

Using Narrative-based Contextual Games to Enhance Language Learning: A Case Study

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ABSTRACT

This paper describes a narrative-based design framework that organizes three narrative elements (i.e., storyline, character, and quest) to support a contextual game-based environment for language learning. Using this design framework, a PlanetAdventure system was developed to examine its feasibility and its effects on student language learning. A case study with 61 college students who used the game-based system to learn English vocabulary words was conducted. The findings revealed that their learning achievement was enhanced after using the system. The majority of the students favored the game-based learning experience. Based on these data and behavior logs, the students can be sorted into three clusters with different learning patterns. The findings and implications of developing contextual game-based learning environments are also discussed.

Keywords

Narrative, Context, Game-based learning, Language learning

Introduction

English has become an important common language over the world. In a non-native English speaking country such as Taiwan, English proficiency is valued as a critical competence for participation in the international community (Lan, Sung, & Chang, 2009). Vocabulary learning plays a fundamental role in building English proficiency, including learning English as a second language (Nguyen & Khuat, 2005). The theory of second language acquisition (SLA) suggests that language should be learned in a meaningful context, which is linked to society, culture, and life experiences (Eun & Lim, 2009). When students are situated in a context, the contextual and non-linguistic cues in the context allow students to comprehend and retain their learning (Ray, 2012; Upal, Gonce, Tweney, & Slone, 2007). However, most learning activities in Taiwan are conducted via traditional rote and de-contextualized methods (Lan, Wei, & Chiu, 2014). Such de-contextual approaches may fail to promote language learning.

Recently, digital games have been identified as having the potential to enhance language learning (Di Blas & Paolini, 2014; Ibáñez et al., 2011). Digital games offer the characteristic of representation, presenting the details of objects and scenes in a context via multimedia (Chen et al., 2017). Situated learning theory (Lave & Wenger, 1991) contends that learning should be situated in a specific context, rather than out of context (Kindley, 2002). Students in the context are encouraged to integrate needed knowledge and skills in a meaningful way, which benefits student transfer learning (Clark & Mayer, 2011; Clark, 2009). Digital games could simulate or represent learning contexts and concrete examples. When students learn from context, they become good at discriminating similarities and differences among various examples. This experience can help them process what they have learned. Therefore, they will better understand how to apply their knowledge and skills from one scenario to other scenarios (Cormier & Hagman, 2014; McKeough, Lupart, & Marini, 2013).

Based on the ability of digital games to represent contexts, a number of studies have used digital games to support language learning, in which the interactive environment creates contexts that enrich the learning experience (Lin & Lan, 2015; Huang & Yang, 2012; Yip & Kwan, 2006). These studies leverage the power of game representation to embody a set of concrete scenarios to foster students' exploration, observation, and interaction (Toscano et al., 2015; Chien et al., 2013). For instance, Barab and his colleagues (2015) developed a game-based learning environment to facilitate students' scientific inquiry. In the environment, students were encouraged to observe, propose, and evaluate their hypotheses. Such exploration and interactions in digital games are beneficial to student participation and learning performance (Tsai, Yu, & Hsiao, 2012; Kebritchi, Hirumi, & Bai, 2010; Papastergiou, 2009; Tüzün et al., 2009). Di Blas and Paolini (2014) developed a multi-user 3D game-based environment to promote student language learning, in which students are situated in authentic contexts to learn foreign language through interacting with peers or communicating with computer-controlled characters (Ibáñez et al., 2011).

Nevertheless, although the aforementioned studies contribute to our understanding of game-based language learning, the literature still appears to lack a systematic framework for guiding the integration of language learning with contextual game-based environments. Such a framework is significant because a contextual game-based environment requires systematic guidelines to ensure that the interplay between gaming and learning is effective and engaging for students. In particular, although narrative is a pervasive game element (Ke, 2016; Qian & Clark, 2016; Chen, Ciou, & Chi, 2017) and can provide scaffolding and support (Dickey, 2006; 2007), few studies investigate how narrative could be applied to enhance game-based language learning. To this end, this study proposes a narrative-based contextual game framework and investigates its influences on students' language learning. The research questions addressed in this study are: (1) How can narrative be incorporated into the development of a contextual game-based language learning system? (2) What are the influences of such a contextual game-based language learning system on student achievement, perception, and behaviors?

