of the game ensures they will not experience harassment.

"It seems that a digital roleplaying game, viewed as a graded reader, is yet unexplored terrain."

2.4 Graded Readers

Graded readers are books written specifically for second language learners. Through the process of grading, or the systematic simplification of language through close control of syntax and lexis, each book is designed for students at a particular level. Graded readers may be simplifications of existing books, original stories, or non-fiction books (ERF, n.d.a). The pedagogical foundation of the graded reader approach is ER, or the reading of large amounts for pleasure, with a focus on meaning, rather than directly on form (ERF, 2011, n.d.b; Krashen, 2011; Nation, 2013; Waring & Takahashi, 2000).

Graded readers often follow a multi-level schema, a plan intended to get learners from their current level to a target level (Nation & Wang, 1999). These are typically 4-8 books in length (ERF, 2011, n.d.a). Principles involved in schema creation include: (a) A close control of vocabulary monitoring through restriction of headwords and total word counts, (b) a steady increase in headwords and total words throughout the series, (c) an ample number of books per level, and (d) a CEFR or other level descriptor. The Extensive Reading Foundation (ERF, 2011, p. 1) uses the acronym R.E.A.D. to describe the process. Students are to:

- Read quickly and
- Enjoyably with
- Adequate comprehension so they
- Don't need a dictionary.

Hu and Nation (Hu & Nation, 2000) argue that to read in such a manner, a learner needs to know approximately 98% of words in a text. Knowledge of approximately 95% is appropriate for intensive reading, and anything less than 90% may be quite difficult, resulting in poor comprehension, high effort, and demotivation (ERF, 2011). While each learner comes to the text with different size vocabularies (Nation & Wang, 1999), writers of graded readers can use vocabulary profiling software to compare text with high-frequency word lists (Anthony, 2010), helping them to write comprehensible input (Ballance & Coxhead, 2024). While vocabulary level is not the only factor contributing to the comprehensibility of a text, it is one of the most important factors. Other important factors include the reader's background knowledge and interest in the material, their general reading ability in both their first and second languages, the quality of the book (Nation & Wang, 1999), the genre of the text, and the strength of affective filters like motivation, self-confidence, and anxiety (Krashen, 2009).

In surveying the evidence for Sustained Silent Reading (SSR), the classroom version of ER, Krashen (2011) observes that students participating in SSR do better than their comparisons in writing, writing fluency, spelling (in most cases), vocabulary, and grammar. Nation (2013) argues it is so effective that approximately one quarter of a language program should be dedicated to ER, claiming that, "Adding an extensive reading program to a language course is the most important improvement that a teacher can make, and if this was the only improvement made, the teacher could still feel very satisfied about that" (emphasis added, p.19).

2.7 Extensive RPGing

Digital RPGs may be particularly suitable for use in extensive reading (Compton, 2025; Johnson, 2023). Compton (2025) refers to the practice of using digital RPGs in extensive reading as "extensive RPGing" (p. 43). They argue that RPGs are suitable for use in extensive reading because they typically have large amounts of text when compared to both other videogames, and even when compared to books, noting that a common criticism of RPGs is, "I want to play a game, not read one" (p. 42). Compton (2025) argues that an extensive reading program which uses digital RPGs rather than books fulfills Day and Bamford's ten principles of extensive reading (Day & Bamford, 2002).

1. The reading material is easy.
2. A variety of reading material on a wide range of topics must be available.
3. Learners choose what they want to read.
4. Learners read as much as possible.
5. The purpose of reading is usually related to pleasure, information, and general understanding.
6. Reading is its own reward.
7. Reading speed is usually faster than slower.
8. Reading is individual and silent.
9. Teachers orient and guide their students.
10. The teacher is a role model of a reader.

Compton (2025) further maps the linguistic level of RPGs (easy, normal, difficult, and extreme) to a description of linguistic features which may be found at each level (e.g. simply vocabulary, short sentences, straightforward plot and character interactions), and offer suggested titles for each level (e.g. the *Pokémon* series, *Stardew Valley*, *Super Mario RPG*). While a great start, they do note that their mapping is "based on personal experiences with and/or perceptions of the games suggested" (p. 46). There is also a possibility that many commercial games may fail to meet a condition laid out by Day and Bamford (2002), that the reading material is easy. Compton (2025) recognizes this difficulty, noting, "Unfortunately, there are no graded RPGs, so the level of difficulty is a real concern" (p. 46). This present project seeks to address this concern by the creation and playtesting of the first graded digital RPG.

3. Methods and Materials

3.1 Framework for Leveling Graded Readers

The graded digital RPG was levelled using a corpus-informed schema for leveling graded readers and creating materials I developed in my master’s dissertation (Johnson, 2023). This schema uses six 500-word sub-sections of the NGSL (table 1). A book is assigned a level based on the number of headwords in the book. For instance, a book with 2,100 headwords would be level 5. Coverage is calculated by profiling the text of the book against the NGSL level on which it lands. For example, when the text of the graded reader *The Adventures of Robin Hood* (Pyle & Daniels, 2016), a book with 2,100 headwords, is profiled against the first 2,500 words of the NGSL, it receives a coverage score of 87%. Meaning that if a student knows only the individual words of the first 2,500 words of the NGSL, they will know 87% of the individual words in the book.

