

American University in Cairo

## AUC Knowledge Fountain

---

Theses and Dissertations

Student Research

---

6-1-2015

### An approach to evaluating the pedagogical value of concordances in Arabic foreign language classrooms: Perspectives from the users

Ola Hashad

Follow this and additional works at: <https://fount.aucegypt.edu/etds>

---

#### Recommended Citation

##### APA Citation

Hashad, O. (2015). *An approach to evaluating the pedagogical value of concordances in Arabic foreign language classrooms: Perspectives from the users* [Master's Thesis, the American University in Cairo].

AUC Knowledge Fountain.

<https://fount.aucegypt.edu/etds/83>

##### MLA Citation

Hashad, Ola. *An approach to evaluating the pedagogical value of concordances in Arabic foreign language classrooms: Perspectives from the users*. 2015. American University in Cairo, Master's Thesis. AUC Knowledge Fountain.

<https://fount.aucegypt.edu/etds/83>

This Master's Thesis is brought to you for free and open access by the Student Research at AUC Knowledge Fountain. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of AUC Knowledge Fountain. For more information, please contact [thesisadmin@aucegypt.edu](mailto:thesisadmin@aucegypt.edu).

The American University in Cairo  
School of Humanities and Social Sciences

**An approach to evaluating the pedagogical value of concordances in  
Arabic foreign language classrooms: Perspectives from the users**

A Thesis Submitted to

Department of Applied Linguistics

in partial fulfillment of the requirements for  
the degree of Master of Arts  
in Teaching Arabic as a Foreign Language by

**Ola Mohie El Din Hashad**

under the supervision of Dr. Dalal Aboelseoud

May 2015

The American University in Cairo

School of Humanities and Social Sciences

**An approach to evaluating the pedagogical value of concordances in Arabic  
foreign language classrooms: Perspectives from the users**

A Thesis Submitted by

Ola Mohie El Din Hashad

Submitted to the Department of Applied Linguistics

May 2015

In partial fulfillment of the requirements for  
The degree of Master of Arts  
in Teaching Arabic as a Foreign Language

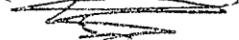
has been approved by

Dr. Dalal Aboelseoud Dalal Abo El Seoud  
Thesis Supervisor  
Affiliation: Department of Arabic Language Instruction  
Date May 21<sup>st</sup>, 2015

Dr. Ashraf Abdou Ashraf Abdou  
Thesis First Reader  
Affiliation: Department of Applied Linguistics  
Date May 21, 2015

Dr. Iman Soliman Iman Aziz Soliman  
Thesis Second Reader  
Affiliation: Department of Arabic Language Instruction  
Date 21st May 2015

Dr. Robert S. Williams Robert Williams  
Chair, Department of Applied Linguistics  
Date May 26, 2015

Dr. Nathaniel Bowditch   
Dean, School of Humanities and Social Sciences  
Date May 28, 2015

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

« وَقُلِ اعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ »

To my parents, my source of inspiration, motivation, and support.

My mother, you will always be my soul of enthusiasm and success.

My father, I dedicate all my work to you and I thank you for your constant  
guidance.

Karim, you are such a caring brother who always made me feel that the sky  
is my limit.

For every person who prayed for me and wished me good luck.

Thank you All

# Acknowledgement

I would like to express my deepest appreciation to all those who provided me with the opportunity to complete this thesis.

Foremost, I would like to express my sincere gratitude to Dr. Dalal Aboelseoud for her never-ending support, if it was not for her patience, motivation, enthusiasm, guidance, and immense knowledge, I wouldn't have been able to complete this research. I couldn't have imagined having a better advisor and mentor for my thesis.

Furthermore, I would also like to acknowledge with much respect the crucial role of Dr. Ashraf Abdou who was abundantly helpful and offered invaluable assistance, support and guidance in the area of corpus linguistics.

Last but not least, I am using this opportunity to express my sincere thanks to Dr. Iman Soliman who supported me throughout the course of writing this thesis. I highly appreciate her aspiring guidance, invaluable constructive criticism and friendly advice. I am absolutely grateful to her for sharing her truthful and illuminating views on a number of essential issues related to my thesis.

## **Abstract**

The use of electronic corpora in recent years has been widely spreading among language educators, yet they are still at their initial stages of exploring key issues relating to this approach. One way to integrate corpora in language courses is through concordances, which Baker, Hardie, and McEnery (2006) define as “a list of all the occurrences of a particular search term in a corpus, presented within the context in which they occur, usually a few words to the left and right of search term” (p.42). Despite opposing and supporting arguments on the adaptation, there is a lack of evaluative research examining sufficiency and compliancy of learning through corpus-based activities, especially from intermediate students’ perspectives.

In this respect, the study is divided into two parts. The first part is divided into two segments which on the one hand intends to introduce Arabic foreign language (AFL) learners to corpus analysis using arabiCorpus concordancer -this is expected to raise their awareness of how the language functions as well as enhance their spirit of inquiry- while on the other hand, the study also uses a quantitative-oriented approach to measure the effect of utilizing arabiCorpus concordancer on students’ usage and retention of Arabic discourse connectives (ADCs)in comparison to conventional learning techniques. In order to achieve successful results for this study, a repeated-measures design is utilized to collect numeric data using pre and post-writings analysis. The results of these analyses are given via a non-parametric Wilcoxon Signed Ranks Test. The second part of the study aims at inspecting AFL learners’ perceptions and attitudes toward learning through arabiCorpus concordancer, throughout a qualitative-oriented approach that uses two instruments, a focus group and a Likert scale questionnaire.

The results of the present study revealed that in a first instance both teaching techniques were successful, yet on another note the concordance surpassed the

conventional in both usage and retention, on the short term. Furthermore, on the long term the usage and retention of both conventional and concordance techniques were similar. It was observed that the concordance technique had slightly excelled at that point. Finally, participants' reported that they would continue to use arabiCorpus concordances, yet under certain restrictions.

## Table of Contents

Chapter 1.....	1
Introduction.....	1
1.1 Rationale of the study and statement of the problem .....	3
1.2 Web Based Instruction (WBI) for both students and teachers .....	4
1.3 Research questions .....	6
1.4 Definition of terms.....	7
1.5 Abbreviations used in the study.....	9
Chapter 2.....	10
Literature Review.....	10
2.1 What is a concordance?.....	10
2.2 Corpora and language teaching .....	13
2.3 Corpora and language acquisition .....	17
2.4 The importance of corpora in foreign language classrooms.....	19
2.5 An overview on Arabic writing and discourse connectives .....	21
Chapter 3.....	24
Methodology .....	24
3.1 Multiple case study .....	24
3.2 Mixed methods design.....	25
3.3 Study design .....	27
3.4 Participants .....	30
3.5 Instruments .....	34
Chapter 4.....	37
Data Collection.....	37
4.1 Quantitative data collection procedure.....	37
4.2 An overview on Al-Masry Alyoum concordance .....	40
4.3 Qualitative data collection procedure.....	42



Chapter 5.....	44
Findings and data analysis.....	44
5.1 Introduction.....	44
5.1.1 Analysis of the quantitative part of the study.....	45
5.1.2 Analysis of the qualitative part of the study.....	46
5.2 Findings and data analysis of each participant.....	47
5.3 interpretation of analysis.....	86
5.4 Conclusion.....	97
5.5 Recommendations.....	99
5.6 Limitations.....	100
5.7 Delimitations.....	101
References.....	103
Appendix I.....	113
Appendix II.....	114
Appendix III.....	115
Appendix IV.....	117
Appendix V.....	131
Appendix VI.....	136
Appendix VII.....	137
Appendix VIII.....	140

# Chapter 1

## Introduction

In this chapter, a general overview of corpus linguistics is provided. The chapter answers questions such as, what is corpus linguistics, how can we use it for pedagogical purposes and how can we implement it in a language course? Other questions also arise of which, how do educators view corpus linguistics and concordances, what are the benefits of corpora in language classrooms and what are the students' attitudes toward web-based instruction (WBI)? The answers of these questions will provide a solid starting point for this study.

The advent of computer technologies in recent years has instituted substantial changes to the study of language. The possibility of saving language data on computers and acquiring access to them through a certain software or a website has led to the founding of what we believe to be the emergence of modern corpus linguistics (Breyer, 2009; Bennett, 2010).

Over the past years the research community has treasured what corpus linguistics has to offer to language pedagogy, and even though it is a relatively new specialization, many scholars and practitioners regard it as an indispensable tool in their daily work. Sinclair (1991) states that “more and more people in every branch of information science are coming to realize that a corpus as a sample of the living language, accessed by sophisticated computers, opens new horizons” (p.14).

In recent years, corpus linguistics has received growing attention and recognition, especially in acquiring linguistic rules. According to McEnery (2001) corpus linguistics is “the study of language based on examples of ‘real life’ language use” (p.1). It offers

compilations of data that provide illustrative insights relevant to how people employ the language in their life. In other words, and according to Bennett (2010) corpus linguistics “looks to see what particular patterns are associated with lexical or grammatical features” (p.2) to create an understanding of how the target language functions utilizing real life examples. Hence, it could be used as a tool that enables students and teachers to analyze various speaking and writing forms in various contexts.

However, in spite of its usefulness and continuous growth in the past two or three decades, researchers have always and still are hesitant to affirm that corpus linguistics has succeeded in placing it on today’s pedagogical landscape. Mukherjee, remarks that “in reality, the influence of applied corpus linguistic research on the actual practice of language is still relatively limited” (as cited in Breyer, 2009, p. 239). Furthermore, and despite the spreading use of electronic corpora in language classrooms, educators remain at their initial stages of exploring key issues relating to this approach due to a number of reasons. “One of the generally acknowledged reasons why corpora has not caught on is that the majority of corpus resources are neither pedagogical or user friendly” as reported by Frankenberg-Garcia (2012, p.476).

The implementation of corpora in language courses could be achieved using a number of techniques, yet there is one powerful way to integrate them in classrooms through concordances. As per Johns, Leech and Candlin, as well as Johns and King, and finally Hanson-Smith, corpora and concordances have been regularly described as one of the most promising ideas in computer-assisted language learning (CALL) and Johns was among the first to suggest putting corpora and concordances into the hands of foreign language (FL) learners (as cited in Cobb, 1997).

## *1.1 Rationale of the study and statement of the problem*

There is no doubt that a lot of studies provide excellent ideas on how concordances could be implemented in foreign language (FL) classrooms in order to reduce language ambiguity (Johns & King, Tribble & Jones, Aston, Sinclair, Bennet, and Reppen, as cited in Frankenberg-Garcia, 2012).

These studies explain how to employ concordances in a language course while others clarify what language features should be investigated using this tool. Additional studies focus on frequency tables and their importance in learning various linguistic patterns, while a number of others studies offer different types of corpora and concordances activities (Ebeling, 2009; Flowerdew, 1996; Tomlinson, 2011; and O’Keeffe, McCarthy, and Carter). In the latter studies, a wide range of corpus-driven exercises were suggested to be executed in an interactive learning environment with language students.

Despite these efforts, a very few number of studies pursued further evaluation of the effectiveness of this teaching/learning tool in order to verify whether its overall performance is sufficient and satisfactory or not. The effectiveness of general data-driven learning (DDL) and concordances specifically has been indicated in studies on the teaching and learning of grammar, vocabulary, writing, and CALL activities by Boulton, Cobb, Cresswell, Granath, Johns, Hsingchin, & Lixun, and Yoon (as cited in Römer, 2011).

Even fewer studies were conducted to evaluate concordances empirically from students’ perspectives, such as Kennedy and Miceli (2001), Sripicharn (2003), Chambers (2005), and Farr (2008).

Regardless of the arguments supporting and those opposing the adaptation of corpus linguistics in language classrooms, there is a lack of evaluative research

examining sufficiency and adaptability of using corpus-based activities in an educational setting, especially from Arabic intermediate students' point of view. As a result, the current study attempts to 1) measures the effectiveness of concordances in learning, using, and retaining Arabic discourse connectives (ADCs) in contrast to learning them conventionally as well as 2) reveal students' perceptions and attitudes toward learning through concordances.

## *1.2 Web Based Instruction (WBI) for both students and teachers*

It is important in the beginning to determine students' general attitudes toward web-based instruction (WBI) before trying to assess their attitudes toward concordances. It should be taken into consideration that, positive or negative learner expectations toward WBI significantly affect learning outcomes (Sanders & Morrison-Shetlar, 2001; Alomyan & Au, 2004). Studies such as, Erdogan (2005), Bayram, & Deniz, (2008); and Federico (2002) examined the impact of WBI on students' attitudes (as cited in Erdogan, 2008). These studies propose that using the web has positive effects mainly on students' motivation and enjoyment while learning.

Using WBI can be very helpful in creating independent comfortable learning environments. According to Mathew and Dohery-Poirier (2000) utilizing WBI has a number of benefits for both students and teachers. For students, it allows a learning pace that is more comfortable for everyone, as some students work faster than their peers while others may need more time. It also permits students to manipulate the materials at any time and for as long as they wish. In addition to that, WBI offers a sustained virtual teacher for students, which means that, they have a permanent access to the material, curricula and their work whether they are in or outside their classrooms. It is worth

highlighting as Erdogan (2008) proclaims that, "more individualized teaching takes place in the virtual environment where learner involvement is a fundamental element" (p. 32). As a result, it is to be concluded that, learning through WBI not only provides a suitable learning pace for everyone, but it also enhances students' autonomous learning to a great extent.

For teachers on the other hand, the majority of material is delivered via the web, which means that the instructor is free to spend more time working with students individually and small groups instead of wasting time on whole-class teaching. It is also worth highlighting that materials are securely saved, allowing for quick and easy access/revision. This method also ensures a reduction in paper flow required in conventional instructional, guaranteeing the availability of materials to students at any point.

Even though in WBI "it is a fact that students' interests and needs vary greatly when compared with the conventional learning approaches" (Glenn, as cited in Erdogan, 2008, p. 42) yet, many surveys have concluded that WBI could be equally effective as the conventional instruction (Buchanan; Tucker; Partrich; Gordon, as cited in Erdogan, 2008). One way to integrate WBI in a language course is through concordances.

Although there are many concordances available in the Arabic language, such as, Skitch engine, QAMUS, aConCorde, and The Alexandria Library Concordance, the researcher chose to conduct this study using arabiCorpus concordancer. To the researcher's knowledge, it is popular among Arabic teachers, and easy to navigate. As stated by the website:

ArabiCorpus is a free, untagged, 30-million-word corpus with a user-friendly interface. Maintained by Dil Parkinson, professor of Arabic, this corpus allows users to find larger

structures and grammatical patterns through frequency analysis, regular expression searching, and other advanced interface features.

The current study focuses on learning Arabic discourse connectives (ADCs) using arabiCorpus concordancer. It aims at revealing whether the results of the concordance teaching technique will surpass the results of the conventional teaching technique in students' usage and retention of ADCs or the other way around.

The researcher chose ADCs and not any other linguistic item because, as stated by El-Kashaawy (2009) learning how to write is a fundamental language skill that Arabic foreign language (AFL) learners use to express their ideas, opinions, and beliefs. However, no matter how well they perform in other language skills, they continue to report constant difficulties when practicing writing. One way to improve writing in Arabic is through mastering (ADCs), which act as punctuation marks in other languages.

### *1.3 Research questions*

The research questions which will be addressed in this study are:

- How will arabiCorpus concordancer affect Arabic foreign learners':
  - a) usage and b) retention of Arabic discourse connectives?
- What are the students' perceptions and attitudes toward learning through arabiCorpus concordancer?

The independent variable is arabiCorpus concordancer while the dependent variables are Arabic discourse connectives usage and retention.