Design framework

Narrative focuses on the storyline that engages students in the story and compose the story in the gaming process (Shih et al., 2015). A narrative environment allows students to collaborate, strategize, plan, and interact with objects, learning resources, or other students via motivational and cognitive supports (Novak, 2015; Dickey, 2007). To foster contextual language learning, this study proposes a Narrative-based Contextual Game for Language Learning (NCGLL) framework, which emphasizes three significant narrative elements, including storyline design (Novak et al., 2016), character design (Dickey, 2006), and quest designs (Chen et al., 2012) in three different dimensions, as illustrated in Figure 1.

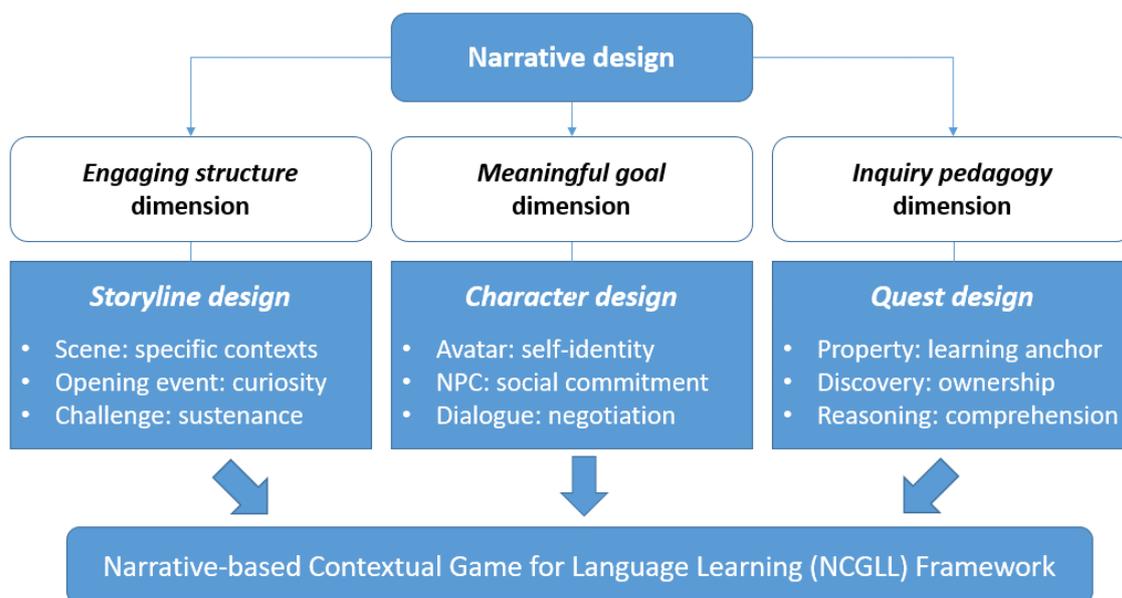


Figure 1. NCGLL framework

Storyline design (engaging structure dimension)

Since storyline is one of the major motivators for game-based learning (Ke, 2016; Qian & Clark, 2016; Novak, 2015), the purpose of storyline design is to engage students in the virtual context based on a well-designed structure, which consists of a scenario, an opening event, and a challenge. Scenario refers to a set of specific contexts represented in the virtual environment, which can enhance the authenticity of learning contents. Contexts are crucial because it has been argued that comprehension comes from the context in which the language occurs (Krashen, 1981). Contexts offer students rich information, including objects themselves as well as the relationships among various objects. Such rich information is helpful in comprehending and retaining knowledge. Information presented in a contextual way can engage students in the knowledge acquisition process (Herrington, Reeves & Oliver, 2014). Additionally, contexts also provide students with an immersive environment, which further allows them to have the sense of “really being there” and develop an emotional connection with the environment (Haring, Chakinska, & Ritterfeld, 2011). Both of these contribute to engaging learning.