Table 1 Johnson’s (2023) schema applied to GR *The Adventures of Robin Hood*

NGSL (HW) Level	Level	CEFR
1-500	1	A1
501-1,000	2	A1
1,001-1,500	3	A2
1,501-2,000	4	A2
2,001-2,500	5	B1
2,501-2,801	6	B1

3.2 From Graded Readers to Graded Roleplaying Games

There are ways in which RPGs are different from books. Books are non-interactive and the reader takes in the story only through reading. In contrast, digital RPGs are interactive and multi-modal. When playing a digital RPG, the player inhabits the role of the protagonist, represented on screen by a digital avatar, and interacts with and explores the multi-modal game world.

While books are linear and follow a set narrative, RPGs can be open-ended, and allow the player, through their choices, to co-create the narrative with the game designer (Mackay, 2001). Except for those books in the ‘choose your own adventure’ genre, novels and stories have a fixed narrative. However, in many digital RPGs, while the game designer sets the parameters in which a narrative can form, the narrative which forms is co-created with the player, and each player may co-create a different narrative through the choices they make, experiencing the game uniquely. Titles with multiple endings dependent on player choice include *The Witcher 3* (CD Projekt Red, 2015) *Baldur’s Gate 3* (Larian Studios, 2023) and *Life is Strange 2* (Square Enix, 2018).

Open world games whose endings are not dependent on player choice may still allow the player to experience the narrative in the order of their choosing, like *The Elder Scrolls V: Skyrim* (Bethesda, 2011) and *The Legend of Zelda: Breath of the Wild* (Nintendo, 2017). Even a game with a linear story, like *Final Fantasy VI* (SquareSoft, 1994) gives the player autonomy by allowing them to talk with NPCs or visit cities in different orders, thus experiencing the narrative in a different sequence. *Final Fantasy VI* (SquareSoft, 1994) even includes a section where the adventuring party is split into three groups, and the player has to choose in which order they play each group, in which order they experience the story. This approach is also used in a more recent game, *Last Stop* (Annapurna Interactive, 2021), of which Nicklin (2022) observes:

“Allowing the player to choose which core character to follow in what order (per each chapter) is, on the face of it, a simple offer, but it is an interestingly empowering one” [...] [The developers] “cleverly hand the agency over what a satisfying-feeling next-chapter choice might be to the player. In considering this choice, the player is doubly empowered: not just in making a choice, but in making an informed choice” (p.161).

A final note is that some games will be more suitable for Extensive RPGing than others. In particular, games which are text-heavy will be better for Extensive RPGing than games which are text-light and focus on fighting. Examples of games which are text heavy include *Last Stop* (Annapurna Interactive, 2021), *Life is Strange 2* (Square Enix, 2018), and for advanced English users, the choice matters game *Disco Elysium* (ZA/UM, 2019).

3.3 The Graded Digital RPG: *Just the Facts*

In the demo for *Just the Facts* (iterative process education, 2024), the graded digital RPG used in this project, the player inhabits the role of “Sam,” a character who has just moved to a new village, Pleasant Valley, and takes a contract as a newspaper reporter (figures 2-3). Sam’s first assignment (quest) from the newspaper’s editor (quest giver) is to interview the local residents about their hobbies, goals, work, and how they feel about the village. Once she has conducted her interviews, Sam is to return to the editor, report her findings, and write an article for publication. If the player completes this assignment, they are offered a job at the newspaper and given their next, more difficult assignment. As Sam completes their quests, they come to learn that a mysterious person is seeking to destroy the newspaper. To save the newspaper, Sam must uncover the facts and publish the truth.

