The Effects of Storytelling on Primary Students’ Arabic Vocabulary Acquisition and Interest

Nur Farhanah Abu Hassan
Navitas Singapore
hanahassan@live.com.sg

Arifin Mamat
Kulliyyah of Education,
International Islamic University Malaysia
drarifin@iium.edu.my

Abstract
This article reports on a quasi-experimental study conducted to determine the effectiveness of storytelling in enhancing students’ Arabic vocabulary acquisition and interest in the technique. The experiment was carried out with 24 Primary 6 students over a period of one and a half weeks at a well-established madrasah in Singapore. Two instruments were used to collect data on Arabic vocabulary acquisition and student interest in storytelling, namely Wesche and Paribakht’s (1996) Vocabulary Knowledge Scale and an Interest-in-Storytelling questionnaire. To address the research questions, the study used descriptive statistics, independent samples t-test and paired samples t-test. The main observations were: i) the control group obtained a higher mastery of Arabic vocabulary after the experiment was conducted, which was due to their relatively higher academic ability; ii) the two groups had unequal ability from the very onset of the study; iii) based on Cohen’s $d$ effect size of 3.68, the storytelling technique had a tremendous effect on the treatment group’s Arabic vocabulary acquisition; and (iv) students expressed a general interest in storytelling as a means of learning Arabic vocabulary where a majority (83%) liked storytelling as a method to discover new words. The study made some recommendations on how teachers can improve their practices of storytelling to increase students’ learning of Arabic vocabulary.

Keywords: Storytelling, Grammar Translation Method, Arabic vocabulary learning, vocabulary acquisition, interest in storytelling

INTRODUCTION

Storytelling is a powerful pedagogical method that can be used to enhance learning outcomes for general, scientific and technical education (Sharda, 2007). It has roots that can be traced back to Hindu and Muslim cultures of learning. According to Mercer (2005), traditional Hindu styles of instruction and storytelling, the Gurukula (oral explication of text to students) and Harikatha (which literally means the tales of the gods), have been widely used in India since ancient times, long before the western education system took over. Both styles of Gurukula and Harikatha depend on oral transmission of content where the guru (storyteller), would sit at the centre and extensively explicate the subject’s content to his students who would then learn the content by rote. The belief behind these two traditions is that an oral transmission method would provide students with first-hand access to knowledge. Even in Islam, early Muslims were extensively taught how to handle their life affairs through real-life stories depicted in the Holy Qur’an. The Prophet Muhammad (peace be upon him) is considered one of the most influential storytellers who educated the entire human race through his words and actions.
Allah the Almighty mentioned in the Qur'an, “So relate the stories, perhaps that they may reflect” (Surah Al-A'raf:176).

According to Arifin (2004), storytelling is one of the most emphasized methods of teaching in the Qur'an, owing to the fact that the holy book comprises many chapters that unfold stories of prophets, people, and events from different generations. Throughout the Qur'an, verses and stories are repeated again and again to drive home certain points or messages. In connection to language learning, Bloor (1991) contends that children learn a foreign language better in situations where attention is focused on meaning rather than on the language itself, and that usually happens with a tale. Tales attract children’s attention and would lead them to a deep understanding of the story's plot and intended meaning. Additionally, the advantage in using tales in language teaching is that the vocabulary taught within them is concrete and contextualized, and is hence, removed from abstraction. Moreover, tales are useful because learners can understand the new vocabulary without resorting to translations into their mother tongue as the new words are introduced and used in context. In this sense, Halliwell (1994) points out that young children are good at interpreting the general meaning in stories. Teachers can make use of voice intonation or body language to facilitate the process of generating meaning from context. This can happen when learners listen to a story.

There are many advantages of using storytelling in the language classroom. Among them are enhancing fluency and recall of facts (Farrell & Nessell, 1982), improving learners' in-class concentration and ability to think symbolically and metaphorically (Maguire, 1985), and developing learning motivation and interest (Moon & Maeng, 2012). Gonzalez (2010) observed that language centres often use stories to teach children a foreign language, and the stories function to motivate the children and increase their engagement in different classroom activities. When students tell stories, they take ownership of their learning and become an integral part of the learning process. Writers agree that storytelling has the power to change the pace of the classroom, providing analogies that help students to establish a connection between the subject and the story (Miley, 2009). The primary power of storytelling lies in its ability to captivate listeners. A writer, Jane Yolen in her book Touch Magic (2000), remembered the captivating moments as a child listening to stories told about Perseus battling against Medusa in the Greek mythology, and wrote,

And when the storyteller came to the part where the hero held up the head of the gorgon Medusa, I held my own hand aloft. I could have sworn then--as I can swear now--that I saw snakes from the gorgon’s head curling and uncurling around the storyteller’s arms. At that moment, I and all the other listeners were unable to move. It was as if we, and not Medusa’s intended victims, had been turned to stone. (p. 37)

One thing in common is that all these scholars agree that not only is storytelling captivating, but it also improves learners' vocabulary knowledge and acquisition when employed innovatively in the classroom.

