Psycholinguistic research of personal approach of students to learning English topical Vocabulary

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ABSTRACT

The study investigated on the psycholinguistic research of personal approach of students to learning English topical vocabulary. The population of this study comprised all lecturers teaching English Language in tertiary institutions Kano State. The study adopted descriptive Survey design, while simple random sampling technique in selecting 400 respondents for the study. The study used questionnaire for data collection. The questionnaire was designed using the four point Likert type scale and divided into two sections (A and B) which helped measure the respondents' personal data and the research variables respectively after the instrument vetting by 1 expert of test and measurement. The reliability test was conducted with 30 respondents and the result which was 0.88 proved the instrument reliable for the study. Data collected were analysed using descriptive statistics to answer research questions and regression analysis for test of hypotheses. The results of the data analyses were all significant and from the results of the analysis, it was observed that there is significant influence of language acquisition on effective learning of English topical vocabulary. It was also observed that there is significant influence of language comprehension on effective learning of English topical vocabulary. It was concluded that there is high influence of language acquisition and language comprehension on effective learning of English topical vocabulary. One of the recommendation was that There should be increased use of think-aloud protocols in the study of decontextualized vocabulary learning; a greater focus on how lexical acquisition takes place in beginning L2 learners, investigations into whether acquiring a wider, richer and more automatized vocabulary plays a role in the acquisition of morpho-syntax; investigations into the relationships that exist between the development of vocabulary breadth, elaborated knowledge, and automaticity.

KEYWORDS: language acquisition, effective learning, English topical vocabulary, language comprehension

Introduction

Psychologists, linguists, and language teachers have been interested in vocabulary learning strategies for a long time (Field, 2004). Numerous studies have been conducted comparing the retention effects of different vocabulary presentation strategies. In fact, the vocabulary field has been especially productive in the last two decades. According to Richards and Schmidt (2009), vocabulary work is the easiest to devise and the easiest to abuse. Virtually all texts in English as a second language (ESL) work with vocabulary items, but it takes a teacher with a strong theoretical commitment to use such exercises effectively. A basic premise which should not be violated is: work with real language contexts. Words are vehicles of meaning and as such rarely occur in isolation. Three types of vocabulary attack strategies emphasized are: obtaining meaning from context, from morphological analysis, and from monolingual English dictionaries. Guessing vocabulary from context is perhaps the most important of the vocabulary attack skills.

Students must be made aware of the number of language clues available to them when they are stopped by an unfamiliar word. They should realize that they can usually continue reading and obtain a general understanding of the item. In context work, there are syntactic and semantic parameters of which we should make our students aware. We can emphasize the redundancy of language by demonstrating the types of contexts which can provide the meaning of an unfamiliar word: Traditional techniques of presenting new words in class or requiring students' to memorize lists of vocabulary items seem old-fashioned in the context of current task-based language programs. The debate in SLA about the need to focus on form in classroom communication activities (Doughty & Williams, 2008) has centered almost entirely on the acquisition of grammar, but there are similar issues involved in finding a place for the systematic study of vocabulary in the language curriculum.

There are instructional strategies that are pivotal for psycholinguistic approach such as language acquisition, language production and language comprehension as cognitive science process skills. In addition, gaining linguistic proficiency in a particular content requires such strategies as hands-on activities for science cognitive development. Some examples of these multimodal strategies are "gestures, oral, pictorial, graphic and textual communication". Children who experienced formal contexts, where multimodal strategies and linguistic strategies

can be applied, accessed the use of more strategies than children who experienced the acquisition of language in informal contexts. In addition to these instructional and linguistic strategies, there is also the use of students' home language as an opportunity for different strategic and pedagogical uses for cognitive science learning. Therefore, code-switching and the use of cognates are useful strategies in communicating science understanding and comprehending scientific processes and reasoning. If teachers are familiar with their students' native languages, they may introduce key vocabulary and/or conceptual aspects in their native language(s).

