Abstract

"One forgets words as one forgets names. One's vocabulary needs constant fertilizing or it will die." - Evelyn Waugh (qtd. in Bose). Vocabulary is crucial not only during the learning process but also throughout one's life. To communicate effectively it is essential that one should possess ample vocabulary. A major complaint imposed on English as Second Language (ESL) learners is their inability to communicate effectively in English language. In order to communicate fluently, the L2 learner needs to possess sufficient vocabulary in the target language which is generally lacking in ESL learners, and this lack of vocabulary causes difficulty in their speaking and writing.

*Quizlet* is one among the most popularly used online tools that has been reported to be highly effective with language learners of different ages. It is a Digital Flashcard application with a desktop and mobile phone version. It has gained tremendous popularity in recent times. The experimental design study presented here has employed *Quizlet* to teach vocabulary to college students. 70 I year B.Com. (A&F) General English students from Chevalier T. Thomas Elizabeth College for Women, Perambur, Chennai, were the samples for this study. The target vocabulary was chosen from the prescribed General English textbook entitled *Communicative English*.

- The researcher designed a lesson plan to train the students using the *Quizlet* app for a week. After administering the pre-test, the researcher divided the class into groups based on their scores. Based on the lesson plan, Constructivist learning theory was used in teaching vocabulary to Group 1 students, and Behaviourist learning theory was used in teaching vocabulary to Group 2 students. At the end of the week, each group took a post-test.

Constructivist classroom environment is where students made their own digital flashcards compared to a Behaviourist classroom where the students used only the digital flashcards designed by the teacher.
Quantitative data (pre-test and post-test scores) and Qualitative data (feedback responses) were collected by the researcher. The findings indicated that both the Group 1 and Group 2 participants showed significant improvement in their vocabulary post-test scores. This study acknowledges and recommends using Quizlet application for teaching vocabulary to college students at undergraduate level.

Keywords: Quizlet, Digital Flashcards, Vocabulary Development, Behaviourism, Constructivism.

Background of the Study
Learning Theories

“A theory can be described as a set of hypotheses that apply to all instances of a particular phenomenon, assisting in decision-making, philosophy of practice and effective implementation through practice… Technology is pedagogically neutral and can be applied quite merrily to many theories and pedagogies” (Nichols, 2003). Although there are many different approaches to learning, there are three basic types of learning theories: Behaviourism, Cognitivism, and Constructivism.

Behaviourist design principles include rote learning, repetition, modular learning, stimulus-response, and conditioning. Cognitivist design principles include observational techniques, bootstrapping, and equilibration in the form of assimilation and accommodation. Constructivist design principles include new habit formation through experience and interaction with a ‘mature social medium’ in the form of a simulation facilitator (Erlam, Smythe, and Clair, 2017).

CALL (Computer Assisted Language Learning) and MALL (Mobile Assisted Language Learning)

As the term suggests, CALL is basically dependent on computer as a delivery medium of applications. In its broader definition, CALL includes a number of technologies such as PCs, mobile phones, electronic whiteboards, all of which have computers of different sorts embedded in them. Other associated terms were coined later on: Internet-Assisted Language Learning (IALL), Web Enhanced Language Learning (WELL), Technology Enhanced Language Learning (TELL), and Mobile Assisted Language Learning (MALL) (Al-Kadi, 2018). Mobile Assisted Language Learning (MALL) describes an approach to language learning that is assisted or enhanced through the use of a handheld mobile device. MALL is a subset of both Mobile Learning (m-learning) and Computer-assisted language learning (CALL). MALL is language learning using mobile devices such as:

- Cell (mobile) phones (including the iPhone or iPad.)
- MP3 or MP4 players (e.g., iPods)
• Personal Digital Assistants (PDAs) (e.g., Palm Pilot, Blackberry, etc.)

With MALL, students are able to acquire language learning materials and to communicate with their teachers and peers at anytime, anywhere. They have become an important part of students’ lives to the extent that many students see their mobile phones as part of their identity and the few investigations of mobile phone-based language learning have shown some astonishingly large beneficial learning effects.

