Cartoons as the Incidental Vocabulary Acquisition Tool for English Language Learners

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Abstract
Incidental learning is a well-known process of acquiring new knowledge, vocabulary, or information without intention. Traditional or intentional learning is widely practiced in classroom environments, while incidental one receives less attention from educators, schools, and scholars. English Language Learners encounter various problems when they start learning the second language, including culture shock, lack of understanding of foreign culture, different contexts, and ineffective teaching strategies implemented by teachers. Many English Language Learners cannot communicate in a second language outside the classroom, yet, they are exposed to a variety of media, including cartoons and animated films, when they are at home. By using cartoons as the means of incidental learning among English Language Learners to acquire second language vocabulary, students could learn a foreign language faster. The current paper critically analyzes the benefits of incidental learning, the evidence of its effective implementation in the classroom with English Language Learners, and the results of previous studies using cartoons as the method of incidental learning among students, including English Language Learners. The paper recommends using incidental learning as one of the strategies to acquire second language vocabulary among English Language Learners. However, teachers must pair this practice with intentional learning to retain the results. Also, it is recommended to use cartoons with subtitles for students with basic or limited knowledge of a second language for effective accommodation and scaffolding of English Language Learners in general classrooms.

Keywords: cartoons, children, English language learners, incidental learning, vocabulary acquisition

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Introduction

In most cases, education is a well-guided and monitored process where the teacher and the curriculum develop the instructions preapproved by the authorities. However, children can learn in other instances that do not require specific guidance or an educational curriculum. Specifically, incidental learning refers to the process of learning that does not have a goal of doing so. According to the definition of Richards and Schmidt (2002), incidental learning is learning one thing while intending to learn another. Children can learn from context, including their out-of-class experience, interaction with their peers, communication with family, and media consumption. English Language Learners (ELLs) could benefit from incidental learning, as acquiring new vocabulary from the context could be even more effective than learning new words in the classroom (Teng, 2020).

Moreover, ELLs often experience a lack of opportunities to learn a language in an English-speaking environment outside the classrooms, which is critical for acquiring vocabulary in a faster and more effective way. Young children are often exposed to various media types, from online social platforms to cartoons or animated motion pictures. While parents choose to limit the time children are exposed to media to preserve their health and maintain healthy physical and mental development, it is still possible to use this time to benefit children, especially those learning English as their second language. The main goal of this paper is to analyze the theoretical basis behind incidental learning and its efficacy for ELLs, review the literature on testing the effectiveness of cartoons as means of vocabulary acquisition, consider all advantages and disadvantages of this method of learning, and propose an approach for using this media as a teacher of vocabulary for young students. Finally, the paper analyzes the different types of evidence of benefits of incidental learning for ELLs for acquiring Second Language (L2) vocabulary.

Literature Review

This section analyzes the literature dedicated to incidental learning, the theories that serve as the basis for this practice, and the studies that tested this method of vocabulary acquisition in practice. The main purpose of this section is not only to present an overview of the previous research but also to analyze the evidence of the effectiveness or ineffectiveness of incidental learning as a tool for vocabulary acquisition among ELLs. Theories that serve as the basis for incidental learning have to be analyzed as well to determine if this practice is based on a solid theoretical basis.

Theoretical Basis of Incidental Learning

Incidental learning sounds like a natural and straightforward process when children or adults could learn something from unintentional actions. However, this learning tool was proposed by Marsick and Watkins (1990) by calling it a theory of incidental or informal learning and contrasting it with formal (traditional) learning. According to their study, formal learning is a traditional institutionally-sponsored, classroom-based, and structured process, while informal learning can occur anytime anywhere, yet it is not typically classroom-based. Incidental learning could be a byproduct of unrelated activity, including personal interaction, communication activities, or task accomplishment (Marsick & Watkins, 1990). Informal learning could be used by the teacher, parents, or organizations as a deliberate method of incidental learning, even if it could sound like mutually exclusive
actions (Marsick, Watkins, Callahan, & Volpe, 2006). However, according to this theory, incidental learning could be pre-planned. Incidental learning, however, could happen when learners are not conscious of it (Rosales, 2019).