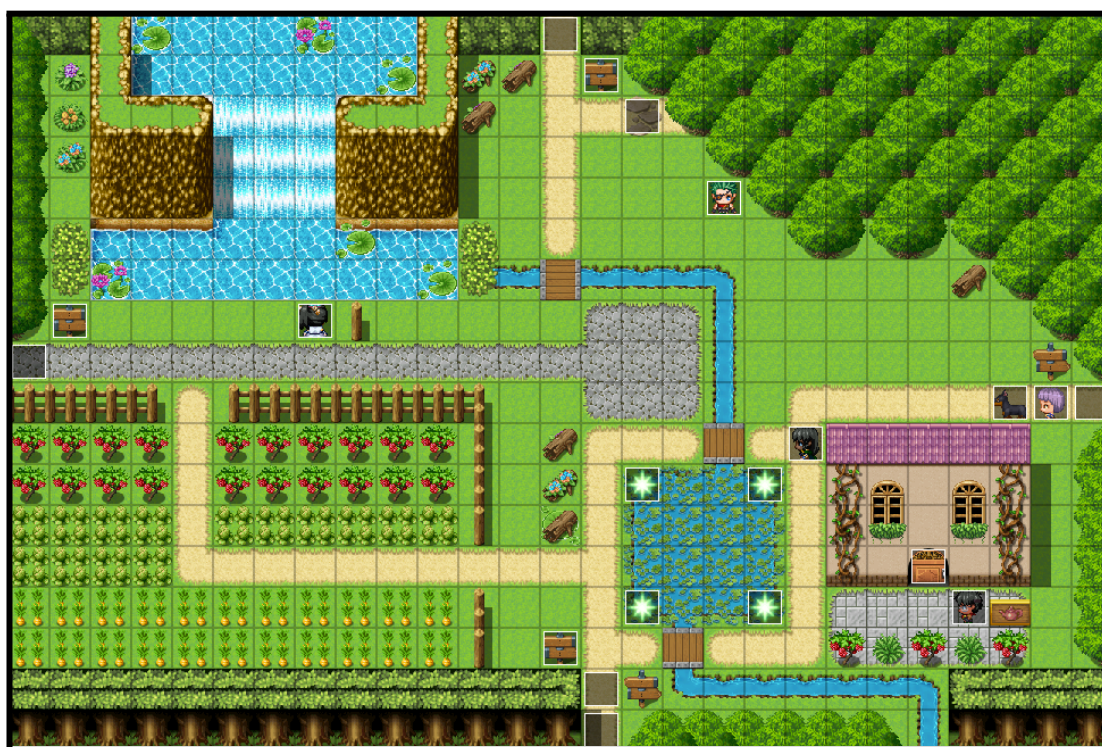


Figure 2. Screenshot: Developer’s screen – Town square in *Just the Facts*

3.4 Potential Schema for *Just the Facts*

Graded readers often follow a multi-level schema, a plan intended to get learners from their current level to a target level (Nation & Wang, 1999). This approach is taken in the schema for a potential full version of *Just the Facts* (table 2). The schema is in line with principles involved in schema creation: (a) A close control of vocabulary monitoring through restriction of headwords and total word counts, (b) a steady increase in headwords and total words throughout the series, (c) an ample number of books (or game areas) per level, and (d) a CEFR or other level descriptor. Graded reader series are typically 4–8 books in length (ERF, 2011, n.d.a), so the below schema includes 6 regions. Furthermore, the game is levelled using the NGSL meaning that there is an emphasis on teaching and

learning the most high-frequency words. This project used the demo version of *Just the Facts*, which includes content from region one.

RPGs follow a quest system, which comes from Arthurian legends, where a knight is sent out to complete a “quest” or “challenge” at the request of another, a quest giver. For example, in *Sir. Gawain and the Green Knight* (Tolkien, 2021), Sir. Gawain accepts a challenge proposed by the mysterious Green Knight. Upon completion, Sir. Gawain returns to Camelot where he is praised for completing the quest. In RPGs, once the quest is finished, a player is given another, more difficult quest.

The differences between books and RPGs necessitate the schema be applied in a certain way. Instead of books in a series, a graded digital RPG should have “regions” or “locations” of a game world, where players can explore, making their own decisions. Rather than chapters of a book, a graded digital RPG will have dialogue trees with non-player characters (NPCs). NPCs are the characters which a player may encounter in a game. The game designer creates NPCs and writes their dialogue trees. The player will be given a quest by an NPC quest giver and need to speak with other NPCs to complete it.

Stage 1 of *Just the Facts*, which takes place in the *Pleasant Valley* region, has been developed (table 2). This section includes interviews with four NPCs and an assessment. The demo which was playtested consisted of an interview with one NPC and an assessment relating to that interview.

Table 2 A for schema for a potential full version of ‘*Just the Facts*,’ with stage 1 complete.

Stages	1	2	3	4	5	6
Region	Pleasant Valley	Willow Lakes	Moon Meadow	Fantastic Forest	Caves of Corruption	The Newsroom
NGSL	500	1,000	1,500	1,500	2,000	2,000
CEFR	A1	A1	A2	A2	B1	B1
*VP	**92.5	%	%	%	%	%

*Vocabulary profiles should be calculated and posted for each region, with a target of coverage of +90%(Johnson, 2023). **Percentage shown is the average of the four NPCs interviewed in-game.



3.6 Leveling the in-game Language

When comparing books with digital RPGs, Compton (2025) notes, "It is more difficult to control the linguistic difficulty of an RPG, so learners may encounter unfamiliar words more frequently. While all aspects of extensive RPGing are in need of further research, this would be a particularly important area on which to focus" (p.49). This section addresses this need precisely by documenting the way in which language may be leveled to create a graded digital RPG.

The writing of the game text was informed by Krashen's (2009) observations on optimal input. *It is important to note that it is not necessary to hold to or defend a hard version of Krashen's Input Hypothesis (nor does a graded digital RPG need to be grounded in it) to gain some insight from Krashen's observations concerning the characterizations of optimal input* While the Input Hypothesis has been criticized substantially (for a summary of critiques, see Gass et al., 2025), Krashen did help us understand the importance of input.

According to Krashen (2009), optimal input is comprehensible, interesting and/or relevant, not grammatically sequenced, and must be in sufficient quantity. Krashen (2009) considers comprehensibility to be, "clearly the most important input characteristic" (p.63), and rightly observes that, "The main function of the second language teacher is to make input comprehensible" (p.64). Input which is not comprehensible is "noise" (p.58) and will not result in acquisition. When applied to the creation of a graded digital RPG, a designer could adopt the motto, "A central function of a graded digital RPG is to provide comprehensible input."

As discussed above, word profiling software, such as AWP, can be used to compare texts against wordlists, ensuring there is a focus on high-frequency words. The text for the graded digital RPG used in this study was written inside AWP and repeatedly checked against the target word list. Non-list words were replaced with list synonyms when possible. It should be noted that following these principles does not guarantee comprehension, a learner can understand 100% of the individual words in a sentence without understanding the sentence, but using the guide rails discussed in this paper will increase the likelihood that a learner will find a text comprehensible.