Next, the opening event and challenge are also closely related to the structure of a story – a set of events organized in a reasonable and attractive way in the story. The former (i.e., opening event) emphasizes a first event that can initiate and “hook” student attention (Novak et al., 2016). This is because curiosity is a necessary precondition for exploration in the game-based environment (Berlyne, 1960). The latter (i.e., challenge) focuses on following events in the story that sustain their interest via crises. The sequencing of challenges in a story creates an emotional tension that influences student sustenance (Laurel, 1993). Such tension may be further sustained by a “confrontation” design which uses a dramatic three-act structure (Chatman, 1980) containing setup, confrontation, and resolution. Setup aims to establish the main character and the world where he/she lives in. Then, the coming of a serious problem changes the life of the main character, who needs to face a series of challenges (i.e., confrontation). The difficulty levels of the challenges often increase before the climax, and finally the main character solves the problem (i.e., resolution). Such a confrontation curve can maintain student attention and participation in the game-based environment.

Character design (meaningful goal dimension)

The purpose of goal dimension is to offer a meaningful goal via three related elements: avatar, non-player-character (NPC), and dialogue. Avatars and NPCs are two categories of actors used in digital games. The former (i.e., avatars) refers to the images of the students themselves appearing in the virtual environment, which offers students a sense of presence (i.e., of being there) via representing and controlling their self-images. Because people tend to regard self-images as themselves and the behavior of their self-images as theirs (Chae et al., 2016), self-images can enhance students’ feelings of telepresence in the virtual world (Qiu & Benbasat, 2005). For instance, when students clearly observe the relationship between what they did in the real world and what the consequences were in the virtual world, their feeling of control and self-presence can be enhanced.

The NPCs (non-player characters) are simulated figures controlled by the software whose goal is to offer meaningful and enhanced goals in the two aspects of social commitment and negotiation. For social commitment, goal commitment is a critical element that influences student motivation and task performance (Locke & Latham, 2002). Difficult goals require more effort and persistence, and higher goal commitment often leads to a better performance. Thus, to achieve more difficult goals, stronger goal commitments are needed. NPCs can offer students a sense of “being together with” in a social space (Haring, Chakinska, & Ritterfeld, 2011). Students’ goal commitment is enhanced by social commitments created by interacting and negotiating with NPCs. This process further involves the design of the NPCs’ dialogues, which is related to the negotiation aspect. Negotiation refers to the process of discussing with NPCs to reach an agreement with them. To this end, the design of dialogues can stimulate students’ clarification, elaboration, argumentation, and compromise, further contributing to their goal pursuit.

Quest design (inquiry pedagogy dimension)

The purpose of the pedagogy dimension is to foster students’ knowledge acquisition via quest design, which includes the design of three mechanisms: property, discovery, and reasoning. Specifically, quests often involve properties that need to be investigated to discover their histories or sources. Thus, the properties in the digital games can trigger interesting or mysterious questions (e.g., where are they from, or what are their histories), which can link to the content of quests, and offer an immediate goal for students to initiate inquiry-based learning. Therefore, quests driven by the properties can play the role of “anchor” and offer a starting point for inquiry-based learning.

In a sense, when students conduct inquiry-based learning, they are invited to participate in a series of discovery and reasoning processes. This is because inquiry-based learning is an active learning that is initiated by a question or problem in a specific context. During the process, students discover related cues and evidence from the context, and attempt to identify the relationships between questions and evidence. Thus, inquiry-based learning is a journey of thinking, which provides a valuable context for students to acquire, clarify, and apply the concepts they have learned (Edelson, Gordin, & Pea, 1999). When students develop their own knowledge and solutions via inquiry and discovery, their ownership of the knowledge can be enhanced. In addition, when students actively create and construct their own knowledge, what they learn is further linked to their prior knowledge. Thus, such learning experiences can deepen their understanding.

Implemented system

Based on the NCGLL framework, a learning system, named PlanetAdventure, is implemented. The storyline of the system extends the background setting of the novel “The Little Prince.” A student plays the role of the little prince who loves his rose on planet B-612, but one day he finds the rose has been murdered. Thus, the game goal for the students is to solve the mystery: who murdered the rose.