In general, most of the studies addressing the use of storytelling in promoting vocabulary acquisition focused on the English language and were conducted in countries like Taiwan (Ling, 2006; Hsu, 2015), Spain (Gomez, 2010), Algeria (Fadel, 2005), and the Middle East (Cagri, 2012). Soleimani and Akbari (2013), for example, showed how the use
of children’s stories was able to develop an understanding of new English vocabulary among Iranian preschool students. The technique proved to be effective and was perceived positively by the children. In Kalanthari and Hashemian (2015), the technique tremendously increased low proficiency students' English vocabulary as well as their interest in learning the language. The use of storytelling for language teaching in countries like Singapore, where the present study was carried out, is still noticeably under-researched, particularly when it comes to investigating its effects on the Arabic vocabulary acquisition of primary students. A thorough literature searches through the university's online databases and the World Wide Web yielded zero results for storytelling research in the Singaporean setting. This, therefore, highlights the need to explore the use of storytelling to address Singaporean primary students' lack of Arabic vocabulary knowledge.

Vocabulary refers to “the words we must know to communicate effectively: words in speaking (expressive vocabulary) and words in listening (receptive vocabulary)” (Neuman & Dwyer, 2009, p. 385). The pressing need to carry out a research on vocabulary acquisition, instead of grammar, is due to the fact that the frequency of student’ vocabulary errors is three times that of their grammatical mistakes (Gas & Selinker, 2008). In addition to being the most frequent, vocabulary errors are also the most severe (Politzer, 1978). They often lead to semantic interference resulting in miscommunication. Vocabulary errors are even more severe than grammatical errors because the latter are more likely to lead just to structural errors without impacting meaning (Gass & Selinker, 2008). Meaning is primarily conveyed through vocabulary rather than grammar, and communication occurs because of vocabulary, rather than grammar. As David Wilkins (1972), a British linguist, puts it, "without grammar little can be conveyed, without vocabulary nothing can be conveyed" (p. 111).

Wilkins’ (1972) statement supports the importance of teaching and learning vocabulary over grammatical rules. In agreement with Wilkins, Schmitt (2010) noted that, “learners carry around dictionaries and not grammar books” (p. 4). Students’ mastery of vocabulary is normally reflected in their proficiency in speaking and writing. When a student has successfully acquired vocabulary items, he is able to recognize the words and know how they work in a sentence. Having a good extensive vocabulary will allow students to understand ideas better, enabling them to put their thoughts across effectively and confidently.

In the case of learning Arabic language, for the past few decades, much attention has been given to the acquisition of four main skills, namely listening, reading, writing and speaking (Harun & Zawawi, 2014). Consequently, in comparison, the learning of Arabic vocabulary has received little emphasis. This oversight has indirectly caused the teaching and learning of vocabulary to occur implicitly as an additional activity, for instance, learning it casually and incidentally through reading activities (Fan, 2003; Catalan, 2003; Al-Shuwairekh, 2001). What makes it worse is that many vocabulary learning activities take place in an ad-hoc manner without proper planning (Catalan, 2003). In addition, among the typical methods used by teachers to teach vocabulary is by distributing a list of new words to be learned through memorizing, which students consider a tough endeavour (Muhammad Sabri, 2011). This rote learning method will lead to deficiencies in the development of Arabic vocabulary where students will eventually disregard the importance of learning new words due to the mundane teaching method employed. As a result, their vocabulary knowledge will be below the expected level.
Statement of the Problem

Many researchers have found that students learning Arabic vocabulary still lack the ability to comprehend words fully and use them appropriately in the right context. Among religious secondary school students, Harun and Zawawi (2014) observed, the mastery level of Arabic vocabulary remains low. Their observation is consistent with the findings of Irma-Martiny (2012), Saifudin (2002), Ab. Rahim (1994), all of whom found that the Arabic vocabulary size among students is small and has not achieved the targeted learning objectives set by the national Arabic Language syllabus and expert recommendations. Research shows that students’ lack of vocabulary can be addressed with meaningful storytelling activities in the classroom. However, as a teaching method, it has not won much favour among teachers as only 50% reported frequently using storytelling to explain lessons (Arifin, 2004). A probable reason for the underutilization of stories among Arabic language teachers is that the teachers themselves did not know how to put storytelling into practice in the teaching of Arabic.