At the same time, the theory by Marsick and Watkins (1990) was based on the theories of Dewey (1938) and Lewin (1951) as well as the theory of transformative learning (Mezirow, 1990). Particularly, John Dewey insisted that the curriculum has to be relevant to children, as they have to learn practical skills that could be useful for them in the future (Dewey, 1938). The main opposition of Dewey was directed towards the formal learning that usually demanded the development of a standard set of skills (e.g., reading, writing, and math). Instead, according to Dewey (1938), students have to be able to learn skills and acquire knowledge that reflects their environment and could be applicable in real life. In other words, Dewey (1938) insisted on the deviation from traditional formulaic learning that could increase children's interest in education and provide them with natural motivation to acquire knowledge. The scholar proposed investing more students' time in art, history, and science within the areas relevant to a specific group of children because, according to Dewey (1938), schools have to raise community members that could use effective self-direction and autonomous decision-making.

Kurt Lewin introduced a complex theory that implied that children could learn better in their environment. Moreover, Lewin (1951) claimed that every child's environment is individual and different, relying on individual behavior and psychological force, including drives, tensions, thoughts, and specific contexts. Lewin (1951) illustrated his theory through a diagram in which a learner remains at the center and moves through life-space that is constructed of facts that determine her or his behavior at a given time. This theory is closely connected to incidental learning, as it allows understanding how a child would learn by the incident and how this process could be re-constructed. In this case, an individual learner could be exposed to a situation where incidental learning is inevitable.

Another theory that could be closely linked to incidental learning is Jack Mezirow's transformative learning. While this theory was initially developed for adult learners, it could be applied to the perspective of teaching children, especially considering the ELLs, as they would have to go through the process of transformation to acquire new vocabulary (Mezirow, 1990). In other words, transformative learning is a concept implying that when learning, students could also develop their skills and acquire knowledge from context through a transformation process. In addition, transformative learning demands the new material to be based on the learners' previous experiences to connect them to the new knowledge (Mezirow, 1990). Incidental learning could be transformational for ELLs, as they have to change their linguistic patterns, learn how to comprehend, interpret, and analyze new language, retain foreign words, and use them in practice.

**Cartoons as an Incidental Learning Tool**

Exposure to the media of children could generate positive learning effects if this practice is used in an effective manner and concerning the children's developmental milestones, the time of exposure, and their attention span. For instance, a study by Rawan, Dar, and Siraj (2018) experimented on Pakistani children by using Japanese Hindi-dubbed
cartoons as the tool for Hindi language acquisition. The results determined the connection between the frequency of the use of Hindi words in cartoons and the expanded frequency of vocabulary acquisition by participants (Rawan et al., 2018). The same research confirmed that such indicators as age and gender determine the capacity of incidental learning, while the exposure time (to the cartoon) did not generate a significant link to learning new Hindi words (Rawan et al., 2018). This study confirmed the efficacy of cartoons as the means of learning new words among children who have just started learning the language. While this research was conducted among young children who learn their native language, the same process could be designed for ELLs as well. (Singer, 2019)

Earlier research was conducted among students who learn English as their second language. A study conducted by Mousavia and Gholami (2014) involved Iranian children who learn English to watch animated flash stories with English subtitles. The study compared the children's performance in English vocabulary acquisition when they watched the stories with the task they had only to read the subtitles. According to the findings, children were more prone to retain new words when watching the flash stories with subtitles (Mousavia and Gholami, 2014). Children may be prone to learn through cartoons or other visual media, as they use two means of perceiving information (visual and auditory). However, an earlier study conducted by Brown, Waring, and Donkaewbua (2008) compared the possibility of incidental learning by using reading, reading-while-listening, and listening to the stories, which showed that the children do not incidentally learn in any of these modes. Thus, it is possible to speculate that this is the visual element of cartoons or animated films that stimulate incidental learning among young children (Chen, 2021). The use of both visual and auditory elements may affect young learners even more effectively.

Overall, like any other media, cartoons could be used for students' learning of new words in the classroom or outside of it. Munir (2016) analyzed the effectiveness of a cartoon as a tool in learning new vocabulary among ELLs. The results showed a significant increase of retained words by ELLs in the classroom when the teacher was using it as a primary method to stimulate vocabulary acquisition among students (Munir, 2016). While this study focuses on the controlled and instructed environment of the classroom, it is possible to notice that cartoons could be a viable option in generating language acquisition in an out-of-classroom environment. Torralba and Mazra (2015) determined new details on incidental learning through cartoons in ELLs by involving children from emigrant families of several age groups in the experiment. According to the study results, older children were mainly familiar with subtitles, and the acceptance was very high in all age groups (Torralba & Mazra, 2015).

