The Efficacy of In-House Materials on Academic Reading Proficiency of EFL College Level Omani Students

Sarath W. Samaranayake  
English Language Center, Shinas College of Technology  
PO Box 77, PC 324, Al-Aqr, Shinas, Oman  
Tel: 968-9107-5564 E-mail: Sarath.samaranayake@shct.edu.om

Joaquin Jr. Gabayno  
English Language Centre, Shinas College of Technology  
PO Box 77, PC 324, Al-Aqr, Shinas, Oman  
Tel: 968-9639-5071 E-mail: joaquin.gabayno@shct.edu.om

Received: September 5, 2016 Accepted: September 24, 2016 Published: September 25, 2016
doi:10.5296/elr.v2i2.9993 URL: http://dx.doi.org/10.5296/elr.v2i2.9993

Abstract

This paper reports the results of an intervention program aimed at improving academic reading skills of foundation level students at a College of Technology in Oman. The study aimed at finding out whether the in-house materials were effective in helping tertiary level learners to perform better in reading in an examination setting. The study included an intervention with two experimental and two control groups (N = 84) selected from level 3 in the foundation program. The experimental groups were taught using context-specific in-house materials while the control groups were instructed using a prescribed textbook (Ready to Read Now) for one semester. Data were collected through four research instruments and, data were analyzed using both descriptive and inferential statistical tests to determine whether there was any effect of the context-specific materials on the performance of the experimental groups in the post-test. The findings indicated statistically significant (p < .001) difference between the pre-test and the post-test for the experimental group. Based on the findings of the study, it can be concluded that in-house materials are more effective in helping English Foreign Language (EFL) tertiary level students to improve their academic reading.
skills than using commercially produced textbooks in (EFL) programs in the context of technological education in Oman.

**Keywords:** Reading proficiency, Intervention, Tertiary education, In house materials, Textbooks

### 1. Introduction

Victor Hugo, in *Les Miserable* (1862) one of the greatest French historical novels of the 19th century, wrote, “To learn to read is to light a fire, every syllable that is spelled out is a spark” (p. 7). When educators provide students with plenty of opportunities to read, engaging in repeated practice of reading skills, students are more likely to acquire, maintain and generalize skills. Improving reading proficiency of EFL learners has become an important issue among EFL/ESL instructors because research has found that there is a strong correlation between reading and academic success at all ages beginning from the primary school to university level (Pretorius & Naudé, 2002). Given the important role that reading plays in Omani tertiary level education, the Higher Education Council in Oman (2008) set out academic standards for general foundation programs in higher education institutions. The two learning outcomes for reading skills in English are as follows: 1) General Foundation Program students should be able to read from one to two pages and identify the main idea(s) and extract specific information in a given period of time. 2) Read an extensive text broadly relevant to the student’s area of study (minimum three pages) and respond to questions that require analytical skills (Oman academic standards for general foundation program, 2008). Moreover, Tuzlukova, Eltayeb and Gilhooly (2013) state that the teaching of reading skills in tertiary education institutions in Oman is considered vital for all academic courses taught English medium instruction (EMI). Therefore, it is mandatory for the students at the colleges of technology in Oman to be proficient in academic reading skills. The College of Technology offers professional courses in Engineering, Business Studies and Information Technology leading to certificates, diplomas and higher diplomas. Given the academic standards for the English Language, it is mandatory for the general foundation program (GFP) students to acquire a satisfactory level of competence in all language skills to function well in the post foundation program where they are supposed to study their specializations (Engineering, Business Studies and Information Technology). Thus, students who are enrolled in a study program in a college of technology are required to study English, Math’s and Information Technology (IT) for a period of one year in the foundation program in order to develop their English, Math’s and basic IT skills to meet the requirements of post foundation study program.

The researchers, who have been English teachers in the foundation program at the English Language Center (ELC) of this College for the past three years, have observed that a majority of foundation students from level-3 demonstrated low performance in the college based Mid-Semester (MSE) and the Level Exit (LEE) examinations carried out during the academic year of 2014-2015. During the academic year of 2014-15, 1142 students from the four levels (1-4) sat for the LEE and the test result analysis in 2014-2015 for the general foundation program (English) indicated that 915 (80%) students passed LEE as a total (The minimum marks that a student should obtain to move from one level to another are 25 out of 50 from all the skills (Reading, Writing, Grammar, Listening and Speaking). However, 227 students out...
of 915 failed in the LEE with a percentage of 19 (Test results analysis, 2015). The results of failures indicated that a majority of students received low marks (below 10 out of 25) for reading skills. Condition of this nature clearly shows that a fair number of students from all the four levels (level 1 to 4) did not perform well in reading in the LEE. Even though the other levels (1, 2 and 4) also come under the GFP, this study was limited to level three and the rationale for selecting level three for this study will be discussed in 3.5.4 below. This study aims to address the academic reading issues experienced by level 3 students in the GFP at this college.

