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THE EFFECTIVENESS OF CONTEXT-FAVORED VOCABULARY EXERCISES ON IRANIAN INTERMEDIATE EFL LEARNERS' READING COMPREHENSION ABILITY

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ABSTRACT

This study was conducted to investigate the effect of context-favored vocabulary exercises on Iranian Intermediate EFL learners' reading comprehension ability. For this purpose 40 learners of English at Shokouh language institute participated in this study. Having being homogenized by a TOEFL test, they were randomly assigned into two groups of 20, control and experimental. Then both groups sat for a pre-test which was a reading comprehension test. The purpose of this test was to measure the learners' initial subject knowledge of reading comprehension ability. Afterwards, the experimental group received treatment based on context-favored vocabulary exercises. However, the control group received no treatment and approached the traditional way of teaching. The treatment procedure took seven sessions. Finally at the end of the course both groups sat for the post test of reading comprehension. Then the statistical analysis was run through T-test. It was explored from the study that learners' reading comprehension ability improves more when provided with context-favored vocabulary exercises. However, this study provides a significant contribution to curriculum innovation and policy with respect to the learners' reading comprehension development.

Key Words: *Context-Favored Vocabulary Exercises, Reading Comprehension*

INTRODUCTION

In any one program, contextualization of basic skills instruction contains one or more of the following components: interdisciplinary learning (Berns & Erickson, 2001; National Council for Workforce Education & Jobs for the Future, 2010) use of students' informal, out-of-school knowledge (Goldman & Hasselbring, 1997) active, student centered learning (Dirkx & Prenger, 1997; Dowden, 2007) student collaboration (Johnson, 2002) use of explicit literacy strategies (Paquette & Kaufman, 2008) authentic assessment (Johnson, 2002) and teacher collaboration to identify real world examples (Orpwood *et al.*, 2010). Professional development may be given (Stone *et al.*, 2006) but seems rare. Guidelines for contextualization have been provided for workplace and transition programs (Kalchik & Oertle, 2010; National Council for Workforce Education & Jobs for the Future, 2010) and instructions for integrating literacy instruction in high school science courses have also been offered (Krajcik & Sutherland, 2010).

Workplace literacy focuses on a broader range of skill than do other forms of contextualization; oral language, problem solving, teamwork, research skills and basic computer operations are taught in addition to reading, writing, and math (Jurmo, 2004).

Some programs have a vocational English language component where oral language is taught to English language learners using the content of specific jobs for which they are preparing (Mazzeo *et al.*, 2003).

Contextualization is implemented using many different instructional techniques, and over the years a fairly large number of program descriptions have accumulated, although many are not accompanied by student outcome data. The following examples illustrate the range of approaches. In high school CTE, plumbing content was the basis of instruction in an English course (Darvin, 2000). Community college allied health and criminal justice students learned to write documentation relevant to their respective fields (Perin & Charron, 2006). Also in a community college, allied health students in a developmental math course learned to solve math problems drawn from curricula in respiratory therapy, radiology,

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occupational therapy, medical laboratory, physical therapy, and nursing courses they were or would be taking (Shore & Boggs, 2004). A learning community linked literature, criminal justice, and business courses (Badway & Grubb, 1997) while another one linked developmental English and psychology courses such that writing was taught using material from the psychology course (Cargill & Kalikoff, 2007). In two studies, developmental education and middle school students worked collaboratively to create “publishing companies” in order to share their writing or math products (Goode, 2000; Reilly & Pagnucci, 2007). Students’ informal, out-of school knowledge was used to teach middle school pre-algebra by organizing the class around a project centered on a fictitious pizza company (Brenner, 2002). Developmental education courses in a learning community utilized content from a service learning experience, or paired English instruction and college success courses using the theme of African American culture, literature, and experience (E. Baker *et al.*, 2009). In a final example, service learning in local organizations was used as an instructional foundation across the whole curriculum in a high school serving Native Hawaiian students (Yamauchi, 2003).