Furthermore, the same research showed that the level of efficacy of incidental learning through cartoons was predetermined by habit, readability of subtitles, and level of interest in the cartoons (Torralba & Mazra, 2015). Not only could young children learn through cartoons, but all age groups could also retain vocabulary. Of course, the choice of the cartoons or animated series has to be connected to children’s interests and comply with their developmental milestones. At the same time, subtitles are not always proved to be a more effective method to ensure a harmonious L2 acquisition. For example, Karakaş and Sariçoğan (2012) tested on Turkish
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children learning English by exposing them to a cartoon in English with and without subtitles. According to the findings of this study, the subtitle group did not outperform the no-subtitle group, yet, both groups showed significant results in L2 vocabulary retention in post-test results (Karakaş & Sariçoban, 2012). As the researchers concluded, the contextualization of target words in cartoons improved children's performance in both groups (Karakaş & Sariçoban, 2012). At the same time, it is critical to admit that using L2 cartoons without subtitles would require students to have a basic understanding of L2 or the cartoon's language to be adapted to ELLs. Otherwise, even if children are provided with the target words, they would not be able to understand or retain new vocabulary. Furthermore, incidental learning occurs unintentionally, yet, it is highly unlikely that children can acquire L2 vocabulary without understanding the meaning of words or phrases.

**Specificities of Second Language Acquisition in English Language Learners**

Acquiring knowledge about a new foreign language could be a challenging job for children who have just come to an environment with L2 (foreign language). Multiple reasons influence students' L2 learning. Specifically, ELLs' initial expertise in a second language could be limited or even inexistent. Also, children's L1 (native language) could be dramatically distinctive compared to L2. Finally, teachers could use an ineffective practice for learning L2 in the classroom by ignoring the needs of ELLs from different countries. Differences between L1 and L2 could be dramatic in terms of the alphabet, grammar, stylistics, pronunciation, as well as culture, values, and traditions that exist in every language as a code. For example, the difference between English and Chinese is severer compared to Italian and Spanish languages based on the Latin alphabet (Teng, 2015).

For a very long time, the only method used in classrooms for ELLs was a monolingual strategy that eliminated L2 from the context of the lessons. This approach was based on the idea that students would learn L2 quicker if provided with the so-called immersive experience and would be surrounded by L2 most of the time in classrooms. As many ELLs are deprived of interacting with native speakers in an out-of-classroom environment, such an approach could sound viable. Nonetheless, recently, educators began to acknowledge the efficiency of the multilingual teaching technique for ELLs to accommodate the learners.

The multilingual approach permits educators to utilize L1 in the class when it is needed. For instance, a study conducted by Alrabah, Wu, Alotaibi, & Aldaihani (2015) revealed a significant connection between a multilingual approach and the efficacy of L2 acquisition in the classroom. At the same time, this study showed that the teachers were initially against using L1 in the classroom opposite to L2. A negative attitude towards the bilingual approach was connected to the lack of knowledge and practice among teachers in using this teaching method in the classroom (Alrabah et al., 2015). ELLs acquire new vocabulary by being exposed to L2 as well as being able to understand new words, structures, and phrases. If ELLs are surrounded with L2 without the provision of explanation of interpretation of the context, it is more likely that they would fail to recognize or retain new words. Incidental learning would not be able in this case.

The negative attitude of teachers towards the use of L1 in the classroom would prevent students from accepting an immersive strategy outside of it. One more research came
to the same final thought by establishing that educators have a debatable understanding of the multilingual method as a result of their training (De la Campa & Nassaji, 2009). A research study by Murga (2018) recognized that most teachers ban L1 from the classroom because they either did not understand it or were sure that it would hinder students who learn English from acquiring new knowledge. Incidental learning could not be used to acquire new vocabulary if students were unable to understand L2 through their native language. ELLs with basic or no comprehension of L2 might not be able to perceive new vocabulary in full capacity. Educators who do not understand the importance of using L1 could be unaware of how language is acquired. As a result, it is critical to determine if the methods of vocabulary acquisition in ELLs could be connected to their ability to understand L2 and learn incidentally (Huber, 2000).