1.1 Research Problem

The Foundation English program at this College lasts one semester (16 weeks) and during the semester, foundation students are required to sit for two examinations (MSE and LEE). As described above, the analysis of exam results in the foundation program for the past two academic years (2012-2014) showed that a majority of students’ performance in reading in the examinations was below the expected level. Therefore, the Student Support Committee (SSC) of the college hypothesized that there might be a link between the current material and students’ performance in college based examinations (MSE and LEE) because commercially produced textbooks are used for the foundation program. Moreover, the textbooks have not been selected using any global or local criteria. The current textbook (Ready To Read Now, 2005), which has been used as the instructional material in level 3 for the last four years has proved that it is neither interactive and nor engaging since the pedagogical implications of current theories and research in linguistics and language learning have not been updated in the textbook. This textbook has not been written aiming for a target group and the students of this college study English for a specific purpose. As noted earlier, these students are required to study their specializations (Engineering, Business Studies and IT) in English medium instruction in the post foundation level. In addition, in a discussion which one of the researchers had with students in two groups of level 3 revealed that the reading texts included in the book do not deal with current issues and cover topics of subject areas that they were going to study in the post foundation level. In other words, what students complain is that what is being taught using this textbook is not perceived by them as useful and relevant (Tomlinson, 2003) Moreover, as Tomlinson (2003) argues that materials should achieve impact and impact can be achieved through novelty, variety, attractive presentation and appealing content. From the point of achieving impact, ‘Ready To Read Now’ (2005) should be re-written as a new book. Therefore, the SSC decided to produce in-house materials for reading, writing and grammar. As such, the researchers produced context-specific materials for reading during the first semester. At the outset, it was agreed to develop the materials and use them during the second semester which started in January and finished in April in 2015.

As stated above, the analysis of tests results for MSE and LEE exams in semester 1 (September-December, 2014) indicated that a majority of students received low marks (below 10 out of 25) for reading in both exams. However, it should be noted that these students have studied English as a subject at school for almost ten years in addition to taking reading course for two semesters (in level 1 and 2) at college.

Lack of reading proficiency in the target language constantly becomes problematic for foundation level students in academic contexts because the foundation level students at this
college are from different majors such as Engineering, Business Studies and Information Technology and most of them aspire to study in the post-foundation level where they are required to read books and journals in English relevant to their specializations to successfully complete assignments and projects before graduation.

The low performance in reading skill in the college based examinations suggests that the current practice of teaching reading using the prescribed textbook (*Ready To Read Now*), does not interest and engage learners in reading effectively. Therefore, given the problem above, the researchers decided to investigate the effectiveness of the in-house materials developed by the material writers for foundation students (level-3). The developed materials included student work sheets, reading texts relevant to their specializations (Engineering, Business Studies and IT), Authentic texts extracted from magazines and instruction leaflets, different types of activities with clear instructions for students, *Power Points*, Color pictures and video clips with instructions for teachers on how to use them in the class. The in-house materials were used to teach the experimental groups (Groups 4-5) while the control groups (Groups 12-14) were instructed using the prescribed textbook (*Ready To Read Now*). It should be noted that the material used does not include any worksheet, *PowerPoint* or video to support reading texts.

2. Literature Review

This section will focus on the research that investigated the effectiveness of in-house materials which were used in reading courses conducted in different teaching contexts across the world and their relevance to the current study.

A common assertion is that instructional materials in any given language program play a crucial role and are generally considered the second most important factor in an EFL classroom after the teacher (Allwright, 1990; Riazi, 2003). Given the importance of instructional materials, Evan and John (1998) state that materials can serve four purposes: 1) as source of language. 2) as learning support. 3) for motivation and stimulation and 4) for reference.