The first region of *Just the Facts* is a level 1 game, meaning that it focuses on teaching CEFR A1 learners, using the first 500 words of the NGSL. Table 3 below shows that if a learner knows only the first 500 words of the NGSL, they will know 92.5% percent of the in-game dialogue for region one. In the demo version used in this study the player interviews the NPC Jason. As seen below, the NGSL first 500 offers 93.21% coverage of the dialogue with Jason.

It should also be noted that while Hu and Nation (2000) argue that to engage in extensive reading, a learner needs to know approximately 98% of words in a text, the game text is written in such a way that the NGSL first 500 offers only 90% coverage. This is for three reasons. Firstly, each learner comes to the text with different size vocabularies (Nation & Wang, 1999). It is not assumed that each individual learner's vocabulary size is equal to the NGSL first 500. Secondly, a target of 90% gives the authors of graded materials more room to focus on story. Thirdly, combining coverage scores and vocabulary bands is an imprecise way of measuring. For example, suppose one text has 999 words (placing it on level 3) while another text has 1,001 words (placing it on level 4). Is it really accurate to say that to read the first text a learner needs to know the first 1,000 words while to read the second text they need to know the first 1,500 words, when the texts are only two words apart? Clearly vocabulary bands and coverage scores serve only as guidelines. Helpful guidelines, but guidelines nonetheless.

Table 3 Vocabulary profiles and word count of NPC dialogue trees from level one of *Just the Facts*

NGSL band	Jason	Chaehyeon	Zuri	Himari
1-500	93.21%	91.73%	93.06%	92.27%
501-1,000	2.03%	3.97%	3.43%	4.18%
1,001-1,500	1.31%	1.74%	.78%	.98%
1,501-2,000	0.83%	.74%	.47%	.8%
not in lists	2.62%	1.82%	2.26%	1.78%

*In iteration. 92.5% mean.

While a focus on using high frequency words is important, the frequency of a word is simply that, frequency. Another important consideration is communicative function. To account for this, the conversations with NPCs center on CEFR A1-A2 communicative goals (see table 4 and figure 4).

Table 4 Interviews with NPCs with a focus on communicative competence

Categories	Initial Questions
Hobbies	What do you like to do? What are your hobbies?
Work	What do you do for work?
City	How do you like living in the city?
Follow-up questions	NPC specific (based on answer, four per category)

Syntactic simplification and use of shorter sentences was achieved by noting the sentence types used at different levels. Despite the complexity of English, there are only four kinds of sentences: simple, compound, complex, and complex-compound (Purdue Owl, 2022). While stopping well short of adopting a grammar syllabus, developers should help scaffold the materials by knowing generally when to include which type, working their way from easier to more difficult forms. Rather than having strict rules for when different types of sentences should be used, there should simply be a focus on comprehension and communication. This demo focused on simple and compound sentences. Use of well-constructed, level appropriate sentences will help provide students with scaffolding, comprehensible input, and provide models of good writing.

“While a focus on high frequency words is important, the frequency of a word is simply that, frequency. Another important consideration is communicative function.”

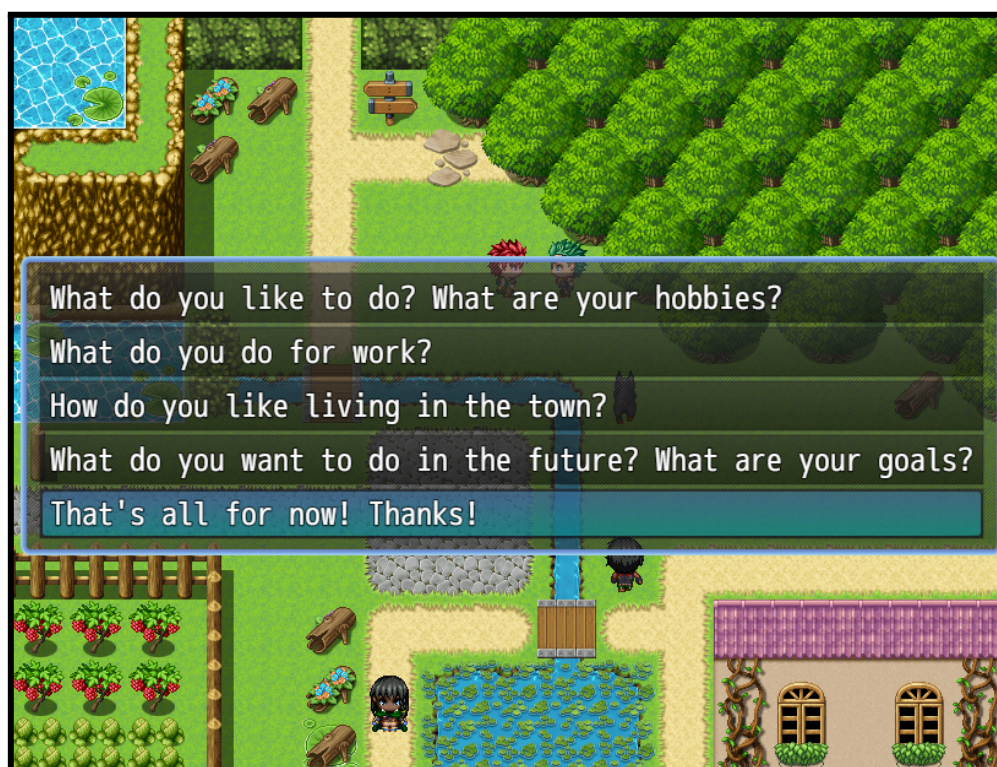


Figure 4. Screenshot: Gameplay – The interview questions focus on developing communicative competence.