In Singapore’s madrasahs, the Arabic language is taught everyday of the week where each session would last for 40 minutes. In these sessions, students are trained to write an essay, read aloud, and form a debate group to discuss current issues in Arabic. During holiday periods, some madrasahs would organize an Arabic camp where students develop a cultural awareness of the language through activities that require them to re-enact scenes involving an Arab situation or environment. In addition to that, students are also able to pick up the language indirectly through religious subjects, such as Islamic theology (tawheed), prophetic traditions (hadith) and Islamic jurisprudence (fiqh), whose textbooks are written in the Arabic language. However, in most madrasahs, the texts are translated into Malay or English to ensure students’ clear understanding of the subject matter.

Researchers have clearly identified that Arabic language learners suffer from low level, small-sized vocabularies, but they have not been quite as clear as to what the remedy is to this problem. None has suggested a concrete solution to solving the inadequate vocabulary issue among Arabic learners. Pursuant to this, the researcher saw a tremendous need to bridge the research gap by proposing storytelling as a possible remedy based on her review of relevant literature. This study, therefore, was proposed to explore how storytelling could help students acquire Arabic vocabulary naturally in a fun and enjoyable manner without feeling pressured to learn. Hence, this study is an important research undertaking because the failure to address this phenomenon would result in two unfavourable situations: (i) the impediment of students’ learning of Arabic, and (ii) a growing percentage of incompetent Arabic learners who are poor in expressing themselves through speaking and writing due to low level vocabulary knowledge. This study intended to assess Arabic vocabulary acquisition via storytelling among upper primary students in a Singaporean madrasah, thus making it a unique undertaking as previous studies that addressed this issue were mostly done in Malaysia, Indonesia, the Middle East, Spain, and Taiwan.

Research Objectives and Questions

The study aimed to determine the effectiveness of storytelling in enhancing Primary Six students’ Arabic vocabulary acquisition, explore their perceptions of storytelling as a vocabulary learning technique, and to ascertain their preferences in the storytelling instruction, i.e., between written text and pictorial stories.
The research questions posed were:

1. What is the effect of storytelling on primary students’ Arabic vocabulary acquisition?
2. What is the extent of students’ interest in storytelling as a technique to learn Arabic vocabulary?

METHODS

Research Design

The study was a quasi-experimental study that evaluated the effects of storytelling (the independent variable) on primary students’ mastery of Arabic vocabulary (the dependent measure). It followed the pretest-posttest, non-equivalent control group design (Leedy & Ormrod, 2014). It was categorized as a quasi-experimental study as two intact groups were used instead of two equivalent groups formed using the procedures of matching and random assignment.

Two Primary 6 classes were randomly assigned to treatment and control groups. Both classes were pretested on Arabic vocabulary before the intervention (storytelling versus Grammar Translation) began. The treatment group was taught Arabic vocabulary using the storytelling method, while the control group was taught the same content via the conventional vocabulary teaching approach (Grammar Translation method). The experiment was conducted for a period of one and a half weeks, after which the subjects were tested again to see if their mastery of Arabic vocabulary improved after the treatment. A survey examining the subjects’ perception of storytelling was run at the end of the posttest. The study’s design may be described as follows (Table 1):

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Study’s Pretest-Posttest Control Group Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>R</td>
</tr>
<tr>
<td>Control</td>
<td>R</td>
</tr>
</tbody>
</table>

Note: R = Random Assignment; X = Treatment (Storytelling); O = Observation (Pretest-Posttest)

Setting and Population

This study was conducted at a madrasah (Islamic school) in Singapore. The republic has six full-time and 27 part-time madrasahs (The Islamic Religious Council of Singapore, 2016). Table 2 shows the list of all six madrasahs registered under the Ministry of Education Singapore. Two of the madrasahs below (NA) no longer accept primary school students.
Table 2
List of All Registered Full-Time Madarasahs in Singapore