Teaching materials, in general, include textbooks, handouts, activity sheets, *PowerPoint* presentations, video and audio tapes, computer software, and visual aids. They contain a lot of contents extracted from different sources ranging from books to websites. Therefore, the contents of teaching materials are rich in both linguistic and information in the target language where learners find them helpful as a source of language. As described above, when materials have an approach and activities with vocabulary, linguistic examples and visuals relevant to the students' age level, knowledge, and interest, learners will find the materials as learning support. Not only that, when materials contain visuals, various viewpoints on controversial issues, students learn to explore, analyze and make clear judgments, clear instructions and objectives. In a study conducted by Sass (1989) asked his classes to recall two recent class periods, one in which they were highly motivated and one in which their motivation was low. Each student wrote a list of specific aspects of the two classes that influenced their level of motivation, and students then met in small groups to reach consensus on characteristics that contributed to high and low motivation. In over twenty courses, Sass (1989) reported that the students came out with the following eight characteristics:

1. Instructor's enthusiasm. 2. Relevance of the material. 3. Organization of the course.
4. Appropriate difficulty level of the material. 5. Active involvement of students. 6. Variety
7. Rapport between teacher and students. 8. Use of appropriate, concrete, and understandable examples

From the list above, it is evident that 3 out of the 8 characteristics concerned materials which contributed to students' high level of motivation. Moreover, Dudley-Evans and John (1998) view, print materials used in teaching and learning process can serve as a reference when students review previously learned information. Students can control the pace of their involvement in the learning process and can pause if there is a need to consult reference materials and make clarifications about the lesson they have already learned.

Given the pedagogical value of materials as indicated by Riazi (2003) and Dudley-Evans and John (1988), in-house materials were used in the current study with the assumption that they would enhance Level 3 learners' academic reading proficiency. Hutchinson and Waters (1987) suggest that the process of material production for a specific language course involves a number of stages and that material production should be based on the syllabus, while syllabus should reflect the language features of the target situation and the learners' needs (Hutchinson & Waters, 1987). Based on the course outline for Level 3 students at this College, the researchers developed in-house materials in which a specific order was followed for each of the reading topics which had to be covered in a given semester.

The reading tasks suggested in the prescribed textbook (Ready To Read Now) were not adequate to provide students with ample opportunities to practice reading in an interactive way. Both psycholinguistic theories of skill acquisition and second language acquisition theories suggest that considerable practice is required to automatise a skill (DeKeyser, 2007).

Literature review has shown that there are only a few studies that have investigate the effectiveness of in-house materials over commercially produced materials in enhancing EFL/ESL learners' skills in the target language. To this end, Faridi’s study was conducted in a school setting. The researcher used developed materials as opposed to commercially produced textbook to instruct the experimental groups and found that the results were positive in teaching English language skills for elementary level students. Therefore, given the success of using developed materials, the study reported below seems relevant to the current study even though it was conducted with tertiary level students.

Faridi (2010) conducted an experimental study in Central Java, Indonesia using developed teaching materials to teach English language skills to elementary school students. The researcher first conducted a needs assessment for teaching English followed by the design of the model materials and then the study was carried out in three selected schools to evaluate the effectiveness of them. The researcher’s study consisted of three main study groups each consisting of one experimental and one control group. The students for the above study were selected as follows: The first main study group was chosen from grade 6 students from the first school and the second main study group was selected from grade 5 students from the second school while the third main study group came from grade 4 students from the third school. The English teachers of those selected schools assisted the researcher to conduct the study and each study group consisted of between 30 to 35 students. The researcher administered a pretest to the 6 study groups to measure their existing knowledge of English
as well as to ensure that the students in the study groups were homogeneous and then the
treatment began. The experimental groups were instructed with developed materials while the
control groups were taught using commercially produced ELT textbooks with no
modification. However, the researcher does not describe the types of ELT textbooks used in
her study. At the end of the study, a post-test was administered to the study groups and the
students’ results of the post-tests were scored and ranked from 0 to 100. The results revealed
that there was a difference between the experimental and control groups in the post-test.
However, the researcher does not provide the reader with information relating to the
difference between the pre-test and post-test in scores. The post-test results for the three main
study groups were as follows: The experimental group in the first main study from grade 6
received 92.6 while the control group got 78.6. The experimental group in the second main
study group from grade 5 received 89.8 while the control group from grade 5 obtained 79.8.
The experimental group from the third main study group form grade 4 got 88.7, whereas the
control group scored 74.5 out of 100. Based on the results of the post-test from the sample
schools, the researcher concluded that the developed materials were effective in teaching
English including reading to elementary schools in Central Java Province as compared to
commercially produced English textbooks which included traditional method of teaching
reading.