Our focus is the contextualization of basic reading, writing, and math skills, but it should be mentioned that contextualization is also used in discipline area instruction without a basic skills dimension. In this iteration, content area teachers contextualize instruction by referring to authentic practices related to the topics being taught in order to deepen domain knowledge (Baldwin, 2003; Biermann & Sarinsky, 1993; Cammarata, 2009; Chaplin & Manske, 2005; Craig, 2006; Englert, 2009; Englert *et al.*, 1995; Keselman, Kaufman, Kramer, & Patel, 2007; Macaulay, Van Damme, & Walker, 2009; Nikitina, 2006; Nokes, Dole, & Hacker, 2007; Rivet & Krajcik, 2008; Schultz, 2003; Wooden, 2008). For example, studies have been conducted to teach high school history students to think like historians by learning about the social, cultural, and economic environment in which a primary document was written (Nokes *et al.*, 2007), or to teach science to community college science students by having them conduct and interpret experiments employing methods used by professional scientists (Biermann & Sarinsky, 1993).

Statement of the Problem

The last twenty-five years has been seen as an explosion of experimental research in the area of SLL&FLL. In the recent past, a lot has been done in favor of the role of contextualized learning vocabulary and its effect on reading comprehension (Nielson, 2001). More specifically, seeing vocabulary in rich context provided better reading comprehension achievement rather than in isolated vocabulary drills (National Reading Panel, 2000). Mostly contextualized vocabulary learning strategy has been argued upon as an potent and effective reading comprehension performance (Ynagki, 2003). Above all the present study is aimed at ameliorating the pedagogical status of the possible effects of the context-favored vocabulary exercises on EFL learner’s reading comprehension ability which might highlight its significant in language pedagogy and curriculum innovation. This being so, the researcher has been inspired to conduct this study to explore the possible effects of teaching vocabulary through contexts in which learners are strongly interested to promote reading comprehension ability.

Research Question

In order to tackle the problem of the research in a much consolidated way, a research question has been formulated as follows:

Q: Does context favored vocabulary exercises have effect on EFL learners’ reading comprehension ability?

Research Hypothesis

To answer the research question of the study, a research hypothesis has been formulated as follows:

H0: context favored vocabulary exercises do not have any effect on EFL learners’ reading comprehension ability.

Review of literature

Recently there has been an increased awareness of the role of vocabulary acquisition with regard to EFL learners reading comprehension (Zimmeman, 1997, 21-140). Contemporary studies in reading and L2 vocabulary acquisition often cite the work of Michael West (1953). His work is highly relevant to reading

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and second language acquisition .CGS, among other strategies, deserves a careful attention because it is considered as a useful tool in teaching and learning of reading by many practitioners. Not every study, however, support utilization of this strategy or contextual clues as a sound strategy for identifying semantically unfamiliar words. Liu and Nation (1985, 38-39) claims CGS as a complex and often-difficult strategy to carry out successfully from context. Learners are required to know about 19 out of every 20 words (95%) of a text, which entails knowing the 3,000 most common words. Kelly (1990, 199) has strongly questioned the reliability of context clues even with easy texts and concludes that ‘unless the context is very constrained, which is a relatively rare occurrence, or unless there is a relationship with a known word identifiable on the basis of form and supported by context, there is little chance of guessing the correct meaning (203). However, putting the two opposing point’s side by side .one cannot ignore the role of context and the guessing through the context because the literature is replete with empirical studies (Redouane, 2004; Alesweed, 2005; Nash and Snowling, 2006, among others) that demonstrate the facilitating effects of context on word recognition.

In addition to the vital importance of vocabulary for success in reading, a language vocabulary is more specifically predictive and reflective of high levels of reading achievement .The report of the National Reading Panel (2000), for example, concluded “The importance of vocabulary knowledge has long been recognized in the development of reading skills. As early as 1924, researchers noted that growth in reading power relies on continuous growth in word knowledge”(The Report of the national Reading Panel,2000).