Storyline design (engaging structure dimension)

The goal of storyline design is to engage students in the game environment. Three elements are taken into account, including scene, opening event, and challenges. First, to support the background setting of the PlanetAdventure, a game world consisting of four planets is established so that students can travel and explore, including the b-612 planet where the little prince lives (Figure 2), the forest planet (Figure 3), the mushroom planet (Figure 4), and the light planet (Figure 5). These scenes offer students authentic contexts to learn English. In addition, the opening event is a mystery in which the little prince finds that his planet is different – his rose has been murdered. The challenge across the storylines is whether the little prince can solve the mystery.



Figure 2. Screenshot of the PlanetAdventure system (b-612 planet)



Figure 3. Screenshot of the PlanetAdventure system (forest planet)



Figure 4. Screenshot of the PlanetAdventure system (mushroom planet)



Figure 5. Screenshot of the PlanetAdventure system (light planet)

Character design (meaningful goal dimension)

The purpose of character design is to offer students meaningful goals. This involves three elements: avatar, NPC, and dialogue. The avatar is the little prince that helps students project themselves into the game world. Additionally, different NPCs are designed to provide concrete and clear goals, such as “sloth geographer,” “lake goddess” (Figure 3), “fox,” “penguin king” (Figure 4), and “lantern fish” (Figure 5). These NPCs are portrayed as cartoon animals with problems, who need the students to help them solve their problems. If the students help these NPCs, the students can receive clues about the murderer. Interaction and communication via the dialogues with the NPCs forms a social environment that offers students more opportunities to learn and use language.

Quest design (inquiry pedagogy dimension)

The primary goal of quest design is to provide pedagogies to foster knowledge acquisition. It contains three key elements: problem, discovery, and reasoning. A problem often serves as an anchor of inquiry-based learning, which is a starting point for learning. Because the student needs to understand what the NPCs are saying, they will pay more attention to the dialogues. In this way, the student is further encouraged to explore the game world, and interact with various NPCs to obtain more information. Because the information is collected and knowledge is constructed by students, the feeling of ownership of the knowledge can be enhanced. Further, as the student continuously correlates the findings with the problem, this iterative process of discovering and reasoning is helpful to deepen their thinking and knowledge comprehension.

Method

To address the research questions, the researchers conducted a case study in which the participants used the PlanetAdventure system. Its effects on students were evaluated in three aspects: learning achievement, perception, and behaviors.

Participants and procedures

The participants were 61 first-year college students recruited from a “basic English” class, where they had general English abilities but wanted to improve their reading and vocabulary in various themes. The PlanetAdventure system was developed to learn 30 English words related to the theme of a fantasy adventure, including 10 basic words, and 20 advanced words. The details of these English vocabulary words are listed in Appendix. The words were presented to the participants via dialogues with NPCs. For the game goal (i.e., finding the murderer who killed the rose), the participants were required to carefully read the message of the dialogues. In this way, they learned these words in a meaningful and contextual way. As illustrated in Figure 6, the following procedures were conducted.

- Preparation session: before the participants used the system, a pre-test was conducted to evaluate their prior knowledge as the baseline.
- Usage session: the participants were introduced to the operations and functions of the PlanetAdventure system, to ensure that all of them knew how to use the learning system. The participants were then permitted to freely use the learning system for 40 minutes. During this session, their behaviors were collected.
- Evaluation session: after the usage session, the participants were given a post-test and a perception questionnaire. The former was compared with the pre-test to investigate their learning achievement. The latter was used as self-reported evidence to understand their learning experience.



Figure 6. Procedures conducted in this study

Data collection

To collect students' data about their achievement, perception, and behavior, three kinds of tools were used in this study. The details are given below.

- *Achievement test*: A pre-test and post-test were given before and after the system was used. The two tests were identical, but they were formatted in different order to prevent the rote effect. The test contained 30 fill-in-the-blank questions with scores ranging from 0 to 30.
- *Perception questionnaire*: To measure students' learning experiences for the specific PlanetAdventure system, a perception questionnaire was developed by the authors. It consists of four facets, including perceived helpfulness (3 items), joyful experience (3 items), narrative design (2 items), and scaffolding design (2 items). These items were further formatted as a 5-point Likert scale ranging from “strongly

disagree” (point = 1) to “strongly agree” (point = 5). The questionnaire demonstrated adequate reliability (Cronbach’s $\alpha = 0.84$). The responses of “agree” (point = 4) and “strongly agree” (point = 5) were regarded as positive responses for further analysis.

