The Impact of an Instructional Program on Students' Proficiency of English Vocational Terms

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Abstract
The present study aimed at investigating the effect of an instructional program on vocational educational students' proficiency of vocational educational terms in English. The study sample consisted of 60 male and female students from Al-Balqa'a Applied University, Jordan. Moreover, the study investigated the effect the students' gender and secondary school stream on their performance after receiving the vocational instructional program. Findings revealed that the instructional program had a positive effect on students' achievement and awareness of the vocational terms in English and both their gender and secondary school stream influenced their achievement, since female students did better than male students, and students from the academic stream were better than their counterparts from the vocational stream.

Keywords: English, Vocational Education, EFL, Gender, Jordan.

Introduction
Examining the literature of vocational education shows that the field of vocational education has received special attention since vocations are considered to be the tools for economic, social, and environmental development (Brewer,1996). More importantly, it is a fact that no country can develop its economy and society without quality technical and vocational education and training sector ( Amedorme & Fiagbe, 2013,p.53). In addition to this, is it is well acknowledged that vocational education is part of total education given to an individual in order to acquire the necessary skills and knowledge required for employment in a specific occupation. Thus, vocational education has a valuable role in preparing qualified people for the world of work. (Gunderson,p.2004)

In the same vein, Boateng (2012) claimed that technical and vocational education affords an individual the chance to acquire practical knowledge and requisite skill training needed in the job market or for immediate self employment. But this training and education requires an adequate mastery of English since studies in the field prove that vocational education students suffer from poor achievement in English a matter that causes failure to some of them and it is an obvious fact that English has become the international language of communication and business around the world, and nearly all companies around the world require English for job positions ( Brown, 2002, p.21). Therefore, everyone should seek for an adequate mastery in English to be able to compete with others to have a better opportunity in having a job. But unfortunately, it is sad to say that the major language (English Language) with which this vocational education will be made impacted into the students is in crisis, as most of non-English speaking students display a weak performance in English. And where the proficiency in English is lacking in any academic setting, it could lower the academic performance of such students. Yet, students’ academic performance in English language is worrisome and awfully poor ( Olanipekun, 2013). Therefore, there is a need to shed some light on the important role that English language plays as the key element to learning and the need for a better understanding by all teachers of the significance of language in the education and training process. For instance, Pithers and Lim (1997) claim that hindrances or barriers to learning faced by non-English-speaking background adult vocational students can lead to increased feelings of desperation, frustration, helplessness and inadequacy. In some cases these outcomes lead to course withdrawal and lowered chances of breaking through the boundaries and achieving job attainment and satisfaction. Moreover, In predominantly English-speaking countries such as North America, Australia, New Zealand and the United Kingdom, a non-English-speaking background may mean some hindrances and barriers to learning. These hindrances can act to set boundaries that can affect access, participation and completion of adult vocational education courses and a role in the local job market (Lynch and Kegan 1986). Moreover, Wagner (1985) has also pointed out to the importance of learning English, mainly because proficiency in English language is regarded as an acceptable criterion for determining access to educational and employment opportunities for adults. Non-English speaking people themselves have experienced confusion with regard to the English barrier. They recognize the acquisition of English as being a major stumbling block and the key to understanding and being happy in an English-speaking society. Wagner, (1985) identified what many migrants have called the 'English merry-go-around' when, after completing several English courses, they find themselves having not progressed to a course of study or job of their choice. These migrants believe that they have failed and will never be able to participate fully in society. In the same line, Sim & Dhungel (1993) found that a higher percentage of Non-English speaking first generation women enrolled in vocational courses in Australia were affected by language-related difficulties compared to second generation of Non-English speaking women. This conclusion was arrived at by the high percentage of first generation women reported experiencing difficulties in
understanding class teachers, writing assignments, reading and understanding textbooks.