Furthermore, the two studies conducted in school-based settings are cited below seem
relevant to the current study in terms of the effectiveness of intervention programs in reading
even though they were conducted in different teaching contexts. Parker, Holland and Jones
(2013) conducted a reading intervention in a south Texas urban school in the USA and have
recorded positive results in that they included two intervention programs for ninth-grade
students, READ 180 and Voyager Journeys III (Computer-based programs). Students’ pre-test
and post-test performance on the Scholastic Reviewing Inventory (SRI) and the effect of the
programs on Texas Assessment of Knowledge and Skills (TAKS) test results were analyzed.
The results indicated that students enrolled in Voyager Journeys III had statistically
significant higher results on Scholastic Reading Inventory post-tests when using the pre-tests
as the covariate. In addition, the students who enrolled in READ 180 had statistically
significant higher test results on the 2011 ninth grade Reading TAKS scores than the students
who enrolled in the Voyager Journeys III for the same year.

Another study conducted by Vaughn, et al. (2012) has reported the effects of a yearlong
intensive reading intervention for eighth-grade students with serious reading difficulties in
that they had demonstrated low response to intervention program in both Grades 6 and 7.
However, at the end of the intervention, the results showed that students in the treatment
group had demonstrated significantly higher scores than the comparison group on
standardized measures of comprehension (effect size = 1.20) and word identification (effect
size = 0.49), even though some students still showed lower proficiency in reading. Given the
positive results of the study, the authors hold the view that intervention programs for middle
school students with severe reading difficulties are worth conducting to help students to
improve their reading proficiency in the target language. With the premise that the in-house
materials would help the participants in the intervention to perform better in a standardized
reading test, the following research question was formulated.
2.1 Research Question
Does the application of in-house materials help tertiary level EFL students to perform better in reading in an examination setting as measured by the Cambridge Reading Test-PET (2004)?

2.1.1 Research Hypothesis
Previous studies which investigated the effects of developed materials used in reading interventions (Faridi, 2010; Parker, Holland, & Jones, 2013; Vaughn et al., 2012) in improving reading proficiency in EFL students in different teaching contexts suggest that context-specific materials have positive results. Therefore, based on the assumption stated above, the following hypothesis will be investigated in the present study.

The application of in-house materials will help tertiary level EFL students to perform better in reading in an examination setting as measured by the Cambridge Reading Test-PET (2004).

2.1.2 Materials Used in the Study
As noted earlier, a majority of students in the foundation program in level 3 demonstrated low proficiency in reading skills during the academic years of 2013-14 even though they had studied English in school context for several years and three semesters at the college. The researchers hypothesized that their students' reading proficiency could be developed by using contextually developed in-house materials delivered through an interactive way where learners could work collaboratively either in pairs or groups in the class. Therefore, when designing and developing reading materials for level 3, a unified structure was followed in order to make them more effective than the lessons in the prescribed textbook (*Ready To Read* 2). As discussed above, the developed materials included student work sheets, reading texts relevant to their specializations (Engineering, Business Studies and IT), Authentic texts extracted from magazines and instruction leaflets, different types of activities with clear instructions for students, *Power Points*, Color pictures and video clips with instructions for teachers on how to use them in the class. A reading lesson consisted of three phases in which pre, while and post reading were clearly specified along with the allocation of time for each task. The pre-reading task included a video clip and a *PowerPoint* presentation aimed at activating students' prior knowledge of the topic which the student is going to bring into the text at hand (schema activation). According to Anderson and Pearson (1984, p. 73), Schema theory is based on the belief that “every act of comprehension involves one's knowledge of the world as well”. Thus, readers develop a coherent interpretation of text through the interactive process of “combining textual information with the information a reader brings to a text” (Grabe, 1988, p. 56). During the 'while reading' phase, students were required to work either in pairs/or groups depending on the type of task they had to complete while the teacher was monitoring the class. In a reading lesson, as 'while reading' activities, the materials included various types of tasks such as marking true or false statements, filling gaps, matching items, cloze items, scanning, skimming and comprehension questions while the post reading activities were limited to one or two tasks in which students were required to do a quiz or participate in a competition. At the final stage of the lesson, the reading teacher recapitulated the lesson which the class had already studied and discussed any problem/s students still had in
regard to the lesson. However, the three phases of reading (pre-while and post) used with the context-specific materials was the instructional method as intervention used in the experimental groups. What has been stated above is a brief description of the content and the procedure of a lesson which the experimental group studied during the research.

