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Guessing Patterns of Palestinian College Students

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ABSTRACT

Top-down models of reading emphasize methods and techniques that promote active reading which involves utilizing contextual clues to guess vocabulary meaning. This study aims at analyzing the correlation between EFL students' general reading proficiency and guessing patterns, and identifying the types of contextual clues actually used by EFL readers of various proficiency levels. Sixty freshman students from two Palestinian universities participated in the study, and two separate tests were conducted to measure the students' reading proficiency and their guessing patterns. Statistical analyses of the results showed that there is a high correlation between correct guessing from context and text comprehension. Readers of all levels tend to rely on local, rather than global or general, contextual clues. Moreover, although high-level readers seem to guess correctly more often than low-level readers, they all seem to favor reading backward in the text for comprehension rather than reading forward.

INTRODUCTION

Some prominent applied linguists have recently started to argue for the adoption of lexis as a basic organizational principle in modern language syllabi and teaching approaches (Lewis, 1997; Sinclair & Renouf, 1988; Willis, 1990). This suggestion stands in sharp contrast with the slight attention vocabulary has traditionally received; most scholars believe that vocabulary has received less attention than it deserves (e.g., Coady, 1997; Zimmerman, 1997). Richards (1976) detected this trend of ignoring vocabulary and attributed it to the influence of new trends in the field of linguistics, namely, the rise of the Chomskyan theory which gives grammar a more prominent role in the process of language learning. Sinclair and Renouf (p. 143) further argue that using grammar as an organizational principle in textbooks has relegated vocabulary to the periphery of the language classroom because it is inconvenient to employ two organizational themes at once.

In his article, Zimmerman (1997) provides a comprehensive review of the position of vocabulary throughout the history of language teaching, concluding that, with limited exceptions, most language teaching methods have ignored vocabulary instruction one way or another. Carter

and McCarthy (1988) argue that, although overlooking the lexical component has been a general trend during the reign of traditional methods, some changes have recently started to take place in the level of attention given to vocabulary, but not necessarily in the methods and techniques adopted in helping the proper acquisition of this vital component. They write:

Although it suffered neglect for a long time, vocabulary pedagogy has benefited in the last fifteen years or so from theoretical advances in the linguistic study of lexicon, from psycholinguistic investigation into mental lexicon, from the communicative trend in teaching which has brought the learner into focus, and from developments in computers. What is perhaps missing in all this is more knowledge about what happens in classrooms when vocabulary crops up. (p. 51)

One explanation for this methodological weakness is provided by Coady (1998) who argues that teachers tend to teach their students the way they themselves were taught. It would then be natural to see teachers ignore vocabulary instruction in their classrooms because it was ignored in their language-learning experience. He further argues that most teachers seem to believe that the skill of reading is transferred from L1, and that vocabulary acquisition occurs naturally as students get immersed in reading activities. When immersed in such activities, students rely on their lexical inferencing skills, and these skills are highlighted in the top-down reading models. Such models are learner centered in the sense that they emphasize the role of the learner in utilizing various sources of top-down and bottom-up information, depending on his or her proficiency level and world experience (Hudson, 1998; Morrison, 1996).

Nagy and Herman (1985) proposed the incidental vocabulary learning hypothesis which argues that extensive reading plays an important role in providing students with opportunities to build their vocabulary wealth naturally just as native speakers do in their L1. According to this view, the repeated exposure to vocabulary items in various contexts may lead to more successful acquisition of a vast lexicon than any program of explicit instruction. Another leading proponent of this incidental vocabulary learning approach is Krashen (1989) who argues that learners may develop a vast amount of vocabulary through exposure to comprehensible input within reading texts.

Krashen's view, which seems to assume that vocabulary does not require any explicit instruction, is not shared by Paribakht and Wesche (1998) who conducted a study on adults studying English for academic purposes in a university setting. The researchers found that, although learners gained a significant amount of vocabulary during the natural reading of texts, the explicit instruction of vocabulary led to the attainment of a larger number of vocabulary items and to a more in-depth knowledge of the items learned.