Studies conducted in Australia for instance that investigated the importance of learning English by people from non-English-speaking backgrounds show that there are wide differences in the labor market and in vocational education and training participation and attainment. For instance, in 1993 only 35% of people born in non-English-speaking countries undertook study or training courses compared with an estimated 50% of other Australians. Moreover, within vocational education and training, people from non-English-speaking backgrounds were substantially overrepresented in the lower skill preparatory courses and underrepresented in the operatives, trades and skilled levels of study (ANTA, 1996). Besides, Singh (1992) also reported that a high proportion of students lacked proficiency in writing and speaking English which was the biggest barrier to participation in the workforce and some students also had difficulty in understanding teachers. As for Jordanian context studies in the field show that vocational students are considered weak and poor achievers in English. Never the less, they have positive attitudes and they are highly motivated to learn English as well as they have a great aspiration to learn English since they realize its importance for their future careers. (Ababneh, 2012; Ababneh & Al-momani, 2011; Ababneh & Al-momani, 2015; Khasawneh, et al, 2006).

Methodology
Sample of the Study
The subjects of the study were randomly chosen from the students registered in the first semester of the academic year 2015/2016 in two courses given at Al-Huson University College entitled Fundamentals of Vocational Education and Guidance and Counseling in Vocational Education. Sixty male and female students sat for the test. Table 1 shows the details of the sample.

Table 1: The Distribution of the Sample According to Gender, Secondary School Stream and University Year Level.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>Female</td>
<td>44</td>
<td>73.3</td>
</tr>
<tr>
<td>Secondary school stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational</td>
<td>18</td>
<td>30.0</td>
</tr>
<tr>
<td>Academic</td>
<td>42</td>
<td>70.0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Instrument of the Study
The researchers used a multiple-choice test of vocational education terminology in English. The test was adopted from a previous study conducted by the researchers (Ababneh and Al- Momani, 2015, p. 11). The test consisted of two parts. The first part consisted of twenty-five questions that aim at identifying students’ awareness of the vocational terms in English as they were asked to choose the correct term that best matches the definition given in each item. The second part of the test also consisted of twenty-five statements where the students were asked to choose the correct term that best completes the statement in order to examine their ability in using the right term in the right place so that this may reflect their proficiency in using the terms properly.

Data Collection Procedures
One of the two researchers is the instructor who taught the two courses in which the subjects were registered. The researchers used the data collected in their previous paper mentioned above as a pre-test. Based on the findings of that study, an instructional program that aimed to improve the students’ awareness and proficiency in vocational terms in English was prepared by the researchers. The teaching material included a large number of vocational terms in English taken mainly from Al-Tamimi et al’s (2007) glossary for TVT terms. The subjects received the instructional program for six weeks. The post-test was administered at the end of the program to measure the program’s efficiency and to discern if there were any significant differences between the subjects’ achievement on the pre-test and the post-test. The subjects were told that their performance on this post-test would count towards their grade of participation to ensure their seriousness in taking the test.

Data Analysis Procedures
The independent variable in this study was the instructional program. The dependant variable was their awareness and their proficiency on the post-test. The total average mean score and the standard deviations of the students’ performance on the pre- and post-tests were computed to see if there were any significant differences between the subjects’ performance that could be attributed to the effect of the instructional program. Moreover, a t-test was used to see if there were any significant differences in the subjects’ performance in the pre- and post-tests due to their gender, and ANOVA tests were also used to determine if there were any significant difference due to their secondary school stream.

Questions of the study
The present study aims to answer the following questions:
1. Are there any statistically significant differences at (α = 0.05) between students’ awareness and proficiency of
vocational terms in English between the pre- and the post- tests?
2. Are there any statistically significant differences at (α = 0.05) between students' awareness and proficiency of vocational terms in English between the pre- and the post- tests due to the difference in their gender?
3. Are there any statistically significant differences at (α = 0.05) between students' awareness and proficiency of vocational terms in English between the pre- and the post- tests due to the difference in their secondary school stream (vocational or academic)?