- *Behavior logs*: two categories of student behavior data were recorded in the system logs during the usage session. One is the display time, which refers to the time a dialogue panel appears, and can be regarded as an indicator of how much attention the students gave to the dialogues. The other is click number, which refers to the number of mouse clicks on a vocabulary explanation. This can be viewed as an indicator of the degree to which the students paid attention to the vocabulary explanation.

Data analysis

Three quantitative analyses approach were applied to analyze data in this study.

- For achievement test, a paired samples t-test was conducted to examine the learning gains during the use of learning system.
- For the perception questionnaire, since one-sample t-tests are sometimes used to examine students’ choices in the questionnaire (Chen et al., 2018), this approach is also adopted to examine whether students’ choices were significantly different in this study.
- The data collected from the achievement test, perception questionnaire, and behavior logs were analyzed via two-stage cluster analysis (i.e., k-means approach is used after a hierarchical cluster) to identify possible different learning patterns. All of the analyses were performed on Statistical Package for Social Sciences software.

Method

Achievement test

The results of the pre-test and post-test are given in Table 1. The means of the scores improved from 10.73 to 25.14. In addition, the standard deviation fell from 5.12 to 4.73. The findings of the paired-samples t-test indicated that the improved scores had a statistically significant difference, implying that the PlanetAdventure system helped students improve their learning. A possible explanation was that the use of PlanetAdventure did help them comprehend the meaning of the vocabulary words via contextual game-based playing, which seems to echo to the argument that the contextual and non-linguistic cues in the context enable students to comprehend and retain knowledge (Ray, 2012). This supports the perspective that language should be learned in a meaningful context (Eun & Lim, 2009).

Table 1. Results of the achievement test

	Pre-test		Post-test		<i>t</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	
Score	10.73	5.12	25.14	4.74	-27.95**

Note. ** $p < .01$.

Perception questionnaire

The results of the questionnaire are shown in Table 2. The majority of responses are positive for each of the four facets (i.e., 69%, 79%, 74%, and 85%). Further, the one-sample test was used to examine the statistical difference, and the results demonstrated that the average score was significant for all four facets: perceived helpfulness ($t = 53.08, p < .01$), joyful experience ($t = 49.26, p < .01$), narrative design ($t = 40.62, p < .01$), and scaffolding design ($t = 52.83, p < .01$). This implies that most of the students felt that the PlanetAdventure system is interesting and helpful in their English learning (especially in vocabulary and reading). In addition, the narrative design and scaffolding design of the PlanetAdventure system were regarded as useful mechanisms for holding their interest and stimulating vocabulary learning.

Table 2. Results of the questionnaire

Categories/Items	Agreement	Average
Perceived helpfulness		
This system improved my mastery of the vocabulary words	54/61 (89%)	4.13
This system improved my listening ability	42/61 (69%)	3.87
This system enhanced my reading ability	48/61 (79%)	3.97
Total		3.99**
Joyful experience		
This system is a well-integrated system for gaming and learning	54/61 (89%)	4.28
I liked to learn English via such a game-based system	50/61 (82%)	4.15
I looked forward to using this system in the future	48/61 (79%)	4.20
Total		4.21**
Narrative design		
The narrative design of this system stimulated my learning interest	45/61 (74%)	4.05
The narrative design of this system motivated me to engage in exploration, problem-solving, and learning	46/61 (75%)	4.05
Total		4.05**
Scaffolding design		
The explanation function helped me comprehend the meaning of the vocabulary words	53/61 (87%)	4.15
The review function helped me summarize what I have learned	52/61 (85%)	4.08
Total		4.11**

Note. ** $p < .01$.