Results in favor of explicit instruction have also been advanced by a number of other researchers (Cohen, 1990; Hulstijn, 1998; Nation, 1990; Nuttal, 1982; Zimmerman, 1994). Coady (1998) is critical of the incidental-learning view and argues that the role that incidental learning plays in vocabulary acquisition may actually depend on the proficiency level of the learner. He suggests the concept of the paradoxical situation in which beginner learners find themselves as they try to guess words from context when they actually do not possess enough vocabulary to read properly: "How can they learn enough words to learn vocabulary through extensive reading when they do not know enough words to read well?" (p. 229). Nation and Coady (1988) further argue that in order to be able to guess certain vocabulary items successfully from context, the learner needs to know about 98% of the other vocabulary items in the text. Along the same lines, Laufer (1998) argues that a learner needs to know at least 5000 vocabulary

items before he can start to guess confidently from context. One may hence concede that the lexical problem in foreign language reading is manifold.

As mentioned earlier, the learner needs a threshold level of vocabulary in order to be able to guess effectively from context. Additionally, guessing may not be possible or feasible if context clues are not available. Bensoussan and Laufer (1984) conducted a study in which students were asked to guess 70 vocabulary items in a standard academic passage. They found that only 13 out of the 70 unknown words had clearly exploitable clues. One, therefore, should not always assume that all reading contexts provide sufficient or usable clues. Laufer (1998) further argues that some contextual clues are available, but are unusable (p. 28): in order to be usable, words that function as clues to more complicated words need to be already known to the reader so that he or she can use them toward guessing the meaning of the more sophisticated vocabulary item.

Other potential problems presented by Laufer include misleading clues and suppressed clues. Misleading clues come into play when the reader is encouraged to infer a general understanding of the text, and thus, he is tempted to be satisfied with a general notion of what a word means. This could lead to serious misunderstanding if the reader is engaged in reading a scientific or technical text. Readers also may ignore available clues if they are not congruent with their general global understanding of the text (hence, suppressed). Haastrup (1987, 1990, 1991) conducted a comprehensive analysis of 62 paired think-aloud protocols of Danish learners, only to find that, out of the great variety of contextual clues utilized by learners, many were useless or ineffective.

Clarke and Nation (1980) suggest approaching context clues with a strategy that encourages the learner to look at the immediate clues in the same sentence, then to search for additional clues in the content surrounding that sentence, and—finally—to look for relevant clues in the global context (i.e., in other paragraphs). Strategy use is often determined by individual preference, and educators generally believe that it might be beneficial to look at the strategies chosen by successful learners in order to encourage weaker ones to implement them. Schouten-Van Parreren (1992) conducted a study with Dutch students learning French and came to the conclusion that less proficient students should be encouraged to “master relevant vocabulary learning and reading strategies” (p. 94). Ahmed (1989) conducted a study on 300 Sudanese students and found that good learners tend to use more vocabulary-learning strategies, and they also rely on various types of strategies when approaching a text. He also noticed that, as the learner becomes more experienced in strategy use, more variation in the types of strategies used would be detected.

THE STUDY

The Purpose

This study aims to investigate the types of context clues used by college students in the Palestinian EFL setting. It also attempts to explore the variation in types of clues utilized by students of various reading proficiency levels, specifically highlighting the differences in the types of clues employed by proficient readers compared to those used by low-level readers. The researchers believe that the foreign language context poses special difficulties for EFL learners whose level of vocabulary retention and knowledge may be below the threshold level required

for successful guessing. All this, combined with the tendency among EFL students to rely on the teacher as the main source of word meaning and text explanation, robs the students of the opportunity to gradually and naturally develop their guessing using context strategies. This study attempts to find answers for the following research questions:

1. Is there a significant correlation between reading comprehension and guessing vocabulary from context?
2. What are the types of clues most frequently used by all readers (of high- and low-proficiency levels)?
3. What is the correlation between the use of each type of clue and student results in reading comprehension?
4. What types of context clues were used most, and how successfully were they used?
5. Are there differences in the performances of high- and low-level readers when guessing across each type of context clue?
6. What is the number of guessing trials attempted by high- versus low-level readers, and what is the percentage of correct guesses made under each clue type?

The Methodology

Instrumentation

The students'

Data Analysis

The two tests were corrected and results were recorded. In the TOEFL test, one point was given for each correct answer. As for the guessing test, one point was assigned for each word guessed correctly. The total for each student differed according to the number of difficult words initially selected. For instance, a student who chose 11 difficult words and guessed 4 of them correctly would get a score of 4/11. Upon studying the explanations provided by the students, researchers found that students generally used one or more of five types of guessing clues in reading: backward clues, forward clues, general-context clues, general-information clues, and word-structure clues.