3.5 Assessment

Another issue to consider is assessment. Ideally, when students engage in extensive reading, they should not be tested on what they read (ERF, n.d.a). However, this allows for what is called “click-through,” where the player of a video game quickly clicks through the dialogue of a game and skips ahead to the action. To prevent clickthrough, this project adopted a three-stage assessment (table 5). The first stage is during the interviews and checks for use of appropriate follow-up questions (figure 5). The second stage of assessment takes place back at the newspaper, where at the player’s in-game desk they have been assigned, they need to document what they learned while interviewing an NPC (figure 6). The third level of assessment is to write the article, “Life in the City,” for publication in the in-game newspaper. Each stage uses questions in the form of a cloze test. A cloze text was used to best simulate the writing of a newspaper story. Each wrong answer is worth -1 energy. When a player gets to 0 energy, their character faints, and they must start again from the last saved game. To complete the demo, the player had to interview the NPC Jason and complete assessment stages 1 and 2.

Table 5 *Three-stage assessment*

State	Assessment	Per NPC	Total
Interviews	Follow-up questions	16	64
Article Pt.1	Write about individual NPC	15	60
Article Pt.2	Write the new article “Life in the City”	7.5	30



Figure 5. Screenshot: Gameplay – Level 1 Assessment (followup questions during the interview)

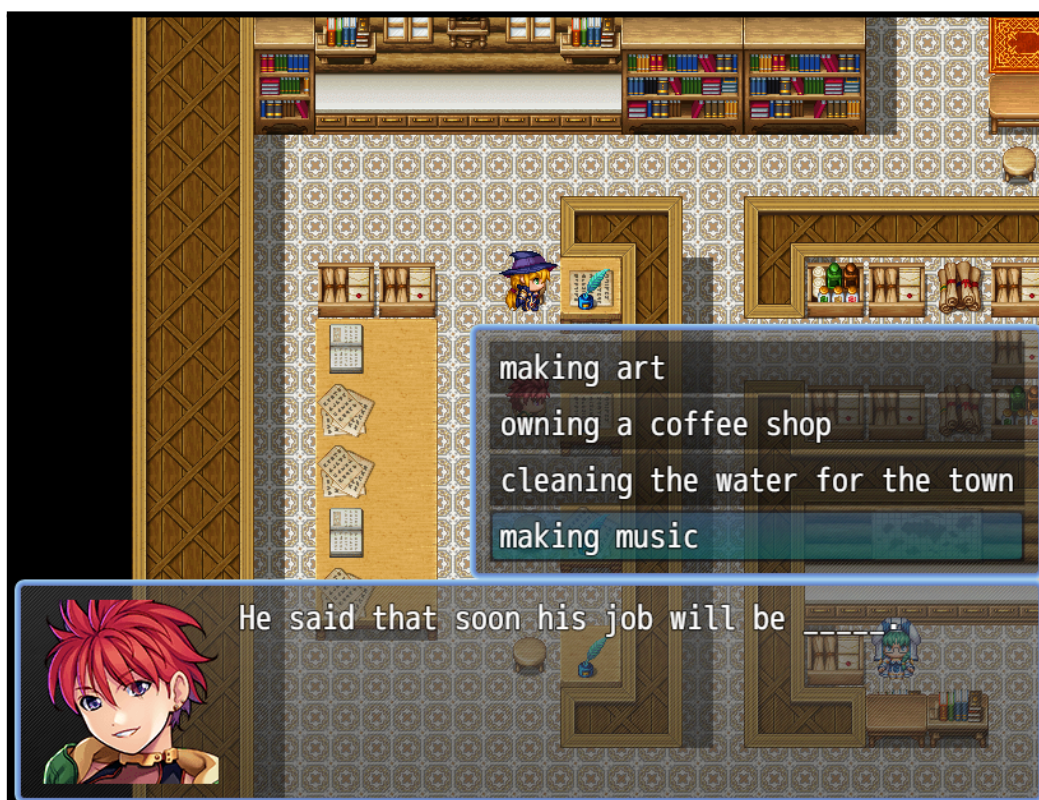


Figure 6. Screenshot: Gameplay – Level 2 assessment (writing the story)

4. Playtesting

This study playtested a graded digital RPG with first year South Korean university students, CEFR A1-A2, taking compulsory English classes. While the university where I work has an extensive graded reader library, which is utilized heavily in the course, this instructor wanted to provide the students with an alternative form of grading reading, which took advantage of the affordances of game-based language learning discussed above. Thus, a computer lab which was booked for the purpose of playtesting a graded digital RPG. The playtesting took place over one hour. Each observation starts with difficulties noticed during playtesting and ends with suggestions for improvement and iteration.

4.1 Click-through

Once students began the game, the rapid pressing of the spacebar began, as many students tried to click through the dialogue as quickly as possible. Because the initial starting energy for the main player was set too high, the 3-stage assessment strategy (2-stage in the demo) largely failed at preventing clickthrough. On future iterations, if the 3-stage assessment strategy is maintained, the player will begin with lower initial energy. This should effectively stop click-through, as the player would quickly run out of energy and must start again from the last saved game.