**Quizlet**

*Quizlet* is a mobile and web-based study application that allows students to study information via learning tools and games. It utilizes user-designed learning modules composed of terms and their definitions or descriptions. These modules (called study sets by *Quizlet*) are presented to students through different learning modes including flashcards, games, collaborative activities, and quizzes to allow rote-learning environments that can help students master different subjects especially languages. The application interfaces designed for the website incorporate 8 learning modes of which 5 are available in the mobile application interface. Collaboration has also become possible with *Quizlet*. The company has recently introduced *Quizlet Live* with which students can play synchronously when they can’t be physically together. After creating a game, the teacher can allow students to join by QR code or by entering the 6-digit code on *Quizlet Live* or the teacher can also share a link so that the students can join quickly. (*Quizlet.com*)

**Research Methodology**

**Statement of the Problem**

In order to communicate fluently the L2 learner needs to know enough vocabulary in the language they are learning which is generally lacking in General English students, and that lack of vocabulary is bringing in further difficulty in their speaking and writing activities. This fact encouraged the researcher to experiment with *Quizlet* app under the expectation that it would become a useful alternative for vocabulary learning, providing students with new learning experience, creating / retaining motivation for learning, and enhancing their vocabulary.

**Purpose of the Study**

The digital flashcard application called *Quizlet* has gained tremendous popularity in the recent times. It is important to examine whether *Quizlet* serves its purpose in developing vocabulary in students at undergraduate level.

**Hypotheses**

• Administering the digital flashcard app *Quizlet* can promote vocabulary development in college students at undergraduate level.
• Implementing Quizlet in a constructivist classroom environment rather than a behaviourist classroom environment can elevate vocabulary development in the undergraduate students.

Research Questions
• Can teachers promote vocabulary development in undergraduate students by using Quizlet app in online classes?
• Is there any difference between the results of Groups I (advanced learners) and Group II (intermediate learners) in terms of vocabulary development?
• Can Quizlet flashcard app improve vocabulary development in a Constructivist classroom environment where students make their own digital flashcards compared to a Behaviourist classroom where the students use only the digital flashcards designed by the teacher?
• What would be the students’ perspective on learning new vocabulary using Quizlet app?

Location for the Study
• The location of the study was Chevalier T. Thomas Elizabeth College for Women, Perambur, Chennai.

Samples for the Study
• The samples of the study were I year B.Com. (A&F) General English students from Chevalier T. Thomas Elizabeth College for Women, Perambur, Chennai.

Objectives of the Study
The objectives of the study are:
• To evaluate the effect of Quizlet app, a rapidly growing application with an online and mobile version, on the vocabulary development of college students at undergraduate level.
• To check the effect of Quizlet app in a Behaviourist and Constructivist classroom environment.

Tools Used for the Study:
• Quizlet was utilized to make digital flashcards by the researcher and the students.
• Pre-test and post-test questionnaires were designed using Google Forms that aim at testing the student’s vocabulary development.
• A feedback questionnaire with 10 multiple choice questions was designed using Google Forms.
• All kinds of information regarding the online classes and activities were sent to the student participants using WhatsApp.
Description of the Tools

- The pre-test questionnaire contained 26 multiple choice questions and the post-test questionnaire contained 29 multiple choice questions based on Communicative English vocabulary, for 30 marks each. The questions focused on the basic categories of vocabulary like Synonyms and Antonyms, Idioms and Phrases, Collocation, Connotation and Denotation, Phrasal verbs, and Prefix and Suffix.
- Feedback survey questionnaire contained 10 multiple-choice questions. It was designed to know the students’ interest in learning vocabulary using Quizlet flashcards.

Method Selected for the Present Study

Research Design

This study has used an experimental research design that aims in investigating the effect of Quizlet, a rapidly growing application with a desktop and mobile version, on the vocabulary development of students at undergraduate level. The study has incorporated Quantitative method (including Pre-test and Post-test) and Qualitative method (including Student Feedback analysis).

70 participants from I B.Com. A&F class from Chevalier T. Thomas Elizabeth College for Women, Chennai, were chosen as samples for the study. The vocabulary targeted for the study consisted of 50 difficult words including Synonyms and Antonyms, Idioms and Phrases, Collocation, Connotation and Denotation, Phrasal verbs, Prefix and Suffix, from their General English textbook entitled Communicative English.