Brown (1991) presented several strategies that are useful for English Language Learners (ELLs) in their development of content area learning. For example, she discussed implementing the use of graphic organizers such as content maps that point out the location of the main idea and draw students' attention to it. Guiding questions were also a useful strategy for students in order to focus their attention on the most important points of the theme being studied. Teachers also required that students activate their prior knowledge in their first language in order to engage in comprehension of a text or concept. Though these strategies were critical to students' conceptual understanding of the content however, Brown found that many teachers who teach content are not usually concerned with teaching the structure or grammar of a language since they view their task as only content delivery. Such a perspective is limiting for teachers of ELLs and bilingual learners because a lack of integration of content acquisition strategies that supports the development of academic language can reject opportunities to practice literacy and computational skills needed to develop scientific reasoning and arguments. Context clues are another strategy mentioned that would promote the acquisition of new vocabulary through the contextual reading of a text. Such a practice could assist students in understanding how particular words are utilized within a decontextualized content area.

Statement of the Problem

Recent research has shown a great deal about how cognitive science learning can be enhanced in the English as a Foreign Language reading classroom. However, in spite of the impressive progress in the past decade, a significant gulf exists between the growing body of knowledge in the field and its implementation in foreign language contexts. This may point to a critical lack of available information and teacher training, or a failure to apply pedagogical knowledge. As the field moves forward in the next decade, researchers and educators will need to work simultaneously on two fronts: the continued expansion and refinement of our understanding of ways to enhance cognitive science leaning and the effective implementation of this knowledge in the foreign language classroom.

Objectives of the study

- 1. To find out the influence of language acquisition on effective learning of English topical vocabulary.
- 2. To examine influence of language comprehension on effective learning of English topical vocabulary.

Research Questions

- **1.** What is the influence of language acquisition on effective learning of English topical vocabulary?
- **2.** What is the influence of language comprehension on effective learning of English topical vocabulary?

Hypotheses

- **1.** There is no significant influence of language acquisition on effective learning of English topical vocabulary.
- **2.** There is no significant influence of language comprehension on effective learning of English topical vocabulary.

Literature Review

Incidental and Intentional Learning

One distinction that has been influential in vocabulary studies is that between incidental and intentional learning. The basic issue is the extent to which learners can acquire word knowledge incidentally, in the sense of being a by-product of their main learning activity inside or outside the classroom, rather than through activity that is primarily intended to enhance their vocabulary knowledge. Thus, as applied in the literature, the distinction involves both where the learner's attention is concentrated and the pedagogical context in which the opportunity for learning is available (Vidal, 2003). There is no doubt that incidental learning occurs, particularly through extensive reading in input-rich environments, albeit at a rather slow rate. In the heyday of the communicative approach to language teaching, the concept of incidental learning offered the seductive prospect that, provided the learners had access to sufficient comprehensible input, L2 vocabulary acquisition would largely take care of itself, without the need for any substantial pedagogical intervention. However, the research makes it clear that this strong position is no longer tenable. More recent studies involving reading tasks include those by Swanborn and de Glopper (2002), who showed that incidental learning of words was influenced by the readers' purpose and level of reading ability, and by Pulido

(2003), who also found a significant effect for reader ability, as well as for topic familiarity and passive sight vocabulary.

In an important discussion of incidental and intentional vocabulary learning from a psycholinguistic perspective, Hulstijn (2001) points out that, whereas the distinction can be maintained operationally in research studies by directing the participants' attention toward or away from vocabulary, it has little theoretical significance in influencing whether words that learners encounter will be retained in long-term memory. Instead, it "is the quality and frequency of the information processing activities (i.e., elaboration on aspects of a word's form and meaning, plus rehearsal) that determine retention of new information" (Hulstijn, 2001, p. 275). He argues that, in the classroom context, incidental and intentional learning should be seen as complementary activities. This leads to two crucial implications for teaching:

- 1. If learners are to have the automatic access to a rich L2 lexicon that is the foundation of fluent communicative ability, psycholinguistic research indicates that it is necessary to re-visit such unfashionable procedures as regular rehearsal of words, rote learning, and training in automatic word recognition as one component of vocabulary learning, particularly for beginning and intermediate-level learners (Hulstijn, 2001, pp. 275–285). Any gains from incidental learning will be modest for them, when compared with what can be achieved with more "intentional" or direct forms of vocabulary study.
- 2. Where vocabulary learning is more incidental to classroom activity, Laufer and Hulstijn (2001) argue that learning tasks can be graded according to the level of vocabulary processing that they generate. The authors propose that there are three factors in "task-induced involvement": the learners' need to achieve, a requirement that they search for information on the meaning or form of the word, and evaluation of how the information obtained applied to the particular use of the word in question. From an analysis of previous research, they found that tasks incorporating two or three of the factors led to better retention of the target vocabulary than those with only one factor.