Significance of the study
The significance of the present study stems from the fact that Jordanian vocational education students are very poor in English (Ababneh and Al-momani, 2011 and 2015; Khasawneh, et al., 2006) and they need to improve their English since English is the language of science, commerce, business and communication all over the world. Moreover, this study came to meet one of the recommendations of an earlier study that was conducted by the same researchers (Ababneh and Al-momani, 2015. p.17) which highlights the need to improve vocational education students' skills in English by presenting teaching materials that introduce vocational terms and expressions in English due to the weakness they displayed in this regard and to the importance of such a thing for their future careers or for their graduate studies since mastering an adequate degree of English is necessary for both domains in Jordan.

Findings and Discussion
This section aims at introducing the analysis of the collected data. As mentioned earlier the study aimed to explore the effect of a vocational instructional program that was particularly prepared to improve and develop vocational education students' proficiency and awareness of vocational terms in English. Moreover, this study also investigated if students' gender or secondary school stream has any effect on their awareness or proficiency in English vocational terms after the program. In order to answer the first question of the present study which explores the effect of the vocational instructional program on students' achievement on the post-test, the researchers computed students' mean scores and standard deviations of their responses on the exam questions. As mentioned earlier, the exam consisted of two parts. The first part catered for investigating students' knowledge and awareness of the vocational terms in English by choosing the right term that matches the definition provided to each item. And the second part caters for exploring students' ability in using the vocational terms correctly in English sentences by filling a space with a correct English term. Table 2 below presents the summary data of students' overall achievement on the pre-test and the post-test. Paired Samples T-Test was also applied to see if there are significant differences between the pre- and post-tests.

<table>
<thead>
<tr>
<th>Part of the test</th>
<th>Test</th>
<th>Mean scores</th>
<th>Standard deviation</th>
<th>T</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>First part of the test</td>
<td>pre</td>
<td>12.23</td>
<td>3.70</td>
<td>4.17</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td>16.17</td>
<td>5.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second part of the test</td>
<td>pre</td>
<td>9.33</td>
<td>3.03</td>
<td>6.21</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>post</td>
<td>14.75</td>
<td>6.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data presented in table 2 show that there are statistically significant differences at (α = 0.05) between students' achievement on the pre- and post-tests and on the two parts of the exam in favor of the post-test. This indicates that the instructional program had a positive impact on students' achievement and awareness of the vocational terms in English.

In order to investigate the effect of gender on students' achievement and awareness on both the pre- and post-test, the researchers also computed the mean scores and standard deviations of students' responses on the exam and they applied t-test to see if gender plays a significant role in this regard. Table 3 presents the data that illustrate the answer of this question.
Table 3: Means and Standard Deviations of Students' Achievement on Pre-and Post-tests According to their Gender.

<table>
<thead>
<tr>
<th>Part of the Test</th>
<th>Male mean</th>
<th>Male standard deviation</th>
<th>T</th>
<th>Male significance</th>
<th>Female mean</th>
<th>Female standard deviation</th>
<th>T</th>
<th>Female significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>First part of the test</td>
<td>10.75</td>
<td>3.92</td>
<td>3.76</td>
<td>0.00</td>
<td>12.77</td>
<td>3.50</td>
<td>-2.67</td>
<td>0.01</td>
</tr>
<tr>
<td>Second part of the test</td>
<td>8.38</td>
<td>3.26</td>
<td>3.31</td>
<td>0.00</td>
<td>9.68</td>
<td>2.90</td>
<td>-5.19</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>19.13</td>
<td>5.46</td>
<td>3.84</td>
<td>0.00</td>
<td>22.45</td>
<td>4.72</td>
<td>-4.27</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Statistics in table 3 show that there are statistically significant differences between students' achievement on the pre-and post-test at $(\alpha = 0.05)$ that could be attributed to the difference in gender in favor of the females since the $t$ value for the females is -4.27 while for males is -3.84.

As for the third question which aims at investigating if the difference in the secondary school stream (vocational or academic) has any significant influence on students' achievement, the mean scores and standard deviations of students' responses on the exam were computed and they $t$ test of equality was applied to see if secondary school stream affects students' responses on the exam. Table 4 below presents the data.