A typical lesson which the control group studied during the study is as follows: The control groups used the prescribed textbook (Ready to Read Now) in which a reading chapter began with a picture relevant to the teaching strategy which the students were expected to study. The teacher drew the students’ attention to the picture and asked a few questions to check learners’ understanding about the topic. Then, the teacher explained the reading strategy relevant to the chapter and explained them in detail using more examples for the students to understand and then students do the exercises suggested in the lesson. The exercises in the textbook are mostly based on reading texts with comprehension questions. Once students completed the exercises, the teacher discussed the right answers with the whole class and provided the class with feedback. Every chapter follows a similar procedure throughout the text with some exceptions in certain lessons.

3. Research Instruments

In this study, in order to gather data, execute the intervention and analyze the data, four different research instruments were used as follows:

3.1 Reading Pre-test

For reading pre-test, the researchers used a sample reading paper (1) from Preliminary English Test (PET) administered by the University of Cambridge, ESOLE as pretest to measure reading proficiency of the study groups before any classroom instruction commenced. The purpose of using the sample reading paper from (PET) was that the participants’ reading proficiency level closely matched with PET which is a preliminary level qualification set at level B1 of the Common European Framework of Reference for Languages (CEFR). The CEFR is an international standard for describing language abilities. The reading test consists of 5 parts each with different types of questions (multiple choice, matching, true/false, and filling gaps). The reading test had 35 questions each carrying one mark. Since the PET is a standard international test with global recognition for its reliability and validity, there was no need to pilot the test. At the end of the pretest, the answer scripts of the two study groups (experimental and control) were evaluated using the answer key provided with the sample test papers. As the sample reading papers of PET are available for public free of change by accessing the website stated above, before administering the pre-test, the researchers verified through a class discussion whether the students had done any Cambridge English Exam while they were at school, after school or privately and the researchers found that not a single student had taken any Cambridge English Exam or even known about Cambridge English Exams. This was further confirmed after administering the pre-test because most students said that the test was difficult and the structure of the test items were different from what they were used to doing at school and the college for reading tests.

3.2 Reading Post-test

For the post-test, as in the pre-test, reading sample paper (2) from PET exam was used. The
structure of the sample paper (2) was same as the sample paper (1). However, sample paper (2) consisted of different questions (more information about PET exam is found at http://www.cambridgeenglish.org/exams/preliminary/exam-format/). After the post-test, answer scripts were rated using the answer key of PET.

3.3 Intervention Tools
As described above, the researchers used in-house materials to teach the experimental group. The instructional method described in section 4 above and in 5.5.4 below in detail was followed to teach the experimental group. The control group was instructed using their prescribed textbook (Ready To Read Now) and the instructional procedure described above in section 4. Since the intervention lasted for 14 weeks, 28 lessons were included in the developed materials (two lessons per week). At the end of the intervention, the researchers investigated whether there was any impact of the treatment on the dependent variable (reading proficiency) of the study groups.

3.4 Analytical Tools

3.4.1 Statistical Analysis
In order for the data to be analyzed in this study, both descriptive and inferential tests were used because there were two main study groups. Descriptive statistics provided simple summaries about the sample and the measures while they formed the basis of analysis of data. Independent Samples T-test was used to compare the mean difference between the experimental and control groups in the Pre, MSE and LEE tests to determine whether there was a statistical difference between the two groups in mean scores in different test sessions.

3.5 Data Collection Tools
The current study employed three research instruments namely the pre-test, post-test and intervention instruments to gather data. On the first day of the first week, the pre-test was administered for the study groups (experimental and control). After the pre-test, the answer scripts of the study groups were rated using the answer key of the PET. The reading post-test was administered at the end of the study and it was scored out of 35 using the same procedure, as applied to the pre-test, to collect the data. Finally, the data gathered from the three research instruments were analyzed using Independent Samples T-test (IBM SPSS (20).

3.5.1 Data Analysis
In analyzing the data, the raw score given out of 35 for each participant in the study groups in the pre-test and post-test was used. Using the IBM SPSS (20) statistical software, both descriptive and Independent Samples T-test were performed to determine whether the treatment group had performed better in the post-test than the comparison group.