In the recent past ,a lot has been done in favor of the role of contextualized learning vocabulary and its effect on reading comprehension (Nielson ,2001).More specifically ,seeing vocabulary in rich contexts provided better reading comprehension achievement rather than in isolated vocabulary drills(National reading panel ,2000). Mostly presenting vocabulary in a relevant context might lead to the better performance in ESL &EFL reading comprehension (Sanaovi, 1995).

MATERIALS AND METHODS

Introduction

As it is said earlier the present study was conducted to ameliorate the pedagogical and practical effect of word contextualization in reading comprehension. So this part aimed at paying attention to the methodology of the research as follows: the design of the study, participants of the study, materials, procedures and the statistical analysis.

Design of the Study

The design of the study is quasi-experimental design which is a pre-test and post-test design.

Participants

The participants of the study are 100 intermediate students both male and female. After administration of OPT test, 40 intermediate students whose scores were between 31 and 50 were selected. They will be divided into 2 groups control and experimental group. Both groups will sit for the pre-test of reading comprehension to take their initial knowledge of reading comprehension ability. Then the control group receives no treatment. However, the experimental group receives treatment based on context–favored vocabulary exercises and finally both groups sit for the post test which is the same reading comprehension test.

Materials

This research scheme takes advantage of three types of tests for the sake of data collection. An OPT (Oxford placement test) not released and publicized in order to measure the subjects’ current status of proficiency level. The test covered the areas of reading, grammar, and vocabulary proficiency (see Appendix A). The subjects in both groups were screened and equated as far as their proficiency levels were concerned. A pre-test of reading comprehension was given to the subjects to measure the subjects’ initial differences in reading comprehension test. And finally a post test of reading comprehension was administered to both groups to find out the effectiveness of the treatment.

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Procedure

The procedure through which this study is conducted includes different stages of application which embraces the selection of the subjects, instrument and materials. Basically three types of test will be used in this study, one is OPT test which is used to make the subject homogeneous and the next one is pre-test which is used to assess the initial knowledge of the subject under investigation and the last one is the post-test used to assess the subjects' ability on the specific treatment program.

Statistical Analysis

The data will be computed through SPSS, an ANCOVA will be powerful enough to handle the significant of the study if there is any.

RESULTS AND DISCUSSION

Introduction

This study investigates the effect of context-favored vocabulary exercise on reading comprehension ability of Iranian EFL learners. The researcher tries to find out whether context-favored vocabulary exercise has any effect on Iranian EFL Learners' reading comprehension ability or not. In this chapter the descriptive statistics will be handled through measuring mean and standard deviation (SD). Analysis of covariance (ANCOVA) will be used to test the hypotheses.

Descriptive Statistics

Before starting the treatment, a test of OPT was employed to establish the homogeneity of the subjects in terms of language proficiency. It consisted of three parts: Cloze tests, structure and vocabulary. Initially, 100 male and female students participated in the study.

After administration of OPT test, 40 intermediate students whose scores were between 31 and 50 were selected. Then they were randomly classified into two groups. One of them was considered as the control group and the other one as the experimental group.

A descriptive statistical analysis was done on the collected data of OPT test. The results are shown in Table (4-1).

Table (4-1): Descriptive Statistics for the Proficiency Test

| N | Mean | SD |
|-----|------|-------|
| 100 | 32 | 10.32 |

Table (4-2) shows the number of students who took the pre-test and post-test. It should be mentioned that no one excluded.

Table (4-2): Number of Students Participated in Pre-test and Post-test

| Cases | Included | | Excluded | | Total | |
|------------------------|----------|---------|----------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Pre-test*group | 40 | 100% | 0 | 0% | 40 | 100% |
| Post-test*group | 40 | 100% | 0 | 0% | 40 | 100% |

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The descriptive statistical analysis done on the collected data of pre-test and post-test is shown in table (4-3).