Vocabulary Selection and Coverage

High-Frequency Words

The first priority in direct vocabulary teaching is to focus on which words are to be studied. A fundamental feature of the lexicon, which governs many decisions about teaching and learning, is the fact that a small proportion of the total number of the words in the language are highly frequent, and vice versa. There is an obvious

payoff for learners of English in concentrating initially on the 2000 most frequent words, since they have been repeatedly shown to account for at least 80 percent of the running words in any written or spoken text. As a pedagogical reference work on the most frequent words, West's classic (1953) General Service List is yet to be superseded. Although the list can be faulted for being dated in some respects, frequency counts derived from much larger contemporary computer corpora confirm that most of the words would still be included were it to be compiled afresh today.

Explicit Lexical Instruction and Learning Strategies

From a cognitive psychology perspective, explicit learning can be characterized as a conscious searching, building and testing of hypotheses and assimilating a rule following explicit instruction, whereas implicit learning is characterized by the "automatic abstraction of the structural nature of the material arrived at from experience of instances" (Ellis 1994a). With regard to vocabulary development, connecting word form and meaning is best learned explicitly, whereas the phonetic and phonological features and articulation of new words is best learned implicitly (Ellis, 2004). While these definitions begin to clarify explicit and implicit learning, questions remain concerning what features of vocabulary and grammar are best learned explicitly or implicitly and how these processes occur (Laufer and Hulstijn, 2001).

Metacognitive and cognitive strategy use is one key to learners becoming more independent and responsible for their own learning; therefore, learners should be encouraged to individualize their strategy use, which may vary based on ethnic or educational background and learning style (Yamato, 2000).

Learners' metacognitive and cognitive strategies

Metacognitive strategies involve regulating, directing, monitoring and evaluating one's language learning; effective learners apply metacognitive knowledge and strategies by planning their approach to the task, monitoring their comprehension and production for overall meaningfulness (Chamot and O'Malley, 1994) and using strategies flexibly (Gu and Johnson, 1996). This requires a "metacognitive awareness of the linkages among strategies, the tasks on which they can be applied, and learning outcomes" (Chamot and O'Malley, 1994). For example, learners need to develop an awareness of when to infer vocabulary meaning, use a dictionary, or ignore lexis (Hulstijn, 1993). This means that learners will need to practice making deliberate decisions about which tasks and vocabulary learning goals are best served by using one strategy or combining several. For instance, if the goal is to acquire a lexical item met in a reading passage, the learners might want to combine inferencing with dictionary use, and possibly follow this by making and reviewing a vocabulary card, using the word productively in original contexts, rereading the passage or applying some combination of these approaches.

Studying decontextualized lexis

Because a relatively small number of high frequency, general academic and technical vocabulary provides a significant amount of textual coverage, the teacher's initial challenge is to create an environment in which the learners can rapidly acquire these words in the first several years of study. One way in which teachers can encourage the acquisition of new lexis is through the use of pre-reading activities that highlight vocabulary in the text (Folse, 2004. Previewing can increase the salience of target vocabulary, ensure more repetition in terms of input and possibly output, and allow learners to meet lexis in both partially decontextualized and fully contextualized settings, a combination which has been found conducive to acquisition (Zimmerman, 1997). Although further research into pre-reading tasks is needed, a move toward activities based on cognitive criteria such as noticing, processing items repeatedly and meaningfully, creating bridges with already known information, and generative use may be called for. This would replace the pervasive use of definition-based activities that require relative shallow cognitive processing found in many reading textbooks.

Second, as a supplemental activity, teachers can introduce vocabulary cards as an efficient way to speed up the *initial* process of lexical acquisition. Many learners value the explicit study of vocabulary and vocabulary cards are a potentially self-initiating activity that can promote autonomy. A third way in which new vocabulary can be acquired is when learners negotiate the meaning of unknown lexis during in-class discussions, a communicative act that involves a temporary focus on lexis.

Consolidating previously met vocabulary.

The goal of consolidation activities is to recycle previously met lexis and consolidate it in long-term memory. Consolidation can be addressed explicitly in numerous ways. Previously met lexical items can be reviewed during post-reading activities. Learners can also generate sentences or semantic maps in which they relate the target items with words and phrases they are already acquainted with (Nation, 2001).