3.5.2 Teaching Equipment Used in the Study
The current study aimed to investigate the effects of in-house materials in improving academic reading proficiency of the college level students. Therefore, a quasi-experimental study was conducted using a treatment and a control group. Multi-media equipment was used for both groups as learning aids to help students understand some reading strategies involved in academic reading. A computer already installed in the classroom along with the multi-media projector was used to show video clips and PowerPoint presentations and pictures relevant to the reading topics. The developed materials were used with the experimental group while the
control group was taught using the prescribed textbook (*Ready to Read Now*). However, some extra work sheets were used with the control group in order to provide them with more practice in reading, but the extra work sheets were not similar to the in-house materials used with the experimental group.

### 3.5.3 Participants of the Study

The students for the current study were selected from foundation level (Level 3) students. From the 14 groups, group 4 and 5 were selected as the experimental while the group 12 and 14 were selected as the control groups. The rationale of selection students for this study form level 3 is that level 3 students start studying English for specific purposes until they complete their bachelor’s degree, whereas level 1 and 2 are taught general English and also the students in level 3 of this college are expected to conduct a small research, write a report and deliver a presentation relating to the findings of their research. Moreover, the researchers were assigned to teach reading skills in level 3 by the center during that particular semester. The students of the current study were between the ages of 18 and 20 and consisted of both male and female. According to the college policy and student promotion criteria, a student who studies in the Foundation Level should obtain a minimum of 25 marks out of 50 for the course work, which includes MSE, continuous assessment, class participation and presentation marks as well as a minimum of 25 marks out of 50 from the LEE which includes listening, speaking, grammar, reading and writing.

After the Level Exit examination of each level, the student registration department uses a computer program to allocate students within the next level. The students are not grouped according to any criterion based on their marks or any other performance in their previous level. All participants in the study finished studying in level 1 and 2 where they had studied English in addition to studying at school for 12 years. Most of the participants came from families whose main occupation was farming or fishing except a very few whose patents were either government servants or businessmen. Given the participants age, educational and social backgrounds, they were homogenous in the current study.

### 3.5.4 Procedure

On the first day of the class, during the class orientation, the researchers informed the four study groups all information about the research study. After that, the reading pre-test was administered for both the experimental and controls groups. In the pre-test, both groups were required to answer the reading test of PET which consisted of 35 questions and it was scored using the answer key of PET. One main study group was taught by the first researcher while the second main study group was instructed by the second researcher. The context-specific materials were used to instruct the experimental group in which student first watched a video clip or a *PowerPoint* presentation relevant to the topic of the lesson followed by a whole class discussion initiated by the teacher to elicit what students know about the topic under discussion. Next, students did a warm-up activity relating to the new vocabulary found in the text (pre-reading phase). During the while reading phases, students read the text and completed different types of activities (multiple choice items, gap filling, cloze items, matching items, labeling items and writing answers to comprehension questions) based on the text either as pairs or small groups. At the post reading stage, students did a short quiz or a competition which was followed by the teacher’s recap of the lesson. The prescribed textbook
(Ready to Read Now) was to instruct the control group. The teaching topics for both groups were similar. Therefore, the control group was not disadvantageous over the experimental group. The study lasted for 14 weeks with a total of 72 hours of classroom instruction.

3.5.5 Data Analysis
The raw score given out of 35 for each participant in the pre and post-tests was used to calculate the descriptive statistics of experimental and control groups while Independent Samples t-test was performed using the same data sets to compare the mean difference between the experimental and control groups in the Pre, MSE and LEE tests. The results of the descriptive test and the comparison of the Independent Samples T-test are indicated in the Tables 1 and 2 below.

Table 1. Descriptive statistics of the Experimental and Control groups between the pre and post-tests

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pretest</td>
<td>42</td>
<td>11.14</td>
<td>2.28</td>
<td>.35</td>
</tr>
<tr>
<td>Control</td>
<td>Pretest</td>
<td>42</td>
<td>10.64</td>
<td>1.84</td>
<td>.28</td>
</tr>
<tr>
<td>Experimental</td>
<td>Posttest</td>
<td>42</td>
<td>22.02</td>
<td>5.58</td>
<td>.86</td>
</tr>
<tr>
<td>Control</td>
<td>Posttest</td>
<td>42</td>
<td>12.21</td>
<td>2.49</td>
<td>.34</td>
</tr>
</tbody>
</table>