Table (4-3): Descriptive statistical analysis done on the collected data of pre-test and post-test

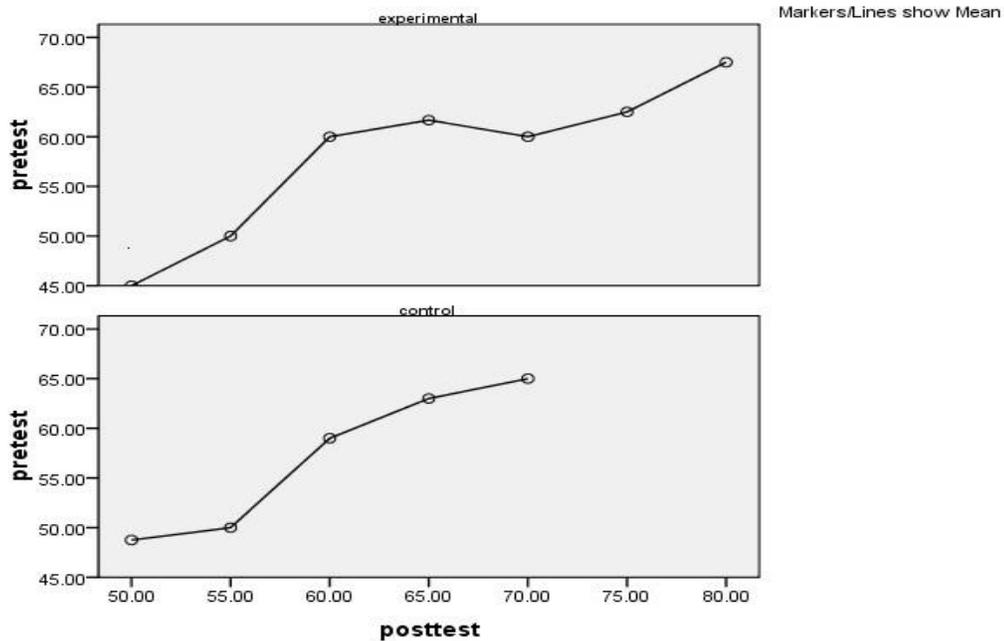
| Group | | Pre-test | Post-test |
|---------------------|------|----------|-----------|
| Experimental | Mean | 59.9 | 68.4 |
| | N | 20 | 20 |
| | SD | 4.8 | 4.7 |
| Control | Mean | 58.45 | 58.1 |
| | N | 20 | 20 |
| | SD | 5.64 | 5.2 |
| Total | Mean | 59.15 | 63.25 |
| | N | 40 | 40 |
| | SD | 5.216 | 7.121 |

Interpretive Statistics

Analysis of covariance (ANCOVA) is particularly appropriate when subjects in two or more groups are found to differ on a pre-test or other initial variable. In this case the effects of the pre-test and/or other relevant variables are partialled out, and the resulting adjusted means of the post-test scores are compared. Through ANCOVA differences in the initial status of the groups can be removed statistically so that they can be compared as though their initial status had been equated. In this study, in order to investigate the research hypothesis "context-favored vocabulary exercises has no effect on Iranian EFL learners' reading comprehension ability", the differences between mean scores of pre-test and post-test of control and experimental group were calculated through ANCOVA. Before running ANCOVA, the following hypotheses were examined:

1. Linear relationship between variables (pre-test and post-test)
2. Equality of Variances
3. Homogeneity of regression

1. The linear relationship between pre-test and post-test was examined through spread plot, graph (4-1):



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As graph (4-1) shows, because the regression lines are parallel, so there is a linear relationship between the two variables, pre-test and post-test. It means that the relationship between the two variables in both groups is the same.

- In order to examine the equality of variances, Levin’s Test of Equality of Error Variances was run. It tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table 4-5: Levine’s Test of Equality of Error Variances

| F | df1 | df2 | Sig |
|-----|-----|-----|-----|
| .26 | 1 | 38 | .61 |

According to table (4.5) the calculated F is not meaningful. So there is equality of variances and ANCOVA can be run.

- The data in table (4.6) are related to test of homogeneity of regression. Before running covariance, between-subjects effects of pre-test-group should be investigated.