<table>
<thead>
<tr>
<th>Madarasah</th>
<th>Gender Composition</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Arabiah Al-Islamiah</td>
<td>Mixed</td>
<td>NA</td>
</tr>
<tr>
<td>Aljunied Al-Islamiah</td>
<td>Mixed</td>
<td>NA</td>
</tr>
<tr>
<td>Wak Tanjong Al-Islamiah</td>
<td>Mixed</td>
<td>150</td>
</tr>
<tr>
<td>Al-Irsyad Al-Islamiah</td>
<td>Mixed</td>
<td>1200</td>
</tr>
<tr>
<td>Al-Maarif Al-Islamiah</td>
<td>All-girl</td>
<td>390</td>
</tr>
<tr>
<td>Al-Sagoff Al-Islamiah</td>
<td>All-girl</td>
<td>160</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td></td>
<td><strong>1900</strong></td>
</tr>
</tbody>
</table>

Basically, all of these madrasahs teach various subjects in Islamic Education as well as academic subjects, such as Maths and Science. However, some offer the academic stream for students who are more inclined to study non-religious academic subjects, while others offer the *ukhrawi* (or religious stream), which is an intensive religious education curriculum for students who are interested to pursue Islamic education at post-secondary levels. Eighty percent of madrasah students speak Malay, while about 66.5% also speak Arabic as a second or third language (Hussin, 2004). Two factors contribute to this situation. First, the main ethnic group attending madrasahs is Malay. Second, the medium of instruction for subjects other than religious subjects is Malay language.

The madrasah involved in this study is a private religious institution located in Sims Avenue, an average earning, primarily Malay-Muslim neighbourhood. The school has a population of 33 teachers and 150 students. It was established in 1958 by a well-known Islamic figure in Singapore. Originally, the madrasah intended to equip children with basic Islamic knowledge (*fardhu ain*), and offered only three subjects—religion, Arabic, and Qur’an—which were taught in the evening after *maghrib* prayers. In 1959, it developed into a standalone private school that it is today, and gradually incorporated academic subjects, such as English and Bahasa Melayu, into its curriculum. Today, the madrasah aims to have a balanced focus of religious and non-religious academic subjects.

**Subjects**

The subjects comprised 24 Primary 6 students aged 12 attending two classes (Class 6.1 and Class 6.2) at the madrasah. Class 6.2 was the better class between the two in terms of achievement. Twelve (12) of the subjects were boys and 14 were girls. The choice of primary students as the study’s subjects over secondary ones was made following the researcher’s belief that young primary children are better able to grasp more vocabulary items compared to older children and adult language learners. This belief is supported by research that reports
a gradual decline in learners’ ability to learn vocabulary as age increases (Service & Craik, 1993). The subjects, all of whom were Muslims of mixed races, were speakers of three languages, i.e. Malay, Arabic and English. Of the three, Arabic was their third language. In terms of academic ability, the subjects were a mixture of high and average achieving students.

**Materials**

The study used three storybooks that were published in Egypt. The researcher chose these three books as they were narrated based on the Prophet’s (peace be upon him) tradition. The stories are known to have a great influence on listeners as they get to discover the lives of the pious predecessors and how they led their humble lives full of trials and tribulations, but yet prioritized their religion over everything else. The stories that the researcher chose for the experiment were: (i) *The Talking Cow*, (ii) *The Voice in the Clouds*; and (iii) *The Monkey and the Thief*.

**Intervention**

Two types of intervention were administered. The treatment group received storytelling as their method of learning Arabic vocabulary, while the control group learned vocabulary via the conventional Grammar Translation method.

**Storytelling**

The treatment group was taught the selected Arabic vocabulary through storytelling. Students were asked to sit close together in a circle. The researcher introduced the story and began her storytelling session with the right intonation, facial expressions, and hand gestures. As the story progressed, the researcher introduced the new Arabic words in context. The storytelling session was interspersed with questions from the researcher to assess the students’ progressive understanding of the story and the new vocabulary introduced. The students were allowed to ask questions regarding the story, and discuss among themselves to come up with contextual guesses about what the new words might mean. This technique emphasized the skill of listening attentively to the stories rather than reading them for understanding. In this technique, students were not given any handout to read the story from.