## *1.4 Definition of terms*

Below is a list of all the terms used in this study with their definitions:

**Collocation:** “The tendency of certain words to co-occur regularly in a language.”

(Baker, 1992)

**Computer assisted language learning:** "The search for and study of applications of the computer in language teaching and learning". (Levy, 1997)

**Concordances:** “A collection of the occurrences of a word-form, each in its own textual environment. It is an index. Each word- form is indexed and a reference is given to the place of each occurrence in a text.” (Sinclair, 1991)

**Corpus-based approach:** “An empirical approach to describe language use, assuming a contextual and functional theory of meaning while making use of the new technologies. It aims to derive linguistic categories systematically from the recurrent patterns and the frequency distributions that emerge from language in context.” (Tognini-Bonelli, 2001)

**Corpus linguistics:** “The study of language based on examples of ‘real life’ language use” (McEnery, 2001)

**Data-driven learning:** “An application of computers to language learning that has come to be known as ‘classroom concordancing’ or ‘data-driven learning’ (DDL) – the use in the classroom of computer generated concordances to get students to explore the regularities of patterning in the target language, and the development of activities and exercises based on concordance output.” (Johns & King, 1991)

**Data-driven learning approach:** “Giving students large quantities of language data and the tools to examine it. Students can then build their own explanations of how language works.” (Warschauer& Healey, 1998)



**Discourse connectives:** “Lexical expressions that relate to text segments that express abstract entities such as events, belief, facts, or propositions. These text segments are called the arguments of the discourse connective.” (Prasad et al. 2008a as cited in Al-Saif & Markert, 2010)

**Key word in context:** “Keywords arranged one below the other down the center of the page, with a fixed number of characters of context to the left and to the right.” (Johns, 1991)

**The Leeds Arabic Discourse Treebank:** “A news corpus where all discourse connectives are identified and annotated with the discourse relations they convey.” (Saif&Markert, 2010)

**Sequential mixed methods:** “Procedures in which researcher seeks to elaborate on or expand on the findings of one method with another method.” (Creswell, 2009)

**Web-based instruction:** “It is the usage of the internet to access learning materials, to interact with content, instructors and other learners.” (Khan, 2000)

### *1.5 Abbreviations used in the study*

Below is a list of all the abbreviations used in this study:

CALL	Computer assisted language learning
DDL	Data-driven learning
ADC	Arabic discourse connectives
AFL	Arabic foreign learners
FL	Foreign language
KWIC	Key Word In Context
LADTB	Leeds Arabic Discourse Treebank
WBI	Web-based Instruction

# Chapter 2

## Literature Review

### *2.1 What is a concordance?*

In order to begin this research a well-defined definition of concordances should be provided in order to build upon this study. A concordance is an analytical language tool that presents linguistic items surrounded by the context in which they occur. In other words, they are alphabetical records of all language items (words, verbs, prepositions, phrases, and some other more complex entities) in a text or corpus of texts, exposing every possible contextual occurrence of them. Sinclair (1991) defines it as “a collection of the occurrences of a word-form, each in its own textual environment. In its simplest form, it is an index. Each word is indexed, and a reference is given to the place of each occurrence in a text” (p.32) whereas, O’Keeffe, McCarthy, and Carter (2007) defines it as “a core tool in corpus linguistics and it simply means using corpus software to find every occurrence of a particular word or phrase” (p.8).

One of the most common formats of concordances is Key Word In Context (KWIC) which was defined by Baker, Hardie, & McEnery (2006) as “a list of all the occurrences of a particular search term in a corpus, presented within the context in which they occur, usually a few words to the left and right of search term” (p.42). (See figure 1)



Figure 1  
KWIC concordance format

اقتصاد المنزل وكأنها طبقت حرفيا كبرى نظريات الاقتصاد العالمية. أشناق	أيضا	لغضبها كان جامعا بين العقوفان والرقعة. أتذكرها كلما ترتت على
كله ملكا خالصا للناس وصناديق الانتخاب.. ولكنني لا بد أن أشكر	أيضا	خالد مرتجي الذي لم يكن في ذلك الاجتماع يقود الجيل
لن أدافع عن حسن شحاتة ولن أشنقه	أيضا..	وإن أطالب الناس في بلدى بكل هذا القدر من التسامح
زكى انضم إلى هال سيثي الأسبوع الماضي لمدة 6 أشهر	أيضا	على سبيل الإعارة مقابل 500 ألف جنيه إسترليني.
في معسكر تأهيل خلال تسعينيات القرن الماضي، ووضع ليضعة أشهر	أيضا	رهن الإقامة الجبرية الفعلية في منزله.
إلا أن السويدي لم يتوقف وأضاف «لقد قال عنى أشياء	أيضا	عندما كنت في برشلونة».
توزيع ترواته وأيضا تدخل أيدي في إدارته. وأحب أن أشير	أيضا	إلى التجربة الصينية التي أعتبرها جدا فللمصين حكومة نكية
للنظمت مع مرض الملك عبدالله بن عبدالعزيز، وبسبب ما أشيع	أيضا	عن مرض ولي العهد الأمير سلطان بن عبدالعزيز، وبعد ترتيب
عن مشاركتنا شرب أى شىء لأنه صائم! يا الله أصائم	أيضا	يا عم زكى؟ ما شاء الله أى تناقض جديد تصيفه
وحين حاول ولدى الأكبر متعهم من سرقة بعض الأغراض أصابوه	أيضا.	وقد حررنا محضرا بالواقعة بقسم الشرطة».
الكثير من الشباب في ظل انتشار البطالة، إلا أنها أصبحت	أيضا	سببا في تغير سلوكيات الفرد والأسرة، ومن ثم المجتمع الأوسع
لمواطن هؤلاء، وهذه التماثيل غالية عندي لأنها تذكرني بقلسفة أصحابها،	أيضا	من أقرب مقتنياتى لقلبي سيمفونيات بيتهوفن الذى أعتبره عبقريته موسيقية
الإسلامية، ولم تقتصر إصدارات المركز على الدراسات والسير حيث أصدر	أيضا	عددا من الدواوين الشعرية جميعها مترجم.

Adapted from arabiCorpus website

Johns (1988), a strong advocate of using concordances, claims that “the concordance is... one of the most powerful tools that we can offer the language learner” (p.15).

According to Johns & King (1991) and Granger & Tribble (1998), concordances can be used to examine language in a variety of ways. They provide learners with the opportunity to observe a certain linguistic item in different contexts where they can find out how it is used, and how it collocates with other items. By doing so, students are allowed to acquire a deeper understanding of meaning and usage than can be obtained from an ordinary dictionary as all language items appear within context and not by themselves.

In more recent studies, such as, Gabrieltos, 2005 and Nesselhauf, 2004, other advantages had been detected concerning this matter (as cited in Gilquin and Granger, 2010). Gabrieltos (2005) argues that, corpora in general and concordances in specific “bring authenticity into classrooms” (p.10). The act of providing numerous number of authentic examples for each linguistic item contributes in enlarging students’ vocabulary as well as intensifying students’ awareness of various language patterns. Nesselhauf

(2004) on the other hand, points out that corpora can be used on the level of revising and correcting. Students can use it to their advantage as it provides authentic examples offered by the corpora to revise their choices of patterns and structures. This will allow them to acquire and formulate phrases and sentences that are used in real life communication.

Corpora and concordances aim at boosting the learning environment, meet individual learning requirements, enrich learning experiences, and diminish the conventional role of the teacher by overcoming the restrictions of traditional instruction for students. It is worth highlighting that according to Kasapoglu-Akyol (2010) corpora and concordances are also of benefit to teachers, as they provide innovative points of view for more effective language learning environment (as cited in Celik, 2011).

Of the many uses of concordances, this study focuses on classroom activities which consist of hands-on student-conducted language analysis.

## *2.2 Corpora and language teaching*

The idea that forms the backbone of corpus linguistics was established by Sinclair (1991), who is considered the most influential scholar of modern corpus. He claims that, a word in and of itself does not carry meaning, but its interpretation is often made through several words in a sequence. In other words, the purpose, function, or meaning of any language item is clearer when presented in context rather than by itself. Accordingly a corpus of texts would facilitate the understanding of any language, especially since it deals with natural, authentic language patterns. Tognini-Bonelli (2000), defines a corpus as “a collection of texts assumed to be representative of a given language put together so that it can be used for linguistic analysis” (p. 2). From this respect, scholars such as, Burnard and McEnery (2000), Connor and Upton (2004), Botley, McEnery and Wilson (2000), Granger, Hung, and Tyson (2002), Mukherjee and Rohrbach (2006) and

O’Keeffe, McCarthy, and Carter (2007) to name a few followed Sinclair’s footprints and made substantial contributions to the development of corpora (as cited in Aijmer, 2009). Burnard and McEnery (2000) as well as Connor and Upton (2004) provided comprehensive edited volumes on the use of corpora in language teaching and learning. Botley, McEnery and Wilson (2000) focused on the use of multilingual corpora in teaching and research. Granger, Hung, and Tyson (2002) addressed the link between computer learner corpora, second language acquisition and foreign language teaching. Mukherjee and Rohrbach (2006), O’Keeffe, McCarthy, and Carter (2007) dealt with the use of native and learner corpora in the classroom and the necessary mediation between research findings in corpus linguistics and classroom pedagogy.

Over the past few years, corpora have been used not only in linguistic research, but also in the teaching and learning of languages. A use that “the compilers of corpora may not have foreseen” as stated by Johansson (2007, p.17). Currently, there is a wide range of corpus-based references accessible to both learners and teachers and a number of devoted practitioners such as, Johns & King, 1991; Tribble & Jones 1997; Aston 2001; Sinclair, 2004; Bennet, 2010; and Reppen, 2010 have made concrete suggestions on how this corpora could be used in language teaching, thus exceptionally improving the quality and value of the learning process (as cited in Frankenberg-Garcia, 2012).

A key pedagogical approach for using corpora in language teaching is data-driven learning (DDL) which Johns and King (1991) define as “the use in the classroom of computer generated concordances to get students to explore the regularities of patterning in the target language, and the development of activities and exercises based on concordance output” (p.iii). They stress that the DDL approach is distinct since the student is able to work directly with the data, eliminating the mediating influences that may impact the meaning. This direct access allows students to take part in building up their

own profiles of meaning and uses. Consequently, using such an approach while teaching will lessen the teachers' role and widen the students' contribution in their own learning process, which will result in an independent self-sufficient learning environment. Johns (1991) argues that the direct use of corpora in classrooms involve "a shift in the traditional division of roles between student and teacher". The teacher "has to learn to become a director and coordinator of student-initiated research" which is a change he concedes "can be difficult for teachers to come to terms with" (p. 14,3,3).

In an attempt to overcome the limited availability of ready-made corpus teaching materials, as well as to encourage teachers to use corpora, many researchers have developed the idea of how to use corpora in language teaching and contributed various teaching materials based on the DDL approach. They provided the language community with creative ideas and guidelines for ways to use corpus information in language classrooms (Johns 1988, 2002; Stevens 1991; Wichmann 1995; Fox 1998; Kettemann 1995; Tribble and Jones 1990, 1997; Flowerdew 1993, 1996; Gavioli 1996; Wichmann et al. 1997; Tribble 2000, 2003; and Aston 2001 as cited in O'Keeffe, McCarthy, and Carter, 2007). It is worth mentioning at this point that, "the teacher needs to possess a degree of `corpus literacy` in order to teach with these materials and integrate them meaningfully into the classroom" as reported by Breyer (2009, p.156). The teacher should have the ability to employ compilations of corpora in convenient classroom activities and exercises. This should take place within the parameter of the students' language proficiency in order not to frustrate them. In addition to that, the teacher should be well aware of all technical and linguistic maneuvers of the chosen concordance, otherwise he/she will not be able to assist students when needed. According to Frankenberg-Garcia (2012) this means that, raising teachers' awareness of corpora nowadays has become a



necessity as “non-experts cannot be expected to understand the full significance of this without being explicitly taught how to do it” (p.478).

As some studies suggested ways to integrate corpora in language curricula, other studies such as those of Aijmer (2009) worked on revealing the strong relation between corpora and successful language teaching. She was able to emphasize on that relation by showing how the different perspectives of teachers and applied linguists can be reconciled while using concordances.

From another standpoint, it is important to note that the idea of using corpora in language teaching was not always welcomed in the educational field. Some linguists such as Chomsky (2004) stood against the corpus-linguistic approach as a whole - not just the use of concordances- criticizing it by stating “my judgment, if you like, is that we learn more about language by following the standard method of the sciences. The standard method of the sciences is not to accumulate huge masses of unanalyzed data and to try to draw some generalization from them” (p.5). Other practitioners such as Carter (2004) who also follows the Chomskyan School claims that in using corpora to teach language, one cannot describe a certain linguistic item through compilations of data, even if it is authentic, because this approach is working at the sentence level only. Moreover, he claims that this approach is not useful to extrapolate a theory of language nor does it focus on the analysis of meaning. O’Keeffe, McCarthy, and Carter (2007) similarly vote against the use of corpora in language classrooms. They criticize contextualized authentic examples provided by the concordances as they argue that “the language has been wrenched from its original context, and so, in one sense, is decontextualised” (p.26). This opinion supports the idea that once texts are removed from the context they first appeared in, then stored in electronic concordances in a form of chopped sentences, and reproduced in teaching; they are effectively removed from their original authentic environment. This

means that the learner will not understand these examples with reference to their original meaning, instead a different context may be predicted or hypothesized by the student, which raises the question of whether these examples are truly authentic and contextualized or not.

Despite several opposing and supporting studies on the adaptation of corpora, its use in teaching has been steadily growing, and publications of some researchers have slowly gained ground among language teaching professionals. Yet, regardless of that, and to the researcher's knowledge, no studies were found on the use of corpora and concordances in Arabic language. It still seems that more research and in depth studies have to be made before corpora can be integrated and used by Arabic language teachers in their classrooms.

### *2.3 Corpora and language acquisition*

One of the key elements of using a corpus-based approach in foreign language classrooms is trying to understand the mechanisms of the new language. Corpora helps in doing that while establishing an experimental self-discovering and analyzing classroom environment.

It is argued by Granger (2002) that, usually the acquisition of foreign language (FL) tends to be constructed on a relatively narrow experiential base as students do not learn through experience. They most likely learn conventionally, which raises questions about the authenticity and generalizability of their acquired language. Concordances on the other hand, allow students to reflect on their learning because they equip learners with means to observe and investigate language in authentic contexts. This exposure guarantees authenticity and generalizability of the language being learned. In light of such benefits, Reppen (2010) states that, learning through corpora will result in a well prepared

student who can communicate confidently when stepping outside the classroom and into the real world of language use.

It is worth mentioning that, researchers such as Breyer (2009) argues that computerized concordance can also help resolve language conflicts if used wisely with the appropriate academic levels. Although Granath (2009) states that “advanced students definitely benefit from working with corpora” (p.59). They might be of limited interest to beginners due to the fact that the lexical information will seem vast and confusing, since in concordance, words are being presented in rich contexts and many of these words are in themselves unknown to a novice learner; this may have a negative impact on the whole process of acquisition because it may become frustrating more than helpful. As argued by Mark (1998) “it goes against common sense to base instruction on limited learner data and to ignore, in all aspects of pedagogy from task to curriculum level, knowledge of learner language” (p.84).

Using corpora generally and concordance specifically in language classrooms can be stimulating and motivating to students as well as teachers if used correctly. For teachers, corpora can provide contextualized ready-made examples that can answer confusing lexical questions which sometimes arise as a result of students’ misconceptions or confusions. Moreover, it was reported by Johns (1988), that for learners corpora can develop an ability to "learn how to learn" by allowing students to adopt the role of an explorer (as cited in Johns, 1991).

As the argument continues to exist among language professionals around the effectiveness of corpora in language acquisition, the compilation and analysis of corpora continue to develop year after year and more teachers are introducing and using corpora in their language classrooms recently.

## *2.4 The importance of corpora in foreign language classrooms*

The use of corpora and concordance in language classrooms is essential for both students and teacher as reported by Breyer (2009). He stresses that it facilitates the teaching/learning process to a great extent as they work on raising students' awareness of how the language functions by giving them access to a native-speaker consultant who would be at their service all the time to provide authentic language patterns. However, he admits that "despite undiminished enthusiasm in the research community, the application of corpus tools and resources in the classroom remains limited" (p.1). He asserts that the role of teachers in the process of integrating corpora in language courses is a very important step towards popularizing that approach. Breyer also believes that it is quite essential for future language teachers to get exposed to corpora and concordances as early as possible in order to use them as part of their initial teaching in different classroom activities.

Advantages of corpora in language classrooms have been formulated by scholars of which Sinclair (1997) who argues that for the learner, "corpora will clarify, give priorities, reduce exceptions, and liberate the creative spirit" which can empower learners to find out things for themselves (p.38). From another standpoint, Granath, Hunston and Römer proclaim that corpora is an invaluable tool for teachers, in that they can employ it in a number of ways, such as, creating exercises, demonstrating variation in grammar, showing how syntactic structures are used to signal differences in meaning and level of style, discussing near-synonyms and collocations, and last but not least to give informed answers to students' questions (as cited in Römer, 2011). Nesselhauf also points out that, it could work as a tool for revising and correcting (as cited in Gilquin and Granger, 2010). Students can compare their own writings with the examples provided by the corpora to edit any possible misuse, overuse, or under use of whichever patterns or structures they

chose to employ. By doing so students will have a native consultant to improve their understanding toward the target language any time of day.

Irrespective of the continuous contributions of corpora in teaching and learning, one should not dismiss the fact that concordances are still not used as expected in today's language classrooms. As brought forth by Granath (2009) only a small minority of all language students in universities are given the opportunity to try out this educational tool.

## *2.5 An overview on Arabic writing and discourse connectives*

Out of the four language skills (reading, writing, speaking, and listening) the teaching and learning of writing have always been the most complex and difficult aspect in language development. This is not only true when writing in the first language, but also in a second or foreign language (Dulger, 2007).

Like any native speaker in any language, Arab natives fully understand the rules and regulations that govern their language phonology, morphology, syntax, and semantics. To them the Arabic linguistic system is pretty clear. Yet, on the other hand, non-native speakers face a hard time understanding and using this system, due to the rich nature of its morphology.

In contrast to many languages, Arabic is famous for its lengthy detailed sentences. Chaalal (2010) asserts that Arabic favors the use of “regrouped and large grammatical chunks” over the use of short sentences in the construction of writing (p.32). In order to compose such long sentences correctly, Arabic foreign learners (AFL) are obliged to master as many discourse connectives as they can to avoid ambiguous and incoherent end products, as Arabic relies heavily on connectives to fulfill coherence and cohesion of texts. According to O’Keeffe, McCarthy, and Carter (2007) discourse connectives are “words or phrases outside of the clause structure, that function to link segments of the discourse to one another in ways which reflect choices of monitoring, organization, and management exercised by the speaker” (p.172).