Table 4-6: Tests of Between-Subjects Effects

| Source | Type III Sum of square | df | Mean square | F | Sig |
|---------------------------|------------------------|----|-------------|--------|------|
| Corrected Model | 1879.82 | 3 | 626.61 | 230.95 | .00 |
| Group (a) | 17.86 | 1 | 17.86 | 6.6 | .015 |
| Pretest(b) | 802.97 | 1 | 802 | 295.95 | .00 |
| Group*pretest(a*b) | .41 | 1 | .41 | .15 | .7 |
| Error | 97.68 | 36 | 2.71 | | |
| Total | 46200 | 40 | | | |

As table (4.6) shows, between –subjects effect (a*b) is not significance (F=0.15 , Sig=0.7). It shows that the data supports homogeneity of regression. Therefore, covariance should be run just for between – subjects effect of post-test and group to show whether mean scores of two groups are the same or not. The results of this analysis are demonstrated in table (4.7).

Table 4-7: Mean and Corrected Mean of Reading Comprehension Ability

| Source | Post-test | | Corrected Mean | |
|---------------------|-----------|------|----------------|-----|
| | M | SD | M | SE |
| Experimental | 38.4 | 4.7 | 37.77 | .36 |
| Control | 28.1 | 5.11 | 28.72 | .36 |

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Table (4.7) shows the corrected means of dependent variable reading comprehension ability. The data demonstrate that the means of experimental group are upper than control group.

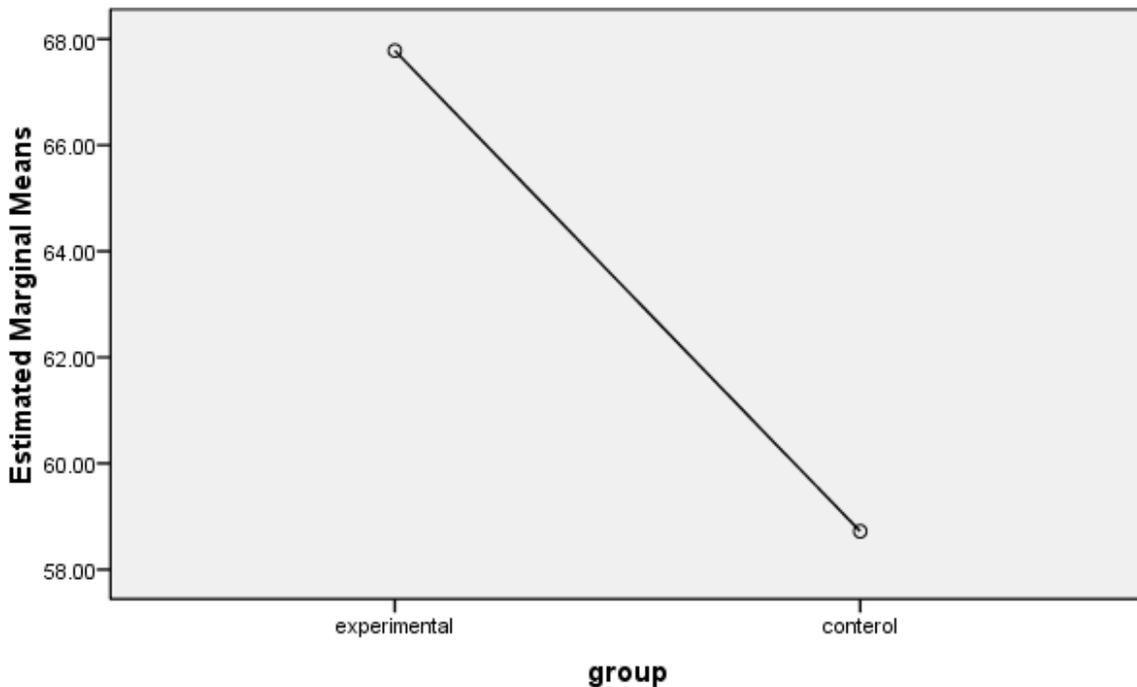
Sum of analysis of covariance (ANCOVA) of reading comprehension ability in experimental and control group after eliminating between-subjects effect is demonstrated in table (4.8):