**Grammar Translation Method**

The control group was taught the same number of new Arabic words through the conventional Grammar Translation method. This method emphasized reading the stories aloud by students while the teacher provided the translation of the dialogues. As opposed to the treatment group, the students in the control group were given a copy of each story to read. They were then asked to read the title and dialogues in the handouts. The researcher then read the dialogues out loud and translated them into English to ensure students’ comprehension of the stories. The students in this group were also allowed to ask questions when they did not understand certain phrases, and to discuss the possible meanings of the new words.
Instruments

Two instruments were used to collect data on the two dependent variables assessed in the study, i.e. Arabic vocabulary acquisition and perception towards storytelling. The first instrument was the Vocabulary Knowledge Scale (VKS), while the second instrument was a 15-item questionnaire.

The Vocabulary Knowledge Scale (VKS)

The VKS was developed by Wesche and Paribakht (1996) to assess students’ vocabulary knowledge. It consisted of 15 open-ended items that measured students’ knowledge of Arabic words through initial recognition and use of new words. Students were presented with a list of target words and asked to indicate their level of knowledge for each word. The purpose of this scale is to measure progressive degrees of word knowledge in five levels (Table 3).

<table>
<thead>
<tr>
<th>Level</th>
<th>Indicator</th>
<th>Score Points</th>
<th>Visual Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I don’t remember having seen this word before</td>
<td>1</td>
<td>😞</td>
</tr>
<tr>
<td>II</td>
<td>I have seen this word before but I don’t know what it means</td>
<td>2</td>
<td>😞</td>
</tr>
<tr>
<td>III</td>
<td>I have seen this word before and I think it means _____</td>
<td>3</td>
<td>😞</td>
</tr>
<tr>
<td>IV</td>
<td>I know this word. It means _____</td>
<td>4</td>
<td>😊</td>
</tr>
<tr>
<td>V</td>
<td>I can use this word in a sentence: _____</td>
<td>5</td>
<td>😊😊</td>
</tr>
</tbody>
</table>

This Level I reflects the subjects’ lack of knowledge about the given word. Level II shows that the subjects remember having seen the word, but do not have knowledge of its meaning. Level III shows that the subjects remember having seen the word, but are uncertain of its meaning. Level IV indicates students’ concrete knowledge of the word. The last level, Level V, indicates students’ mastery of the word as they know how to use it in a sentence.

Visual equivalents were provided as a guide to help students decide which level they were at, and corresponding score points were given based on the level selected. The reliability of the VKS was 0.80 (Wesche & Paribakht, 1996).

Interest-in-Storytelling Questionnaire

The second instrument was a 5-item Likert questionnaire adapted from Radhwa (2013), which was used to explore the students’ interest in storytelling as a technique to learn Arabic vocabulary. A reliability test was run on the 5 items yielding a Cronbach’s alpha of 0.81. The index indicated that the scale has good internal consistency.
Procedures

Two intact Primary 6 classes were randomly assigned to treatment (Primary 6.1) and control (Primary 6.2) groups. The former (n = 11) were taught Arabic vocabulary via storytelling, while the latter (n = 13) via the Grammar Translation method. At the beginning of the first session with both classes, the researcher briefed the subjects about the experiment. The briefing took about five minutes. Then both classes were pretested on the first vocabulary set of 10 new words, and later taught the new Arabic vocabulary using their respective intervention method. The intervention (storytelling versus the Grammar Translation method) session took about 20 minutes of class time. At the end of the intervention, the subjects were given a task to complete. The task entailed drawing out the story plot and discussing the gist and moral of the story, interspersed with questions from the teacher. The teacher made sure that she asked the same questions to both groups. The activities took place over three sessions. At the end of the third session, the subjects were given a posttest that assessed their comprehension of the Arabic vocabulary taught. They were also given the 5-item interest questionnaire to fill out. The entire experimental procedures took one and a half weeks to complete.

Validity

Two types of validity were established. The first was content validity of the research instruments, and the second, validity of the research results.

Content Validity of the Instruments

Validity of the Vocabulary Knowledge Scale (VKS) and survey items was assessed using expert judgment. Although the two instruments were already well-established measures used in previous studies, expert judgment was still sought to confirm that the items demonstrated sufficient content validity. The items and their respective operational definitions were put in a validation template and submitted to two Arabic language teaching experts. Both were education lecturers at a local public university and had more than 25 years of experience in teaching Arabic. They were requested to examine the alignment of the items with the intended operational definitions and the difficulty level of the items. Both experts confirmed the consistency between the items and their respective operational terms, hence establishing the content validity of both instruments.