Numerous studies recognized the advantages of using L1 among ELLs concerning their academic effectiveness and benefit of the understanding process. Specifically, Boutsani (2019) generated the findings that claimed L1 for ELLs lowers talking anxiety among them, which fosters much better cause their vocabulary purchase, especially among children who struggle. Other advantages of implementing L1 included improvement of knowledge building and construction in L2, facilitation of social interaction, and also an increase in language effectiveness (Pan & Pan, 2018). Furthermore, it was acknowledged that pupils' language understanding is better supported by the use of L1 in the classroom in certain scenarios (Almoayidi, 2018). Particularly, as it was admitted, L1 needs to be used in the class when needed by the scenario rather than replacing TL2 completely (Almoayid, 2018). Zaboli and Bozorgian (2017) showed a clear connection between the effectiveness of incidental learning and vocabulary acquisition among ELLs during the intensive reading exercise, even when the students were not provided with explicit instructions concerning the words they have to retain. Figure 1 shows the difference between pre- and post-test results:

![Incidental Learning in ELLs](image)

*Figure 1. Incidental learning pre- and post-test (Zaboli & Bozorgian, 2017, p. 74)*

This is the main issue that ELLs classroom instructors are saying, as they consider that the inclusion of L1 would certainly supersede L2 as well as lower the top quality of language understanding completely. Numerous research studies agreed that L1 has to be used just
when it is needed (e.g., when a student stops working to understand a new term) rather than carried out as a substitute in the EFL class (Al-Musawi, 2014; Galali & Cinkara, 2017). Really few studies revealed that EFL instructors authorize the use of L1 in the classroom (Jadallah & Hasan, 2014). Subsequently, the use of a bilingual training technique is warranted only when it is applied correctly in the classroom. At the same time, the reluctance of instructors to make use of L1 is connected to several problems.

**Incidental Learning among ELLs**

Vocabulary acquisition through incidental learning among ELLs is an effective method of increasing the capacity of words and phrases in students' lexicon. A study on incidental learning among English speakers who learn Russian showed that the participants were able to improve their receptive but not productive grammatical knowledge in L2 (Russian) acquisition (Denhovska & Serratrice, 2017). It would be challenging for ELLs to perceive and retain correct grammar structures during incidental learning, which explains the results of this study. Bisson et al. (2014) recommended exposing ELLs to media that aims at incidental learning at least two times for their effective L2 vocabulary acquisition. Students who learn L2 tend to acquire and retain new vocabulary with repetition, which is already a well-known fact. At the same time, repetition of the same media might not constitute incidental learning but rather the purposeful one, as children are already familiar with the material. The following Figure shows the difference among the sources of incidental, intentional, and informal learning practices:

![Figure 2. Comparison among modes of vocabulary acquisition](image)

The effectiveness of incidental learning among ELLs might depend on the means and the environment of children. Also, ELLs could be required to learn a certain type of words or develop a specific vocabulary during educational practice. For instance, Ahmed (2017) compared incidental and intentional learning strategies among ELLs in their ability to retain the new words. The results showed that intentional learning was more effective compared to the incidental one (Ahmed, 2017). Furthermore, the number of words memorized by ELLs during incidental learning was larger compared to the number retained during the incidental learning practice (Ahmed, 2017). This result is viable, and it evidences the significance of intentional learning versus the incidental one in terms of the educational goals (Journal et al., 2018). However, as it was noticed earlier, intentional traditional learning is deeply instructive and controlled, with educators having clear educational goals requiring students to learn specific vocabulary structures. Incidental learning does not have such a goal, as children could learn vocabulary without pressure or an intention to learn or memorize...
something.

It is challenging to measure incidental learning and its outcomes since the students usually do not plan to engage in the learning activity. However, inquiries involved in neuroscience attempt to shed light on the efficacy of incidental learning when this experience is not monitored. For example, a study analyzing the neuroscientific explanation of incidental learning among students showed that during this practice, frontal lobe parts of the brain are engaged after learning (Luthra et al., 2019). The study used functional MRI scans that linked the ability to retain novel phonetic category information to the function of frontal brain regions, even when students were not provided explicit category labels (Luthra et al., 2019).

Another study exploring the connection between incidental learning among ELLs and their brain functions by using online video games showed that learners' striatum is engaged during incidental learning (Lim et al., 2019). The striatum is a part of the human brain, which is a critical element of motor and reward systems. Lim et al. (2019) recognized that participants were able to incidentally learn auditory categories during videogame play without direct attention to them, the striatum was engaged during this practice, and the control of striatal activity and connectivity differed in both experimental and control groups, which evidenced the sensitivity of the striatal learning system. The results of both Luthra et al. (2019) and Lim et al. (2019) confirmed the efficacy of incidental learning at the level of brain functions that emphasizes the viability of this method as means of vocabulary acquisition. All of these studies showed that the use of incidental learning among ELLs is an effective approach when acquiring new L2 vocabulary.

