

## THE POWER OF IMAGE IN ENGLISH LANGUAGE TEACHING

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**Abstract.** *This paper aims to investigate the effectiveness of using infographics as a learning tool in enhancing learners' comprehension and memory retention in the Foundation Program of the English Language (FPEL) in the Language Center at Sultan Qaboos University. The paper first highlights the increasing need for making the new generation visually literate. This is due to the fact that the use of visuals in media and the online world has intensified. Then, it defines infographics as a learning and teaching tool and discusses the rationale for using this tool in English as a Foreign Language (EFL) classrooms. To explore the effect of infographics on learners' comprehension and memory retention, an experimental and a control group were randomly selected from the English for Commerce Program (Level six students) at the Language Center. Two tests were administered for both groups to investigate the effectiveness of the infographic used with the experimental group. The results of the two quizzes revealed that the use of infographics in EFL classes enhances students' comprehension of what is learned in class and boosts their ability to recall it after one week.*

**Key words:** *infographics, English as a Foreign Language, comprehension, memory retention, Sultan Qaboos University*

### 1. INTRODUCTION

A picture is worth a thousand words; a saying which has unprecedentedly proved its validity in the era of digital images. Social media networks, for example, have created the opportunity for their users to intensively create, view, download and share an unlimited number of visuals. A wide range of visuals, in various and amazing forms, are available online. Therefore, in this complex visual terrain of technology, it has become a demand to teach our students not just to be textually literate, but also to be visually literate. According to the Social Science Research Network, around 65% of the world's population are visual learners (McCue, 2013). Research has shown that 70% of the receptors in our body are in our eyes (Krauss, 2012). Thus, it is evident that a sizeable group of our students can digest information through visuals better than any other learning tools. Educators and practitioners have investigated the use of multiple visuals that have the potential to sufficiently visualize information. One of these visuals that has been gaining an increasing popularity in education is infographics. The literature on infographics as a teaching and/or learning tool is scarce. However, this does not mean that infographics are novel. They did exist in prehistory in cave paintings that depict lots of information about the painters and their lives (Nuhoğlu

Kibar & Akkoyunlu, 2014). Infographics are simply graphic depictions of information which are visually attractive. The name, infographic is basically a combination of information and graphic. An infographic is defined as “a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood (Smiciklas, 2012, p. 3). Infographics are multi-modals; and hence interactive teaching tools that include pictures, charts, diagrams and links to different media tools (*Ways to teach*, n.d). There are five common types of infographics which are: 1) statistical, 2) process, 3) timeline, 4) geographical, and 5) conceptual (Young & Potter, 2011).

In the information age, language learners need to acquire the visual literacy in order to understand the visual culture that is dominating the online world and predominantly presented in English (Matrix, Hodson & Hodson, 2014). A study done on Chinese EFL students in 2009 concluded that most of the EFL learners in the study were visual learners (Fu, 2009). Therefore, exposing EFL learners to visual learning aids might be one of the best options teachers can offer them. Since processing a new language is an uneasy task, simplifying new input in a more visualized and attractive way can facilitate the learning of the second language. Islamoglu et al. (2015) summarized the benefits of using infographics as a promising learning tool. They stated that “some of the learning benefits associated with infographics include: (a) improved comprehension of information, ideas and concepts; (b) enhanced ability to think critically and develop organized ideas; and (c) improved retention and recall of information” (p. 35). They also suggested that 21st century teacher education should include infographics in the teachers' training programs. Schulten (2010) pointed out that using infographics would save students hours that they usually need to process tens of pages in their history or science books. Similarly, EFL teachers may save time they usually spend on teaching vocabulary that belongs to the same category or grammar items such as modals, tenses or prepositions. This is because infographics can provide both teachers and students with the necessary learning resources to master the target language. Teachers can creatively combine images, charts and links to video clips in one neat space.

In addition, there is a wide range of infographics that are available online for EFL teachers to use in their classrooms. Teachers can use these infographics to teach different language skills as well as content that is complex to understand by EFL learners. For example, in English for Academic Purposes (EAP) courses, EFL students need infographics to deal with technical terms and sophisticated content. There are also plenty of web 2.0 tools that can be used to create customized infographics. Besides teaching language skills, teachers can turn their course syllabus into an interactive infographic. Clark (2014) indicated that “While I don't suggest everyone should drop the idea of a traditional syllabus, nearly any course can benefit from a simplified visual overview that quickly gives students a sense of what will happen during the semester” (para.2). Students can better grasp the nature of the assignments and other important information stated in the syllabus when it is visualized using a simplified language.