Implicit lexical instruction and learning strategies

Although extensive reading probably accounts for much of L1 and advanced L2 learners' knowledge of reading vocabulary (Nagy, 2007), many EFL reading programs do not provide a sufficient amount of richly contextualized, comprehensible input. Although studying decontextualized vocabulary can enhance the saliency of spelling patterns, affixes, collocations and both core and secondary word meaning, such knowledge is of limited value until it can be accessed in context.

Meaning-focused reading

The primary focus in EFL reading classrooms should be on meaning-focused reading because, in the long term, it is the primary means by which to immerse students in a word-rich environment that can result in incremental increases in vocabulary size, the elaboration of lexical knowledge and the development of reading fluency. Implicit learning through meaning-focused reading can occur incidentally as a result of learners engaging in such activities as integrated task sets (a series of tasks requiring the use of multiple skills), narrow reading, rereading, timed and paced readings, intensive reading and especially extensive reading.

Increasing vocabulary size through extensive reading

In extensive reading, learners select and read large amounts of materials that interest them and that are within their level of comprehension. Successful programs integrate extensive reading with speaking, listening, and writing tasks and encourage large quantities of reading over long periods of time (Waring and Takaki (2003). For extensive reading to be effective, learners must be regularly exposed to large amounts of comprehensible text. Because the knowledge gained from a single encounter with a lexical item is likely to be forgotten unless soon followed by another encounter, repeated contextualized exposures are necessary to consolidate and elaborate word meaning. Knowing 98% of the vocabulary in a text is necessary for both unassisted comprehension (Hu and Nation, 2000) and to provide enough coverage to give learners a reasonable chance to infer the meaning of unknown lexis (Hirsh and Nation, 1992).).

Developing fluency

Current theories of automatization are based on research that has repeatedly demonstrated that frequency of occurrence is an essential feature of fluency development (DeKeyser, 2001). As such, the development of rapid lexical access requires that learners meet and use vocabulary frequently in a variety of communicative contexts. Reading tasks can effectively develop fluency, provided that processing demands are minimized, which can be accomplished through the use of familiar conceptual schema, discourse and grammatical structures and task types combined with practice in performing tasks faster than normal while maintaining comprehension.

Methods

Research Design

This study adopted the descriptive Survey design

Population of the Study

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The population of the study consisted of all lecturers teaching English Language in tertiary institutions Kano State.

Sample and Sampling Technique

This study will adopt the simple random sampling technique in selecting 400 respondents for the study.

Research Instrument

The study used questionnaire for data collection. The questionnaire was designed using the four point Likert type scale and divided into two sections (A and B) with an introduction to assure the respondent of the confidentiality of their responses. Section A measured the respondents' personal data while Section B measured the variables of the research variables.

Validation of the Instrument

The instrument had face and content validation by one expert of test and measurement and evaluation.

Reliability of the Instrument

A test-retest reliability was used to determine the reliability of the instrument. In the trial testing, 20 respondents who were not part of the main study were randomly selected and the instrument administered on them. Data collected from the respondents were subjected to test-retest statistical analysis using Cronbach Alpha and the test gave an average reliability coefficient of 0.83 which was high enough to justify the use of the instrument.

Technique for Data Analysis and Model Specification

This study used descriptive statistics to analyse the data in respect of the research questions. However, for the hypotheses the researcher used regression analysis to test them. Test for significance was done at 0.05 alpha level.

RESULTS AND DISCUSSION

Research Question One

The research question sought to find out the influence of language acquisition on effective learning of English topical vocabulary. In order to answer the research question, Pearson Product Moment Correlation analysis was performed on the data collected as shown in Table 1.

Table 1: Descriptive statistics of the influence of language acquisition on effective learning of English topical vocabulary

Variable		N	Arithmetic	Expected	r	Remarks
			mean	mean		
Language Acquisition			14.55	12.5		
1		400			0.62*	*Moderately weak
Effective Learning of						Relationship
English	Topical					-
Vocabulary			14.98	12.5		

Source: Field Survey

Table 1 resents the result of the Pearson Product Moment Correlation analysis of the influence of language acquisition on effective learning of English topical vocabulary. The two variables were observed to have moderately weak relationship at 62%. The arithmetic mean for language acquisition (14.55) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards effective learning of English topical vocabulary (14.98) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable influence of language acquisition on effective learning of English topical vocabulary.