The researcher designed a lesson plan to train the samples for a week. After administering the Pre-test, the researcher divided the class into 2 groups based on their scores. Based on the lesson plan, Constructivist learning theory was used to teach vocabulary to Group 1 students, and Behaviourist learning theory was used to teach vocabulary to Group 2 students. At the end of the week, each group took a Post-test and filled in a feedback survey questionnaire. Quantitative and Qualitative data analysis was done to find out the results.

The students co-operated very well. They enjoyed creating and learning vocabulary using digital flashcards in Quizlet app.
<table>
<thead>
<tr>
<th>Day</th>
<th>Objectives</th>
<th>Outline</th>
<th>Materials</th>
<th>Learning outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>The aim of this class is to sensitize the students to difficult vocabulary.</td>
<td>50 difficult words taken from Communicative English pdf</td>
<td>Digital flashcards Communicative English pdf</td>
<td>Development of strong <strong>vocabulary</strong> that makes reading more meaningful and enjoyable</td>
</tr>
<tr>
<td>Day 2</td>
<td>The aim of this class is to sensitize the students to Idioms and phrases</td>
<td>Idioms and phrases</td>
<td>Digital flashcards Communicative English pdf</td>
<td>The students will be able to listen and make their conversation less monotonous and funnier by employing Idioms and phrases.</td>
</tr>
<tr>
<td>Day 3</td>
<td>The aim of this class is to sensitize the students to Collocation</td>
<td>Collocation</td>
<td>Digital flashcards Communicative English pdf</td>
<td>The students will be able to read the text and identify the correct collocations</td>
</tr>
<tr>
<td>Day 4</td>
<td>The aim of this class is to sensitize the students to Prefix and Suffix</td>
<td>Prefix and Suffix</td>
<td>Digital flashcards Communicative English pdf</td>
<td>The students will be able to determine the meaning of new and unfamiliar words using roots, <strong>prefixes, and suffixes.</strong></td>
</tr>
<tr>
<td>Day 5</td>
<td>The aim of this class is to sensitize the students to Connotation and Denotation</td>
<td>Connotation and Denotation</td>
<td>Digital flashcards Communicative English pdf</td>
<td>The students will be able to define <strong>denotation</strong> and <strong>connotation</strong>, understand the difference, and use the knowledge to create <strong>connotations</strong> of words used every day and in literature.</td>
</tr>
</tbody>
</table>

**Administration of the Tools**

- Pre-test
In order to check the prior vocabulary knowledge of the students, the researcher met the students in their class and gave a pre-test questionnaire which contains basic questions related to the chosen vocabulary from the *Communicative English* textbook.

- **Groups 1 & 2**
  Based on the pre-test scores, the researcher divided the class into two groups. Group 1 consisted of students who scored 16 and above, and Group 2 consisted of students who scored 15 and below.

- **Using *Quizlet* app in Constructivist and Behaviourist Classrooms**
  For Group 1 that consisted of 12 students the researcher taught vocabulary by applying the learning theory Constructivism. The researcher introduced MALL (Mobile Assisted Language Learning) by making the students download the *Quizlet* app in their mobile phones. All the instructions were given in *WhatsApp*. In order to make the students become familiar with the *Quizlet* app the researcher conducted two online classes through *Google Meet* where the researcher guided the students step by step to create flashcards by making them present their screens. Once the students became familiar with the *Quizlet* app, the researcher started giving activities related to vocabulary learning in *WhatsApp*. Deadline was given to them to complete the activities. The researcher did not interfere with the learning of the students in Group I. The students designed flashcards, took formative assessments, and played live games in *Quizlet* app. They learnt by exploring the application and by classroom collaboration.

  On the other hand, for Group 2 the researcher taught vocabulary by applying the learning theory Behaviourism. The researcher introduced CALL (Computer Assisted Language Learning) for this group. The researcher conducted online classes, each with one-hour duration for a week in *Google Meet*. In each of the classes, the researcher taught vocabulary by using digital flashcards made with the help of *Quizlet* website by sharing the screen in *Google Meet*. After the classes, the students took formative assessments that tested their understanding of vocabulary, and the researcher tracked their performances. For Group I students, the researcher also employed other strategies like drills and positive reinforcement during the online classes.

**Post-test**
- After completing the online classes, activities, and formative assessments based on the lesson plan, a post-test was administered to both the groups in order to test the vocabulary improvement of the students.

**Feedback Form**
- A feedback questionnaire with 10 multiple choice questions is designed using *Google Forms* to understand the students’ perspective on learning vocabulary using *Quizlet* application.