However, a graded digital RPG should not feel as if it is one big test. There needs to be a balance of preventing click-through while encouraging play. One alternative is to take an approach that favours quest or level completion over typical assessment. In this approach, a player would complete the quest or level by simply knowing what to do, who to talk to, and where to go, and the only way of learning this information would be by paying close attention to the story and in-game dialogue. This seems more in-line with a game experience and the cyclical quest system of RPGs, more likely to induce the flow state which video games and reading may promote (Csikszentmihalyi, 1990; Krashen, 2011), and could reduce the impact of affective filters like motivation, self-confidence, and anxiety. As extensive reading is the reading of large amounts for pleasure, with a focus on meaning, rather than directly on form (ERF, 2011, n.d.b; Krashen, 2011; Nation, 2013; Waring & Takahashi, 2000), and students are ideally not to be tested (ERF, 2011), this aligns more with best practices in extensive reading. A hybrid approach could be adopted where the main form of assessment is quest and level completion, but there are also L2 knowledge checkpoints which can be used to measure student progress. If one of these checkpoints occurs at the beginning of play, and another at the end of play, perhaps they can serve as an in-game pre and post-test.

There were two positive observations regarding click-through during playtesting. One occurred after a player had clicked through an interview with an NPC. They were startled to find out they needed the information to complete the second level of assessment, writing about the life of that NPC, and had to go back and re-interview the NPC. The second observation was when one student, who was running very low on energy, was desperately trying to make it through stage 2 of assessment without getting any wrong answers. Other students gathered around her desk to watch as she played, rooting for her success.

“A graded digital RPG should not feel as if it is one big test. There needs to be a balance of preventing click-through while encouraging play.”

4.2 Re-playability and Length

One issue was with the length of the game. The demo version of *Just the Facts* included only the section of the game involving the NPC Jason and only went through stages 1 and 2 of assessment. Different students finished the game at different times, of which click-through was a factor, and most students had little interest in replaying the same, shorter scenario more than once. To serve better as a platform for extensive reading, a graded digital RPG would have to be much longer, including at least all the content from region one: conversations with four NPCs and level 3 assessment. This would better align both with best practices in ER, where students are to read large amounts of text, and with Krashen's (2009) observations that optimal input must be of sufficient quantity.

4.3 Bugs

Early players of video games often find bugs the developer is unaware of. There were several bugs which the students quickly found. Not every side of every wall operated as a solid body, so that the player would collide with and not penetrate the wall. Several players got stuck in walls and had to restart from the most recent save point or from the beginning of the game. In addition, some players did not follow the narrative and went into a section of the town that is still under development. Doors in this section did not work properly, and this caused students to have to restart. In future iterations, it cannot be assumed that players will follow the narrative, and any sections which are off-limits should simply not be available in the game. In addition, an auto-save feature would help, as many students were not manually saving.

4.3 More in-game Guidance

There were times when the students seemed confused and did not know where to go or what to do next. This uncertainty can disrupt or prevent meaningful play (Salen & Zimmerman, 2004). “Railroading” is a technique game makers use to keep their players on track in terms of the narrative. While normally used in a negative sense, railroading, or limiting the players' options, could help keep the players following the story. Importantly, this can be done with the game mechanics themselves. This feature was taken advantage of three times in the demo. Once at the beginning of the game, where the player was forced to talk with an NPC named Jessica, who introduced them to the city. Once when the character could not go to the next section of the map where the town square was, which contained all the NPCs to be interviewed, until they had taken a job at the newspaper. And once in the newspaper, where they were prevented from going into an “employees only” room. In the above examples, a pop-up bubble would appear reminding them of the task which they had to complete, or where they should go, and their character would automatically move back a space, preventing them from continuing until they had fulfilled a requirement. These kinds of features should be better taken advantage of in future iterations, perhaps including a full tutorial at the beginning of the game.

Better in-game guidance would enable the students to play outside of the classroom. This would promote informal, autonomous language learning. Or perhaps a hybrid situation would be the best context. For example, in addition to having a graded reader library, schools could also incorporate a computer lab for graded digital RPGs, where students could work independently through the graded digital RPGs of their choosing.

“Schools could also incorporate a computer lab for graded digital RPGs, where students could work independently through a graded digital RPG of their choosing.”

4.4 Teacher Intervention

Finally, there was too much instructor intervention required. This occurred when helping the students to download and install the game (monitoring if the students could download and install the game without help was part of the larger assessment), keeping them on track in terms of narrative and gameplay, and helping them figure out what to do when they encountered a bug. This could be improved upon by having the game installed and ready to play when the students arrive, fixing any bugs which are encountered, and providing more in-game guidance, perhaps by creating an in-game tutorial, where a student must learn how to play the game by playing through the tutorial.

An instructor or game designer can also aid comprehension through non-linguistic means (Krashen, 2011). A graded digital RPG is well-suited for this, as one of the main ways a player experiences the game is through the images on the screen. Non-list words can be represented in images in several ways. Firstly, as a natural part of the story or narrative. For example, a “waterfall” can be a location on the map the player must journey to. Secondly, in the background on screen. Thirdly, as a “hover over feature,” where a player can move the cursor over the word and an image of it would automatically pop-up. This feature could be enabled or disabled depending on the needs of the student. The first two strategies are adopted in the present study, and the third could be implemented in future iterations. However, as Nation observes in an interview with Kennedy (2020) when discussing graded readers, learners may over rely on pictures, ignoring the text.