As shown in Table 2 below, an Independent Samples T-test results indicated that the means between the experimental ($M = 11.14, SD = 2.28$) and the control group ($M = 10.64, SD = 1.84$); $t(82) = 1.10$, $p = .273$ were not different significantly in the pre-test. However, the difference in means between the experimental ($M = 22.02, SD = 5.58$) and the control group ($M =12.21, SD = 2.49$); $t(82) = 10.40, p = .001$ were significant in the post-test. Therefore, based on the statistical results, it can be stated that the students' reading proficiency was not significant at the beginning of the study. However, after the treatment, where the experimental group was taught using the in-house material, the experimental group got higher mean values in the post-test than the control group. Given the results as shown in the Table 2 below, it can be concluded that a condition of this nature indicates that the treatment was the cause to improve the students’ reading ability significantly at $\alpha = 0.05$. 

http://elr.macrothink.org
As it is evident from the results above, the control group was also similar in reading proficiency before the instruction with the prescribed textbook began because the difference in mean scores in the pretest of both the experimental ($M = 11.14, SD = 2.28$) and control group ($M = 10.64, SD = 1.84$) were not significantly different at $\alpha = 0.05$. However, after the study, control group made an improvement in reading proficiency even though it was not statistically significant as that of the experimental group. The possible reasons for the significant improvement of reading proficiency of the experimental group and the non-significant improvement of the control group will be discussed in the following sections in detail.

4. Findings and Discussion of the Results Obtained from the Four Study Groups

This section presents and discusses the collected data from the study groups and interprets these results in the light of previous research.

The research question in this study examined whether the application of context-specific in-house materials help tertiary level EFL students to perform better in reading in an examination setting as measured by the Cambridge Reading Test-PET (2004). In order to answer the research question, the researchers formed the following hypothesis that the application of context-specific in-house materials will help tertiary level EFL students to perform better in reading in an examination setting as measured by the Cambridge Reading Test-PET (2004).
However, it needs to be emphasized at the outset that even though the participants for the current study were randomly allocated to level 3 by the Registration Department of the College using a computer program, their proficiency levels in reading was not determined before they were assigned to the study groups. According to the descriptive statistics as shown in Table 1 for the study groups (experimental and control) respectively, there is a statistically significant difference ($\alpha = 0.05$) between the means of the students’ scores in reading between the pre-test and post-test tests due to the instructional procedure used with the experimental group. As discussed above, both the descriptive and the inferential statistic results revealed that the two study groups were similar in their reading proficiency at the beginning of the study because the mean scores of the two groups were not significantly different at ($\alpha = 0.05$). However, experimental group received higher mean scores in the post-test than the control group. Given test results as indicated in Tables 1 and 2, it can be concluded that the developed materials and the way they were delivered in the classroom were largely responsible for the increase in students' scores in the post-test. Given the positive results emerged from the current study in which the context-specific in-house materials were used to instruct the experimental group during the intervention, the hypothesis which the researchers formed at the beginning of the study that context-specific in-house materials are effective in helping level-3 EFL students to improve their reading proficiency as measured by the Cambridge Reading Test-PET (2004) can be accepted.

The possible reasons for the positive results of the experimental group can be ascribed to the effectiveness of the context-specific in-house materials and the way they were used with the experimental group during the study. According to Allwright (1981), materials should teach students to learn and students learn what is presented in the materials. Given the views as stated by Allwright (1981), the in-house materials included student work sheet, video clips, PowerPoint presentations and pictures with the premise that information is encoded and remembered better when it is delivered in multiple modes (verbal and pictorial), sensory modalities (auditory and visual) or media (computers and lectures) than when delivered in only one single mode, modality or medium (Mayer, 2001). According to Mayer (2001), this kind of learning is termed as ‘Dual code and Multimedia effects’ in which dual codes provide richer and more varied representations that allow more memory retrieval routes. The in-house materials can be assumed to be in line with the learning principle above. Therefore, the learners in the experimental group had the opportunity to receive information from multiple modes, modalities and media. In other words, before introducing a reading topic to the experimental group, the students watched a short video relating to the topic at hand so that the students were able to process the new knowledge coherently in relation to existing knowledge frameworks according to schema theory (McCarthy, 1991). Thus, the students in the experimental groups were able to make sense of the text before it was presented to them. Moreover, most of the time students engaged in either pair or group work where they were allowed to interact with their peers and the teacher in the class. This kind of interaction with peers and experienced others help learners move from their existing level of performance ‘what they can do now’ to a level ‘what they can do without assistance’ (Hyland, 2007). Research shows that students are able to reach much higher levels of performance by working together and with an expert than they might have achieved working on their own (Donato, 2000; Ohta, 2000). The degree of
teacher intervention and the selection of tasks, therefore, play a key role in scaffolding reading.