It was observed by Anis (1975) that Arabic is the language of connectives. It has many articles that do not exist in any other language, which makes it even harder for AFL learners to acquire a decent number of connectives to help them produce meaningful coherent writings. This justifies why students encounter difficulty in expressing

themselves in a logically connected piece of writing. For that reason, the researcher chose to conduct the study on ADCs and not any other language aspect.

This study attempts to reveal which teaching technique will surpass the other in students' usage and retention of ADCs, the conventional teaching or teaching through arabiCorpus concordancer. According to Stevens retaining and retrieving words from the memory is more successful "when cued by concordance lines in spite of their chopped-off nature" (as cited in Cobb, 1997, p.302). Although this idea is mentioned, this exploratory study was not conducted on any hypothesis, hence the research's arguments are based on testing both teaching techniques to find out which one is more effective than the other.





# Chapter 3

## Methodology

According to Mackey and Gass (2005) “case studies clearly have the potential for rich contextualization that can shed light on the complexities of the second language learning process” as a result, a multiple case study methodology is employed in this research (p. 172).

### *3.1 Multiple case study*

Hartley (1994) defines a case study as “a detailed investigation, often with data collected over a period of time, of one or more organizations, or groups within organizations, with a view to providing an analysis of the context and processes involved in the phenomenon under study” (p.208). In multiple case studies this procedure is repeated to include each participant in the selected sample. Multiple cases enable the researcher to explore differences within and between individuals. As reported by Powell (1997) case studies typically involve “intense analyses of a small number of subjects rather than gathering data from a large sample or population” (p.80). The aim over here is to build a general explanatory model that fits each of the cases in the study, even though the cases vary in detail. Tellis (1997) argues that, a multiple case study is outlined “to bring out the details from the viewpoint of the participants by using multiple sources of data” which makes the population deeply involved and responsible for the end results (p.1). In addition to that, multiple cases allow the researcher to explore the phenomena under study through the use of a replication strategy. Yin states that, “the goal is to replicate findings across cases, because comparisons will be drawn” at the end of the

analysis phase (as cited in Baxter, 2008, p.548). According to this model, if all or most of the cases provide similar results, there can be substantial support for the development of a preliminary theory that describes the phenomena (Eisenhardt, 1989). Overall, the evidence revealed from this type of study is considered solid and reliable, but it can also be extremely time consuming mentions Baxter (2008) as the researcher studies cases in depth, individually as well as in a comparative mode in order to locate similarities and differences.

### *3.2 Mixed methods design*

Within this multiple case study methodology, a mixed method approach is applied to data collection. Creswell defines it as follows, “a mixed methods research design at its simplest level involves mixing both qualitative and quantitative methods of data collection and analysis in a single study” (as cited in Onwuegbuzie, 2007, p.165). In other words, it is the procedure of collecting, analyzing, and mixing both quantitative and qualitative data at some stage of the research process, to understand the research problem more clearly.

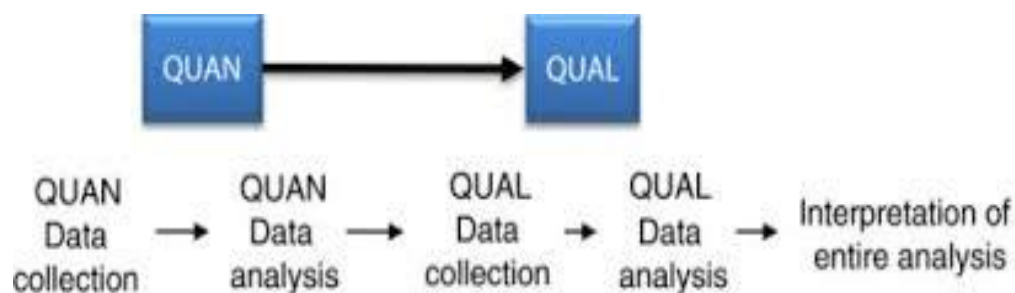
The reason behind mixing is that neither quantitative nor qualitative methods will be sufficient by themselves in the existing study. Mixing qualitative and quantitative data will allow the creation of one large database where results can be used side by side to reinforce each other. This method is needed in such research due to its limited number of participants (five AFL learners). The quantitative data will be used to measure participants’ usage and retention of ADCs and the qualitative data will be used to evaluate this usage and retention from the participants’ perspective. In the end, both methods will complement each other to lead to more credible final results rather than using one method by itself.

In a mixed methods approach, researchers choose variables and units of analysis, which are most appropriate for finding an answer to their research questions. Creswell (2009) states that both numerical and text data, collected sequentially or concurrently, can help better understand the research problem. In this study numerical data is collected through writing analysis results and text data is collected through focus group and questionnaire results.

### 3.3 Study design

This study uses a sequential exploratory design which is one of the most popular strategies in the mixed methods approach in educational research. It consists of two distinct phases as stated by Creswell (2009). First, the collection and analysis of the quantitative data takes place, then the collection and analysis of the qualitative data follows. The results of the second phase is used to build and reflect on the results of the initial phase. (See figure 2)

Figure 2  
Sequential Design



Adapted from Creswell (2009)

The sequential exploratory mixed methods design can be very useful “when unexpected results arise from the quantitative data collection” (Morse, as cited in Creswell, 2009) When that happens, the qualitative data can be used to examine and reflect on these discovered results in a more detailed manner.

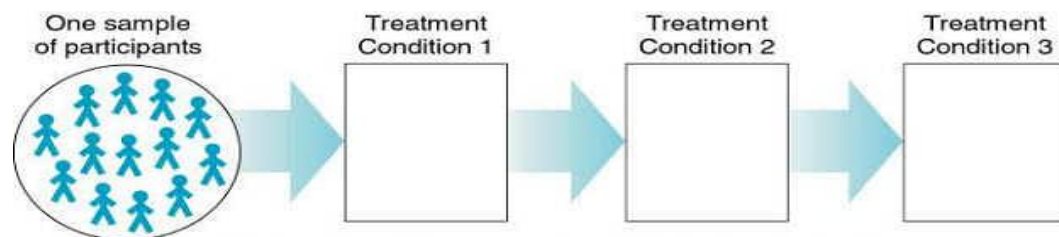
One of the main strengths of this design is its straight forward nature. It is easy to implement because the steps fall into clear and separate stages (Creswell, 2009) which makes it easier to trace and report data and findings.

In phase one, a quantitative-oriented approach is used to measure the effect of using arabiCorpus concordancer on the learning of ADCs in comparison to learning them

conventionally. For that, a repeated-measures design (see figure 3) is used to collect numeric data using pre and post-writings. The goal of the pre-writing data is to establish an understanding about what ADCs are being used in the sample's writings and how diverse they are prior to the treatment. On the other hand, the goal of the repeated post-writings, whether immediate or delayed, is to inspect the percentage of usage and retention of ADCs after learning them using both techniques to see which teaching one is more effective on the short and long term. The reason behind choosing this design is that, it gives multiple measurements from each participant which makes the final analysis more credible and reliable compared to collecting a singular measurement, especially that the number of participants is relatively small.

Figure 3

Repeated Measures Design



Adapted from Google images

It is worth highlighting that, the writing analyses of this section were done using Wilcoxon Signed Ranks Test which is a non-parametric statistical test that is equivalent to a t-test.

In phase two, a qualitative-oriented approach is used to assess the performance of the five chosen AFL learners in handling concordance-based tasks in addition to detecting

their perceptions toward the use of this tool. The two instruments that are used to inspect participants' reactions toward learning ADCs via arabiCorpus concordancer are:

1) A focus group that brings all participants together to discuss and reflect on the whole learning experience (See Appendix VI)

2) A questionnaire that contains six different sections. (See Appendix VIII)

The first four sections contain closed-ended questions and the rest contain open-ended questions. The questions varied to cover students':

- 1) enjoyment and choice
- 2) benefits
- 3) technical difficulties
- 4) linguistic and conceptual difficulties
- 5) views, opinions, and perceptions
- 6) future learning

One should not disregard that the researcher avoided using close-ended questions only, because this would force the sample to give answers that only fit in the researcher's box of options. Such a short cut could be a contradiction with the aim of this study, which is to provide participants with the opportunity to share their beliefs toward the use of concordances as a pedagogical tool in learning Arabic as a FL.

It is worth mentioning that, the analyses of this section were done using the focus group comments, as well as the results of a Likert scale questionnaire. The Likert scale is one of the most widely used itemized scales in the research community. It is easy to construct and administer. In addition to that, it is clear and enables the understanding of the participants of the questionnaire. The Likert scale was used to present the close-ended questions that are part of this questionnaire.

### *3.4 Participants*

The number of participants in this study is five German undergraduates who are studying at Philipps-University Marburg, Germany. At the time of this study, they were studying Arabic media in Ain Shams University Cairo, Egypt. All subjects were in their

intermediate level as they studied an average of two years of Arabic. Participants' majors varied between Islamic Studies and Near & Middle Eastern Studies.

Note that, real names of the participants were omitted for privacy purposes. Each participant was given a number from one to five.

- Participant one who is a Near and Middle Eastern Studies major with Semitic focus has studied four semesters of Arabic before the commencement of the study. Materials used by teachers were al-Kitaab part one and two along with other teachers' prepared scripts and videos. As per the participant, teachers used a grammar translation method and classes were mostly teacher centered before it gradually moved to a more communicative manner.

- Participant two who is an Islamic Studies major with History and Religion focus has studied four semesters of Arabic before the commencement of this study. Materials used by teachers were al-Kitaab part one and two along with another grammar booklet that was prepared by his German class teacher. The grammar booklet was entirely in German. Later, Kalami Arabi and another Media book published by the American University in Cairo were introduced to him. As per the participant, classes had an interactive nature. The majority of the focus was on grammar rules and spoken Modern Standard Arabic. At some point, the student used to translate Arabic texts into German in writing.

- Participant three who is an Islamic Studies major with Arabic Language and History focus has studied four semesters of Arabic before the commencement of the study. Firstly, a book which focused on Modern Standard Arabic grammar only, excluding everything related to dialects was studied. Then, a book that contains all language skills (reading, listening, speaking, and writing) with less grammar focus. According to the participant, it was more like a



children's book yet more vivid than the former grammatical one. Note that, a minimum attention was given to speaking and listening at this point. At last, al-Kitaab part two was introduced in class along with the other teachers' prepared material. As per the participant, teachers used a communicative approach most of the times, although at the beginning classes were more likely to be teacher centered.

- Participant four who is a Middle Eastern Studies major with an Economic focus has studied four semesters of Arabic before the commencement of the study. Material used by teachers was al-Kitaab part one and two, Kalimni Arabi, as well as Media Arabic material prepared by teachers. As per the participant, mixed approaches were used yet, classes were mostly student centered. Teachers paid particular attention to reading and writing comprehension with less focus on speaking and listening. Assignments had the same approach as most of them were testing reading and writing skills.

- Participant five who is a Middle Eastern Studies major with Arabic Literature and Poetry focus has studied four semesters of Arabic before the commencement of this study. Material used by teachers was al-Kitaab part one and two. Teachers did not provide any outside material at any point. As per the participant, a communicative approach was used during class time yet, it was more like a student centered approach once outside the class. The teacher only went through each chapter as presented in the book and assigned homework. Students had to do most of the work by themselves and get back to their teachers if they could not understand anything.

It is important to note that the program in which they were enrolled in was a semester long non-intensive Arabic program offered by Ain Shams University. Classes met four times a week for the duration of two hours and a half. Students' ages ranged from 20 to 23.

Access to the sample group was gained through personal contact. Individuals contacted expressed an initial willingness to participate in the study, although some later withdrew because of scheduling constraints. The study was conducted after classes' official times. Subjects volunteered to participate in the experiment as they were interested in learning and understanding corpora in general and concordances in specific.

The group met an average of three times a week for the period of five weeks though in the fifth week only one meeting was held to conduct the post-delayed writing. Sessions varied from two hours to two hours and a half.

## 3.5 Instruments

A triangulation method was used to enhance confidence in the study results.

Triangulation is a powerful technique that works on increasing the credibility and validity of findings. Denzin (1978) identified four basic types of triangulation:

- 1) Data triangulation: which involves time, space, and persons
- 2) Investigator triangulation: which involves multiple researchers in an investigation,
- 3) Theory triangulation: which involves using more than one theoretical scheme in the interpretation of the phenomenon
- 4) Methodological triangulation: which involves using more than one method to gather data, such as interviews, observations, questionnaires, and documents.

The design of this study uses type four.

The researcher constructed three instruments for answering both research questions (See chapter one, section 1.1):

- 1) a pre and two post- writings (immediate and delayed)
- 2) a focus group
- 3) a questionnaire.

1) Multiple writings -that were limited to a 200 word limit passages-were conducted to answer research question number one (See chapter 1, section 1.3). A pre-writing test was administered in order to assess students' knowledge of ADCs prior to conducting the treatment. Then, two post-immediate writings were performed, one after the conventional teaching technique and the other after the concordance technique. Finally, a post-delayed writing was assigned in order to measure students' progress at the

end of the treatment. These writings aimed at monitoring and comparing participants' usage and retention of ADCs on the short and long term.

Both, pre-writing and post-delayed writing were not guided by the researcher. Whereas, post-immediate writings were guided.

The reason the pre-writing was not guided is because the aim of it was to measure students' knowledge of ADCs prior to the treatment. Similarly, the post-delayed writing was also not guided, but for a different reason. The researcher wanted to point out students' choices after the completion of the treatment. Any kind of guiding, would have affected the students' choices of connectives. This would have resulted in damaging the evaluation's results. On the contrary, both post-immediate writings were guided by the researcher, since they aimed at measuring participants' instant usage and retention of ADCs. Participants' were instructed to use each set of connectives in their writings to ensure full understanding after employing both teaching techniques.

To answer research question number two (See chapter one, section 1.3), 2) a focus group as well as 3) a questionnaire with closed and open-ended questions were conducted at the end of the study to inspect students' reactions toward concordance. Note that, the focus group comments were recorded in writing.



# Chapter 4

## Data Collection

This study is divided into two main parts. Part one, is concerned with the quantitative data collection and part two is concerned with qualitative data collection. As the researcher is using a sequential mixed methods design, the quantitative data collection took place first while the qualitative data collection followed.

### *4.1 Quantitative data collection procedure*

The data of the quantitative phase, was collected through three steps:

The first step required a pre-writing test which was conducted to identify the diversity of ADCs in the participants' writings prior to the treatment. The second step consisted of dividing the chosen ADCs into two sets. One set was taught using conventional techniques and the other set was taught using the concordance techniques. It is worth highlighting that, for the conventional teaching, the researcher used prepared political news texts that contained the targeted ADCs. This was followed by mechanical drills for reinforcement. These exercises varied between choosing the correct answer and filling the blanks using a word bank. On the other hand, the researcher used arabiCorpus concordancer citations to introduce the set of ADCs that will be learned via concordance.

Due to the limited context provided in the concordances chopped sentences, a set of higher order thinking drills were provided for reinforcement. These exercises varied between synthesizing, applying, inferring, analyzing, and creating. Following that, two post-immediate writings were administered to see whether participants' would put what they have learned into practice or not. Note that, in both post-immediate writings

participants' were guided to use what they had previously learned in order to measure their short term usage and retention after each teaching technique. The third step featured a post-delayed writing was conducted. This writing took place after one week without meetings between the researcher and the participants. The aim was to see whether they would be able to use and retain the learned ADCs on the long term or not. It is worth mentioning that, the post-delayed writing was not guided. Participants' were given free will to use any ADCs they opted for. The goal was to conclude which set of connectives would be used and retained more than the other; the one learned conventionally or the one learned via concordances.

The whole treatment was conducted over the period of five weeks divided as follows: two weeks teaching ADCs conventionally via political news texts and mechanical drills, followed by a post-immediate writing to measure students' usage and retention. Then, an additional two weeks of teaching ADCs via concordances, similarly followed by a post-immediate writing to measure students' usage and retention. A post-delayed writing took place after a week's time to measure participants' usage and retention of the targeted ADCs on the long term.

By the end of the five week study, the researcher analyzed and compared all writings to measure students' progress, whether in using or retaining the chosen ADC. Note that, the short time frame of the study is deliberately planned and was based on neutralizing a number of external factors as follows:

- First, to have as little influence as possible from participants' other Arabic classes as this may have affected their recognition and usage of ADCs provoking damages to the results of this treatment. Especially that, they were

enrolled in two courses in Ain Shams University (an Arabic media course and an MSA course)

- Second, to also have the least influence as possible from Arabic media (newspapers and political T.V/radio programs) since the participants' were living in Egypt at the time of this study.

The two sets of ADCs used in this study were adapted from Al-Saif and Markert's (2010) Leeds Arabic Discourse Treebank (LADTB) (See Appendix 1). In the mentioned study, they came to construct a table that contains the most frequently used connectives utilized in Arabic news in an approach to produce a reference that contains the most popular ADCs in written media. A corpus of 537 news text was analyzed to reach the final results.