Research Question Two

The research question sought to find out the influence of language comprehension on effective learning of English topical vocabulary. In order to answer the research question, Pearson Product Moment Correlation analysis was performed on the data collected as shown in Table 2.

Table 2: Descriptive statistics of the influence of language comprehension on effective learning of English topical vocabulary

Variable	N	Arithmetic	Expected	r	Remarks
		mean	mean		
language comprehension		12.47	12.5		
	400			0.56*	*Moderately weak Relationship
Effective Learning of English Topical					•

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Vocabulary	14.98	12.5

Source: Field Survey

Table 2 resents the result of the Pearson Product Moment Correlation analysis of the influence of language comprehension on effective learning of English topical vocabulary. The two variables were observed to have moderately weak relationship at 56%. The arithmetic mean for language comprehension (12.47) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards effective learning of English topical vocabulary (14.98) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable influence of language acquisition on effective learning of English topical vocabulary.

Hypothesis Testing

Hypothesis One

The null hypothesis states that there is no significant influence of language acquisition on effective learning of English topical vocabulary. In order to test the hypothesis regression analysis was performed on the data, (see table 3).

Table 3: Regression Analysis of the influence of language acquisition on effective learning of English topical vocabulary

Model	R	R-Square	Adjusted Square	Std. error of the Estimate	R Square Change
1	0.62^{a}	0.39	0.38	1.57	0.38

^{*}Significant at 0.05 level; df= 298; N= 300 critical R-value = 0.113

The table shows that the calculated R-value 0.62 was greater than the critical R-value of 0.113 at 0.5 alpha levels with 298 degree of freedom. The R-Square value of 0.39 predicts 39% of the influence of language acquisition on effective learning of English topical vocabulary. This rate of percentage is highly positive and therefore means that there is significant influence of language acquisition on effective learning of English topical vocabulary.

Hypothesis Two

The null hypothesis states that there is no significant influence of language comprehension on effective learning of English topical vocabulary. In order to test the hypothesis regression analysis was performed on the data, (see table 4).

Table 4: Regression Analysis of the influence of language comprehension on effective learning of English topical vocabulary.

Model	R	R-Square	Adjusted Square	Std. error of the Estimate	R Square Change
1	0.56^{a}	0.32	0.32	1.64	0.32

^{*}Significant at 0.05 level; df= 298; N= 300 critical R-value = 0.113

The table shows that the calculated R-value 0.56 was greater than the critical R-value of 0.113 at 0.5 alpha levels with 298 degree of freedom. The R-Square value of 0.32 predicts 32% of the influence of language comprehension on effective learning of English topical vocabulary. This rate of percentage is highly positive and therefore means that there is significant influence of language comprehension on effective learning of English topical vocabulary.

Discussion of Findings

The result of the data analyses in tables 1 and 3 were significant due to the fact that the calculated R-value 0.69 was greater than the critical R-value of 0.113 at 0.5 alpha levels with 298 degree of freedom. The R-Square value of 0.39 predicts 39% of the influence of language acquisition on effective learning of English topical vocabulary. The significance of the result is in agreement with the findings of other research experts and authors. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analyses in tables 2 and 4 were significant due to the fact that the calculated R-value 0.56 was greater than the critical R-value of 0.113 at 0.5 alpha levels with 298 degree of freedom. The R-Square value of 0.32 predicts 32% of the influence of language comprehension on effective learning of English topical vocabulary. The significance of the result is in agreement with the findings of other research experts and authors. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusion

From the findings of the study, it was revealed that there is high influence of language acquisition and language comprehension on effective learning of English topical vocabulary.

Recommendation

- 1. There should be increased use of think-aloud protocols in the study of decontextualized vocabulary learning; a greater focus on how lexical acquisition takes place in beginning L2 learners, investigations into whether acquiring a wider, richer and more automatized vocabulary plays a role in the acquisition of morpho-syntax; investigations into the relationships that exist between the development of vocabulary breadth, elaborated knowledge, and automaticity.
- 2. Furthermore, more empirical research is needed to document the effects of extensive reading on increasing vocabulary size, acquiring partial vocabulary knowledge, elaborating knowledge, and automatizing known vocabulary.

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