Internal Validity of the Research Results

Internal validity refers to how much the research results are attributable to the treatment, and not to any other factors. In other words, the differences between the learning gains of the control and treatment groups are attributable only to the independent variable (the treatment), which in this case was storytelling. Differences in the learning gains should not be caused by other factors--such as learning that occurs among the subjects in between treatment sessions, or the subjects' ability to recall the test items. In this study, the researcher made sure, as much as she could, that the experiment was conducted in a tightly controlled setting with tightly controlled procedures. These included using the same three stories to teach the Arabic vocabulary to both groups, not allowing any time lapse between each treatment session and its corresponding posttest, and ensuring an equal duration of intervention for both groups. Additionally, the researcher herself taught both the treatment and control groups to minimize experimenter effects (the influence exerted by the experimenter's expectations or subtle cues that affect the performance of subjects) from skewing or influencing the results. By having just herself to
teach both groups, the researcher minimized differing teacher variables from contaminating the results.

RESULTS

Students’ Arabic Vocabulary Acquisition: A Descriptive Comparison

Table 4 shows each group's gain score after the intervention. The pretest scores indicated that, at the onset of the study, the control group had a higher mastery of Arabic vocabulary than the treatment group with a pretest score of 19.9 points, while the treatment group secured 15.8 points. The difference between them in the pretest was 4.1 points. This indicates that in terms of ability, the control group was academically better. As the study used intact classes, the difference in their ability could not be adjusted to create equal groups.

Table 4
Arabic Vocabulary Acquisition between the Treatment and Control Groups (N = 23)

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Gain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Control</td>
<td>13.0</td>
<td>19.9</td>
<td>46.0</td>
</tr>
<tr>
<td>Treatment</td>
<td>10.0</td>
<td>15.8</td>
<td>36.9</td>
</tr>
</tbody>
</table>

After the intervention, the control group’s Arabic vocabulary score increased to 46 points against 36.9 points of the storytelling group. Their posttest difference was 9.1 points. Overall, the control group exhibited a higher gain score (26.08 points) than the treatment group (21.1 points). This information is visualized in Figure 1.

Figure 1: Arabic Vocabulary Acquisition between the Treatment and Control Groups: A Descriptive Comparison of Pretest, Posttest and Gain Scores (N = 23)

Figure 2 shows a box plot that summarizes the pretest scores of both the treatment and control groups before the intervention (i.e., storytelling versus the traditional Grammar Translation method). No outliers (indicated by Os below or above the whiskers) or extreme
values (indicated by asterisks) were observed in the distributions of scores for both groups. Both distributions were a little skewed. That of the control group was right skewed with the median approaching the lower quartile towards low scores, while that of the treatment group was left skewed with the median score approaching the upper quartile towards high scores. This means that the control group's score distribution was near normal, while that of the treatment group was not so.

![Box plot comparing pretest scores of the control and treatment groups.](image)

*Figure 2: Arabic Vocabulary Acquisition between the Treatment and Control Groups: A Descriptive Comparison of Pretest Scores (N = 23)*

Additionally, as indicated in the box plot, the highest score for the treatment (storytelling) group before the intervention was much lower than the highest score for the control (Grammar Translation) group, as with its lowest and median scores. This indicates that the control group was of a higher ability. The range between the lowest score (the bottom horizontal line on each plot) and the highest score (top horizontal line of each plot) for the control group was 13 with a minimum of 14 points and a maximum of 27 points. On the other hand, the treatment group exhibited a lower minimum score of 9 and a maximum score of 22 with a range of 13 points. This highlights the fact that the control group had a higher mastery of Arabic vocabulary even before the experiment began.

Figure 3 shows a box plot of the posttest scores of both the control and treatment groups. As illustrated in the figure, the mastery of the control group increased drastically with a minimum of 34 points and a maximum of 58 points. The range between the lowest and highest scores was 24 points. The treatment group, on the other hand, observed a range of 22 points where the minimum was 22 points and the maximum 44 points. The distribution was skewed right as most of the vocabulary scores were distributed at the lower end of the quartile. However, there was one outlier (subject number 7) in the distribution, which might have slightly skewed the results. Overall, both groups showed a marked improvement in the posttest vocabulary scores following their respective intervention, although the control group
still demonstrated a higher achievement, being a higher ability group. Nonetheless, the results suggest that storytelling had successfully enhanced the subjects’ Arabic vocabulary acquisition and brought the vocabulary achievement of the treatment group to a higher level, as had the Grammar Translation method.