The LADTB table of connectives contains 26 different ADCs. They are not grouped based on a certain function or theme. They are only presented according to their frequency. As a result, the researcher formulated the two needed sets of connectives based on an odd/even strategy of choice. Set one represents the odd numbers taught via conventional techniques, while set two represents the even number taught via concordance techniques.

Throughout the study only 22 connectives out of a total of 26 were used. The researcher eliminated four ADC from the LADTB list of connectives as they came in a one consonant form. It was discovered earlier by the researcher that, the students faced hard times during searches of one consonant connectives in arabiCorpus. Consequently, the researcher decided to avoid using these connectives as the aim of the study is not to test participants' technical proficiency, but to test their usage and retention of the learned ADCs. Set one of connectives was taught through conventional teaching techniques using



political news text and set two was taught using the sub-corpora of Al-Masry Alyoum 2010 in arabiCorpus concordancer. (See Appendix II)

#### *4.2 An overview on Al-Masry Alyoum concordance*

Al-MasryAlyoum is one of the most recent Arabic corpora provided by arabiCorpus website. It contains 13,880,826 million words and is considered to be a sub-corpus of the All Newspapers section which contains other sub-sections of different Middle Eastern newspapers such as: Al-Thawra from Syria, Al Tajdid from Morocco, Al-Watan from Kuwait, Al-Ghad 1 and 2 from Jordon, Al-Ahram 99 from Egypt, Al- Hayat 96 and 97 from London... etc.. Besides the corpora provided by the Newspapers section, there is also Modern literature, Islamic discourse, Egyptian colloquial, Adab literature, Grammarians, Hadith literature, Philosophy/Science, Quran sections corpora, and more.

The decision of conducting the study on Al-MasryAlyoum 2010 sub-corpora is chosen based on the fact that it is the most up to date available concordances compared to other Arabic concordances. Another reason is that “written media have a great influence on the language we use every day” as argued by Ryding (2010), as a result the chosen concordance will be the best to provide students with authentic language patterns. Note that, if the examples presented in Al-MasryAlyoum sub-corpora were not clear enough, participants would have been referred to navigate other sub-corpora in the same website for extra assistance.

As a starter, the researcher introduced arabiCorpus concordancer to the participants, they were then taught how to access and navigate the website in an approach to familiarize them with how KWIC concordance look like and operate. In the next step, the researcher demonstrated in which language aspects they should expect this tool to be

of help by giving them some hands-on teacher-guided queries. The aim of these simple exercises was to show participants how to deal with arabiCorpus concordancer and how corpora could offer answers to some of their questions before being exposed to the actual study theme. The chosen exercises were appropriate for novice corpora users conducive to developing their primary analytical skills. One of the introductory exercises was to match a prepositional verb with its correct preposition. The researcher mentioned the verb *تخرّج*/taxarraga/'graduated' and participants were asked to discover what preposition follows that verb. To answer that question, they were directed to Al-MasryAlyoum concordance citations as a reference. The reason why this verb was chosen is that AFL learners are often confused whether to say *تخرّج في*/taxarraga fy/'graduated in' or *تخرّج من*/taxarraga min/'graduated from'. Another exercise dealt with matching a verb-noun collocation. The researcher mentioned the verb *اندلع*/indalaEa/'erupted' and the participants were asked to discover what nouns frequently appear after it, and what do they usually imply.

Note that, for readers who cannot read Arabic script, the researcher provided the Buckwalker Arabic transliteration “that follows the standard encoding choice made for representing Arabic characters for computers” (Habash, Souidi, & Buckwalter, 2007, p.16) readers can refer to Appendix III for assistance.

Knowing that participants had understood how arabiCorpus concordancer operates, the process of learning, using and retaining ADCs allowed this study to begin.

As mentioned earlier in the literature review, there are research studies that have shown the efficiency of concordances and its ability to achieve better results when compared to conventional learning techniques. These studies were majorly conducted on advanced level students. This study though, is concerned with high intermediate level

students'. It attempts to measure the results of usage and retention of ADCs after conventional teaching and after teaching through arabiCorpus concordancer, to see which teaching technique will surpass the other on this level.

### *4.3 Qualitative data collection procedure*

To insure credibility and reliability of results two instruments are constructed for collecting the qualitative data of this study:

- 1) a focus group
- 2) a questionnaire

A focus group as Morgan (1996) defines it, is a data collection method which researchers use to elicit specific information as well as generate new data and insights through direct interaction between participants. In this study, the aim of the focus group was to extract participants' perceptions, opinions, and beliefs about learning through arabiCorpus concordancer. Accordingly, an in depth discussion took place in an interactive group setting where participants were free to talk with other group members to share and construct opinions about their experience. The researcher, played the role of the moderator at this stage by providing certain questions to widen the circle of discussion. (See Appendix VI). Note that the focus group comments were recorded by the researcher in writing.

After that, a questionnaire that contained closed and open-ended questions was distributed to the participants to inspect their perceptions toward a number of items (See Appendix VIII). Participants were asked to indicate their degree of agreement by checking one of three response categories in the provided Likert scale questionnaire: "Agree" if they totally agree, "Moderate" if they agree 50%, and "Disagree" if they

totally disagree. The questionnaire was divided into six sections where four of them contained closed-ended questions while the other two contained open-ended questions.

The first four sections are concerned with:

- 1) Enjoyment and choice
- 2) Benefits
- 3) Technical difficulties
- 4) Linguistic and conceptual difficulties.

Section five and six on the other hand, were concerned with:

- 5) Views, opinions, and perceptions
- 6) Future learning

The answers provided by the participants in the questionnaire (closed- ended and open-ended parts) were compared to their responses in the focus group in order to formulate a detailed picture about each student perception toward learning through this educational tool.

# Chapter 5

## Findings and data analysis

### 5.1 Introduction

The aim of this study is to firstly measure students' usage and retention of ADCs when learned conventionally versus learning them through concordances, and secondly to reveal students' perceptions toward learning through arabiCorpus concordancer.

In the first part of this chapter, the researcher presented the findings and analysis of each participant's usage and retention of ADCs, before, during, and after the treatment. Note that, diversity and accuracy (syntactic accuracy, semantic accuracy), were being measured throughout this process. This segment of the analysis focused of granting one point for the correct use of a variety of ADCs. When participants failed to employ the connective correctly, whether syntactically or semantically, half a point was deducted. The findings of each participant were presented in two tables. The first table, revealed the short term usage and retention of connectives effected by both teaching techniques as per the post-immediate writings. Whereas, the second table, revealed the long term usage and retention of connectives effected by both teaching techniques as per post-delayed writing. The researcher then proceeded to compare the levels of usage and retention of ADCs for all five participants together. The final results were presented in three tables providing the numerical data that answer research question number one (See chapter one, section 1.3).

In comparing results of all five participants, three Wilcoxon Signed Ranks Test tables were provided to display the results of firstly the effectiveness of both teaching techniques, the conventional and the concordances, in comparison to the samples' pre-

writing. Secondly which teaching technique affected the usage and retention of ADCs on the short term. Finally which teaching technique affected the usage and retention of ADCs on the long term.

In the second part of this chapter, the researcher aimed at answering research question number two (See chapter 1, section 1.3). The main approach to data analysis in this section, involved a detailed analysis of both focus groups and questionnaire findings. The results of both instruments were used to confirm or refute participants' acceptance or rejection toward concordances as an educational tool as well as to show if their perceptions has influenced their usage and retention of ADCs in any way. Focus group results were presented in a report and excerpts of this report were integrated in the questionnaire results to show if any co-relation exists between students' perception of arabiCorpus and their long term usage and retention of ADCs.

### 5.1.1 Analysis of the quantitative part of the study

As mentioned earlier in the methodology chapter, this is a multiple case study research that uses a mixed methods approach in data collection. In the quantitative part of the study, a repeated measures design is used to provide multiple measurements for each participant. Four measurements were collected per person to reach the required final results (a pre-writing before the treatment, a post-immediate writing after teaching using the conventional approach, a post-immediate writing after teaching using the concordance approach, and a post-delayed writing at the end of the treatment). The pre-writing evaluation was not guided. The researcher did not ask participants' to focus on any connectives. It took place only to assess students' prior knowledge of ADCs.

Both post-immediate writings, on the other hand were guided by the researcher to test the instant usage and retention of ADCs on the short term. Each writing assignment was conducted immediately after learning the prescribed set of connectives. In this study, the chosen ADCs were divided into two sets, each set contained 11 different connectives. One set was taught conventionally and the other was taught via arabiCorpus concordancer.

As for the post-delayed writing, it was not guided as it aimed at inspecting participants' choices of ADCs on the long term after being exposed to both teaching techniques. The researcher wanted to discover which set of connectives would be used and retained more frequently over a longer period of time.

### 5.1.2 Analysis of the qualitative part of the study

For the qualitative part of the study, a focus group and a questionnaire were conducted to monitor and scrutinize students' attitudes and perceptions toward learning through arabiCorpus concordancer. The focus group was administered by the researcher who provided certain questions to widen the circle of discussion between the participants. The sample comments were recorded in writing during this process.

In addition to that, a questionnaire which was adapted from Farr (2008) was distributed to the participants after the focus group was over. As mentioned previously in the data collection chapter, the Likert scale questionnaire contained six sections that included closed and open-ended questions. The questions varied to cover students':

- 1) Enjoyment and choice
- 2) Benefits

- 3) Technical difficulties
- 4) Linguistic and conceptual difficulties
- 5) Views, opinions, and perceptions
- 6) Future learning

The questionnaire's analysis of each participant was introduced using the same order as the sections above. It is worth highlighting that, the focus group comments were integrated in this process to provide a complete, coherent picture of each participant's perception and perspective toward arabiCorpus concordancer. Ultimately, the analyses of both instruments were used to complement each other, on the one hand to create an understanding of how each participant felt toward the use of concordances as a pedagogical tool and on the other to reveal whether participants' perceptions have influenced their usage and retention of ADCs by any mean. The researcher was able to show that these instruments complement each other the comparison of the numerical data alongside the focus group and questionnaire.

## *5.2 Findings and data analysis of each participant*

### **Participant one:**

#### **a. Findings**

##### **Pre-writing:**

Participant number one had the highest number of ADCs in his pre-writing compared to other participants. Yet, even by taking into account the relatively high frequency of the



ADCs being utilized, connectives were not as diverse as they should have been compared to the length of the writing (200 words). The total number of ADCs being utilized were five. The participant was able to employ all connectives correctly whether syntactically or semantically.

Post-immediate writings:

Two post-immediate writings were conducted, one after the conventional teaching technique and another after the concordances teaching technique.

In the conventional post-immediate writing, the participant was able to use six different ADCs. However, in the concordances post-immediate writing, nine different ADCs were utilized.

After the analyses of both post-immediate writings, results showed that the usage and retention of ADCs being taught via concordances surpassed the ones being taught conventionally. It was clear that the concordances technique excelled the conventional technique at this level. (See table 1)

The analyses of accuracy in both post-immediate writings were similar. The participant was able to use the ADCs of his choice correctly whether syntactically or semantically from both sets.

Table 1

Participants' one post-immediate writings analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post-immediate writing	11	6	54.5%	5	45.5%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-immediate writing	11	9	82%	2	18%

Short term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

Post-delayed writing:

Participant number one was able to use a total number of ten ADCs in the post-delayed writing. Seven various connectives were used and retained from the conventional teaching technique, and three from the concordances teaching technique.

Although this participant showed remarkable usage and retention of ADCs in the concordances post-immediate writing, however, it was somewhat surprising observing the opposite in his post-delayed writing. His final unguided writing revealed that his choice of ADCs relied on the connectives learned conventionally and not the ones learned via concordances. (See table 2)

Table 2

Participant's one post-delayed writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post- delayed writing	11	6.5	59%	4	36.5%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-delayed writing	11	3	27%	8	73%%

Long term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

Participant's one syntactic and semantic accuracy were both present in all his choices, except for one syntactic mistake in one of the connectives being learned conventionally رغم /ragm)/'although'. Nevertheless, it is important to know that all students in this study have shown difficulty in learning, using, and retaining this connective, especially syntactically.

## b. Data analysis and discussion

Although participant number one used the largest number of ADCs in his unguided pre-writing, it is worth highlighting that, it was only higher in frequency, but not in diversity. There was no rational explanation for that except that, he practiced and used those connectives more often compared to others, especially that the connectives employed were commonly used within his academic level. It was also noted by the

participant in the focus group session that, he expresses himself best in writing, which means that most likely his practice in writing was more advanced than his peers. As a result, his ability of using and retaining ADCs surpassed most of the other participants.

The post-immediate writings of this participant showed that he was able to use and retain the connectives taught via concordances more than the ones taught conventionally. The researcher could only claim that the concordances approach surpassed the conventional approach on the short term for two reasons, the first being that the participant was quite enthusiastic and excited since being introduced to corpora. He was dedicated at all times and wanted to grasp as much information as he could about this educational tool. In addition to that, the second reason is based on the researcher's observation of the participant's usage and retention of ADCs which was more efficient when the candidate was instructed on how to use them.

On the contrary, in this participant's post-delayed writing on the basis of his free will in the long term, the usage and retention of ADCs learned conventionally surpassed the concordances technique significantly. This occurrence could be explained by the short time (two weeks) time span allocated to the concordances approach which was too short for him to master the use of this tool. Especially that the candidate expressed his lack of practice of concordances outside of this study during the focus group.

When the researcher compared the results above with the results of this participant's focus group and questionnaire, the following was revealed: (Note that, each participant's focus group comments were integrated in the questionnaire responses, so that together, they constitute a complete, coherent picture of each participant's perceptions and perspectives toward arabiCorpus concordance.)

In section one of the questionnaire (Enjoyment and choice), participant number one reported that, he enjoyed utilizing the concordances in his studies. He also mentioned that, he would definitely choose to use this tool again to investigate and explore Arabic in a more detailed manner.

In section two of the questionnaire (Benefits), participant number one felt that, the integration of concordances in his Arabic learning helped him understand more about the Arabic language system as well as enhanced his spirit of inquiry. In his focus group he mentioned that, “corpora provide no easy answer, so pain no gain”. He revealed that, sometimes he enjoyed the challenge, other times it frustrated him. But, all in all, his autonomous learning improved. This was mentioned earlier in the writings of Johns who stated that corpora allow the student to presume the role of an explorer to reach his/her own discoveries about language use (as cited in Johns, 1991). In section three of the questionnaire (Technical difficulties), the participant admitted that he faced initial difficulties with the technical aspects of the chosen concordances. These difficulties continued to exist for a period of time before they gradually diminished.

In section four of the questionnaire (Linguistic and conceptual difficulties), the participant faced moderate initial difficulties with the linguistic and conceptual aspects of concordances due to its rich linguistic nature. These difficulties escalated when he was using the concordances on his own as the researcher was not present to provide help and guidance. At the end of the study, the participant reported that he was no longer facing difficulties with the linguistic and conceptual aspects of the concordances. It is essential to bring forth the fact that the results of section three and four of this participant contradicts with Farr’s (2008) results. In this study, participant number one reported difficulties with the technical and the conceptual level. Yet, the latter continued to exist till the end of the study, whereas the former diminished on the short term. Farr’s (2008)

study on the other hand stated that, students faced problems on the technical and conceptual level as well. But, the former continued to exist till the end of the study whereas the latter were resolved.

In section five of the questionnaire (Views, opinions, and perceptions), participant number one revealed that, he did not have the time to use the concordances regularly. Yet, he mentioned that when he used them, he used them to verify collocations while writing. The participant also stated that he did not use this tool to find out the meanings of nouns or verbs, instead he used a dictionary for that purpose. Concordances, on the other hand, were used frequently to understand function words like connectives and prepositions. He asserted that seeing those in context facilitated the acquisition process to a great extent, as he not only knew their meaning and how they functioned; he also knew what possible patterns and collocations he should expect to see in the future. This confirms what was mentioned previously in the works of Johns & King (1991) and Granger & Tribble (1998) when they argued that, in corpora students acquire a deeper understanding of meanings and usage than can be obtained from an ordinary dictionary as all language items appeared within context and not by themselves. Participant number one was also impressed by the idea that concordances can provide language patterns of the contemporary language, in a way dictionaries and grammar books do not convey. He felt that, he was learning the real language and not some form of old unused language structures, which was exactly what Reppen (2010) argued earlier. In addition to that, the participant showed a lot of appreciation to the different genres of text provided by arabiCorpus concordancer. It made him realize that Arabic comes in different styles. The way a news article is written is not similar to the way a novel is written or a religious book. He even liked the fact, that within the All Newspapers section there were different corpora of different newspapers in the region. The participant noticed that, the Egyptian

newspaper Al-MasryAlyoum for example, provided one citation for لِكَي /likayy/'in order to', whereas the Kuwaiti newspaper Al-Watan provided 1129 citations for the same connective, which made him conclude (at that time) that, Modern Standard Arabic (MSA) is not used similarly in all Arab countries and that concordances can help him understand these differences in a clear manner. Due to the mysteriously limited number of citations Al-MasryAlyoum corpora have provided for the connective لِكَي /likayy/'in order to', the researcher investigated the phenomena after the study was over and found out the following:

In this training session, participants were asked to type لِكَي /likayy/'in order to', with a ي at the end the same way it usually appears in MSA, but due to the chosen material by the researcher which was the Egyptian newspaper corpora, only one citation was available. Native Arabic speakers in Egypt do not place the required two dots below the ي, they write a ى only instead. As a result, participants were not able to find except one citation. Yet, when the researcher, did the same search again, while typing the ى without the two dots below 2820 citations occurred. This means that, the teacher has to master the chosen concordance as students' may not only face technical and linguistic problems, but also unexpected difficulties related to how the culture influences the language. The mentioned exercise, took place in one of the early training sessions prior to the treatment. Note that the ADC learned was not included in the actual study. It was only given for practicing purposes.