As indicated in Islamoglu, Ay, Ilic, Mercimek, Donmez, Kuzu, and Odabasi (2015), it is obvious that using infographics in classrooms can lead to the enhancement of students' comprehension and memory retention. Vanichvasin (2013) conducted a research study on the effectiveness of using infographics as a communication tool with undergraduate business students. The results showed that the use of infographics has a positive impact on the quality of learning due to their potential to enhance students' comprehension and memory retention.

Based on the literature reviewed, it is evident that infographics can be a promising tool to help students in the Foundation Program in the Language Center at Sultan Qaboos

University to better comprehend and retrieve knowledge learned in language classes and to sufficiently interact with the learning materials.

## 2. STUDY

This study aimed to investigate whether infographics enhances comprehension and whether it increases students' memory retention in the EFL language class. An experiment using interactive infographics in a reading class was conducted.

### 2.1. Participants

The participants in this research study were 27 students from two sections (selected randomly) in FPEL 0560 commerce program and the reading teacher of each section. The students in 0560 program are the ones with the highest language proficiency levels in the Foundation Program at the Language Center of Sultan Qaboos University. The students in this level are prepared to score 5-5.5 on IELTS. The participating students were from the College of Economics and Political Sciences. The researcher selected this program because the reading textbook contains reading texts that deal with numeric information. The experimental group had 13 students and the control group had 14 students. The research was conducted in Spring 2015.

### 2.2. Research tools and data collection

The study used quantitative methods to collect data. The researcher used an interactive infographic based on a text titled "Sweet Business" from the students' reading textbook as the main teaching/learning tool. The whole text was converted into an infographic which was a visual representation of the text information. The teacher in the control group used the printed version of the text from the book, whereas the teacher in the experimental group used the infographic. The researcher used piktochart.com to design the infographic. In addition to the interactive infographic on the screen, students were given a hard copy of the infographic. Both groups were given a comprehension 15-minute quiz after both teachers explained the new vocabulary, discussed the text with the students and highlighted the main ideas. The quiz was administered to test students' comprehension of the text. After the quiz, students in both groups covered comprehension activities from the textbook. One week later, both groups took a retention quiz in the first 15 minutes of the class. The retention quiz was administered to test students' ability to retrieve the information learnt from the text.

### 2.3. Features of the infographic used

The infographic was interactive and the teacher in the experimental group could present it to the students on the screen using a presentation mode. It was clickable throughout so the teacher could show students pertinent photos and videos. According to the common types of infographics, this infographic was a timeline infographic that depicted the life of the founder of Lulu's Dessert Company and how she started and developed her sweet business. In the original reading text, the narrative was in the third person singular form, but in the infographic the whole narrative appeared in the first person singular through which the founder told the reader about her business story. The reading text was converted into chunks of paragraphs with subheadings and visuals.

## 2.4. Findings and discussion

The results of the comprehension and retention quizzes are displayed in the tables below.

Table 1 Results of the experimental group

Students' number	Comprehension quiz mean	Retention quiz mean
13	15,2	11,2

Table 2 Results of the control group

Students' number	Comprehension quiz mean	Retention quiz mean
14	12,9	3,8

It is obvious from Tables 1 and 2 that the participating students in the experimental group scored much higher than their peers in the control group. The mean of the comprehension quiz's marks in the experimental group was 15.2, while it was only 12.9 in the control group. Interestingly, there was a huge gap between the means of the retention quiz in both groups. It was 11.2 in the experimental group and only 3.8 in the control group. Out of 12, more than half of the experimental group got full marks and no one scored less than 10. On the contrary, the highest mark in the control group was 7 out of 12, which was 53% of the total score. In the control group, even those who scored relatively high marks in the comprehension quiz could not, after one week, recall the information learned. Another surprising finding was that a couple of students in the experimental group could remember precisely the same phrases from the infographic.

These findings coincided perfectly with what has been reviewed in the literature about the effectiveness of using infographics in enhancing students' comprehension and increasing memory retention. The students in the experimental group considerably outperformed their peers in the control group in both quizzes. This proves that the infographic helped the students achieve better understanding and facilitate good retention of what was learned through the visuals, videos as well as the layout of the infographic.