![Figure 3: Arabic Vocabulary Acquisition between the Treatment and Control Groups: A Descriptive Comparison of Posttest Scores (N = 23)](image)

**The Treatment Group’s Arabic Vocabulary Gains: Paired Samples t-Test Results**

The results of a paired samples t-test, run on the treatment group's pretest (M = 18.13, SD = 4.86) and posttest (M = 42.04, SD = 7.79) data, showed a significant increase in the students' Arabic vocabulary after the storytelling lessons. The average gain of 21.1 points is statistically significant, t(9) = -7.907, p = 0.001. The effect size of the gain is very large at Cohen’s $d = 3.68$. The average increase in the vocabulary score and the effect size both suggest that storytelling had a tremendous effect on students’ Arabic vocabulary acquisition. The increase in the treatment group’s vocabulary scores from the pretest to the posttest is visually illustrated in Figure 4.
Figure 4: Pretest-Posttest Difference in the Arabic Vocabulary Scores of the Treatment Group (N = 10)

Three Arabic Vocabulary Gains between the Treatment and Control Groups: Independent Samples t-Test Results

The t-test results indicate a statistically significant difference in the groups’ posttest scores, but in favour of the control group (M=46.0, SD=6.65) rather than the treatment group (M=36.9, SD= 6.12), t(20)=3.4, p = 0.03. The effect size of the difference is at Cohen’s $d = 1.42$. These results suggest that the control group, being of a higher ability right from the very beginning of the experiment, managed to acquire greater vocabulary than the treatment group despite not having received the storytelling intervention.

Students’ Interest in Storytelling

Interest in storytelling, in this study, was defined as students’ desire to learn more Arabic words and engage in storytelling activities in the Arabic language classroom. Five (5) items in the questionnaire were asked regarding interest. The students’ responses to the interest items are shown in Table 5. Based on the figures, slightly more than half of the students liked storytelling in general (63%; n = 15), while a majority (83%; n=18) liked storytelling as a technique to discover new words. Most of them enjoyed learning Arabic through storytelling (63%; n=15), while 75% (n=20) enjoyed listening to stories in general. Quite a majority agreed they would enjoy learning Arabic more (63%; n=11) if teachers would use storytelling more frequently. The pattern and distribution of responses suggest that overall, students have an interest in storytelling. The results are visually illustrated in Figure 5.
### Table 5
Students’ Interest in Storytelling (N = 24)

<table>
<thead>
<tr>
<th>Items</th>
<th>Response Distribution</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like storytelling</td>
<td>1</td>
<td>2.58</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>(4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(33%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(63%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I like storytelling because I get to learn new words</td>
<td>0</td>
<td>2.75</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(17%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(83%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I enjoy learning Arabic through storytelling</td>
<td>1</td>
<td>2.58</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>(4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(33%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(63%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I enjoy listening to stories</td>
<td>0</td>
<td>2.83</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(25%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(75%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I believe that the more often teachers use storytelling, the more I will enjoy Arabic</td>
<td>0</td>
<td>2.45</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(54%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(46%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5 shows that a majority of the students liked and enjoyed storytelling. The percentages of agreement to the items ranged between 63% and 83%. Only one item recorded less than a 50% agreement. For this item (believing that they will enjoy Arabic learning more if teachers use more storytelling), 54% had no opinion whether they would enjoy the learning more or otherwise.

![Figure 5: Students’ Interest in Storytelling (N = 24)](image-url)
DISCUSSION

The study has shown that storytelling is an effective technique to help students learn Arabic vocabulary. Although the treatment group--being of a lesser ability--did not outperform the control group (who learned with the Grammar Translation method), their posttest scores did show a significant learning gain. The improvement was attributable to none other than storytelling through which the treatment group acquired the new Arabic vocabulary tested in the posttest. The results concur with Soleimani and Akbari (2013) and Kalantari andHashemian (2015) that indicated the effectiveness of stories in fostering vocabulary acquisition among less proficient learners.

Why do stories and storytelling work in the language classroom, particularly in vocabulary instruction? As stated by Hamilton and Weiss (2005), "Stories go to the heart," and "the head does not hear anything until the heart has listened" (p. 1), citing the Irish poet and philosopher, James Stephens, to show why stories work when other tools and techniques fail. According to Gomez (2010), "Listening to stories is a natural way of acquiring language [as] the child learns to deduce what happens next, to deduce the meaning of words from the context or visual aids" (p. 33). She further added, "stories exercise the imagination. [During storytelling] Children imagine sceneries, characters and so on about a story" (p. 32). Similarly, as suggested by Kalantari and Hashemian (2015), storytelling improves learners' vocabulary knowledge because when they listen to tales being told, they develop a steady and dynamic interaction with the plot, characters, context and new words which helps them to derive the intended meanings and messages. Arguably, storytelling activates the mind and helps it to decode words into meaning visually. Via storytelling, teachers are able to plant ideas, thoughts and emotions into students’ minds. These arguments explain why storytelling is an effective vocabulary teaching technique.