Participant one found some drawbacks from using arabiCorpus concordancer. He noticed that, certain searchers were more helpful than others. One syllable ADCs such as, اذ^/i\*/'because' and اَو^/aw/'or' did not provide accurate results as these connectives sometimes appeared as parts of other words like لماذا/limA\*a/'why' or اَوَضَح^/AwDaHa/'clarified'. The concordances were not able to differentiate between the

words that contained these letters and the participant's search for the target connective. He also mentioned that, search results were not always consistent. Sometimes arabiCorpus concordancer provided citations that did not match the participant's search details. Consequently, he had to search among all examples displayed in order to find what he was looking for. This resulted in a waste of time and effort to find the needed citations.

In section six of the questionnaire (In relation to future learning), participant number one clearly expressed that, he would use arabiCorpus concordancer in his future studies to help him with his homework, assignments, and presentations. He stated that, if he has the opportunity, he would definitely recommend the use of this tool in FL classrooms in his home town university, though this recommendation would not come unconditionally. He believes that:

- 1) The chosen concordance should be easy to navigate like arabiCorpus concordancer,
- 2) It should be reliable, and by that he meant that the body of text compiled should come from a source that represents an uncorrupted variety of fuSHa
- 3) Enough introductory sessions should be conducted prior to using the concordances to establish an understanding of how they work
- 4) Enough training sessions must be provided to facilitate any technical difficulties during the learning process
- 5) He suggested that, as the use of concordances requires a firm linguistic foundation of Arabic language, teachers should provide constant support and guidance while using them, otherwise students (especially lower or intermediate



levels) will get frustrated easily due to the rich nature of its content. This will only result in rejection and avoidance in any future use.

It is worth noting that, Breyer (2009), asserted previously in his work that the teacher plays a key role in popularization of corpus use in language classrooms. In short, the success of students depends more or less on the teachers' approach in concordance.

## Participant two:

### a. Findings

#### Pre-writing:

Participant number two used the lowest number of ADCs in the pre-writing evaluation compared to other participants. Both frequency and diversity of choice were very limited compared to the length of the writing. The total number of ADCs that were used were but two different connectives. The participant was able to employ both connectives correctly either syntactically or semantically.

#### Post-immediate writings:

After the analyses of both post-immediate writings, results showed that the usage and retention of ADCs being taught conventionally surpassed the ones being taught via concordances. It was clear that the conventional technique exceeded the concordances technique at this stage.

This participant was able to employ 11 connectives in the conventional post-immediate writing, which means that, he was able to use and retain the whole set of ADCs taught conventionally. However, in the concordances post-immediate writing, only six varieties of connectives were used. Final results revealed that, the different types of ADCs in the conventional writing surpassed the diversity of choice in the concordances writing. (See table 3)

Table 3

Participant's two post-immediate writings analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post-immediate writing	11	10	91%	0	0%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-immediate writing	11	6	54.5%	5	45.5%

Short term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

The analysis of accuracy in the conventional post-immediate writings showed that, the participant syntactic and semantic accuracy were similar. One mistake was done on each level. On the one hand, the participant was only able to employ رغم/ragm/'although' correctly semantically, yet failed to employ it correctly syntactically. On the other hand, he was able to employ بينما/bynama/'whereas' correctly syntactically, yet failed to employ it correctly semantically.

The analysis of accuracy in the concordances post-immediate writing showed that the participant was able to use the ADCs of his choice correctly both syntactically or semantically.

Post-delayed writings:

In spite of the fact that this participant showed remarkable usage and retention of ADCs in the conventional post-immediate writing when compared to the concordances post-immediate writing, his post-delayed unguided writing revealed that his choice of ADCs on the long term was not compliant to a certain set of connectives. Participant number two used connectives from both sets equally. He was able to use a total number of 16 ADCs in his post-delayed writing. Eight connectives came from the set learned conventionally, whereas another eight came from the set learned using the concordances. (See table 4)

Table 4  
Participant's two post-delayed writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post- delayed writing	11	7.5	68%	3	27%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of correctly used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-delayed writing	11	7.5	68%	3	27%

Long term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

As for the participant's post-delayed writings, syntactic and semantic accuracy were both present in all his choices, except for two mistakes. The first mistake was on the syntactical level, and it came from the conventional set رَغم /ragm/'although'. Once again, as mentioned previously, all students in this study have shown difficulty in learning,

using, and retaining this connective, especially syntactically. It is also worth highlighting that, participant number two was not able to use this connective correctly on the syntactic level at any point whether in his conventional post-immediate writing or his post delayed writing. The second mistake came from the set of connectives taught via concordances. The participant was only able to employ *لأنه* 'because' correctly semantically, yet he failed to employ it correctly syntactically.

## Data analysis and discussion

It was obvious that, participant number two used a very limited number of connectives in his unguided pre-writing. As mentioned previously in the literature works of Dulger (2007), he states that writing has always been the most complex and difficult aspect in language development, this is not only true while writing in the first language it's also noticeable when writing in a second or foreign language. As a result, the researcher was not surprised by the participant's limited ability to employ diverse ADCs in his pre-writing. What was interesting though, was witnessing the dramatic differences between this participant's post-immediate writings and post delayed writing as results were contradicted.

The post-immediate writings of participant two showed that he was able to use and retain the connectives taught conventionally more than the ones taught via concordances. The researcher observed that this happened due to the concordances teaching approach since it was totally new to the participant at this stage. He was still in the process of exploring this mysterious educational tool. In addition, the short period of time allocated to using the concordances did not help him master the required techniques to maneuver the provided corpora. On the contrary, when the conventional teaching

approach was applied the participant was comfortable with it as he was familiar with the entire process. Consequently, the conventional approach automatically influenced his acquisition positively. In short, the participant was not only learning the new connectives at this point, but he was also learning how to use the concordances. As a result, participant number two's performance revealed that the usage and retention of the ADCs taught conventionally surpassed the ones taught via concordances.

The post-delayed writing of this participant on the other hand, did not reveal the same results as the post-immediate writings. When the researcher compared which set of connectives was used and retained in the candidate's final writing, the results showed that participant two used and retained ADCs equally from both sets of connectives (the one taught conventionally and the one taught using the concordances). This means that the more time and practice spent on concordances, the better results students would achieve. The researcher can only claim that concordances may surpass other teaching techniques if enough time is allocated to practicing how to use them as argued by Chambers (2005).

When the researcher compared the results above with the results of this participant's focus group and questionnaire, the following was revealed:

In section one of the questionnaire (Enjoyment and choice), participant number two reported that he enjoyed utilizing the concordances in his studies. He also mentioned that he would definitely choose to use this tool again to investigate and explore Arabic in a more detailed manner.

In section two of the questionnaire (Benefits), the participant felt that the integration of concordances in his Arabic learning helped him understand more about the Arabic language system as well as enhanced his spirit of inquiry. This proves that,

corpora enable students to investigate and explore different language features from which they can extrapolate linguistic theories, rules, and patterns as pinpointed in the literature.

In section three of the questionnaire (Technical difficulties), participant number two admitted that he faced moderate initial difficulties with the technical aspects of the chosen concordances. These difficulties continued to exist for a period of time before they gradually diminished. The participant clearly stated that, by the end of the study, he was no longer facing any technical difficulties with the concordances. He only mentioned that, a longer time dedicated to practicing concordances would have reduced these initial difficulties significantly.

In section four of the questionnaire (Linguistic and conceptual difficulties), the participant faced moderate initial difficulties with the linguistic and conceptual aspects of concordances due to the rich linguistic nature of this tool. These difficulties escalated when he was using the concordances on his own. By the end of this study, these difficulties were reported to have reduced, yet they did not entirely disappear. Participant number two was fond of the concordance idea. He not only used the concordances during his sessions with the researcher, he also used it throughout his regular classes in Ain Sham University. He consulted the concordances frequently while he was studying or doing his assignments, which enhanced his skills in the use of concordance to a great extent compared to his other peers in the study. This serves as proof that the more candidates practice the use of concordance the less difficulties and the better the results as stated earlier by Chambers (2005). The participants stressed that in order to get the best out of these concordances you have to persist with practicing the tools until one get used to them. He revealed that the difficulties he faced were probably due to the intermediate nature of his academic level. He assumed that if he had a deeper knowledge of Arabic,

this tool would facilitate a lot steps throughout his learning process, this was previously voiced in the following authors' works by Breyer (2009), Granath (2009), Mark (1998).

In section five of the questionnaire (Views, opinions and perceptions), participant number two mentioned that, he used concordances majorly to improve his writing style. He claimed that they helped him form high frequency collocations. Before using the concordances he failed to form commonly used collocations, instead he made strange combinations of noun-adjective structures and verb-noun structures that are not utilized by native speakers. This gave him the impression that his Arabic was not authentic and sometimes ambiguous when read. He provided an example where he wanted to describe the word *فصحى* /fuSHa/'Modern standard Arabic'. At first, he decided to use the adjective *كريمة* /karyma/'generous', then after consulting the concordances he found that *كريمة* never collocates with *فصحى*, so instead he used *عظيمة* /EaZyma/'great' as per the concordances results. In addition, he mentioned that concordances were quite useful in extracting grammatical rules and patterns. He also added that they provide many authentic examples in which one could compare and analyze all elements together to reach or formulate a linguistic rule. Although the concordances helped this participant extrapolate a theory about certain language items, however, he asserted that he would not use such a tool to find out the meaning of a word. He found it quite hard guessing a meaning of a word that lies within a chopped sentence that contains in itself many words that he was unfamiliar with. He then reported that using a dictionary for finding out meanings was easier and faster.

One should not disregard that participant two found some drawbacks for using arabiCorpus concordancer. He declared that although concordances are helpful, they are time consuming if not guided by a teacher. He continued on by saying that although he liked the idea of concordance and was able to perform it under the researcher's guidance



he felt that this tool would be more suitable for higher academic level. He argued that students who are in intermediate levels may find chopped sentences presented too difficult to understand, this could result in a lot of frustration; therefore, when used, a teacher must guide the process as well as provide constant motivation. This was reported previously by Breyer (2009) and Granath (2009) who claimed that an advanced student would benefit the most from the use of corpora and concordances, yet less advanced proficiency level may face some difficulties dealing and understanding the rich content of corpora.

Participant number two's focus group and questionnaire results were quite consistent with his performance throughout the study. With this participant the short term usage and retention of ADCs taught conventionally surpassed the usage and retention of the ones taught via concordances. Nonetheless, when the participant was not guided and used his free will on the long term and after he was given enough time to practice using the concordances; his usage and retention of both sets was quite similar with minor differences. This means that practicing improved the participant's performance enormously. Accordingly, on the long run and with more practice the researcher could assume that mastering the concordances would result in better outcomes when compared to conventional teaching techniques.

In section six of the questionnaire (In relation to future learning), participant number two clearly expressed that he would use arabiCorpus concordancer in his future studies to help him with his homework, assignments, and presentations. The participant also revealed that although he will use dictionaries to find out the meaning of certain words, in parallel he will use the concordances to double check the meanings as dictionaries are not always accurate. In addition, he mentioned that he will also use the concordances to help him form high frequency collocations to improve his writing style.

He stated that if he has the opportunity, he would definitely recommend the use of this tool in FL classrooms in his home town university but once again this recommendation does not come unconditionally. Since according to participant number two teachers must:

- 1) Allocate enough time to the introduction, exploration and practice of concordances.
- 2) Provide constant guidance for students, especially, if their proficiency level was limited/less or intermediate levels.

### Participant three:

#### a. Findings

Pre-writing:

Participant number three used the most diverse number of ADCs in the pre-writing compared to all other participants. The total number of connectives used were seven ADCs. The participant was able to employ all of them correctly whether syntactically or semantically.

Post-immediate writings:

After the analyses of both post-immediate writings, results showed that the usage and retention of ADCs taught conventionally were similar to the ones taught via concordances. Participant three used an equal number of connectives from both sets. Eight connectives were employed from the conventional set and similarly another eight connectives were employed from the concordances set. (See table 5)

Table 5

Participant's three post-immediate writings analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post-immediate writing	11	8	73%	3	27%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of used ADCs (#/11x100)
Concordances post-immediate writing	11	8	73%	3	27%

Short term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

The analyses of accuracy in both post-immediate writings were similar. The participant was able to use ADCs of his choice correctly from both sets whether syntactically or semantically.

Post-delayed writing:

Although this participant showed remarkable usage and retention of ADCs in the pre-writing, the post-immediate conventional writing, as well as the post-immediate concordances writing, however, it was unexpected observing the complete opposite in his post-delayed writing. His final unguided writing revealed that his choice of ADCs was quite limited from both sets of connectives. Participant number three was only able to use a total number of seven connectives in the post-delayed writing. Three connectives came from the conventional set while four connectives came from the concordances set. (See table 6)

Table 6

Participant's three post-delayed writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post- delayed writing	11	3	27%	8	73%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-delayed writing	11	3.5	73%	7	63.5%

Long term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

The participant's post-delayed writing, syntactic and semantic accuracy were both present in all his choices, except for one syntactical mistake that came from the set of connectives taught via concordances. The participant was able to employ *إذ/إذ\**/although correctly only semantically, yet he failed to employ it correctly syntactically.

## b. Data analysis and discussion

Despite the fact that using various connectives is challenging for AFL learners as seen in literary works, somehow this participant managed to use the highest number of diverse ADCs compared to all other participants in this study. It was previously argued by Anis (1975) that Arabic is the language of connectives, it has many articles that do not exist in any other languages; this makes the process of acquiring and employing them quite difficult. Participant number three succeeded in overcoming this obstacle since he

employed the largest number of diversified connectives in his pre-writing. In an attempt from the researcher to understand why this participant surpassed the others in the pre-writing analysis a deep investigation of both focus group and questionnaire took place. The researcher discovered that in one of the participant's comments within the focus group session, he mentioned that he was quite fond of Arabic history and culture. He enjoyed reading books and articles about different eras to grasp as much knowledge as he could about the language and the people. The researcher was able to conclude from this comment that due to the participant's intense exposure to sophisticated readings he was most likely able to acquire a decent number of ADCs, which he was able to employ later on in his own writings. He stated that the concordances would definitely help him explore Arabic in depth, especially since the concordances provided by the researcher (arabiCorpus) contained various types of corpora (newspapers, modern literature, Islamic discourse and more).

The post-immediate writings of this participant showed that on the short term he was able to use and retain connectives taught using conventional techniques as well as to the ones taught using the concordances techniques equally. With this participant no approach surpassed the other. It is worth noting that, although this participant mentioned previously that concordances would help him explore Arabic in depth, he was not very enthusiastic about the idea of concordance. He stated that it is definitely an interesting tool, yet for him it would not be a first choice in learning. After the training sessions he revealed his lack of interest in technology and stated his preference of using textbooks and dictionaries to explore and understand Arabic. He also said in the focus group "I feel that I am wasting a lot of valuable time on things that I can learn more easily using a simple book". At this point, and prior to conducting the study the researcher hypothesized that with this participant the results of usage and retention of ADCs being taught

conventionally would definitely surpass the results of usage and retention of the ones taught using the concordances due his initial attitude toward concordance. Unexpectedly, and despite of the participant's negative attitude toward the concordances, his post-immediate analysis showed that both results from the conventional set and the concordances set were similar. The participant was able to use an equal number of connectives from both sets. The researcher then realized the power of this tool. Even though, participant number three did not wish to learn via concordances, he was still able to achieve high results by using it. This confirms that corpora is an invaluable tool for both teachers and students as proclaimed in the literary writings of Granath, Hunston, Römer (as cited in Römer, 2011) and Sinclair (1997); it only needs to be presented wisely using a practical and fun approach while also providing enough time for students' to understand and practice using this tool.

The analyses of the post-delayed unguided writing of participant number three was quite unexpected. When the researcher compared which set of connectives was used and retained, whether the conventional or the concordances, the results revealed his ability to use and retain connectives was limited to a very narrow amount of ADCs from both sets. It is worth highlighting that this participant was able to employ the highest number of various connectives in his pre-writing, which is not common among AFL learners. In addition, he was able to use and retain a reasonable number of connectives on the short term when he was instructed to use them in his post-immediate writings. On the other hand, when he was left to use them independently-at the end of the study- he used few connectives or ADCs in his final writing. The researcher has only one justification for this dramatic change in this participant's writing pattern which is the candidate's eagerness to leave earlier than expected since he had an important appointment which he could not afford to miss. This incident could be the cause behind his low writing

performance on that specific day. The researcher could only claim that the reasons behind this participant's poor performance were probably due to personal or environmental issue.