Backward clues include hints that appear in the sentence preceding the word itself (occurring before the word in the same sentence). Forward clues include those that appear in the sentence segment following the word itself. General-context clues appear somewhere else in the passage beyond the sentence itself. General-information clues are derived from the students' world experience, and they are not necessarily related to the passage. Finally, word-structure clues are derived from the inner structure of the word itself, including knowledge of word affixes and stems. Haastrup (1991) refers to these as morphological clues. The researchers further looked at the types of clues used by the students whose score in the reading test (TOEFL) fell in the top third of the students' results (high-level readers) and compared them to the clue types used by the students whose reading scores were in the bottom third (low-level readers).

RESULTS AND DISCUSSION

Question One: Is there a significant correlation between reading comprehension and guessing vocabulary from context?

As shown in the descriptive statistics below (Table 1), the mean of students' performances in reading was 55.13. This mean shows the average percentage of correct items scored in the reading passages by all students. Conversely, the guessing mean ($M = 43.44$) reflects the average number of items the students managed to guess successfully out of the total number of items initially labeled by them as unknown.

Table 1. Descriptive Statistics for Reading and Guessing Results

	Mean	Std. Deviation	N
Reading	55.13	26.510	60
Guessing	43.44	24.243	60

The strong correlation between reading proficiency and ability in guessing that is highlighted in most related literature (Arden-Close, 1993; Bengelil, 2004; Clarke & Nation, 1980; Coady, 1998; Haynes, 1993; Nation & Coady, 1988; Shen & Wu, 2009) is reflected in Table 2 which shows a high correlation between these two variables ($r = 88.6$). The table also shows that the correlation is significant at the 0.01 level. The same result may also be contrasted with that of Soria (2001) who found that successful lexical guessing is not highly dependent on reading proficiency. Riazi and Babaei (2008) similarly found that the students' ability to infer the word meanings from context did not correlate highly with their reading proficiency.

Table 2. The Correlation between the Reading Results and Correct Guessing Attempts

	Reading	Guessing
<i>Reading:</i>		
Pearson Correlation	1	.886**
Sig. (2-tailed)		.000
<i>N</i>	60	60
<i>Guessing:</i>		
Pearson Correlation	.886**	1
Sig. (2-tailed)	.000	
<i>N</i>	60	60

Question Two: What are the patterns of clues most frequently used by all readers (of high- and low-proficiency level)?

The researchers also compared the means pertaining to various types of context clues used by the students. Table 3 below shows that students relied most on general-context clues (i.e., clues pertaining to the general context beyond the sentence in which the word appears, $M = 53.49$). Another clue they used often is that of word structure ($M = 53.97$). Students seem to rely less heavily on backward clues ($M = 34.14$) and general-information clues ($M = 46.98$). These results, which show a clear inclination to depend on general-context clues, differ from those of Riazi and Babaei (2008) and Huckin and Block (1993) who found that students exploited immediate *co-text* (local) clues more than any type of general-context clue.

These results are similar to those of Soria (2001) who found that morphological (word-structure) clues were extensively used by participants regardless of their level of proficiency.

Table 3. Descriptive Statistics for Various Types of Guessing Patterns

	Mean	Std. Deviation	<i>N</i>
<i>Reading</i>	55.13	26.510	60
<i>Backward</i>	34.1472	28.60954	60
<i>Forward</i>	47.8889	33.51419	56
<i>Context</i>	55.4945	33.06850	52
<i>General</i>	46.9872	43.00294	52
<i>Word</i>	53.9751	40.01578	40

Table 4 below further shows the minimum and maximum numbers of correct guesses under each type of context clue. One may easily notice that upon using backward clues ($M = 34.14$), some students achieved no correct answers at all, while other students managed to obtain fully correct answers.

Table 4. Range of Correct Guessing Attempts across Various Types of Clues

	<i>N</i>	Min.	Max.	Mean	Std. Dev.
<i>Reading</i>	60	23	90	55.13	26.510
<i>Guessing</i>	60	8	70	43.44	24.243
<i>Backward</i>	60	.00	100.	34.1472	28.60954
<i>Forward</i>	56	.00	100.	47.8889	33.51419
<i>Context</i>	52	.00	100.	55.4945	33.06850
<i>General</i>	52	.00	100.	46.9872	43.00294
<i>Word</i>	40	.00	100.	53.9751	40.01578
<i>Valid N (list wise)</i>	28				

Question Three: What is the correlation between the use of each type of clue and students' results in reading comprehension?