## 3. CONCLUSION

In conclusion, it is evident that infographics as a learning and teaching tool are worth trying in our EFL classrooms. In this study, the researcher replaced a whole reading text with an interactive infographic for the sake of getting relatively reliable data. This is due to the assumption that converting only a few parts of the text would reflect students' comprehension and retention of specific and limited types of information. However, infographics are preferably used with a particular section of reading texts and/or specific grammatical or vocabulary items that may be complex to understand and recall within a less visual context. According to the literature review, language teachers can use infographics not only for teaching the language, but also for designing their course syllabi and assignments, so they ensure a better level of understanding by EFL students. Teachers can find online a wide range of free infographics on ELT, especially on digital curation platforms, such as Pinterest and Scoop.it. Moreover, teachers can use free web 2.0 tools to create their own

infographics. Piktochart and Infogram are two well-known platforms for creating interactive infographics.

Since the researcher used one infographic with a small group of participants, it is recommended that further studies should be conducted with EFL learners to verify the results of this study and to further explore the potential of this fabulous teaching and learning tool.

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APPENDIX 1  
COMPREHENSION QUIZ

Academic Readings for CEPS

D. Complete the following notes from the text with no more than three words.

Sweet Business. The Company

- LuLu's real name: Maria 1) \_\_\_\_\_
- Year of starting business: 2) \_\_\_\_\_
- First prepared: 3) \_\_\_\_\_
- Difference in her products from other products: Hers were 4) \_\_\_\_\_

The Challenge

- Year started exports to Mexico: 5) \_\_\_\_\_
- Reasons for her difficulty:
  - didn't have experience in 6) \_\_\_\_\_
  - didn't know 7) \_\_\_\_\_
  - wasn't sure that the distributors were 8) \_\_\_\_\_ and 9) \_\_\_\_\_
  - didn't have the latest 10) \_\_\_\_\_ on Mexico
  - Name of the person who helped her in exporting: 11) \_\_\_\_\_

The Solution

- LuLu received from Tony:
  - 12) \_\_\_\_\_
  - 13) \_\_\_\_\_
- Her future goal: to export all over 14) \_\_\_\_\_ and 15) \_\_\_\_\_

Lessons learned and advice

- Don't run 16) \_\_\_\_\_
- Get the help of resources from 17) \_\_\_\_\_.
- Get the benefits of 18) \_\_\_\_\_ reports.
- Be careful about 19) \_\_\_\_\_.
- Use the resources of 20) \_\_\_\_\_.
- Do your 21) \_\_\_\_\_.

APPENDIX 2  
RETENTION QUIZ

Complete the summary below about Maria de Lourdes:

Maria was known as 1) \_\_\_\_\_ to her friends and customers. She started her sweet business in California in 2) \_\_\_\_\_ (Year). Her gelatin products were different than other gelatin products because they were 3) \_\_\_\_\_

Maria started exporting to 4) \_\_\_\_\_ in 1992. She opened offices and a 5) \_\_\_\_\_ center. She faced many difficulties at first because she did not have 6) \_\_\_\_\_ experience. The trade specialist, 7) \_\_\_\_\_ Michalski helped her realize her exporting goals.

Maria's lessons from the exporting experience were:

8) \_\_\_\_\_

9) \_\_\_\_\_

Currently, exporting accounts for 10) \_\_\_\_\_ % of the company's revenues.

Maria wants to expand her sweet business to 11) \_\_\_\_\_ and 12) \_\_\_\_\_

APPENDIX 3  
THE SWEET BUSINESS INFOGRAPHIC



Maria de Lourdes Sobrino, known as LuLu to her friends and customers

I began in 1982 in a 700 square-foot storefront in Torrance, California. I started with a milk crate for a chair and my mother's Mexican-style recipe for gelatin.

I began preparing tasty treats, and soon thereafter, I founded my own company, LuLu's Dessert.



*My gelatin*

was ready to eat from the time a customer bought it. This was a concept that big companies did not market for another 11 years.

Start



I began exporting to Mexico in 1992. I opened offices and a distribution center there!

**CHALLENGES** →

I often did not have export experience.

I did not know much about potential distributors that were qualified and legitimate.

I did not have the most updated market research reports on Mexico

Exporting





After reading an article about me in a local newspaper, trade specialist Tony Michalski decided to do something.

He contacted me and offered to help me realize my exporting goals.

Michalski provided export counseling and market research



The biggest lesson was not to try to run my company alone and make use of government resources available.



Be careful of buyers who don't pay letters of credits



Make use of the government market research reports



Be careful about trademark protection. In one European country, another company stole and used LuLu's trademark.

Lessons & future



Currently, exporting accounts for two to three percent of the company's total revenues. I want to expand my sales beyond Mexico into other parts of Latin America and worldwide.