When the researcher compared the results above with the results of the participant's focus group and questionnaire, the following was revealed:

In section one of the questionnaire (Enjoyment and choice) participant number three reported his moderate enjoyment of the utilization of concordances in his studies. He also mentioned that he was not sure whether he would choose to use this tool again to investigate and explore Arabic during his classes or not.

In section two of the questionnaire (Benefits), the participant felt that the integration of concordances in his Arabic learning helped him understand more about the Arabic language system as well as enhanced his spirit of inquiry. This was mentioned earlier in the writings of Johns who stated that corpora allow the student to presume the role of an explorer to reach his/her own discoveries about language use (as cited in Johns 1991).

In section three of the questionnaire (Technical difficulties), participant number three admitted that he faced initial difficulties with the technical aspects of the chosen concordances. These difficulties continued to exist for a period of time before they gradually diminished. The participant clearly stated that a longer time dedicated to practicing concordance would have improved his navigating skills alongside his searching skills. Note that the same suggestion was provided by Chamber (2005) earlier in his works when he stated that a longer allocated time for practicing would improve students' results significantly.

In section four of the questionnaire (Linguistic and conceptual difficulties), the participant also faced moderate initial difficulties with the linguistic and conceptual aspects of concordances due to the rich linguistic nature of the tool. These difficulties escalated when he was using the concordances on his own as the researcher was not present to provide help and guidance. At the end of the study the participant reported that he was still facing moderate difficulties with the linguistic and conceptual aspects of the concordances. The researcher assumes that it is because the approach was new, the concordances contain rich content and the allocated time for practicing was not long enough. It should be noted that this participant was not fond of WBI or technology in general.

In section five of the questionnaire (Views, opinions, and perceptions), participant number three revealed that he liked learning certain linguistic items, patterns and rules through compilations of authentic data. Nevertheless, he would have preferred to use printed-corpora instead of electronic-corpora. He claimed that they would have been easier to handle and less complicated technically. The participant stated that he utilized the concordances while studying in order to improve his reading techniques. He was quite keen to read all the citations prepared by the researcher out loud for the rest of the participants. He also attempted to translate them in an approach to widen his lexicon. He also mentioned his use of concordances to check his collocations formations while writing.

Participant number three found some drawbacks from using arabiCorpus concordancer. He argued that a vast linguistic foundation is needed in order to manipulate this educational tool successfully. He asserted that not only do the concordances contain multiple genres of Arabic, they also come in chopped sentences which he found impossible to understand sometimes. In addition, the provided concordances were only



available if the user has internet access, which triggered the questions of accessibility of the material with infrequent web connection and that of the like or dislike of WBI. Another question was raised regarding the ability of the teacher to use this tool in teaching and achieving positive results without the students' cooperation and their lack of involvement in the process. It was quite clear from the participant's response that he moderately enjoyed the use of concordances in this study, as he preferred the conventional teaching techniques over the computerized ones. It is important to know that the participant did not reject the use of concordances but he stressed his intentions to use it as a resource for language learning alongside with traditional course books and dictionaries. Nonetheless, his conviction remained solid that learning through corpora would never be a choice of his.

Although this participant's attitude toward concordance was hostile from the beginning, his opinion confirms the importance of determining students' attitudes toward WBI before deciding whether to apply it in class or not. Positive or negative learner expectations toward WBI significantly affect learning outcomes as reported previously by Sanders & Morrison-Shetlar (2001) and Alomyan & Au (2004).

In section six of the questionnaire (In relation to future learning), participant number three clearly stated that he would not use concordances in preparing homework, assignments, or presentations. If he decides to use this tool at some point, it will either too:

- 1) Revise his patterns and structures
- 2) Explore different linguistic themes and patterns in his free time.

It is worth highlighting that students who participated in Farr's (2008) also expressed future interest in using concordance in independent investigations. The participant also added that he would not initiate the use of concordances in his home town university but if he was asked about it he would recommend using it under certain restrictions:

- 1) The teacher should be an expert in handling corpora, otherwise students would not understand the full significance of this educational tool. Participant number three believes that if concordances were introduced poorly in class and in the case where little time was allocated for practicing how to use them, students would probably lose interest out of frustration, especially if they do not have a strong linguistic base.
- 2) The teacher should only use the concordances with advanced students as less advanced and intermediate ones would not have enough linguistic competence to manipulate this tool successfully.

## Participant four:

### a. Findings

Pre-writing:

Participant number four used a total number of four ADCs in the pre-writing. The participant was able to employ all connectives correctly whether syntactically or semantically.

Post-immediate writings:

After the analyses of both post-immediate writings, results showed that the usage and retention of ADCs being taught via concordances surpassed the ones being taught via conventional techniques. It was clear that the concordances approach excelled the conventional approach at this level.

This participant was able to use seven ADCs from the set of connectives learned conventionally. However, in the post-immediate writing of the concordance technique nine ADCs were used.

Participant's syntactic and semantic accuracy were both present in all his choices, except for two syntactical mistakes. The first mistake came from conventionally set رغم/ragm/'although'. Yet, it is worth highlighting that, all students in this study have shown difficulty in learning, using, and retaining this connective, especially syntactically. The second mistake came from the concordances set خصوصا/xuSwSAn/'especially'. The participant was only able to use it semantically correct but not syntactically. (See table 7)

Table 7

Participant's four post-immediate writings analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post-immediate writing	11	6.5	59%	4	37%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-immediate writing	11	8.5	77%	2	18%

Short term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

Post-delayed writing:

Participant number four showed remarkable usage and retention of ADCs in the concordances post-immediate writing evaluation as well as his post-delayed one. His final unguided writing revealed that his choice of ADCs relied heavily on the connectives learned via concordances and not the ones learned conventionally.

Participant number four was able to use a total number of 10 ADCs in the post-delayed writing. Four from which he learned conventionally and six from which he learned via concordances. (See table 8)

Table 8

Participant's four post-delayed writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post- delayed writing	11	4	37%	7	63.5%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-delayed writing	11	6	54.5%	5	45.5%

Long term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

This participant was able to employ all connectives correctly whether syntactically or semantically. He was able to use and retain ADCs from both sets successfully.

## b. Data analysis and discussion

Although participant number four used a relatively high number of ADCs compared to others in his unguided pre-writing, they were only higher in frequency, but not in diversity. There was no rational explanation for that except that he practiced and used those connectives more often compared to others, especially that the connectives employed were commonly used within his academic level.

The post-immediate writings of this participant showed his ability to use and retain the connectives taught via concordances more than the ones taught conventionally. The researcher could only claim that the concordances approach surpassed the conventional approach on the short term for two reasons:

1) The participant was quite enthusiastic and excited from the moment he was informed that a new approach of learning involving technology would take place in this

study. The important fact to consider is that he was fond of technology. He was very organized and had almost all his studies on his laptop and tablet. He was pretty dedicated all the time since he wanted to grasp as much information as he can about this educational tool before the end of the study.

The results of participant number four in his post-delayed writing continued to show the success of using concordance. When this participant was unguided and independent in his choices of connectives on the long term the usage and retention of ADCs learned using the concordances surpassed the ones that were learned conventionally. The researcher observed this success and assumed that it was due to the participant dedication and time numerous hours spend on the use of concordances whether with or without the researcher. He outlined in the focus group that he practiced the concordances on his own as it helped him in his tasks.

When the researcher compared the results above with the results of this participant's focus group and questionnaire the following was revealed:

In section one of the questionnaire (Enjoyment and choice) participant number four reported that his enjoyment in utilizing the concordances in his studies. He also mentioned that he would definitely choose to use this tool again to investigate and explore Arabic in a more detailed manner.

In section two of the questionnaire (Benefits) participant number four felt that the integration of concordances in his Arabic learning helped give him a better understanding of the Arabic language system, however, it only enhanced his spirit of inquiry moderately. This slightly agrees with what was mentioned earlier in the works of Johns and King (1991) since it was proclaimed that the direct technological access to concordances allows the student to take part in building up his own profiles of meaning and use.

In section three of the questionnaire (Technical difficulties) participant number four mentioned that he faced initial difficulties with the technical aspects of the chosen concordances. These difficulties did not continue to exist for a long time, they gradually diminished toward the end of the study. As the researcher revealed earlier, participant number four was fond of technology. It took him a shorter period of time to overcome all expected technical difficulties compared to other participants.

In section four of the questionnaire (Linguistic and conceptual difficulties) the participant also faced initial difficulties with the linguistic and conceptual aspects of concordances due to the rich linguistic nature of the tool. These difficulties escalated when he was using the concordances on his own as the researcher was not present to provide help and guidance. At the end of the study participant number four reported that the linguistic and conceptual aspects of the concordances were not as hard as when he first started using this tool, yet he still faced moderate difficulties with the tool. The researcher found that this was quite normal as the allocated time for practicing concordances was not long. In addition, the participant was in his intermediate level which made the existence of these difficulties quite understandable, especially that concordances display rich authentic patterns that are in themselves hard to perceive.

In section five of the questionnaire (Views, opinions, and perceptions) participant number four revealed that he used concordances majorly to check collocations, especially words that come after. He also pointed that the concordances helped him understand how certain linguistic items function. The regularities of patterning offered by the concordances was one way for this participant to gain an easy way of learning new rules and patterns. Moreover, he reported that those linguistic rules and patterns acquired via concordances were more retainable for him than the ones learned conventionally. He

mentioned that he “used to visualize the citations” offered by the concordances to recall the information.

From another standpoint, participant number four found some drawbacks from using arabiCorpus concordancer. He stated that, using the concordances required a prior good knowledge of the language, as any linguistics items presented within a rich context. He also noticed that certain searchers were more helpful than others. One syllable ADCs such as, أو/Aw/'or' did not provide accurate results as the connective appeared sometimes as parts of other words like أوضح/AwDaHa/'clarified'. The concordances were not able to differentiate between the words that contained these letters and the participant's search for the connective being learned. In addition, search results were not always consistent. Sometimes arabiCorpus concordancer provided many citations for a certain connective while with other connectives citations were less available. In the latter situation the process of extracting a rule or a common pattern was quite harder as there weren't enough regularities provided for extracting a rule. Participant number four also revealed that the feeling of success comes very late. He reported that a lot of effort has to be done in order to extract a certain linguistic rule or function and this was not always worth the amount of effort exerted.

In section six of the questionnaire (In relation to future learning) participant number four clearly expressed he would use arabiCorpus concordancer in his future studies to help him with his homework, assignments, and presentations. He stated that although he would check direct meanings from a dictionary, he would continue to use the concordances to make sure he is employing and collocating these meanings correctly. He added that if he has the opportunity he would definitely recommend the use of this tool in FL classrooms in his home town university yet, these recommendations do not come unconditionally. Participant number four believes that



1) The teacher who will present and use concordances in class, should be corpora literate. Before trying to raise students' awareness toward concordances he/she must possess the knowledge it takes to run a class using such a technique, otherwise students will find themselves lost most of the time in the rich linguistic nature of this tool. Due to the fact that, this participant was very fond of technology and because he wanted concordances users to continue utilizing them even when alone, he suggested that students use their own devices to access this tool even though they may run into technical difficulties. When this happens, the teacher should have the ability to fix these problems otherwise, students would experience frustration using the tool independently which would probably hold them back from using this tool as required. This was clearly stated in the by Frankenberg-Garcia (2012). The participant also made an interesting suggestion which was that the teacher should search for simple concordances to start with, then move to a more sophisticated one, that way students will be exposed to the rich content of corpora gradually. He added that if this was not possible technologically the teacher can form a simplified concordance him/herself to use for a period of time then move to arabiCorpus concordancer to acquire a deeper understanding of Arabic language.

## Participant five:

### a. Findings

#### Pre-writing:

Participant number five was one of the candidates who used the least number of ADCs in the pre-writing. Connectives used were not varied in accordance to the length of the passage written. The total number of connectives used were only three ADCs.

Participant two was able to employ all connectives correctly either syntactically or semantically.

Post-immediate writings:

After the analyses of both post-immediate writings results showed that the usage and retention of ADCs being taught via concordances surpassed the ones being taught via conventional techniques. It was clear that teaching through concordances outstood the method of conventional techniques at this level.

This participant was able to use six connectives in the post-immediate writing using the conventional teaching technique. However, in the post-immediate writing of the concordance teaching technique eight connectives were used.

Final results revealed that the diversity of ADCs in the concordances post-immediate writing surpassed the diversity in the conventional post-immediate writing. (See table 9)

Table 9

Participant's five post immediate writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post-immediate writing	11	5	45.5%	5	45.5%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-immediate writing	11	8	73%	4	36%

Short term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

The analysis of the accuracy of conventional post-immediate writings showed that the participant semantic accuracy surpassed his syntactic accuracy. Two syntactical mistakes took place in this writing. The first mistake came from the conventional set of ADCs. As mentioned previously, all participants in this study faced difficulty learning, using and retaining the connective رغم/ragm/'although' at some point, this participant was only able to employ this connective correctly on the semantic level, he failed to use it correctly on the syntactic level. The second mistake also came from the conventional set of ADCs. The participant was only able to employ the connective فيما/fymA/while-as correctly on the semantic level but failed to employ it correctly on the syntactic level.

The analysis of accuracy in the concordances post-immediate writing on the other hand, showed that the participant was able to use ADCs of his choice correctly both syntactically or semantically.

Post-delayed writing:

Although this participant showed notable usage and retention of ADCs in the post immediate-writings, whether using the conventional or the concordances method; however, it was somewhat surprising seeing the total opposite in his post-delayed writing. His final unguided writing revealed that his choice of ADCs was quite limited from both sets of connectives. Participant number five was only able to use a total number of 6 connectives in the post-delayed writing. Three connectives came from the conventional set, while another three connectives came from the concordances set. (See table 10)

Table 10

Participant's five post-delayed writing analysis

	Total ADCs of conventional set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Conventional post- delayed writing	11	3	27%	8	73%
	Total ADCs of the concordances set	Number of correctly used ADCs	% of used ADCs (#/11x100)	Number of unused ADCs	% of unused ADCs (#/11x100)
Concordances post-delayed writing	11	3	27%	8	73%

Long term usage and retention of ADCs taught conventionally vs. the usage and retention of ADCs taught using the concordances

## b. Data analysis and discussion:

It was obvious that participant number five used a very limited number of connectives in his unguided pre-writing. As mentioned previously by (Dulger, 2007),

writing has always been the most complex and difficult aspect in language development. Whether students are writing in their first language or foreign language, they continue to report difficulties while constructing their writings. As a result, the researcher was not surprised by the participant's limited ability to employ diverse ADCs in his pre-writing. What was interesting though, was witnessing the major contradiction between this participant's post-immediate writings and post delayed writing.

The post-immediate writings of this participant showed he was able to use and retain the connectives taught via concordances more than the ones taught conventionally. The researcher could only claim that the concordances approach excelled the conventional approach on the short term for two reasons:

- 1) The participant has shown a lot of interest in concordance since the beginning of the training sessions. He was dedicated at all times and wanted to grasp as much information as he could to get the best out of this educational tool.
- 2) The researcher noticed that participant number five's usage and retention of ADCs were better when he was instructed to use sets of connectives being learned, especially the set learned via concordances.

In the participant's post-delayed writing, when he was not guided and made his choices independently on the long term, the usage and retention of ADCs learned via the conventional and the concordances teaching techniques were similar. The researcher noticed that participant number five performed better when instructed to use the connectives. His results throughout the study showed that his usage and retention in the two guided post-immediate writings surpassed the usage and retention of ADCs in his unguided pre-writing and the unguided post-delayed writing.

When the researcher compared the results above with the results of this participant's focus group and questionnaire, the following was revealed:

In section one of the questionnaire (Enjoyment and choice) participant number five reported his enjoyment in utilizing the concordances in his studies. He also mentioned his hesitance regarding the choice of using this tool again to investigate and explore Arabic.

In section two of the questionnaire (Benefits) participant number five felt that the integration of concordances in his Arabic learning helped him enhance his understanding of the Arabic language system as well as increased his spirit of inquiry. He revealed that, in the focus group "when I discover the rule myself, I hardly forget it".

In section three of the questionnaire (Technical difficulties) participant number five reported that he faced no initial difficulties with the technical aspects of the chosen concordance. He found it easy to deal with from the beginning of the study.

In section four of the questionnaire (Linguistic and conceptual difficulties) the participant also reported that he faced no initial difficulties with the linguistic and conceptual aspects of concordances. This was quite surprising to the researcher as this participant was considered the weakest linguistically among his peers.

In section five of the questionnaire (Views, opinions and perceptions) the participant mentioned that currently, he does not use the concordances regularly in his studies, yet in the future he plans on using them more as he finds them helpful on many levels. He was fascinated by the fact that he was learning through authentic MSA examples. This was one of the reasons that kept him focused most of the time. He stated that looking intensely at each citation, and being able to read its parts and connect them

together had strengthened his analytical and reading skills. He felt that his reading is positively influenced since he started using the concordances. He claims that the concordances developed his awareness of the sensitivity of the Arabic patterns and structures.

For the researcher's surprise, participant five questionnaire responses revealed no drawbacks for using arabiCorpus concordancer. Yet, it is worth highlighting that, the same participant mentioned in the focus group session that he found the concordances time consuming and frustrating sometimes when citations are too difficult to understand.