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### Data Analysis and Interpretation

#### Pre-test and Post-test Scores of Group 1 (Advanced Learners)

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
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<tbody>
<tr>
<td>Student 1</td>
<td>28</td>
<td>30</td>
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<tr>
<td>Student 2</td>
<td>16</td>
<td>20</td>
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<td>Student 3</td>
<td>16</td>
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<td>Student 4</td>
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<td>18</td>
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<tr>
<td>Student 11</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>Student 12</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Scores</strong></td>
<td><strong>239</strong></td>
<td><strong>279</strong></td>
</tr>
<tr>
<td><strong>Average Scores</strong></td>
<td><strong>20</strong></td>
<td><strong>23</strong></td>
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</table>

#### Table Showing the Pre-test and Post-test Average Scores of Group 1 Advanced Learners

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<thead>
<tr>
<th></th>
<th>Pre-test Average</th>
<th>Post-test Average</th>
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<tbody>
<tr>
<td>Pre-test Average</td>
<td>20</td>
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<tr>
<td>Post-test Average</td>
<td>23</td>
<td></td>
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</table>
**Graph Showing the Pre-test and Post-test Average Scores of Group 1 Advanced Learners**

- Pre-test average scores for Group 1 advanced learners is 20.
- Post-test average scores for Group 1 advanced learners is 23.
- Average scores of Group 1 advanced learners have improved after using Quizlet app for vocabulary development.

<table>
<thead>
<tr>
<th>Pre-test and Post-test Scores of Group 2 (Intermediate Learners)</th>
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<tbody>
<tr>
<td><strong>Name</strong></td>
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<tr>
<td>Student 13</td>
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Vocabulary Development in College Students Using Quizlet Digital Flashcards - A Study 203
<table>
<thead>
<tr>
<th>Student</th>
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<tr>
<td>46</td>
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<td>47</td>
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<td>15</td>
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<tr>
<td>70</td>
<td>12</td>
<td>22</td>
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Table Showing the Pre-test and Post-test Average Scores of Group 2 Intermediate Learners

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Average</th>
<th>Post-test Average</th>
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</thead>
<tbody>
<tr>
<td>Pre-test Average</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Post-test Average</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>618</th>
<th>986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>11</td>
<td>17</td>
</tr>
</tbody>
</table>
• Pre-test average scores for Group 2 intermediate learners is 11.
• Post-test average scores for Group 2 intermediate learners is 17.
• Average scores of Group 2 intermediate learners have improved after attending the online classes that employed digital flashcards created by the researcher using Quizlet app.
• The average scores of Group 2 students are comparatively lower than Group 1 students.

Feedback Analysis and Interpretation:

• 15 students (36.6%) have prior knowledge on Digital Flashcards before attending the online classes.
• 26 students (63.4%) have no prior knowledge on Digital Flashcards before attending the online classes.

• 39 students (95.1%) say that they have gained knowledge and understanding about digital flashcards after attending the sessions.

• 2 students (4.9%) say that they have not gained knowledge and understanding about digital flashcards after attending the sessions.

• 38 students (92.7%) think that the Digital Flashcards used by the researcher are creative and easily understandable.
• 3 students (7.3%) think that the Digital Flashcards used by the researcher are less creative and not easily understandable.

• 41 students (100%) prefer studying English vocabulary with Quizlet app.

• 39 students (95.1%) think technology tool(s) can help them in learning vocabulary lessons better.

• 2 students (4.9%) think technology tool(s) cannot help them in learning vocabulary lessons better.
38 students (92.7%) think that the Quizlet app used by them or the researcher improved their English vocabulary.

3 students (7.3%) think that the Quizlet app used by them or the researcher have not improved their English vocabulary.

22 students (53.7%) prefer Flashcard mode.

14 students (34.1%) prefer Learning mode.

5 students (12.2%) prefer Test mode.
• 11 students (26.8%) say that they spent 5-10 minutes to create digital flashcard sets given as activity by the researcher.

• 4 students (9.8%) say that they spent 15-20 minutes to create digital flashcard sets given as activity by the researcher.

• 3 students (7.3%) say that they spent 25-30 minutes to create digital flashcard sets given as activity by the researcher.

