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The effects of explicit teaching of context clues at undergraduate level in EFL and ESL context

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Abstract

The effects of a 6-session intervention targeting contextual analysis on reading comprehension were investigated in undergraduate university classes, assigned randomly to treatment and control conditions. According to the quantitative analysis of the study, in comparison to control group, using context clues strategy caused an effect on reading comprehension of the EFL and ESL students in experimental group who were taught in how to use different context clues while reading, without considering the role of proficiency level and gender as a variable because there was no interaction between them and strategy use in this study. Thus, implementing context clue strategy as a learning tool deserves more attention by college English instructors in both EFL and ESL context. On the basis of the major findings in this research, college English teachers should keep the students better informed of the significance and specific functions of context clues in contextual guessing and should encourage the students to guess word meanings from context instead of inhibiting it when there are adequate context clues offered.

Keywords: context clues, contextual guessing, reading comprehension, EFL and ESL learners.

Introduction

According to Sternberg and Powell (1983), there is a growing evidence that suggests a reader must employ certain cognitive processes (or strategies) in order to most efficiently make use of contextual information.These processes involve several components such as planning, monitoring, and decision-making as well as execution of strategic behaviors such as selecting and integrating information. In other words, when a reader encounters a new word, he or she must decide what information will decide and what information will receive the most attention, and then integrate this with previous contextual information and prior knowledge. At the same time, the learner must also test and make adjustments in hypothesized word meanings based upon subsequent contexts.

Sternberg and Powell (1983) have proposed three component processes in their acquisition model. The first is «selective encoding» which refers to the ability to separate relevant from irrelevant information (based on the purpose at hand). The second component, «selective combination», involves integration, combining information into a related whole «to generate a new knowledge structure» (p.888). Finally, «selective comparison» involves relating new information to that acquired as a result of previous knowledge and experiences. In fact, the encoding and combining of new knowledge is guided by this background knowledge retrieval. If integration of the new and the old does not occur, there will not be an «externally connected whole» (p.888). These three component processes are considered to be crucial both in acquiring individual word meanings and in the comprehension of entire texts through structural and interpretational frameworks (Sternberg and Powell, 1983).

Other researchers such as Daneman (Daneman

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and Carpenter, 1983; Daneman and Green,1988) and Nagy *et al.* (1987) have argued that this ability to learn from context very strongly influences both vocabulary acquisition and reading comprehension. In their view, most essential to this is the ability to integrate, whether it be vocabulary-focused such as in connecting related contextual cues or comprehension-focused when forming representations of meaning across ideas in text.

In addition, researchers such as Nash and Snowling (2006), Gunning (2008), and Herman and Dole (1988) have concluded that a way to strengthen reading skills is to strengthen vocabulary. Nash and Snowling (2006) contend that «vocabulary, the knowledge of words and their meanings, is one of the best predictors of educational achievement» (p.336). Other researchers have also emphasized the important correlation between vocabulary knowledge and reading comprehension saying that greater vocabulary knowledge makes comprehension easier (Carlo *et al.*, 2004). There is a variety of ways to learn vocabulary including direct instruction, incidental learning, and context clues. Researchers such as Herman and Dole (1988) and Carlo *et al.* (2004) pointed out that even though students can sometimes learn a new word when the definition is given, there are other times when they need strategies for using context to decipher unfamiliar words.

Generally, there are two basic types of vocabulary instruction: (a) intentional and (b) incidental. Beck and McKeown (1991) define intentional vocabulary instruction as instruction with the explicit purpose to teach the meaning of a word. An example of intentional instruction is when a teacher directly provides one or more resources, such as a dictionary or a more knowledgeable person, with the strict intention of having the student learn the meaning of a word. They also describe incidental vocabulary instruction as an experience where students may increase their word knowledge through an initial encounter with a word. This encounter may come through an oral situation, such as conversation and the media, or through written environments, such as letters, magazines and books.

The most prominent way students learn words incidentally is through the use of context clues (Beck and McKeown, 1991; Beck *et al.*, 2002). Context clues are defined as words found around an unknown word that provides clues that reveal the meaning of the unknown word (Beck *et al.*, 2004). The context in which a word is used can often provide clues that can help students determine a word's meaning independent of a dictionary or a teacher. Using context is one strategy students can use that can help them to become independent word learners and it also helps account for the words students learn outside of intentional instruction. However, students often do not know how to use context to figure out the word's meaning. Further, the text does not provide a clue that will lead to the meaning of every word. Finally, students often do not recognize clues even when they are present. Thus, even though context can be valuable by helping to account for the words students learn outside of direct intentional instruction, students need to know and understand how to use the context in order for it to be a truly useful strategy.