5. Conclusion

Seeking to expand on the practice of extensive through graded readers, this project playtested a graded digital RPG with first year South Korean university students, CEFR A1-A2, taking compulsory English classes. There are several gaps in the field of digital game-based language learning which this project seeks to explore, including a lack in studies investigating reading, an overemphasis on MMORPGs, and the problem of online bullying. It is argued that these two concerns can be addressed through a digital RPG. A demo of a digital RPG was created using RPG Maker MZ, and the language was levelled using AntWordProfiler and the NGSL.

Observations of playtesting show issues with click-through, length and replayability of the game demo, and bugs in the game, resulting in too much instructor intervention being required. Suggestions for future iterations include re-designing the in-game assessment, using a longer version of the game, encouraging informal, outside-the-classroom autonomous gameplay, setting aside a computer lab for an extensive reading, better taking advantage of non-linguistic aides to comprehensible input, and using game mechanics and features to better guide the player.

Resources:

The demo of Just the Facts, the graded digital RPG used in this study can be played at <https://sites.google.com/view/ie-edu/just-the-facts>.

Acknowledgments

I would like to thank Aaron Rotsinger, from the University of St. Andrews, for supervising my master's dissertation, from which many of these ideas are taken. I would also like to thank my friend and fellow corpus linguistics enthusiast, Andrew Bulmer, for introducing me to lexical profiling and suggesting I use it to level my project. Finally, I would like to thank [James York](#) and [Dilay Candan](#) for peer-reviewing this article. Their comments were insightful, helpful, and very difficult to work through. However, it was only in working through those comments that this article was able to take its final form, and for that process, I am grateful.

References

ADL. (2020). *Free to Play? Hate, Harassment and Positive Social Experience in Online Games 2020*. Anti-Defamation League.

<https://www.adl.org/resources/report/free-play-hate-harassment-and-positive-social-experience-online-games-2020>

- Annapurna Interactive. (2021). *Last Stop* [Computer software]. <https://annapurnainteractive.com/games/last-stop>
- Anthony, L. (2010). What can corpus software do? In A. O'Keeffe & M. McCarthy (Eds.), *The Routledge handbook of corpus linguistics* (2nd, kindle eds., Vol. 10, pp. 256–296). Routledge London.
<https://doi.org/10.4324/9780367076399-9>
- Arora, K. (2023). *The Gaming Industry: A Behemoth With Unprecedented Global Reach*. Forbes.
<https://www.forbes.com/councils/forbesagencycouncil/2023/11/17/the-gaming-industry-a-behemoth-with-unprecedented-global-reach/>
- Aubrey, S., Zhang, L., & Zhou, M. R. (2025). Flow in language learning: A systematic review of methodological features. *Language Teaching Research*. <https://doi.org/10.1177/13621688251389358>
- Ballance, O. J., & Coxhead, A. (2024). Corpus Analysis of Vocabulary. In *The Encyclopedia of Applied Linguistics*.
<https://doi.org/10.1002/9781405198431.wbeal20508>
- Bethesda. (2011). *The Elder Scrolls V: Skyrim* [Computer software]. Bethesda Softworks.
<https://elderscrolls.bethesda.net/en/skyrim10/buy-now>
- CD Projekt Red. (2015). *The Witcher 3: Wild Hunt* [Computer software]. CD Projekt.
<https://www.thewitcher.com/nz/en/witcher3>
- Compton, T. (2025). Extensive RPGing? An evaluation of RPG video games for use in extensive reading. *Ludic Language Pedagogy*, 7, 42–52. https://doi.org/10.55853/llp_v7Pg2
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience* (kindle (2008)). HarperCollins.
- Day, R., & Bamford, J. (2002). Top Ten Principles for Teaching Extensive Reading. *Reading in a Foreign Language*, 14(2), 136–141.
- Dixon, D., Dixon, T., & Jordan, E. (2022). Second language (L2) gains through digital game-based language learning (DGBLL): A meta-analysis. *Language Learning & Technology*, 26(1), 1–25. <https://doi.org/10.1257/73464>
- Egbert, J. (2003). A Study of Flow Theory in the Foreign Language Classroom. *The Modern Language Journal*, 87(4), 499–518. <https://doi.org/10.1111/1540-4781.00204>
- ERF. (2011). *Guide to Extensive Reading*. Extensive Reading Foundation.
https://erfoundation.org/guide/ERF_Guide.pdf
- ERF. (n.d.a). *Graded Readers*. The Extensive Reading Foundation.
<https://erfoundation.org/wordpress/graded-readers/>
- ERF. (n.d.b). *What is ER?* Extensive Reading Foundation. https://erfoundation.org/wordpress/what_is/
- ESA. (2025). *Essential Facts About the Video Game Industry* (p. 23). Entertainment Software Association.
<https://www.theesa.com/wp-content/uploads/2025/06/2025-Essential-Facts-Booklet-05-30-25-RGB.pdf>
- Gass, S. M., Behney, J., Plonsky, L., & Huntley, E. (2025). *Second Language Acquisition: An Introductory Course* (6th (kindle)). Routledge.
- Hu, M., & Nation, P. (2000). Unknown Vocabulary Density and Reading Comprehension. *Reading in a Foreign Language*, 13(1), 403–430.
- Hung, H.-T., Yang, J.-C., Hwang, G.-J., Chu, H.-C., & Wang, C.-C. (2018). A scoping review of research on digital game-based language learning. *Computers & Education*, 126, 89–104.
<https://doi.org/10.1016/j.compedu.2018.07.001>
- iterative process education. (2024). *Just the Facts* [Computer software].
<https://sites.google.com/view/ie-edu/just-the-facts>
- Jenkins, H. (2000). *Computer and Video Games Come of Age*. A National Conference to Explore the Current State of an Entertainment Medium.
- Johnson, P. (2023). *A New Kind of Graded Reader: The Digital Roleplaying Game*. [Unpublished Master's Dissertation]. University of St. Andrews.
- Kennedy, O. (2020). An Interview with Paul Nation. *The Language Teacher*, 44(1), 23–26.
- Khoshnoud, S., Alvarez, F., & Wittmann, M. (2020). Peripheral-physiological and neural correlates of the flow experience while playing video games: A comprehensive review. *PeerJ*, 8, 1–40.
<https://doi.org/10.7717/peerj.10520>
- Krashen, S. (2009). *Principles and Practice in Second Language Acquisition* (internet ed.). Pergamon.
- Krashen, S. (2011). *Free Voluntary Reading*. Libraries Unlimited.
- Larian Studios. (2023). *Baldur's Gate 3* [Computer software]. <https://baldursgate3.game>
- Li, J. (2019). A Systematic Review of Video Games for Second Language Acquisition. In P. M. Sullivan, J. L. Lantz, & B. A. Sullivan (Eds.), *Handbook of Research on Integrating Digital Technology With Literacy Pedagogies* (pp. 472–499). IGI Global. <https://doi.org/10.4018/978-1-7998-0246-4>
- Mackay, D. (2001). *The Fantasy Role-Playing Game: A New Performing Art*. McFarland & Company.
- Margaret, R. (2011). *What is Playtesting?* Technopedia. <https://www.techopedia.com/definition/27197/playtesting>
- Murray, D. (1972). Teach Writing as a Process Not Product. *The Leaflet*, 11–14.
- Nation, P. (2013). *What Should Every EFL Teacher Know?* (kindle). Compass Publishing.