Another facet of the finding is the independent sample t-test results which showed the control group outperforming the treatment group despite the latter having gone through three sessions of storytelling. Being intact classes, the control group was of a superior ability to begin with. The treatment of storytelling was not able to equalize the posttest performance of both classes, but it did manage to increase the vocabulary mastery of the treatment group to a higher level. This was indicated by the statistically significant t-test results in favour of the control group. The effect size of the group difference in the posttest scores was also large.

This finding is contrary to past research which revealed the superior effects of storytelling over traditional methods of vocabulary teaching where treatment groups (with storytelling) would normally outperform control groups. For example, in Abasi and Soori (2014), the Iranian subjects who learned English vocabulary via storytelling scored better grades, as did those in Al-Mansour (2011) where the subjects' (kindergarteners') language comprehension level was increased significantly. The reason for this result is simple and straightforward. As established in the analysis, the control subjects were a high ability group, while the treatment subjects were of a lower ability. And storytelling was not able to equalize their mastery of the Arabic vocabulary taught over a brief three-session intervention. To bring about substantive changes in their mastery, a combination of multiple effective techniques of vocabulary instruction would be needed and their use in the classroom must be extended over a longer period of time than just three short lessons.
It was found that the students mostly were in favour of storytelling as a large majority liked learning Arabic vocabulary through the technique and enjoyed listening to stories in general. The data indicated that students had an interest in storytelling. The results derived from this study are consistent with past research where Thakur (2014) found that 75% of students showed great interest in chapters taught through storytelling, while 86% said they listened attentively in an eagerness to discover the unfolding of story plots. In addition, students related that they enjoyed stories very much as they could visualize the characters in the stories like they were watching a film. Quite similarly, Fadel (2005) reported that his subjects showed a great enthusiasm for storytelling.

CONCLUSION

Storytelling can lead to meaningful learning if teachers know how to use it appropriately and innovatively. If storytelling is to make an impact on Arabic language learning, students must be cognitively and affectively engaged in the stories and in the activities based on them. Therefore, first and foremost, Arabic language teachers must be well-trained in the art of storytelling so that they can capitalize on its power to captivate learners to acquire Arabic vocabulary. Good storytelling practices—like placing students themselves in the stories, asking them to sit in a circle on the floor and around the teacher, providing a sketch of the storyline, explaining the key vocabulary, giving important cultural information about the story, providing visual support (e.g., realia, published materials, whiteboard drawings, cut out figures, masks, or puppets), and augmenting the storytelling session with extended activities (e.g., filling out a crossword puzzle, role playing, summary writing, finding synonyms and antonyms, and sentence building)—would increase the impact of the technique on student learning. Teachers should also use gestures, body language, facial expressions, varied intonation, pace and tone, as well as disguise their voice for different characters to convey meaning effectively. Effective disguises help students to stay focused on the story.

For learning a second language like Arabic, storytelling is a highly promising pedagogical technique. It is ancient, yet its power is enduring (Hamilton & Weiss, 2005). Storytelling is effective because students, particularly young learners, naturally enjoy listening to stories. In the language classroom, stories provide meaningful contexts for students to acquire new vocabulary and language skills (i.e., listening, speaking, reading and writing), in addition to helping them understand other cultures and the world external to theirs. Stories help teachers to put vocabulary in context, thereby facilitating students' comprehension of new words. Students' comprehension is further augmented by two things: the illustrations provided in storybooks and teachers' acting out the storyline. These techniques work together to ease students' acquisition of new vocabulary as its referents are made concrete. Much of the evidence supporting the use of storytelling in the language classroom is garnered from research on English language teaching. Only a handful of researchers have looked into the ways and means of using tales to improve the teaching and learning of Arabic vocabulary. This study has been able to address part of this gap in the literature. Its results show that storytelling did have a significant positive impact on students' mastery of new Arabic words. Educators, therefore, should explore further as to how storytelling could be used innovatively to increase student learning of new vocabulary.
REFERENCES