Learning pattern

A two-stage cluster analysis (i.e., k-means approach is used after a hierarchical cluster) was conducted to explore students' learning patterns. Because the results of the hierarchical cluster analysis suggested there were three groups with different characteristics, a k-means approach with the three groups was employed. The results are given in Table 3. Among the variables, ANOVA demonstrated that three variables had statistical differences: click number ($F = 28.409, p < .01$), display time ($F = 226.818, p < .01$), and narrative Q2 (i.e., one questionnaire item of narrative; $F = 3.641, p < .05$). This implies that three categories of student learning patterns can be identified: the majority of students were efficient learners (Cluster 3, $n = 27$) who had relatively low click numbers and display time, and also liked the narrative design (means = 4.11). Next, some of the students (Cluster 2, $n = 20$) were learners who had moderate click numbers and display times but did not like the narrative design (means = 3.70). The remaining group consisted of holistic-acquiring learners (Cluster 1, $n = 14$) who strongly favored narrative design (mean = 4.43), and had higher click numbers and display times.

Table 3. Results of cluster analysis

Variables	Means			F
	Cluster 1 ($n = 14$)	Cluster 2 ($n = 20$)	Cluster 3 ($n = 27$)	
Gained score	14.79	14.65	14.04	.207
Click number	27.64	17.30	2.37	28.409**
Display time	857.85	456.93	67.98	226.818**
Helpfulness (Q1)	4.43	4.05	4.04	2.413
Helpfulness (Q2)	4.14	3.75	3.81	1.036
Helpfulness (Q3)	4.21	3.70	4.04	2.744
Joyfulness (Q1)	4.57	4.05	4.30	2.723
Joyfulness (Q2)	4.50	4.00	4.07	2.146
Joyfulness (Q3)	4.43	4.05	4.19	.999
Narrative (Q1)	4.36	3.80	4.07	2.068
Narrative (Q2)	4.43	3.70	4.11	3.641*
Scaffolding (Q1)	4.29	4.20	4.04	.821
Scaffolding (Q2)	4.21	4.15	3.96	.807

Note. * $p < .05$; ** $p < .01$.

Implications and discussion

Learning patterns with individual differences

The findings of learning patterns seemed to be closely connected with the explanations of individual differences and cognitive styles. The narrative-based contextual environment not only presented information about individual object, but also detailed relationships among these objects. Therefore, students were required to organize various types of information simultaneously in a context (Kalyuga & Plass, 2009). However, previous studies indicated that not all students can effectively deal with multiple information sources (Ishii & Yamauchi, 1994). Different cognitive styles (e.g., Holists and Serialists) should be considered because they represent consistent individual different preferences in organizing and processing information (Messick, 1976).

This perspective can be used to explain the differences among the three clusters of learning patterns. For the students of cluster 3, their outcome may be due to the fact that the contextual environment matched their cognitive styles. Previous studies indicate that the context not only provides text and graphic information, but also the surrounding situation, which was helpful for Holists because they tended to process information in a “whole-to-part” global way (Jonassen & Grabowski, 2012). Thus, they are efficient learners. Students of cluster 1 may be good at processing visual and verbal information together simultaneously. As suggested by the dual-coding theory, visual and verbal channels are processed differently (Paivio, 1971), and combining the two channels can result in better performance (Clark & Mayer, 2016). Because these students liked (means = 4.43) the narrative design, they spent relatively more time on interacting with the NPCs. Thus, they were holistic-acquiring learners. Since the students of cluster 2 disliked the narrative design (means = 3.70), they had lower click numbers and display times than the students of cluster 1 (i.e., holistic-acquiring learners). The context may not have been appropriate for their cognitive styles. Consequently, they did not learn more efficiently than the students of cluster 3 (i.e., efficient learners). These individual differences might be taken into account in the future when developing a contextual game-based learning environment.

Levels of contextual representation

Based on the advanced multimedia technology, a salient characteristic of digital games is the power of representation, which can immerse students in an authentic or imaginary context. Studies show that different levels of contextual representation such as text, graphics, sound, and context influence student learning (Chen et al., 2017). Multimedia learning (Mayer, 2001; Mayer & Moreno, 2003) asserts that optimal learning occurs when visual and verbal information is presented simultaneously because students have separate channels for processing visual and verbal information. Thus, when the two forms of information are linked together, students can receive integrated information that further enhances their comprehension (Rusanganwa, 2015) and long-term memory (Kulhavy, Stock, & Kealy, 1993). From this perspective, students of cluster 3 can benefit most from a game-based learning environment that provides both visual and verbal information.