Knowing how to use context is one of the most important skills that can be taught in order to promote vocabulary growth in students (Gambrell and Headley, 2006). In order for students to utilize context as a word learning method, however, instruction needs to be given on how to do so. Teaching students how to use context should include steps that are broken down appropriately to provide efficient scaffolding. The steps should be direct and free from ambiguity. A study done by Buikema and Graves (1993) suggests that teaching students to use context clues can be effective only if the instruction is explicit, scaffolded, and provides practice and feedback. Explicit instruction can be described as instruction that (a) provides a clear description of the task, (b) encourages students to pay attention, (c) activates prior knowledge, (d) breaks the task into small steps, (e) provides adequate practice throughout each step, and (f) provides teacher feedback (Rand Reading Study Group, 2004). If students are explicitly taught how to use context as a vocabulary learning strategy, their ability to learn words independently may be increased.

On the other hand, there has been an ongoing argument with regard to reading vocabulary growth and instruction. One point of view is that numerous studies show that students can be effectively taught the meanings of specific new words through a variety of instructional strategies (Anderson and Nagy, 1991; Baumann and Kame'enui, 1991; Beck and McKeown, 1991; Blachowicz and Fisher, 2000; Calfee and Drum, 1986; Graves, 1986; Miller and Gildea, 1987; Stahl and Fairbanks, 1986, all cited in Baumann *et al.,* 2002). The opposite idea is that it is futile to attempt to teach words individually because of the vast number of words students must learn and limited instructional time (Nagy and Herman, 1984). Instead, according to Nagy *et al.* (1987), it is argued that students' growth in vocabulary can be best accounted for by independent reading.

On the whole, vocabulary growth can take place through the application of generalizable linguistic knowledge in the form of morphemic and contextual analysis. Morphemic analysis includes acquiring a word's meaning through examining its morphemes, or meaningful parts, such as base words, prefixes and suffixes while contextual analysis involves inferring a word's meaning by examining surrounding text, which comprises syntactic and semantic linguistic cues provided by preceding and succeeding words, phrases, and sentences. According to Baumann and Kame'enui (1991), although morphemic or contextual analysis is not as effective for vocabulary learning when compared to direct instruction in the meanings of specific words, instruction of these two kinds of analysis has the potential to equip a learner with the ability to infer the meaning of numerous words in an independent manner.

Research on teaching contextual analysis

As far as the effects of contextual analysis instruction are concerned, several studies have provided questionable evidence. Sampson, Valmont, and Allen (1982) studied the effect of context clues in third-grade students who received indirect teaching in the use of context clues through the use of instructional cloze exceeded control-group students in performance on a postintervention cloze test and a comprehension test although no index of students' ability to infer the meanings of specific, untaught words was reported in this study.

Then, Nash and Snowling (2006) investigated the effects of two different methods of teaching vocabulary on both vocabulary knowledge and reading comprehension. Twenty-four children with poor existing vocabulary knowledge took part in an intervention study. Half the children were taught new vocabulary items using definitions; the other half were taught a strategy for deriving meanings from written context. Immediately after teaching, both groups had improved equivalently in vocabulary knowledge for the taught words. However, 3 months later, the context group showed significantly better expressive vocabulary knowledge. The context group went on to show significantly better comprehension of text containing a number of the taught words and demonstrated that they could use the newly acquired strategy independently to derive meanings from written context. Nash and Snowling (2006) concluded that «improving ability to infer meanings from written context leads to increases in vocabulary knowledge, which in turn leads to improvements in reading comprehension» (p.350).

Further, Yuen (2009) explored the use of context clues to gain knowledge of new vocabulary words during reading. Context clues strategies taught during intervention included locating appositives, searching for explicit definitions, and using prior knowledge. The study occurred in a self-contained third grade classroom at a public school. He taught the above strategies to twenty students for three weeks. His research findings suggested that teaching students how to use context clues while reading improves their understanding of new vocabulary words. Furthermore, results from classroom sweeps demonstrated students became more attentive to their reading throughout intervention, which implies that they are implementing context clues strategies to assist their reading.