Table 4: Means and Standard Deviations of Students' Achievement on Pre-and Post-tests According to their the Students' Secondary School Stream.

<table>
<thead>
<tr>
<th>Part of the Test</th>
<th>Vocational mean</th>
<th>Vocational standard deviation</th>
<th>T</th>
<th>Statistical significance</th>
<th>Academic mean</th>
<th>Academic standard deviation</th>
<th>T</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>First part of the test</td>
<td>10.56</td>
<td>3.35</td>
<td>3.98</td>
<td>0.00</td>
<td>12.95</td>
<td>3.64</td>
<td>2.51</td>
<td>0.01</td>
</tr>
<tr>
<td>Second part of the test</td>
<td>9.06</td>
<td>3.02</td>
<td>3.03</td>
<td>0.00</td>
<td>9.45</td>
<td>3.06</td>
<td>5.39</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>19.61</td>
<td>5.25</td>
<td>3.76</td>
<td>0.00</td>
<td>22.40</td>
<td>4.86</td>
<td>4.25</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Data in table 4 show that there are statistically significant differences between students' achievement on the pre-and post-test at $(\alpha = 0.05)$ that could be attributed to the difference in their secondary school stream in favor of the academic stream since their $t$ value is -4.25 while it is 3.76 for the vocational stream.

Conclusions and Recommendations

A number of conclusions can be drawn from this study's findings. First, vocational education students' awareness and proficiency in vocational English terms was enhanced as a result of the instructional program as indicated by the significantly enhanced performance on the post-test. This conclusion could be attributed to the fact that vocational students are fully aware of the importance of learning English for their further studies and future careers, but unfortunately the teaching materials presented at their faculty suffer from severe shortage in providing vocational materials in English or even introducing vocational terms in English. This fact agrees with (Ababneh and Almomani, 2011, p. 65) when they conclude that Jordanian vocational education students realize the importance of learning English language and call for using vocational education material in English for their success in their future jobs.

Another interesting fact revealed by the study was that gender has a significant influence on students' use of English vocational terms after receiving the instructional program in favor of female students. This conclusion goes in same line with Ababneh's (2012, p.50-51) conclusion as she concluded that Jordanian vocational education female students have an instrumental motivation towards learning English since they realize its importance for their success, and they also display positive attitudes towards learning English as they believe that English courses should be incorporated to help them function effectively at both their academic and occupational settings.

Moreover, students' secondary school stream also affected their degree of awareness and proficiency in those terms in favor of the academic stream. This might be reasonable since vocational education students are considered the poorest students when they mainstreamed at the secondary school since generally speaking good students choose the academic stream. As Lee(2007) asserts that students streamed into vocational education are
considered to be academically the weakest amongst other streams in the secondary level. In addition, it is almost a fact that most of vocational education students are weak achievers in English. This agrees with Lozada (1998) when he claims that "whether teachers like it or not, vocational classrooms are popular places for students with limited English proficiency" (p.1).

Based on the above conclusions, the researchers offer a number of recommendations particularly for vocational education programs taught in non-English speaking countries. First of all, since learning English as an international language of science and business, it is important for educators and curricula designers to prepare vocational education materials in English including the vocational terms as learning those terms in English can be of a great help in the success of vocational education students’ future jobs or studies since most of the references are available in English.

Second, teachers are also invited to incorporate vocational education terms in English in their classrooms and raise their students' awareness to the importance of using them since they can be useful if they want to look for further information about them for their study. Moreover recognizing and using those terms in English inevitably could facilitate comprehension and communication with non-Arabic speakers if they needed to work in a foreign country or international companies where English is the common language for communication.

Finally, it is recommended to repeat this study using a larger sample over a longer period of time and a bigger number of terms to ensure the validity of the conclusions arrived at this limited-scale study. A larger sample of students from different universities would be more representative and therefore, make results more reliable.

References