Table 5 below further shows the correlation between reading results and the various types of guessing patterns used by students, and that the highest correlation may be found between reading and forward-context clues ($r = .802$). Another relatively high correlation can be noticed between performances in reading and reliance on backward-context clues ($r = .746$). It is important to highlight here that both these types of clues occur in the same sentence. Another rather high correlation can be found between reading and clues pertaining to the students' general world knowledge and experience ($r = .68$). The lowest correlation may be noticed between reading and context (global) clues (i.e., clues which occur somewhere in the passage away from the sentence in which the words appears, $r = .151$). Another low correlation exists between reading and students' use of word-analysis strategies (e.g., using word affixes and stems, $r = .003$).

One may conclude from the previous results that students are most successful in guessing when using forward, backward, and general-context clues. The results provided in Table 4 seem to contradict those in Table 5; it should, however, be kept in mind that while Table 4 provides a comparison among the various types of guessing patterns in terms of the average number of times each pattern is attempted by the students, Table 5 shows the correlation between the successful guessing attempts and reading results. Thus, one may further conclude that the types of clues students seem to favor may not actually be an aid to them when reading.

Table 5. Correlation between Reading Results and the Various Types of Context Clues

		Backward	Forward	Context	General	Word
<i>Reading</i>	Pearson Correlation	.746	.802	.151	.680	-.003
	Sig. (2-tailed)	.001	.000	.621	.011	.993
	<i>N</i>	60	56	52	52	40

Question Four: What types of context clues were used most, and how successfully were they used?

It may be clearly noticed from the data in Table 6 below that the students were most successful in their guessing attempts when using the context clues and were least successful when implementing the backward clues. It may also be noted that the overall percentage of correct answers when using all types of clues is noticeably low (38%). This may be due to the fact that, in the Palestinian high-school educational system, students tend to develop a dependency on their teachers when it comes to getting the meaning of new words or deciphering the overall meaning of the text as a whole. Some teachers tend to oversimplify the task for the students by translating the whole text, sentence after sentence, into the students' L1. Many students also depend on the various commercial guidebooks which provide them with the meaning of new words and the literal translations of reading texts.

Table 6. Percentage of Correct Answers across All Trials when Using the Various Clues

Clue Type	Correct	Incorrect	Total
<i>Backward</i>	27%	73%	100%
<i>Forward</i>	43%	52%	100%
<i>Context</i>	59%	41%	100%
<i>Word</i>	32%	68%	100%
<i>Total</i>	38%	62%	100%

Question Five: Are there differences in the performances of high- and low-level readers when guessing across each type of context clue?

Looking closely at Table 7 below, one may see that high-level readers have surpassed their low-level counterparts in the successful use of all types of context clues. The good readers scored the highest mean when using the forward-context clues ($M = 73.57$), while the poor readers' mean in using the same clue was 25.41. One may also notice that the good readers' lowest mean occurred in using the backward clue ($M = 54.79$). The poor readers scored best when using the word-analysis clues ($M = 55.00$) and scored worst when using the backward-context clues as well ($M = 13.50$).

Table 7. Results of Good and Poor Readers when Guessing across Context Clues

	Levels	N	Mean	Std. Deviation	Std. Error Mean
<i>Reading</i>	Low	15	30.00	4.276	1.512
	High	15	80.25	6.692	2.366
<i>Guessing</i>	Low	15	23.00	10.254	3.625
	High	15	63.88	14.126	4.994
<i>Backward</i>	Low	15	13.5028	13.83260	4.89056
	High	15	54.7916	24.25788	8.57645
<i>Forward</i>	Low	15	25.4166	19.75539	6.98459
	High	14	73.5714	26.88157	10.16028
<i>Context</i>	Low	13	50.0000	44.72136	18.25742
	High	14	60.2014	21.54804	8.14439
<i>General</i>	Low	13	20.64582	20.64582	9.23309
	High	15	41.24974	41.24974	14.58398
<i>Word</i>	Low	13	36.22416	36.22416	16.19993
	High	13	46.36809	46.36809	18.92969

Table 8 below provides additional information with regard to the maximum and minimum scores for good and poor readers across all clue types. The scores of good readers, for instance, ranged from 25 to 100 when using the backward clue. The scores of poor readers, on the other hand, ranged from zero to 34.62 when using the same type of clue.