Regarding some studies which support the power of instruction in contextual analysis, Carnine, Kame'enui, and Coyle (1984) reported that fourth, fifth, and sixth-grade students who were provided a brief instruction in either a rule-and-practice treatment or a practice-only treatment in how to use synonym and contrast context clues performed better in comparison to a non-intervention control group on posttests which were designed by the researcher. Lastly, Patberg, Graves, and Stibbe (1984) taught fifth-grade students synonym and contrast context clues. They concluded that the active-teaching group had a better performance in comparison with a context-practice group and an uninstructed control group.

However, very little research has been reported with respect to the transfer effects of instruction in morphemic or contextual analysis to reading comprehension. For example, Otterman (1955) and Hanson (1966) reported that experimental students who were taught specific morphemic elements could express their knowledge about these elements, but no differences were reported between two groups with regard to general reading or comprehension measures. Summarily, the transfer of context clue instruction to reading comprehension has not been explored except the study done by Sampson *et al.* (1982), which reported that experimental students who engaged in cloze exercises outperformed controls on a standardized comprehension test and a cloze test. Therefore, whether instruction in context clues strategy can enhance the comprehension of text remains an open question which is going to be researched in this study.

Therefore, the purpose of this study was to examine the effect of teaching students contextual analysis to promote reading comprehension. The study compared the effect of instruction in experimental group with control group without giving any instruction. Considering the rationale behind this study, the following research hypotheses were suggested for further research:

1. Context clues strategy intervention can have an influence on Iranian EFL and Indian ESL students' performance in reading comprehension.

2. There is no significant difference in reading comprehension performance between EFL and ESL students after different kinds of context clues were taught.

3. Proficiency level can play a role in enhancing students' performance after they were taught in how to use context clues in both EFL and ESL contexts.

4. There is no interaction between gender and reading comprehension after the strategy intervention.

Methodology

The purpose of this study was to test the effectiveness of instruction designed to teach content-area vocabulary terms through the use of context clues. More specifically, this study examined the effect of using explicit instruction to teach context clues as a strategy to help students improve their level of reading comprehension.

Participants

Three hundred and sixty-nine students from six undergraduate classes from six colleges participated in the study. All of them were studying English as their major field of study. Among them, 183 students were randomly selected as experimental group while 180 subjects were determined as control group of the study. Regarding experimental group, ninety six of the learners were studying English as a foreign language at three different colleges including both private and state ones in Iran. The remaining 93 learners were studying in an ESL environment in three colleges in India. As far as the control group of this study is concerned, 86 students were selected at the same college in Iran while other 94 subjects were selected at the same college in India. Demographic information about the subjects was collected through a background questionnaire (See Table 1 for the Participant Demographics). In order to determine the level of proficiency of the subjects, a TOEFL proficiency test including 40 multiple-choice items was given to the whole subjects in both contexts. Then, based on the normal probability curve, they were divided into three distinct groups on the basis of their positions on the curve; under -1 SD subjects were considered as low-proficient group, between -1 and +1 SD were regarded as moderate-proficient group and over +1 SD were considered as high-proficient group.

Table 1. Participant Demographics of EFL and ESL Learners.

Level of proficiency/ Gender	Experi-mental	Control	Total
Male	80	75	155
Female	109	105	214
Low	33	43	76
Intermediate	121	100	221
High	35	37	72

Design

A pretest-posttest control-group design was used for this study. It is one way to assess the effects of an instruction intervention in a natural educational setting. This design consisted of administering a pretest on a dependent variable to both groups of participants. The independent variable was then administered to the treatment group. Following the treatment condition, the treatment and control groups took a post-test on the dependent variable (Johnson and Christensen, 2004). The scores from the pre- and post-test were then compared to determine students' response to the treatment. The data showed the differences in students' reading comprehension performance before starting the treatment compared to after the treatment was complete as well as if the dependent variable produced an effect (Johnson and Christensen, 2004).

Procedure

In the process of carrying out the study, the investigator took the following procedures to achieve the objectives of the current study. All the procedures including pilot test, pre-test, task performance, post-test, and their administration are explained in detail below:

Seliger and Shohamy (1989) suggested that a pilot study «will significantly improve the quality of the data obtained» (p.173). Therefore, it was decided that the General Proficiency Test (TOEFL) and reading comprehension test as pretest be pilot-tested with a group of 20 students from the same population pool but in a different class. The purpose was to check clarity and comprehensibility of the items. Some modifications to the questionnaires were made in response to problems arising from the pilot test.

Then, six classes in both Iranian EFL and Indian ESL contexts were randomly assigned as experimental group and six others as control group of this study.