In section six of the questionnaire (In relation to future learning) participant number five clearly expressed his intention of using arabiCorpus concordancer in his future studies but not to help him with his homework, assignments, and presentations. He revealed that he was always fond of Arabic poetry and that he would like to write his own poems at some point. He believes that concordances could help him improve his writing style to a great extent since they will allow him to compare his patterns, structures, and collocations with the ones available on the citation section. Using this tool he will know whether his writings represent a good form of MSA or not. He added that if he the opportunity announced itself he would recommend the use of this tool in FL classrooms in his home town university. Yet, in an unexpected twist he stated his preference of using another easier approach for learning Arabic.

### *5.3 interpretation of analysis*

For the first research question, the study presented a series of hands-on, consciousness-raising exercises that aimed at helping AFL learners understand the basics of concordances. The purpose was to discover the effect of the conventional teaching

techniques on the participants' usage and retention of ADCs in opposition to the effect of teaching using concordances. The results revealed the following:

a) In order to prove that both teaching techniques are successful (the conventional and the concordances), the researcher compared participants' pre-writings to their post-immediate and post-delayed writings. The results showed that the participants were able to use and retain ADCs in both post-immediate writings conducted after both teaching techniques. When the researcher compared participants' pre-writings to their post-delayed writings it was detected that the process of using and retaining ADCs was harder, yet still successful on the short term regardless of which teaching technique achieved better results than the other, both teaching techniques were proven effective and reliable. (See Table 11)

Table 11

All participants' non- parametric results

	Post- immediate- conventional vs. pre	Post- immediate- concordances vs. pre	Post-delayed- conventional vs. pre	Post-delayed- concordances vs. pre
Z	-2.032 <sup>-b</sup>	-2.032 <sup>-b</sup>	-.535 <sup>-b</sup>	-.412 <sup>-b</sup>
Asymp. Sig. (2- tailed)	.042	.042	.593	.680

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Post immediate and post delayed writings in comparison to the pre-writings



b) To determine whether the nature of the teaching technique affected the participants' usage and retention of ADCs on both short and long term, the researcher compared the post-immediate writings with each other, then compared the post-immediate writings with the post-delayed writing. Results showed that on the short term participants were able to use and retain ADCs from both sets of connectives successfully. This means that there was no significant difference between the two teaching techniques. (See Table 12)

Table 12

All participants' non-parametric results

	Post-immediate conventional vs. Post-immediate concordances
Z	-.368 <sup>b</sup>
Asymp. Sig. (2-tailed)	.713

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Post-immediate conventional vs. post-immediate concordances

On the long term though, the usage and retention of ADCs of both post-immediate writings (conventional and concordances), surpassed the usage and retention of the post-delayed writing. This means that not only the nature of the teaching technique affects the

usage and retention of ADCs as the researcher was expecting but eventually, time also plays an important role in this process. (See table 13)

Table 13

All participants' non-parametric results

	Post- immediate conventional  Vs.  Post delayed conventional	Post- immediate concordances  Vs.  Post-delayed concordances
Z	-1.761 <sup>-b</sup>	-1.753 <sup>-b</sup>
Asymp. Sig. (1- tailed)	.039	.040

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Usage and retention of post immediate in comparison to post delayed

A number of significant conclusions could be drawn from the above mentioned:

- Both teaching techniques, the conventional and the concordances are proven to be effective in acquiring, using and retaining (ADCs).
- Teaching through concordances surpassed teaching through conventional techniques on the short term; whereas, both conventional and concordance techniques were used similarly on the long term. It is worth highlighting though that a slight surpassing was present in the concordance teaching technique on the long run, yet it was not significant.

For research question two, the usage and retention of participants were not only affected by the nature of the teaching technique, they were also affected by the factor of time.

Students' usage and retention to ADCs diminished over longer period of times, whether the acquisition took place through conventional techniques or concordance techniques.

- Four out of five participants were able to use and retain more connectives utilizing the concordances approach, whether in the short term or the long term. Even participants who expressed discomfort in the beginning toward concordances, still achieved better results when comparing their conventional and concordances post writings. It is worth noting that this discomfort was due to:

- 1) The short time allocated for training and using concordance
- 2) The nature of the proficiency level of the participants.

From another standpoint, although there is no denying that concordances comprise powerful analytical methodologies, it was clearly shown that they offer only limited help in hypothesis formation if used without proper guidance. The teacher should always give clear directions in order to facilitate the learning process. It should be taken into consideration that, intermediate students are not well equipped to handle such educational tool by themselves because of their moderate linguistic skills.

For research question two, the results of the focus group and questionnaire revealed the following:

Enjoyment and choice:

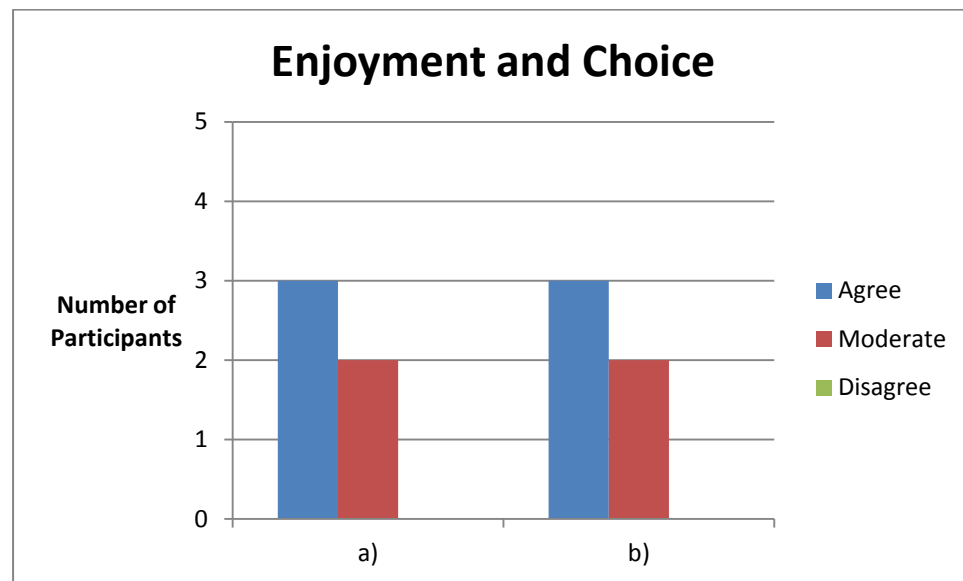
- a) I enjoy using concordances in my studies.
- b) I would choose to use concordances in my studies if I have the option.

Figure 1 shows that three participants out of five enjoyed the use of concordances. Interestingly while seemingly contradictory, all the participants mentioned at some point

in the focus group / the open-ended questions of the questionnaire that they would prefer to stick to a more conventional instruction while studying. They may choose to use this tool but under certain restrictions. (See figure 4)

Figure 4

All participants' Enjoyment and Choice



Participants' Enjoyment and choice of using arabiCorpus concordancer (items A and B in section one)

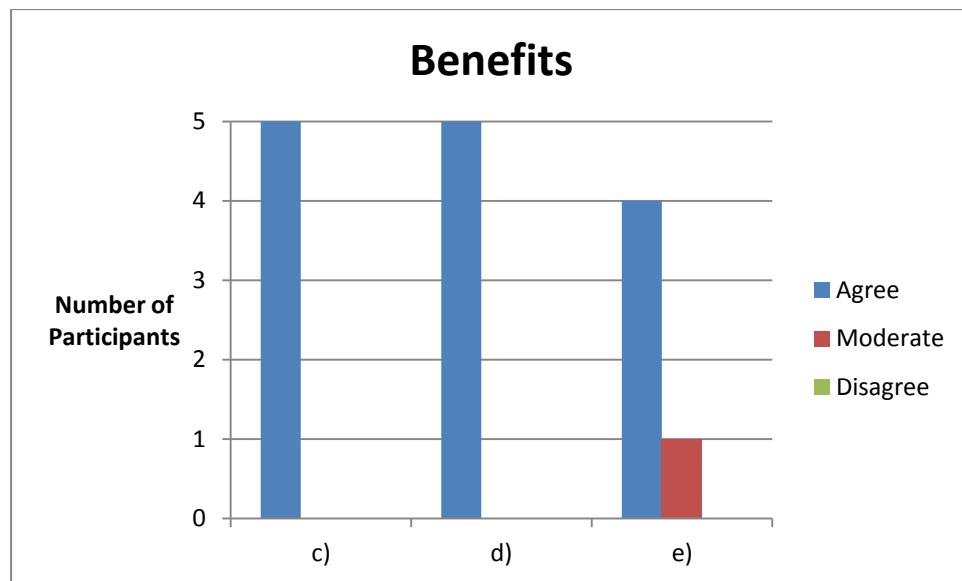
Benefits:

- c) I feel my learning experience (in general) benefited from the integration of concordances in this study.
- d) I feel my understanding of language systems benefited from the integration of concordances in this study.
- e) I feel my spirit of inquiry and research benefited from the integration of concordances in this study

Figure 2 illustrates that the majority of students find multiple benefits in the use of concordances in the language learning. Most of the pros were found under the language investigations category. Concordances majorly helped participants in exploring different linguistic patterns and structures as well as facilitated their understanding of difficult linguistic items such as ADCs and collocations. In addition, concordances enhanced their linguistic analytical skills. (See figure 5)

Figure 5

All participants' Benefits



Perceived benefits of using language corpora (items C, D and E in section two)

Technical difficulties:

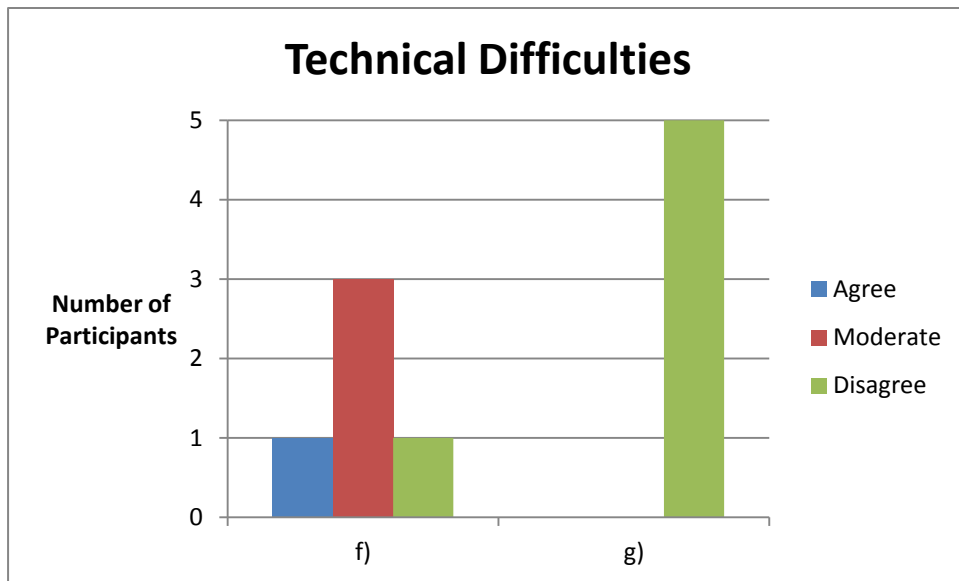
- f) I had initial difficulties with the technical aspects of using the chosen concordances.

g) I still have difficulties with the technical aspects of using the chosen concordances.

Four out of the five participants experienced technical difficulties at the initial stages of using arabiCorpus concordancer. These difficulties varied between severe and moderate; however, when participants had regular exposure and assistance in using the chosen concordances these problems gradually diminished till all five participants reported that they were no longer facing any technical difficulties. (See figure 6)

Figure 6

All participants' Technical Difficulties



Technical difficulties using arabiCorpus concordancer (item F and G in section three)

Linguistic and conceptual difficulties:

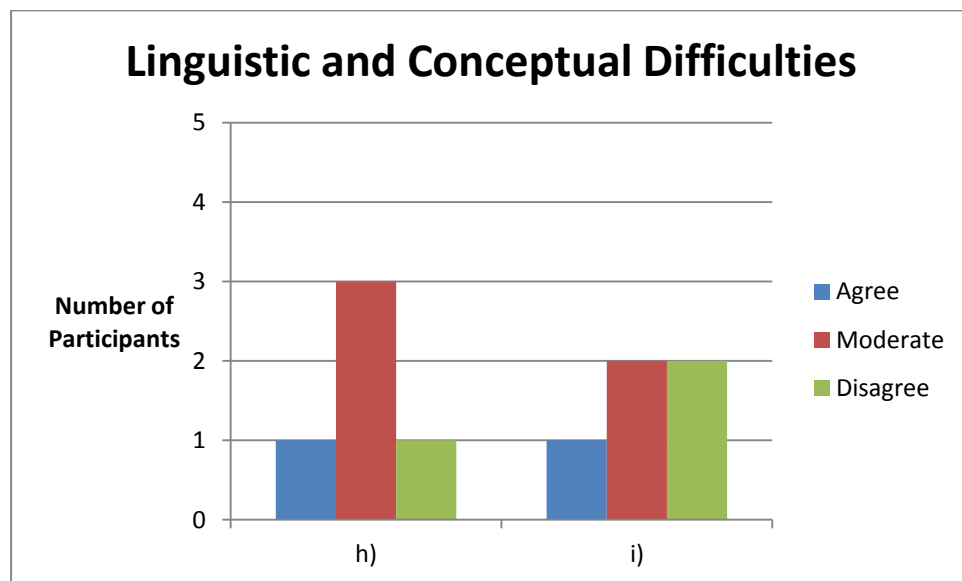
h) I had initial difficulties with the linguistic and conceptual aspects of using concordances.

- i) I still have difficulties with the linguistic and conceptual aspects of using concordances.

Three out of five participants faced linguistic and conceptual difficulties when using the chosen concordances. They reported that, the linguistic nature of this educational tool is quite sophisticated and needs a strong linguistic background in order to be handle successfully. (See figure 7)

Figure 7

All participants' Linguistic and Conceptual Difficulties



Linguistic and conceptual difficulties using arabiCorpus concordancer (item H and I in section four)

Views, opinions and perceptions:

- j) From your experience, what are the positive and negative aspects of learning through the use of concordance?
- k) Do you use concordances while studying? If so, for what purposes?

Participants' focus group and questionnaire results exhibited that, concordances can indeed facilitate inferring and generalizing rules and patterns when learning the Arabic language, regardless of that fact participants of this study still do not prefer to use them autonomously due to their rich sophisticated linguistic nature. Not with standing, the linguistic challenges they faced, participants continued to use concordances frequently to understand function words like connectives and prepositions. They asserted that seeing such linguistic items in context facilitates the acquisition process to a great extent compared to using a course book or a dictionary. The participants not only knew these items meanings and how they functioned they also discovered what possible patterns and collocations they should expect to see in the future. It was also mentioned that concordances provide authentic language patterns of the contemporary language in a way dictionaries and grammar books cannot convey, which prepares the AFL learner for real life language use. It is important to highlight that concordances help in widening participants' pool of vocabulary, especially if enough guidance is provided. Concordances were also reported to be helpful in revising participants' writings in checking their collocations formations and other structures.

It is, however, the disadvantages noted by the participants that are of particular interest here. They provided a list of problems to be solved, issues relating to time dedicated to training sessions, as well as means to overcome concordances difficulties. There is no doubt that tedious analytical work has consumed a lot of their time from their point of view. Yet, with an increased allocation of time for practicing both technical and linguistic aspects the researcher believes that better results could be achieved. The question here is whether allocating such time is possible? As all teachers know, most language courses are quite intense. The curriculum places the teachers under a lot of pressure the majority of the time. As a result, concordances should be integrated in the learning process wisely



with an appropriate planning, especially if used with beginners or intermediate level students. The researcher noticed that most difficulties arose at the linguistic level although some technical problems were reported in the beginning. The latter was resolved on the short term but the former over the whole period of the study. Also, Searches done on arabiCorpus were not always consistent. Sometimes the results contained information the user did not ask for. Finally, without a detailed search, corpora cannot provide accurate citations especially for one consonant connectives or even one syllable words.

In relation to your own future learning, please answer the following:

- l) Do you think you will use the concordances in the preparation of your homework, assignment, and presentations? Why?
- m) Would you initiate or recommend the use of concordances in your institution which already has computer facilities for students?

All participants showed future interest in using the concordances for various purposes. It was noticeable that arabiCorpus was mostly used to check high frequency collocations, especially the ones that came within the range of one word before or after the targeted connective. This feature in arabiCorpus concordancer was quite helpful in forming and revising participants' writing productions. The sample also used arabiCorpus in investigating language patterns and structures, as well as function words and difficult linguistic items. Regardless of its benefits it is important to know that participants clearly revealed they would only use arabiCorpus concordancer under certain restrictions. In order for them to utilize or recommend the use of concordances in their home town universities, especially with intermediate level students, participants stated that teachers would have to carefully plan the integration of concordances in their language course. For that to take place, the teacher him/herself needs to be a corpora literate. He/she should

know how to introduce concordances, how to provide an effective training and how to keep the students excited, as well as enthusiastic about the use of corpora all the time.