Table 8. Performances of High- and Low-Level Readers in Using the Various Types of Clues

	Levels	N	Min.	Max.	Mean	Std. Dev.
Low Reading	<i>Guessing</i>	15	23	33	30.00	4.276
	<i>Backward</i>	15	8	39	23.00	10.254
	<i>Forward</i>	15	.00	34.62	13.5028	13.83260
	<i>Context</i>	15	.00	50.00	25.4166	19.75539
	<i>General</i>	13	.00	100.00	50.0000	44.72136
	<i>Word</i>	13	.00	50.00	14.5000	20.64582
	<i>Valid N (list wise)</i>	13	.00	100.00	52.7452	36.22416
High Reading	<i>Guessing</i>	15	73	90	80.25	6.692
	<i>Backward</i>	15	33	77	63.88	14.126
	<i>Forward</i>	15	25.00	100.00	54.7916	24.25788
	<i>Context</i>	14	40.00	100.00	73.5714	26.88157
	<i>General</i>	14	33.33	100.00	60.2041	21.54804
	<i>Word</i>	15	.00	100.00	67.2916	41.24974
	<i>Valid N (list wise)</i>	15	.00	100.00	55.0000	46.36809

Question Six: What is the number of guessing trials attempted by high- versus low-level readers, and what is the percentage of correct guesses made under each clue type?

Table 9 below shows that good readers scored most of their correct answers (67%) when using the word clue, and were least successful (53%) when using backward clues. This seems ironic when we remember that one of the common practices of EFL learners is stopping and reading backward when encountering an unfamiliar word. Rarely do such students attempt to read forward upon facing a new word unless they are encouraged to do so by the teacher.

Table 9. Percentage of Correct Trials Made across the Various Types of Clues

Type	Good	Poor
<i>Backward</i>	53%	19%
<i>Forward</i>	66%	23%
<i>Context</i>	63%	50%
<i>General</i>	58%	14%
<i>Word</i>	67%	36%
<i>Total</i>	61%	23%

Indeed, low-level readers scored best when using context clues beyond the sentence itself (50%). One may wonder, though, whether they actually used context clues or just threw the word *context* into the explanation because they were not quite sure about the nature of the clue they

utilized. Low-level readers did worst when relying on general clues or clues related to their world knowledge. This is perhaps due to the fact that they do not have strong background knowledge related to EFL reading topics. Both high- and low-level students scored poorly (19-53%) when using backward clues, which takes us back to our previous point regarding the importance of encouraging the students to read forward when faced with a new word.

One may also notice that the overall score of the proficient readers was 61% which means that, out of all their guessing attempts, about two thirds led to correct answers, while poor readers could correctly guess only 23%, which is less than one third of all the words they actually attempted. These findings are congruent with the results of Lee and Wolf (1997), Nassaji (2004), Riazi and Babaei (2008), Na (2009), and Shen and Wu (2009) who all found that advanced students surpassed low-level ones in successful lexical inference.

CONCLUSION

Unfamiliar vocabulary is one of the biggest challenges EFL students face at the college level. This is especially true for students who come from traditional educational settings where the teacher assumes the full responsibility for explaining new vocabulary in a given text. By the time they reach college, these students find they are not well equipped to handle authentic texts and the less-frequent type of vocabulary that occurs in them. This problem is aggravated by the fact that some of the college reading books and courses tend to magnify the value of explicit instruction of context clues which may eventually lead to students' disappointment when they find that actual texts may not be as highly enriched with clues as the ones selected by their teachers or those they encountered in their reading textbooks.

This study has shown that there is a huge discrepancy between good and poor readers in terms of the types of clues each group uses and the level of success each group achieves when implementing each type of clue. Surprisingly, good readers rely most heavily on word clues, ignoring other aspects of discourse that their proficiency may help them to utilize. Word analysis, the researchers believe, is a valuable type of clue since it is not influenced by the threshold hypothesis (which claims that students should surpass a certain level of word knowledge—about 2000 items—before they can successfully attempt to guess new ones). Word analysis, which this study showed as being implemented by good readers, could be taught to poor readers since it might work to their benefit regardless of their actual proficiency.

Another important conclusion that the study points to is the meager value of some traditional strategies that students tend to rely upon, such as backward clues. This study has clearly shown that most of the useful clues seem to lie beyond the word itself in the general context of the passage.

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