The experimental group in each context received six weeks of instruction focused on different context clues. Students were given explicit, direct instruction on how to use context clues to gain knowledge of new vocabulary words during reading. Some of the context clues strategies taught during intervention program included locating appositives, searching for explicit definitions or explanations within the text, contrast or comparison clues such as conjunctive adverbs or coordinate conjunctions, example or illustration clues, and using prior knowledge while reading. A reading comprehension test as pre-test was then administered prior to the start of the six week instructional period and the reading comprehension test as post-test was administered within 1-2 days of the completion of the instruction.

The content of the passages given in the instruction contained information taken from Kit of Reading Comprehension (Rajinder, 2008) was used to check the students' reading comprehension. All texts were tested for readability using the Dale-Chall Readability Scale (Chall and Dale, 1995) to assure they were on undergraduate reading level. The pretest was given before the strategy was taught and the post-test was given after strategy intervention.

In addition, a self-made pamphlet was given to the subjects. In this pamphlet, first, the importance of context clues strategy was introduced and then three reading passages were used to practice the strategy in and out of the class. Context Clues strategy was demonstrated and modeled using the Cognitive Academic Language Learning Approach (CALLA), a well-known L2 strategy instruction model developed based on cognitive theories developed by Chamot and O'Malley (1994). This instructional approach was created to help English language learners learn to read English but it was implemented in this study to help Iranian EFL and Indian ESL students to learn how to use different context clues when they are reading for comprehension. This model included five instructional phases. First, the teacher defined different kinds of context clues considered for the purpose of this study while reading. Second, the teacher modeled and practiced the strategy for one session. In this instructional phase, the students were given explicit, direct instruction in the use of context clue strategy. Third, the students practiced this strategy taught with familiar contexts and tasks which were provided for them by the instructor; in subsequent strategy practice, the researcher encouraged independent strategy use. Further, the teacher provided scaffolding until they became independent. Fourth, the students evaluated their own strategy use immediately after each practice session by checking the strategy they had used and monitoring their understanding. Fifth, to develop a larger repertoire of strategies, the students were asked to apply this strategy to new tasks.

Finally, the results of Iranian EFL and Indian ESL students' performance in reading comprehension for both groups were analyzed to compare the effect of using context clues strategy on reading comprehension performance.

Results and discussion

To determine the effect of context clue strategy and compare its effect in both Iranian EFL and Indian ESL context, first, a paired sample t-test was used for all subjects to see the effect of using this strategy on reading comprehension performance (S1 vs. S1post). Second, the effect of using this strategy in both contexts was compared together by ANCOVA analysis by considering the effect of levels of proficiency and gender as two independent variables in this study.

As it is understood from Table 2, a significant increase was reported in the mean scores of pre- and posttest of Iranian experimental group from 1.85 to 4.43 respectively. Further, paired sample 't' test revealed significant difference between pre- to posttest, where 't' value was 19.70 and p value was .000. Concerning Indian experimental group, paired sample 't' test revealed significant difference from pretest to posttest ($t=16.53$; $p=.000$), which can be attributed to the effective strategy intervention in improving reading comprehension performance. Further, the mean score was 2.00 in pretest, which was increased to 4.22 in posttest of this group. However, there is no significant difference between pre-and posttest of Iranian and Indian control groups. Thus, we can draw this conclusion that if any significant difference is reported between subjects in the experimental groups, it can be attributed to the effect of using context clues strategy. Finally, by taking the above results into account, the first hypothesis of this study (Context clues strategy intervention can have an influence on Iranian EFL and Indian ESL students' performance in reading comprehension) is accepted.

Table 2. Paired sample t-test statistics for Context Clues Strategy in Iranian and Indian context.

Strategy	Group	Test	Mean	SD	t	Sig
Iran	Control	Pre	1.71	.874	1.362	.176
		Post	1.79	.722		
	Experimental	Pre	1.85	.88	19.705	.000
		Post	4.43	1.12		
India	Control	Pre	1.85	.986	1.290	.212
		Post	1.92	1.02		
	Experimental	Pre	2.00	1.18	16.527	.000
		Post	4.22	.80		

Note * p< .01, ** p< .005

Table 3. Results of ANCOVA for mean post S1 scores (Context Clues Strategy) of experimental group in different levels of proficiency in Iran and India.