• 23 students (56.1%) from Group 2 have chosen ‘Not applicable’ as they have used only the flashcards designed by the researcher.
21 students (51.2%) say they like Quizlet app because it is easy to use, fun and interesting, and not time-consuming.

11 students (26.8%) say they like Quizlet app because it is fun and interesting.

9 students (22%) say they like Quizlet app because it is easy to use.

38 students (92.7%) say that they intend to study English vocabulary with Quizlet in the future.

3 students (7.3%) say that they do not intend to study English vocabulary with Quizlet in the future.

Major Results and Findings

- Quantitative data collected using pre-test and post-test scores revealed the effectiveness of Quizlet in developing vocabulary in the undergraduate students.

- Qualitative data that includes student feedback reveals that the students enjoy learning vocabulary using Quizlet.

- Most of the students feel that Quizlet app had improved their English vocabulary.

- Most of the students intend to study English vocabulary with Quizlet desktop and mobile app in the future.

- Group 1 students who created digital flashcards by themselves have showed tremendous improvement in their post-test scores.
• Group 2 students who were taught using the digital flashcards designed by the researcher showed improvement, but their performance is low in post-test compared to Group 1 students.

• Both Constructivist and Behaviourist learning theories using Quizlet app proved to be effective methods of improving vocabulary test scores from the data analyzed, but Constructivist learning theory using Quizlet promotes enormous vocabulary development in undergraduate students rather than Behaviourist learning theory.

• Collaborative Learning using Quizlet app also promotes vocabulary development in undergraduate students.

Limitations of the Study
• Samples were chosen from only one class.

• The sample size was very limited.

• Test validity, reliability, and practicality were not tested.

• As Pre-test and Post-test were conducted online due to time constraints, score evaluation could not be validated.

• Group 1 students who created flashcards using Quizlet mobile app experienced problems due to lack of many features. For example: They were unable to insert images in their digital flashcards while using the mobile version.

Recommendations
• The advanced learners can be encouraged to share their digital flashcards with their friends for peer-learning or group-learning purposes.

• The students can be encouraged to use Quizlet app not only for learning vocabulary but for learning their subject of specialization at undergraduate level.

• Since Quizlet automatically creates an array of learning activities for each lesson, it is recommended that teachers should consider the amount of vocabulary to be covered in a lesson so that it suits students’ average learning capacity.

• Quizlet can offer the upgraded teacher version for free of cost so that many teachers in rural areas can get benefitted.

Scope for Further Research
• This research can be further extended to find whether the teachers in other colleges in Chennai are aware of using Quizlet app in their classes for students’ vocabulary development.
• Large-scale survey studies across colleges could help reveal students’ perceptions on why and how they implement digital flashcards for individual or collaborative study.

• In-depth studies can be conducted to check the use of Quizlet app’s effect on students’ motivation in learning vocabulary.

• Evaluative studies can be done to find out whether Quizlet application helps in improving students’ scores in the University examinations.

• Longitudinal studies can be conducted to find whether Quizlet application helps the students in cracking competitive exams.

My grateful thanks are due to my supervisor J. Jaya Parveen, M.A., M.Phil., NET.

Works Cited


ANNEXURE

I. Pre-test Questionnaire

1. Name

2. Email address

3. What is the meaning of the word "Disbursement"?
   a) to pay out
   b) needing much effort
c) decoration

4. What is the meaning of the word "Redundancy"?
   a) the quality or state of being marked by or using only few words to convey much meaning
   b) the condition of being short
   c) the use of too many words to express an idea

5. What is the meaning of the idiom "once in a blue moon"?
   a) Very Precious
   b) Very Rarely
   c) Very Happy

6. Meena tried to fit in herself to the culture of America being an Indian. What is she trying to do?
   a) Assimilate
   b) Segregate
   c) Contrast

7. The doctor advised Ben to avoid ________exercise.
   a) Effortless
   b) Strenuous
   c) Feeble

8. ________ is a person having a knowledgeable and fine appreciation of the arts
   a) Connoisseur
   b) Neophyte
   c) Novice

9. Trust her to__________, she never could keep a secret.
   a) spill the beans
   b) miss the boat
   c) crack the whip

10. What is the antonym for "flogged"?
    a) Scourged
    b) Glided
    c) Whipped

11. Chris was asleep after ________to finish his assignment
hitting the nail on the head
b) letting the cat out of a bag
c) burning the midnight oil