Another reason for the success of the experimental group can be described in relation to the difficulty level of the reading tasks included in the in-house materials. According to a learning principle called Goldilocks Principle proposed by Metcalfe and Kornell (2005), assignments given to students should not be too hard or too easy, but just at the right level of difficulty for the student’s level of skill or prior knowledge. Researchers have identified a number of zones that reflect how much learning, memory, mastery, or satisfaction occurs along a continuum of task difficulty and that is sensitive to individual differences among learners. When the material is too easy for the learner, the student is not challenged and may get bored. When it is too difficult, the student acquires very little and gets frustrated. Therefore, given task difficulty, the researchers in the current study took care to include and use just the right level of reading tasks in the intervention. As a result, the experimental groups can be assumed to have found the in-house materials interacting, engaging and appealing because the materials also allowed them to study reading strategies such as identifying the main idea, scanning, skimming, previewing and predicting, recognizing sequence, making inferences and using context clues.

As noted above, the possible explanations for limited performance in reading by the control group can be attributed to the reasons below. Firstly, the reading material (Ready to Read Now) which was used to instruct the control group was not interactive and engaging the learners in such a way that learners felt no interest as it was not context-specific. Moreover, the Ready to Read Now has not been written for a specific group of learners. Secondly, the examination of the contents of this prescribed textbook reveals that it has been written for general English learners. However, the students of this college need to study academic English because they will have to study their specialization subjects such as Engineering, Business Studies and Information Technology in English medium in the post foundation program. Therefore, the possible lack of “fit” between learner needs and what the book presents may have not appealed to the students in the control group to study it with interest. Thirdly, the instructional procedure used in the textbook followed a fixed pattern throughout the book and this may have led the students to feel boredom rather than stimulating to read and learn from the materials. Finally, some issues of this textbook can relate to content selection and pedagogical design factors which include choice of activities and exercise types (Richards, n.d.) which, in current perspectives of L2 acquisition, are outdated.

The results of the current study are in agreement with Faridi’s (2010) findings which have shown that the developed materials helped the experimental groups in her study to make more gains in scores than the control groups in the post-test. Likewise, the findings of the current study also support Parker, Holand and Jones’s (2013) study which investigated the effects of two different reading intervention programs and both interventions had yielded more gains in the post-tests than the pre-tests results. Moreover, Vaughn et al’s (2012) findings also corroborate with the current study. Vaughn et al. (2012), who conducted a yearlong intensive reading intervention for student with serious reading difficulties, reported that the treatment group got significantly higher scores on a standardized measures of comprehension test than the comparison group at the end of the intervention.
4.1 Limitations and Delimitation of the Study

As noted above, the current study did not deal with other language proficiencies such as speaking, listening and writing even though they are also important skills of language proficiency. This study mainly focuses on academic reading proficiency because it will allow the researchers to gain an understanding of the usefulness of using in-house materials to help EFL college level students to improve their reading proficiency. Moreover, the outcomes of this study cannot be generalized to learners, who are not cognitively mature enough to carry out the reading tasks included in the in-house materials designed and used with foundation level 3 students and, whose educational level is different from the subjects in the current study even though they study academic reading in similar situations and levels at other educational institutions both in and outside of Oman.

5. Conclusion

In conclusion, this paper reports the findings of a quasi-experimental study which investigated the efficacy of in-house materials on enhancing EFL college level students' academic reading proficiency as measured by Cambridge Reading Test (PET). The major findings of the study included the results of comparing reading performance between the pre and post-tests. The findings indicated that the difference in means between the experimental and the control group was significant in the post-test at ($\alpha = 0.05$). Therefore, based on the findings of the experimental group, it can be concluded that the instructional procedure consisting of in-house materials are more effective than commercially produced textbooks for improving academic reading proficiency of the college level students studying in the context of technological education in Oman.

References


Faridi, A. (2010). The development of context-based English learning resources for elementary


Tuzlukova, V., Eltayeb, C., & Gilhooly, A. (2013). Encouraging Creative Reading in EFL


**Copyright Disclaimer**

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).