Discussion of Literature

Direct exposure to the media of youngsters can generate positive learning results if this method is utilized reliably and also worrying the children's developmental landmarks, the moment of exposure, as well as their focus period. For example, a study by Rawan et al. (2018) explored Pakistani youngsters by utilizing Japanese Hindi-dubbed animes as Hindi language acquisition tools. The outcomes established the link between the regularity of using Hindi words in cartoons as well as the expanded frequency of vocabulary procurement by participants (Rawan et al., 2018). The same research study verified that such indications as age as well as gender establish the capacity of subordinate understanding, while the direct exposure time (to the cartoon) did not create a significant link to finding out new Hindi words (Rawan et al., 2018). This research verified the effectiveness of animations as the methods of learning new words amongst children that just begun discovering the language. While this research study was performed among little ones who discover their native language, the same process could be developed for ELLs as well.

Earlier research was carried out among trainees that find out English as their second language. A study conducted by Mousavia and Gholami (2014) included Iranian kids who discover English to see animated flash tales with English subtitles. The research study compared the kids' efficiency in English vocabulary purchase when they saw the tales with the task they needed to just check out the captions. According to the findings, children were much more susceptible to keeping new words when enjoying the flash tales with subtitles
Children may be prone to learn through cartoons or various other aesthetic media, as they use two information methods (aesthetic and acoustic). However, an earlier research study conducted by Brown et al. (2008) contrasted the possibility of subordinate learning by using analysis, reading-while-listening, as well as listening to the stories, which revealed that the kids do not incidentally find out in any one of these settings. Therefore, it is feasible to guess that this is the visual element of the animations or computer-animated movies that boost subordinate learning among young kids. Using both visual as well as auditory aspects may impact young students a lot more successfully (Chang & Ma, 2018).

**Conclusion**

On the whole, cartoons, like any other media, could be used to understand new words in the classroom or beyond it. Munir (2016) examined the performance of an anime as a device in discovering brand-new vocabulary amongst ELLs. The outcomes revealed a significant boost of retained words by ELLs in the classroom when the teacher was utilizing it as a main technique to stimulate vocabulary purchase amongst students (Munir, 2016). While this research concentrates on the managed and advised environment of the class, it is possible to discover that animes could be a viable alternative in creating language acquisition in an out-of-classroom atmosphere. Torralba and Mazra (2015) established brand-new details on subordinate learning through animations in ELLs by including right into the experiment kids from emigrant families of several age groups. According to the results of the study, older kids were primarily accustomed to subtitles as well, as the approval was extremely high in all ages (Torralba & Mazra, 2015).

Furthermore, the same study revealed that the level of effectiveness of incidental understanding via animes was predetermined by behavior, readability of captions, and also the level of interest in the cartoons (Torralba & Mazra, 2015). Not just young kids can learn through cartoons, but every age group can also retain vocabulary. The animations or animated series option has to be linked to youngsters' interests and comply with their developmental milestones (Singer, 2022).

At the same time, captions are not constantly shown to be an extra reliable technique to ensure a harmonious foreign language (L2) purchase. As an example, Karakaş and Sariçoban (2012) explored Turkish kids learning English by revealing them to an anime in English with and also without subtitles. According to the findings of this research, the subtitle team did not outshine the no-subtitle team, yet, both teams revealed considerable lead to L2 vocabulary retention in post-test outcomes (Karakaş & Sariçoban, 2012). As the researchers ended, the contextualization of target words in cartoons supported an improvement in kids' efficiency in both groups (Karakaş & Sariçoban, 2012). At the same time, it is important to confess that using L2 animations without subtitles would require trainees to have a standard understanding of L2 or the cartoon's language to be adapted to ELLs. Otherwise, even if children are supplied with the target words, they would certainly not have the ability to comprehend or preserve new vocabulary. Incidental discovery happens accidentally, yet, it is very unlikely that youngsters can obtain L2 vocabulary without understanding the meaning of words or phrases.
The performance of subordinate understanding among ELLs could depend upon the means as well as the environment of children. Likewise, ELLs could be needed to discover a particular kind of words or create a specific vocabulary during the educational method. For instance, Ahmed (2017) compared incidental as well as deliberate learning approaches among ELLs in their ability to retain the new words. The results showed that deliberate learning was much more reliable compared to the subordinate one (Ahmed, 2017). The variety of words memorized by ELLs throughout subordinate knowing was wider contrasted to the number retained during the subordinate discovering method (Ahmed, 2017). This outcome is feasible, and it proves the value of willful learning versus the subordinate one in terms of the instructional objective.

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