12. Sheela submitted her project report late. What does this mean?
a) Punctuality
b) Procrastination
c) Promptitude

13. What is the meaning of the word "egregious"
   a) very noticeable especially for being incorrect or bad
   b) lacking importance
   c) being in a state of suspended consciousness

14. ________ is a brief account of something interesting that happened especially to one personally.
   a) memoir
   b) anecdote
   c) biography

15. Shanta was the ________ of her grandmother’s eye; the elderly woman would do anything the little girl wanted.
   a) perfect storm
   b) apple
   c) elephant in the room

16. ________ is a person who engages in a pursuit, study, science, or sport as a pastime rather than as a profession
   a) Amateur
   b) Professional
   c) Expert

17. The following picture represents an idiom. Identify the idiom from the options below.
18. Choose the correct synonym of the words: *

Mark only one oval per row.

<table>
<thead>
<tr>
<th>snarled</th>
<th>caught</th>
<th>articulate</th>
<th>dynamic</th>
<th>dangerous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapped</td>
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<tr>
<td>Incurred</td>
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<td>enunciate</td>
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<td>strenuous</td>
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<td>perilous</td>
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</tbody>
</table>

19. You do a lot of talking, but I don't see you doing anything. You should really
   a) mouth the words
   b) put your money where your mouth is
   c) live hand to mouth

20. Look at the picture and try to give a word that best suits it from the options below

   a) defacement
21. Rama's parents never had a problem with cleanliness; her room was always in_______
   a) back order
   b) apple-pie order
   c) pecking order

22. Choose the correct idioms associated with the given meanings.

   Mark only one oval per row.

<table>
<thead>
<tr>
<th>on a roll</th>
<th>chip off the old block</th>
<th>a piece of cake</th>
<th>Not my cup of tea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having great success which seems likely to continue.</td>
<td></td>
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<td></td>
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<tr>
<td>Someone who is very similar in character to their father or mother</td>
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<td></td>
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<tr>
<td>Something easily accomplished</td>
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<td></td>
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<tr>
<td>Not what one likes or is interested in.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

23. The following picture represents an idiom. Identify the idiom from the options below.
   a) to wear many hats
   b) hang one's hat
   c) pass the hat

24. Replace the underlined phrase with a suitable idiom in the sentence "When the teacher asked Sharad if he had copied, he did not give a straight answer. He kept avoiding the question.
   a) beat around the bush
   b) chip off the old block
   c) looking for a needle in a haystack

25. Identify the equivalent phrase for the word given within the quotes in the following sentence.
   King Edward VIII’s decision to "abdicate" the throne has become legendary.
   a) Use of under a guise of authority but without actual right
   b) Remarkable and therefore very famous
c) To renounce

26. Look at the picture and choose the word that best suits the action in it.

![Picture](image)

a) immobility
b) stillness
c) fidgeting

27. Identify the equivalent phrase for the word given within the quotes in the following sentence.
One of the first things a scholar is taught that it is wrong to "plagiarise".

a) Incapable of making mistakes or being wrong
b) To pass off another’s work as one’s own
c) Look inwards to examine one’s motives

28. Look at the picture and try to guess out the meaning of the word that best describes the action from the options below

![Picture](image)

a) ambidextrous
b) ambisinistrous
c) ambiophony

II. Post-test Questionnaire

1. Name

2. Email address

3. Which group you belong to?

   a) Group 1
   b) Group 2
4. What is the meaning of the word "Incurred"
   a) to get or keep away from (as a responsibility) through cleverness or trickery
   b) to get free from a dangerous or confining situation
   c) brought about through one's own actions

5. My sister is so busy that I get to see her only once in a
   a) red moon
   b) blue moon
   c) stained moon

6. Look at the picture and try to give a word that best suits it.
   ![Image of a desert scene]
   a) scorching
   b) freezing
   c) cold

7. What is the meaning of the idiom "apple of the eye"?
   a) precious
   b) rarely
   c) excited

8. When the newspaper editor discovered the writer’s__________, he fired him for taking credit
   for another person’s work.
   a) plagiarism
   b) anonymity
   c) originality

9. Ravi is as good a singer as his mother - he is a______ the old block.
a) apple off 

b) chip off 

c) piece off 

10. Guess the meaning of the phrase "The early bird catches the worm" from the options below.

a) Make best use of the opportunity 

b) Do things promptly. 