It has also been argued that the contextual and non-linguistic details in the context can contribute to students' learning comprehension and retention (Ray, 2012; Upal et al., 2007). More specifically, different levels of contextual representation vary in how much information is conveyed to students and how such information is presented. For instance, the text reveals symbolic and abstract information, whereas the graphic offers visual and concrete information. The context not only delivers rich information on a specific object, but also the relationships among objects in the context. Thus, when what students learn is linked to their society, culture, and life experiences, learning occurs in a meaningful context that is helpful for their second language acquisition (Eun & Lim, 2009). According to this point of view, students of cluster 1 benefit most from a game-based learning environment that offers rich contextual and non-linguistic details.

Conclusion

This study addresses two research questions. For the first question (*How can narrative be incorporated into the development of a contextual game-based language learning system?*), this study proposed a heuristic NCGLL framework to guide the development of a contextual game-based language learning system. Using this framework, a PlanetAdventure system was constructed to evaluate its feasibility. For the second question (*What are the influences of such a contextual game-based language learning system on student achievement, perception, and behaviors?*), the findings of this study showed that (1) the students improved their learning achievement, and the improved scores were statistically significant. This implies that the PlanetAdventure

system contributed to their learning achievement. (2) The students had a positive perception of the system on the four dimensions of perceived helpfulness, joyful experience, narrative design, and scaffolding design. This implies that the PlanetAdventure system appeared helpful to their English learning. (3) Further analysis of learning patterns suggests that the learning styles and adaptations of students should be taken into account in future contextual game-based language learning design.

Besides, this study contributes to the research field of technology enhanced language learning in terms of theoretical and practical aspects. Regarding theoretical aspect, this case study deepens our understanding of the positive influences of contextual game-based language learning on students' achievement and perception. Such findings can not only be used to improve the design of game-based environments for language learning, but also empirically support the application of context-based learning systems. Regarding practical aspect, a design framework was proposed to guide the implementation of contextual game-based language learning systems. This initial attempt and heuristic experience might further inspire more researchers to investigate how game features could have an ingenious interplay with context-based language learning.

This study contributes to exploring the development of contextual game-based language learning, but it has some limitations. First, it is a short-term study that does not examine the long-term effects of the system. Further, it is a case study that provides preliminary findings but requires more research to examine the potential value and limitation of digital games as learning tools, especially compared to other approaches.

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Appendix

1	journey	N	the act of travelling from one place to another
2	rough	Adj	difficult or unpleasant
3	planet	N	an extremely large, round mass of rock and metal, such as Earth
4	geographer	N	a person who studies geography
5	beloved	Adj	loved very much
6	frequently	Adv	often
7	wonder	V	to express a wish to know about something
8	murder	N	the crime of intentionally killing a person
9	destiny	N	the things that will happen in the future
10	guard	N	a person or group of people whose job is to protect a person, place, or thing from danger
11	be supposed to	V	to have to
12	anonymous	Adj	made or done by someone whose name is not known
13	rude	Adj	not polite; offensive or embarrassing
14	lasting	Adj	continuing to exist for a long time or for ever
15	creature	N	any large or small living thing that can move independently
16	goddess	N	a female god
17	investigation	N	the act or process of examining a crime, problem, statement, etc
18	lead	N	a piece of information that allows a discovery to be made
19	proof	N	a fact or piece of information that shows that something is true
20	clue	N	a sign or some information that helps you to find the answer to a problem
21	wander	V	to walk around slowly in a relaxed way
22	sneak	V	to go somewhere secretly
23	ash	N	The soft grey or black powder that is left after a substance has burned
24	refuse	V	to say that you will not do or accept something
25	get rid of	V	to remove or throw away something
26	speculation	N	the activity of guessing possible answers to a question
27	evidence	N	one or more reasons for believing that something is or is not true
28	suspect	V	to think or believe something to be true or probable
29	permission	N	if someone is given permission to do something, they are allowed to do it
30	petal	N	the usually brightly colored parts that together form most of a flower