Table 4-8: Sum of analysis of covariance

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-----------------|-------------------------|----|-------------|--------|------|---------------------|
| Corrected Model | 1879.415 | 2 | 939.71 | 354.48 | .00 | .95 |
| Pre – test | 818.52 | 1 | 818.52 | 308.76 | .00 | .89 |
| Group | 805.48 | 1 | 805.48 | 303.84 | .00 | .89 |
| Error | 98.08 | 37 | 2.65 | | | |
| Total | 46200 | 40 | | | | |

As it can be seen, the corrected model ($f=00$, $F=354.48$) is statistically significant. The results ($F=303.84$, $f=.00$, $Eta=.89$) shows that there is a difference between two groups. It means that there is significance difference between experimental and control group. As a result the null hypothesis “context-favored vocabulary exercise has no effect on Iranian EFL learners’ reading comprehension ability” will be rejected, so it can be concluded that context-favored vocabulary exercise has an effect on Iranian EFL Learners’ reading comprehension ability.

To clarify the result, the data will be demonstrated in graph (4.2). The vertical axis represents the post-test and the horizontal axis represent experimental and control group.



The graph shows that there is a significant difference between reading comprehension ability of experimental and control group. It clearly shows that the experimental group who received treatment on the basis of context-favored had better scores on post-test.

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1. Implications

1.1 Practical Implications

The presence of large numbers of low-skilled students in colleges, especially community colleges, along with low rates of retention and progress in course work (Bailey, Jeong, & Cho, 2010a, 2010b) and recent findings that traditionally low graduation rates are not increasing (Radford, Berkner, Wheelless, & Shepherd, 2010), suggests that the method of instruction of academically underprepared college students needs to be reformed. Among the many different innovations underway that attempt to promote the learning of low-skilled college students (Perin & Charron, 2006), contextualization seems to have the strongest theoretical base and perhaps the strongest empirical support. Both forms of contextualization, i.e. contextualized and integrated instruction, are supported by quantitative studies that include control or comparison groups. There are more studies on contextualized instruction than there is on integrated instruction, but both forms of contextualization appear potentially valuable.

Moving toward contextualization in general and contextualized-favored instruction in particular will depend on practical conditions internal to the colleges. Most important among these conditions are instructors' willingness to modify their instruction and colleges' ability to provide incentives and support for this change. Many developmental education instructors are not highly aware of the day-to-day applicational context-favored vocabulary exercises in learners' reading comprehension ability so that students find so difficult in college credit disciplinary courses. Further, they are strongly committed to the generic, decontextualized instruction in reading that predominates in developmental education (Grubb, 1999). On the other hand, disciplinary instructors may be equally unwilling to consider contextualization because they feel that basic skills instruction is beyond their range of responsibility and/or competence (Marri *et al.*, in press; McDermott, 2010). Strong college leaders will need to provide ongoing direction and support for either version of contextualization.

The following recommendations may support the implementation of favored contextualization in reading comprehension for low-achieving students in a college setting:

1. Create conditions for interdisciplinary collaboration so that basic skills and content area instructors can familiarize each other with their curricula, assessment approaches, standards, and teaching techniques (E. Baker *et al.*, 2009; Greenleaf *et al.*, 2010; Kalchik & Oertle, 2010; Perin, 2005; Shore *et al.*, 2004; Stone *et al.*, 2006). It is important that instructors visit each others' classrooms, discuss their educational philosophy and instructional techniques, jointly analyze the literacy demands of content instruction, look for context-favored vocabulary exercises in their reading instructional curricula and collaborate to align curricula so that students can be taught reading directly applicable to the subject areas they are learning. Substantial time is required for this effort.

2. Provide ongoing professional development, led by trainers who have experience in contextualization, to initiate and support contextualization. Professional development leaders should be experts from within the institution rather than outsiders (Kozeracki, 2005). Formal professional development should be conducted with interdisciplinary groups of instructors and should be designed to meet tangible targets for implementing favored contextualized courses. Evidence-based professional development methods should be utilized, such as interdisciplinary inquiry-based approaches that involve coaching and intensive institutes (Greenleaf *et al.*, 2010).