c) If you are late, you will be a loser. 

d) Work consistently (regularly) 

11. Choose the correct phrasal verb from the options below to complete the following sentence. "The Pandiyan Super-Fast Express Train ________Chennai at 4.10 am".

a) arrives in 

b) arrives at 

c) arrives into 

12. The sentence given contains an incomplete collocation. Complete the collocation by supplying a suitable word from the options given below. "Please _____free to take a seat and enjoy the show."

a) feel 

b) be 

c) come 

13. Add the correct prefix to the word in parenthesis to complete the following sentence. The lesson is full of mistakes, we will have to _____(write) it.

a) ir 

b) re 

c) un 

14. Select the word with the appropriate neutral connotation from the options below to complete the following sentence. As the boys played video games, their parents__________ them.

a) glared at 

b) scrutinized 

c) watched 

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Vocabulary Development in College Students Using Quizlet Digital Flashcards - A Study  220
15. The following picture represents an idiom. Identify the idiom from the options below.

![Image of a hand holding a bird]

a) An albatross around the neck  
b) A bird in the hand is worth two in the bush  
c) Birds of a feather flock together.

16. Choose the correct collocations of the words: *

Mark only one oval per row.

<table>
<thead>
<tr>
<th>Encourage</th>
<th>Regret</th>
<th>Lengths</th>
<th>Deal</th>
<th>Money</th>
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<tbody>
<tr>
<td>Positively</td>
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<td>Deeply</td>
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<tr>
<td>To go to great</td>
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<tr>
<td>To land a</td>
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<td></td>
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<tr>
<td>Hard-earned</td>
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</table>

17. Sam is a real________ who almost never takes time off his job.

a) workaholic  
b) couch potato  
c) loafer

18. Identify the equivalent phrase for the word given within the quotes in the following sentence. We must realise that however clever or intelligent we maybe we are never "infallible".

a) Look inwards to examine one’s motives  
b) Beyond reform  
c) Incapable of making mistakes or being wrong

19. Match the phrases given within quotation in the sentences in the left-hand side to the words in the right-hand side that best matches them.
20. While Chris believes he is a ________ speaker, he is considered by most people to be a dull and humourless presenter.
   a) Boring
   b) scintillating
   c) tedious

21. Select the word with the appropriate denotation to complete the following sentence. Our professor’s false British accent is a humorous ________.
   a) affect
   b) effect
   c) infect

22. Choose the most suitable collocation for the following sentence from the options below. My motorcycle is quite old. So, getting ________ parts is difficult.
   a) spare
   b) exchange
23. Look at the picture and try to guess the meaning of the word that best describes the action from the options below.

   (Image of hands holding coins)

   a) numismatic
   b) connoisseur
   c) gourmet

24. Read the following sentence and identify the word that has negative connotation. Bedford is a gritty neighbourhood, but the rent is affordable.

   a) rent
   b) gritty
   c) affordable

III. Feedback Survey Questionnaire

1. Did you have prior knowledge of Digital Flashcards before attending the online sessions?
   a) Yes
   b) No

2. Have you gained knowledge and understanding about digital flashcards after attending the sessions?
   a) Yes
   b) No

3. Do you think that the Digital Flashcards used by the researcher are creative and easily understandable?
   a) Yes
   b) No

4. Do you prefer studying English vocabulary with Quizlet app?
   a) Yes
   b) No

5. Do you think technology tool(s) can help you in learning vocabulary lessons better?
   a) Yes
b) No

6. Do you think that the Quizlet app used by you or the researcher improved your English vocabulary?
   a) Yes
   b) No

7. What features in Quizlet do you prefer the most?
   a) Flashcard mode
   b) Learning mode
   c) Test mode

9. If you belong to Group 1, state how much time you spent to create digital flashcard sets given as activity by the researcher? If you belong to Group 2, please choose 'Not Applicable'.
   a) 5-10 minutes
   b) 15-20 minutes
   c) 25-30 minutes
   d) Not applicable

10. Why do you like Quizlet app?
    a) Easy to use
    b) Fun and interesting
    c) Not time-consuming
    d) All the above

11. Do you intend to study English vocabulary with Quizlet in the future?
    a) Yes
    b) No

==================================================================