- Nation, P., & Wang, K. (1999). Graded Readers and Vocabulary. *Reading in a Foreign Language*, 12(2), 355–380.
- newzoo. (2024). *Global Games Market Report 2024*.
<https://newzoo.com/resources/trend-reports/newzoos-global-games-market-report-2024-free-version>
- Nicklin, H. (2022). *Writing for Games: Theory and Practice*. CRC Press: Taylor & Francis Group.
<https://doi.org/10.1201/9781003182832>
- Nintendo. (2017). *The Legend of Zelda: Breath of the Wild* [Computer software].
https://www.nintendo.com/au/games/nintendo-switch/the-legend-of-zelda-breath-of-the-wild/?srltid=AfmB0orLv4LmK7w1ngkCu5wZG3gAQWkwxio1V5G46LmrbQE3-R_1ftc
- Poole, F., & Clarke-Midura, J. (2020). A Systematic Review of Digital Games in Second Language Learning Studies. *International Journal of Game-Based Learning*, 10(3), 1–15. <https://doi.org/10.4018/IJGBL.2020070101>
- Purdue Owl. (2022). *Sentence Types*. Purdue Online Writing Lab: College of Liberal Arts.
https://owl.purdue.edu/owl/general_writing/academic_writing/sentence_variety/sentence_types.html
- Pyle, H., & Daniels, K. (2016). *The Adventures of Robin Hood* (C. Malarcher, Ed.). e-future.
- Reinhardt, J. (2019). *Gameful Second and Foreign Language Teaching and Learning: Theory, Research, and Practice*. Springer.
- Reinhardt, J. (2021). Not all MMOGs are created equal: A design-informed approach to the study of L2 learning in multiplayer online games. In *Digital Games and Language Learning: Theory, Development and Implementation* (pp. 69–88). Bloomsbury Academic. 10.5040/9781350133037.ch-004
- Salen, K., & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals*. MIT Press.
<https://mitpress.mit.edu/9780262240451/rules-of-play/>
- Square Enix. (2018). *Life is Strange 2* [Computer software].
<https://lifeisstrange.square-enix-games.com/en-us/games/life-is-strange-2>
- SquareSoft. (1994). *Final Fantasy VI* [Computer software]. <https://na.finalfantasy.com/titles/finalfantasy6>
- Tolkien, C. (Ed.). (2021). *Sir Gawain and The Green Knight, Pearl, And Sir Orfeo* (J. R. R. Tolkien, Trans.; kindle). William Morrow.
- UN. (2024). *World Population Prospects 2024: Summary of Results*. (UN DESA/POP/2024/TR/NO. 9.; p. 38). United Nations. https://population.un.org/wpp/assets/Files/WPP2024_Summary-of-Results.pdf
- Waring, R., & Takahashi, S. (2000). *The Oxford University Press Guide to the 'Why and 'How' of Using Graded Readers*. Oxford University Press Japan. http://www.robwaring.org/er/articles/Guide_to_Graded_Readers_e.pdf
- ZA/UM. (2019). *Disco Elysium* [Computer software]. ZA/UM Studio. <https://discoelysium.com>