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
S1 Pretest	4.048	1	4.048	4.726	.031
Country	3.611	1	3.611	4.215	.042
Proficiency Level	2.709	2	1.354	1.581	.209
Gender	.116	1	.116	.136	.713
Country* Proficiency Level	3.577	2	1.789	2.088	.127
Country*Gender	4.925	1	4.925	5.750	.018
Proficiency Level*Gender	1.053	2	.526	.614	.542
Country*Proficiency Level*Gender	.595	2	.297	.347	.707
Error	150.747	176	.857		
Total	3713.000	189			
Corrected Total	181.312	188			

As far as it is concerned with the second hypothesis of this study (There is no significant difference in reading comprehension performance between EFL and ESL students after different kinds of context clues were taught), analysis with respect to S1scores (Using content clues), as it is evident from Table 3, revealed a significant difference between countries in the posttest scores, where the obtained F value of 4.215 was found to be significant (p=.042). By looking at table 4, the mean score of Iranian was more than Indian counterparts (4.43 vs. 4.22), which indicates that Iranians performed better after the strategy intervention program in comparison with Indians. Therefore, the second hypothesis is rejected by considering the above results.

Table 4. Mean post scores of samples of experimental group in different levels of proficiency and gender in Iran and India.

Proficiency	Gender	Iran		India		Total	
		Mean	SD	Mean	SD	Mean	SD
Low	Male	4.57	1.397	4.00	.894	4.31	1.182
	Female	3.67	1.188	4.50	.707	3.75	1.164
	Total	3.92	1.288	4.13	.835	3.97	1.185
Moderate	Male	4.84	1.167	4.11	.894	4.35	1.044
	Female	4.33	.859	4.21	.658	4.28	.786
	Total	4.49	.989	4.15	.807	4.31	.913
High	Male	5.25	.957	4.00	.894	4.50	1.080
	Female	5.13	.991	4.59	.712	4.76	.831
	Total	5.17	.937	4.43	.788	4.69	.900
Total	Male	4.83	1.177	4.08	.877	4.36	1.058
	Female	4.24	1.053	4.37	.691	4.29	.926
	Total	4.43	1.122	4.22	.806	4.32	.982

Considering proficiency levels, as it is evident in table 3, it was found that proficiency levels had no significant influence over post test scores (F=1.581; p=.209) indicating that the students with low, moderate, and high levels of proficiency displayed almost the same mean scores in reading comprehension after they were taught in how to infer meanings by using context clues (3.97, 4.31, 4.69 respectively). While considering the interaction between country and proficiency level, it again revealed non-significant (F=2.088; p=.127) indicating that the students had similar performance, irrespective of country they belong to. Thus, the third hypothesis (Proficiency level can play a role in enhancing students' performance after they were taught in how to use context clues in both EFL and ESL contexts) is rejected.

With regard to the fourth hypothesis (There is no interaction between gender and reading comprehension after the strategy intervention), the results of data analysis (ANCOVA) in Table 3 indicates that there is not a statistically significant difference between gender after the context clue strategy intervention (F=.136; p=.713), where mean scores for males and females were found to be statistically same (4.36 and 4.29 respectively). In other words, Iranian and Indian males and females had similar performance in reading comprehension after the strategy instruction. However, there was an interaction between country and gender (F=5.750; p=.01) according to the above table. Therefore, it can be concluded that Iranian males performed better than Indian males (4.83 vs. 4.08) while Indian females performed better in comparison to Iranian counterparts (4.37 vs. 4.24). Therefore, by considering the above results, the hypothesis four is accepted.

Conclusions

The results of this study suggest that explicit instruction of context clues is effective in improving college students' abilities to determine the meaning of unknown words while reading. Students who received the six weeks of instruction were able to more effectively use context clues to determine the meaning of an unknown word than the students who did not receive the instruction. Additionally, results demonstrated that students who received instruction not only improved their vocabulary knowledge through the use of context, but they were able to demonstrate transfer of the context instruction to new text and words that they did not see during the instructional program.

Results of this study confirm the research done by Yuen (2009). They found that teaching context clues while reading can enhance students' understanding of new words. Further, this finding supports Nash and Snowling's (2006) study. They came to this conclusion that teaching how to infer meanings from written context leads to an increase in reading comprehension.