Further, professional development should be guided by common cross-discipline agreement on desired learning outcomes for favored contextualization and means of achieving them (E. Baker *et al.*, 2009). Follow-up activities and supportive monitoring should be provided after the conclusion of formal training sessions to maintain instructors' interest in and ability to contextualize instruction. Greenleaf *et al.* (2010) noted that "A long history of research in reading has demonstrated that reading comprehension strategies are not often taught in subject-area classes, even when teachers are trained to use these strategies during

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subject-area teaching.” (15). To avoid this situation, follow-up coaching and support of respected instructional leaders will be needed.

3. Develop assessment procedures that incorporate both basic skills and content area knowledge to evaluate the effects of favored vocabulary contextualization. Both De La Paz and Felton (2010) and Perin et al. (2010) included measures of content accuracy in instruments to measure favored contextualized vocabulary exercises in reading and Guthrie et al. (1999) developed fine-grained assessment methods that simultaneously measured reading comprehension strategies and science knowledge. It appears that such measures will need to be locally developed, because disciplinary curricula tend to change, and conventional standardized tests do not capture students’ progress in contextualized practice (Greenleaf *et al.*, 2010), although customized subject-specific basic skills tests can be developed and normed (Lazar *et al.*, 1998).

4. As the basis of contextualization of basic skills instruction in community colleges, select discipline-area courses that are needed for graduation by large numbers of students but that also have high failure rates. Because contextualization is a labor-intensive initiative, it will be necessary to select context-favored courses for implementation. Initial attempts should focus on courses that have the highest need, represented by failure rates.

5. When contextualized courses are established, collect outcome data for examination by instructors and administrators alike.

For example, the use of evidence to guide instructional practice in community colleges is a central reform strategy of Lumina Foundation is achieving the Dream initiative (Achieving the Dream, 2005). Instructors who implement contextualization and administrators who support this effort should be made aware of both short- and longer-term outcomes, such as the rate of passing basic skills and disciplinary courses, grade point average, semester-to-semester retention, and degree or certificate attainment. Evaluating favored contextualization in this way will indicate whether the effort is worthwhile, and may point to the need to modify teaching techniques.

1.1.1 Implications for Teachers

Teachers using context-favored vocabulary exercises as a teaching method for their reading instruction should be aware of their students’ vocabulary knowledge levels in order to design appropriate tasks. The set tasks should be, to a great extent, comprehensible to most students so that new input can be inferred adequately and fairly. Tasks set should take into account previous input or known vocabulary in order to measure the amount of new input which is acceptable and challenging enough without being overwhelming to students. One thing teachers have to consider is that not all their students are bound to be at the same level even in terms of vocabulary knowledge. Therefore, potential need for differentiation or extra support to some students may also have to be part of teachers’ planning concerns. They could potentially offer lower attaining students support with the least obvious words in context, by suggesting pictures or other visual cues designed to help harder vocabulary meaning extraction, for example. In any case, dictation should be widely available for the use of all.

Teachers have to consider progression of their students’ reading comprehension when using context-favored vocabulary exercises and should make sure it is secure before moving to a next level of difficulty each time. Teaching content should aim to help students’ reading comprehension ability by proper implementation of favored contextualized vocabulary exercises. Re-adaption of texts, overlapping themes consists of potential teaching content prone to bring a balance between new and old input.

1.1.2 Implications for Students

Context-favored vocabulary learning strategy is not suitable for beginners as it implies that the student has already acquired a certain level in L2 in order to be able to read a second language and infer meaning of particular words from the main context. It also implies more complex cognitive processes by the learner who is actively seeking meaning as opposed to more memorization of a list of words, which conforms to its “opposite” strategy of de-contextualized vocabulary learning. CFVLS requires students to

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make more efforts to find out the meaning of words. Concentration, perseverance and reasoning are the types of skills students are bound to develop by using contextualized vocabulary acquisition extensively. Contextual language learning can be effective; however, words and expressions in L2 or FL may be used in a variety of contexts. It is important that students are exposed to favored contexts vocabulary exercises to ease reiteration of comprehension in reading texts.

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