The present research reaffirms the goals and findings of instructional studies that aim at increasing word knowledge by increasing students' ability to infer word meanings from context (Graves and Buikema, 1990; Herman and Weaver, 1988). The present findings provide support for instructional efforts aimed at drawing inferences, integrating text information, taking into account the flow of text information, and drawing from prior knowledge. These instructional activities capitalize on comprehension processes and the enrichment of the ongoing model of text meaning that is constructed by the reader (Herman and Weaver, 1988). Inferencing is an integral part of comprehension and learning from text (Omanson *et al.*, 1978) and of word meaning acquisition from context. The ability then to draw inferences may be thought of as a general skill applicable in both EFL and ESL learning situations. Also, readers who show a greater tendency to engage in inferential processing may be more likely to develop a mental representation of text meaning that is more well-formed and elaborate, thereby increasing the availability and accessibility of information that can be utilized in word meaning acquisition.

There has been debate among some researchers as to the effectiveness of context as a word learning strategy (Allen, 1999; Baumann and Kame'enui, 2003; Schatz and Baldwin, 1986). However, this study adds to the literature suggesting that context is an effective word learning strategy if students are explicitly taught how to utilize the context clues found within a text.

To sum up, the effects of context clues in contextual guessing are significant enough to be considered when college English teachers are designing the question items of lexical guessing in reading comprehension. For this reason, it is believed that further research into this area will greatly advance the understanding of contextual guessing among both college teachers and college students, help to improve the students' ability of handling unfamiliar words in their English vocabulary learning process, help in turn to enhance their reading comprehension, and yield more constructive suggestions for both English teaching and English learning. After all, contextual guessing can be considered as the most widely used word-solving strategy, and enjoys the highest popularity among the students, regardless of their English proficiency level.

Implications and recommendations

Theoretical implications

These findings have at least two important implications. First, this study can be added to the list of those that claim that there is a role for instruction in the use of contextual clues in the classroom (Buikema & Graves, 1993; Carnine, Kameenui, & Coyle, 1984; Greenwood, 2002; Nagy & Scott, 2000). However, this study also adds to the literature by helping to determine the role of this type of instruction. For example, this study demonstrates that the role of context clue instruction is to help students become independent word learners and to increase student's level of word knowledge. After receiving context clue instruction student's ability to use context to learn unknown words was improved. According to Carnine *et al.* (1984), in order for students to use context clue to their advantage, they need to be experienced in using them. Explicit teaching of context clues was needed to help students make the substantial gains that were made. When given explicit instruction and experience in using context clues, student's word knowledge progressed from having no knowledge or a general sense of the word, to having a narrow context bound knowledge or having a knowledge of the word but not be able to recall it readily enough to use it in an appropriate situation (Beck *et al.*, 2002). The students in this study were given explicit steps on how to recognize a context clue and then they were provided with practice in recognizing them. With this scaffolding and structure, in a remarkably short period of time, these young students made substantial gains in their knowledge of how to recognize and utilize context clues to determine the meaning of a word, which in turn increased their word knowledge. However, explicit steps were needed in order for students to make the substantial gains attained.

Secondly, teachers who integrate context clue instruction into their daily lesson plans will help strengthen students' ability to determine word definitions of unknown words found in text and may thereby help students to improve their ability to comprehend passages. Knowing that vocabulary and comprehension have such a strong relationship (Baumann & Kame'enui, 2003; Yopp & Yopp, 2007), it can be concluded that the use of context can potentially help comprehension in all subject areas at school and not just the studies related to social sciences.

Pedagogical implications

The present research reveals that teaching context clues affect the outcome of reading comprehension significantly. On the basis of the major findings in this study, several pedagogical implications are drawn for college English teachers as well as for college students: (1) College English teachers should keep the students better informed of the significance and specific functioning of context clues in contextual guessing. (2) College English teachers should encourage the students to guess word meanings from context instead of inhibiting it when there are adequate context clues offered.

Regardless of the specific context clue strategy, I noticed in my inquiry study that students need to be given opportunities to practice how to use context clues to decipher new context clues to decipher new vocabulary words within text. Researchers such as Jenkins *et al.* (1989), Walters (2006), and Gunning (2008) also support the importance of practice, concluding that practice and feedbacks are essential parts of the training process. Further, numerous studies such as Marzano *et al.* (2001) states the significance of teaching and working with new vocabularies and a balance of providing explanation or definitions with teaching strategies such as context clues is the best approach to increase students' vocabulary during their performance in reading comprehension. Seeing new words in context can allow students to make new connections and expand their foundation of prior knowledge. Therefore, an effective way to empower students with a self-learning device is to teach them how to make advantage of context clues which assist them in comprehension and let them learn independently.

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