In completion of the conclusion and in a surprising twist, when the researcher compared the participants' usage and retention results to their perceptions and attitudes results toward concordances, it was revealed that even though some participants might have had negative feelings toward the use of concordances this did not affect their usage and retention of ADCs in this study.

The study results showed how corpus consultation has many positive features, particularly in a learning environment that favors learner autonomy; though, the linguistic knowledge of the users should be also taken into consideration.

In short, the researcher would say that concordances encouraged independent and collaborative learning among the chosen intermediate participants of this study. They are deemed to be largely successful in the context discussed by the researcher.

## *5.4 Conclusion*

The purpose of this study is, in a first place, to see how arabiCorpus concordancer would affect AFL learners' usage and retention of ADCs, and in a second place, to reveal what the students' perceptions and attitudes are toward learning through concordances.

The quantitative findings of the study showed that, both teaching techniques-conventional and concordancing- were proven to be effective in acquiring, using and retaining ADCs. However, results revealed that in the short term, participants' usage and retention after the utilization of concordances surpassed their usage and retention after using conventional

techniques. From another stand point, although there was a slight increase in participants' usage and retention of ADCs using the concordances. Yet, analysis showed that there was no significance. This means that the teaching technique was not the only factor that controlled participants' usage and retention to ADCs. Another factor that played an important role and should be taken into consideration was time. It was noticed that in the short term participants' usage and retention surpassed their long term usage and retention, despite the teaching technique employed. Further investigations are needed with a special focus on that matter.

The qualitative findings of the study showed that, participants' perceptions and attitudes toward corpus consultation revealed both positive and negative features. arabiCorpus concordancer, not only enhanced participants language awareness and sense of inquiry, it also provided them with a native-consultant they could refer to, to check, revise, and correct their productions. Utilizing the concordances facilitated the understanding of troublesome linguistic items and patterns, considering that the researcher prepared convenient material and activities that matched the level of an intermediate novice corpora user (See appendix V). It is worth highlighting also, that the researcher provided constant guidance throughout the process of concordancing. Nonetheless, in order for corpus use to be firmly established in Arabic FL classrooms, particularly with intermediate students, some challenges have yet to be overcome. It was clear that the linguistic knowledge of the participants affected their interaction with the concordances; therefore, appropriate exercises and activities are essential if the teacher is planning to use corpora with non-advanced students. The teacher should note that not all concordances may provide enough context to make the meaning clear which could make some students frustrated and confused. As a result, it is advised that the teacher chooses what suits his/her students, especially in the early phases of practicing concordancing. Limited class

time was also an issue for most participants as the use of concordances consumed a lot of time. Based on the researcher's experience, it is worth highlighting that, in order for teachers to use concordances effectively, it is important to gain a thorough understanding of corpus analysis, their own insecurity in using the chosen corpora may have a negative influence on students' acquisition and future usage. While some participants enjoyed the idea of concordancing, others revealed their preference for conventional teaching. Nevertheless, despite how they felt one should realize that their usage and retention of ADCs was not affected by their negative feelings. This means that teachers do not have to choose between teaching conventionally or with the use of concordance. Analysis proved that both teaching techniques are successful. Results of the current study revealed that, both techniques could be integrated together in a language classroom to complement each other. This would be of benefit especially for teachers who adopt an inductive teaching approach. It is important to mention that results of both, focus group and questionnaire stressed heavily on time allocated to training. An adequate time must be devoted to familiarizing students with the sort of things they can find out by using the chosen concordance in order to achieve optimal results. To the researcher's knowledge and according to the available data, no studies were conducted to address the area of concordancing in Arabic. Consequently, the researcher would like to see further researches in the future that investigate corpora in AFL teaching/learning.

### *5.5 Recommendations*

Due to the limited number of participants in this study, results cannot be generalized unless further investigations on larger populations are done.

A total number of five weeks was the time allocated by the researcher for this study. Only two weeks were given for the use the concordances, which is not adequate for

this technique. The drawback was that the researcher had no choice as the participants were attending two Arabic classes at this time (a media course and an MSA course). Both courses included authentic materials. The researcher wanted to reduce the influence of those courses on this study as much as possible. The regular exposure to Arabic could have damaged the end result of this study if it was conducted over a longer period of time. Therefore, devoting enough time in introducing and practicing concordances was a challenge.

The results of usage and retention of ADCs in this study are not only based on the teaching technique used to deliver them, they are also based on the nature of the selected connectives. The researcher used the LADTB list of connectives, so the results are limited to the number of connectives provided by that list. If another set of ADCs is used, results may vary.

The researcher divided both sets of ADCs using an odd/even strategy of choice. The LADTB list of connective contained a diverse number connectives, whether in meaning or in function. As a result, it is possible that one set was harder than the other. In that case usage and retention would rely more on the level of ADCs' difficulty and not on how they were taught.

## *5.6 Limitations*

Due to the limited number of participants in this study, results cannot be generalized unless further investigations on larger populations are done.

A total number of five weeks was the time allocated by the researcher for this study. Only two weeks were given for the use the concordances, which is not adequate for

this technique. The drawback was that the researcher had no choice as the participants were attending two Arabic classes at this time (a media course and an MSA course). Both courses included authentic materials. The researcher wanted to reduce the influence of those courses on this study as much as possible. The regular exposure to Arabic could have damaged the end result of this study if it was conducted over a longer period of time. Therefore, devoting enough time in introducing and practicing concordances was a challenge.

The results of usage and retention of ADCs in this study are not only based on the teaching technique used to deliver them, they are also based on the nature of the selected connectives. The researcher used the LADTB list of connectives, so the results are limited to the number of connectives provided by that list. If another set of ADCs is used, results may vary.

The researcher divided both sets of ADCs using an odd/even strategy of choice. The LADTB list of connective contained a diverse number connectives, whether in meaning or in function. As a result, it is possible that one set was harder than the other. In that case usage and retention would rely more on the level of ADCs' difficulty and not on how they were taught.

### *5.7 Delimitations*

The researcher chose to use arabiCorpus concordancer to answer the research questions of this study. Therefore, the results cannot be generalized on all available Arabic concordances, however, they can be used as a preliminary hypothesis prior to conducting studies on other concordances.

The allocated time for the study was intentionally short. The duration provided by the researcher was a total number of five weeks only. The reason the researcher chose to conduct the study in a short period of time was

1) To avoid the influence of any Arabic classes participants were attending at the time of the study, as it might have affected their acquisition process resulting in damaging the end results

2) To avoid the effect of contact with Arabic media (newspapers and political T.V/radio programs) on the participants' recognition and usage of ADCs since they were living in Egypt during that time.

Time is pinpointed as a further constraining factor which raises the questions for teachers of the time consumed on concordances versus the benefits in return, especially over short period of times, such as in this study.

## References

أنيس، إبراهيم (1975) أسرار اللغة، مكتبة الأنجلو المصرية - الطبعة الخامسة

Al-Batal, M. (1985). *The cohesive role of connectives in a modern expository Arabic text.*

(Order No. 8520857, University of Michigan). *ProQuest Dissertations and Theses,*

185-185 p.

القشاوي، محمد شوقي عباس. (2009). تحليل الأخطاء الكتابية. عند متعلمي اللغة العربية من الناطقين بالإنجليزية في

المعاهد المصرية. رسالة ماجستير من كلية دار علوم، جامعة القاهرة.

Alomyan, H. & Au, W. (2004). Exploration of Instructional Strategies and Individual

Difference Within the Context of Web-based Learning, *International Education*

*Journal*, 4 (4), 86-92.

Al-Saif, A., & Markert, K. (2010). The Leeds Arabic Discourse Treebank: Annotating

Discourse Connectives for Arabic. In LREC.

Al-Saif, A., & Markert, K. (2011). Modelling discourse relations for Arabic. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing* (pp. 736-747).

Association for Computational Linguistics.

Aijmer, K. (2009). *Corpora and language teaching* (Vol. 33). John Benjamins Publishing

Company.

Andor, J. (2004). The master and his performance: An interview with Noam Chomsky.

*Intercultural Pragmatics*, 1 (1), 93-111.

Ardener, E. (Ed.). (1971). *Social anthropology and language* (Vol. 1). Psychology Press.

Aston, G (1997), Enriching the Learning Environment: Corpora in ELT. In: Wichmann et al.

1997, p. 51-64.



- Aston, G., Bernardini, S., & Stewart, D. (2004). *Corpora and language learners* (Vol. 17). John Benjamins Publishing Company.
- Baker, P., Hardie, A., & McEnery, T. (2006). A glossary of corpus linguistics (pp. 64-152). Edinburgh: Edinburgh University Press.
- Baker, M. (2013). *In other words: A coursebook on translation*. Routledge.
- Banko, M., & Brill, E. (2001). Scaling to very very large corpora for natural language disambiguation. In *Proceedings of the 39th Annual Meeting on Association for Computational Linguistics*. p. 26-33. Association for Computational Linguistics.
- Barlow, M. (2002) Corpora, concordancing, and language teaching. Proceedings of the 2002 KAMALL International Conference. Daejeon, Korea.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13 (4), 544-559.
- Bennett, G. R. (2010). *Using corpora in the language learning classroom: Corpus linguistics for teachers*. Michigan: University of Michigan Press.
- Bernardini, S. (2000). Competence, capacity, corpora. *Competence, capacity, corpora*, 1000-1049.
- Biber, D., Conrad, S., & Reppen, R. (1994). Corpus-based approaches to issues in applied linguistics. *Applied linguistics*, 15 (2), 169-189.
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge University Press.
- Bowker, L., & Pearson, I. (2002) *Working with Specialized Language: A Practical guide to using corpora*. London, Routledge.
- Breyer, Y. (2009). Learning and teaching with corpora: Reflections by student teachers. *Computer assisted language learning* 22 (2), 153-172

- Buysse, L. (2009). Corpora and language teaching, p. 549-556
- Campoy, M. C., Cubillo, M. C. C., Belles-Fortuno, B., & Gea-Valor, M. L. (Eds.). (2010).  
Corpus-based approaches to English language teaching. A&C Black.
- Chaalal, M. I. (2010). Foreign Learners' Difficulties in Translating the Arabic Discourse Marker 'Fa' into English The Case of Third Year Students of Translation at the University of Constantine. *MA, Mentouri University-Constantine*.
- Chambers, A. (2005). Integrating corpus consultation in language studies. *Language learning & technology*, 9 (2), 111-125.
- Celik, S. (2011). Developing collocational competence through web based concordance activities. *Novitas-ROYAL (Research on Youth and Language)*, 5(2), 273-286.
- Cañado, M., & Bedmar, M. (2006). Data-driven learning and awareness-raising: An effective tandem to improve grammar in written composition?. *International Journal of Emerging Technologies in Learning (iJET)*, 1 (3), 1-11.
- Cobb, T. (1997). Is there any measurable learning from hands-on concordancing? *System*, 25 (3), 301-315.
- Cobb, T. (1999). Breadth and depth of lexical acquisition with hands-on concordancing. *Computer Assisted Language Learning*, 12 (4), 345-360.
- Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209-240.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE Publications, Incorporated.

- Danielsson, P., & Sayers, A. Corpus Hub at Birmingham: Concordance software for the analytic linguist.
- Denzin, N. (2006). *Sociological Methods: A Sourcebook*. Aldine Transaction. ISBN 978-0-202-30840-1. (5th edition).
- Dülger, O. (2007). DISCOURSE MARKERS IN WRITING. *Selcuk University Social Sciences Institute Journal*, (18).
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14 (4), 532-550.
- Erdogan, Y., Bayram, S., & Deniz, L. (2008). Factors that Influence Academic Achievement and Attitudes in Web Based Education. *Online Submission*, 1 (1), 31-47.
- ell Ebeling, S. O. (2009). Oslo Interactive English Corpus-driven exercises on the Web. *Corpora and language teaching*, 33, 67.
- Farr, F. (2008). Evaluating the use of corpus-based instruction in a language teacher education context: Perspectives from the users. *Language Awareness*, 17 (1), 25-43.
- Federico, P. A. (2000). Learning styles and student attitudes toward various aspects of network-based instruction. *Computers in Human Behavior*, 16 (4), 359-379.
- Flowerdew, J. (1996). Concordancing in language learning. *The power of CALL*. Houston, TX: *Athelstan*, p. 97-113.
- Fox, G. (1998). Using corpus data in the classroom. In: B. Tomlinson (Ed.) *Material Development in Language Teaching*. Cambridge, Cambridge University Press. p. 25-43
- Frankenberg-Garcia, A. (2012). Raising teachers' awareness of corpora. *Language Teaching*, 45 (04), 475-489.
- Fraser, B. (1999). What are discourse markers?. *Journal of pragmatics*, 31 (7), 931-952.

- Gilquin, G., & Granger, S. (2010). How can data-driven learning be used in language teaching. *The Routledge handbook of corpus linguistics*, 359-370.
- Gan, S-L., Low, F., & Yaakub, N. (1996). Modeling teaching with a computer-based concordancer in a TESL preservice teacher education program. *Journal of Computing in Teacher Education*, 12/4, 28–32.
- Gaskell, D., & Cobb, T. (2004). Can learners use concordance feedback for writing errors? *System*, 32 (3), 301-319.
- Ghadessy, M., Henry, A., & Roseberry, R. (2001). *Small Corpus Studies and ELT: theory and practice* (Vol. 5). John Benjamins Publishing Company.
- Granath, S. (2009). Who benefits from learning how to use corpora?. *Corpora and language teaching*, 33, 47.
- Granger, S., Hung, J., & Petch-Tyson, S. (Eds.). (2002). *Computer learner corpora, second language acquisition and foreign language teaching* (Vol. 6). John Benjamins Publishing Company.
- Granger, S. (2009). The contribution of learner corpora to second language acquisition and foreign language teaching. *Corpora and language teaching*, 33, 13.
- Habash, N., Souidi, A., & Buckwalter, T. (2007). On Arabic Transliteration. In *Arabic computational morphology* (pp. 15-22). Springer Netherlands.
- Hadley, G. (2002). An introduction to data-driven learning. *RELC journal*, 33 (2), 99-124.
- Hartley, J.F. (1994) 'Case Studies in Organisational Research', In C. Cassel and G. Symon (eds) *Qualitative Methods in Organisational Research: A Practical Guide*, London, UK: Sage, 208-209.
- Hobbs, J. R. (1985). *On the coherence and structure of discourse* (pp. 85-37). CSLI.

- Jackson, H. (1997) 'Corpus and Concordance: Finding out about Style'. In: A. Wichmann, S. Fligelstone, T. McEnery, & G. Knowles (Eds.) *Teaching and Language Corpora*. London, Longman. p. 224-240.
- Johansson, S. (2007). Using corpora: From learning to research. In E. Hidalgo, L. Quereda, & J. Santana (Eds.), *Corpora in the foreign language classroom*, Amsterdam, The Netherlands: Rodopi. p.17–30.
- Johansson, S. (2009). Some thoughts on corpora and second-language acquisition. *Corpora and language teaching*, 33-44.
- Johns, T. (1988). Whence and whither classroom concordancing. *Computer applications in language learning*, p. 9-27.
- Johns, T. (1991). Should you be persuaded: Two samples of data-driven learning materials. *English language research journal*, 4, 1-16.
- Johns, T. & King P. (1991) *Classroom concordancing*. *English Language Research Journal* 4, 27-45.
- Johns, T. (2002). Data-driven learning: The perpetual challenge. *Language and Computers*, 42 (1), 107-117.
- Khan, B. (2000). Discussion of resources and attributes of the web for the creation of meaningful learning environments. *Cyber Psychology & Behavior*, 3, 17-23.
- Kennedy, C. & Miceli, T. (2001) 'An evaluation of intermediate students' approaches to corpus investigation'. *Language Learning and Technology*, 5:3, 77-90.
- Kettemann, B. (1996) Concordancing in English language teaching. In: S. Botley, G. Glass, T. McEnery, & A. Wilson (Eds.) *Proceedings of Teaching and Language Corpora* 1996. UCREL University of Lancaster, Lancaster, p. 4-16

- Krieger, D. (2003). Corpus linguistics: What it is and how it can be applied to teaching. *The Internet TESL Journal*, 9 (3).
- Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford University Press.
- Liu, J., Lee, C., & Hung, P. (2008). An Information retrieval approach to facilitating second language learning. *ICCE 2008 Proceedings*, p. 439-444.
- Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design*. Routledge.
- Mallikamas, P. (2001) *The use of corpora and concordancing in translation*. *PASAA*, 32, 52-70
- Mark, K. (1998). The significance of learner corpus data in relation to the problems of language teaching. *Bulletin of General Education*, 312, 77-90.
- Mathew, N., & Dohery-Poirier, M. (2000). Using the World Wide Web to enhance classroom instruction. *First Monday*, 5 (3).
- McEnery, T. (2001). *Corpus linguistics: An introduction*. Edinburgh University Press.
- McEnery, T., & Hardie, A. (2011). *Corpus linguistics: method, theory and practice*. Cambridge University Press.
- Minugh, D. (1997). All the language that's fit to print: Using British and American newspaper CD-ROMs as corpora. In *Teaching and language corpora*. p. 67-82
- Morgan, D. L. (1996). Focus groups. *Annual review of sociology*, 129-152.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing research*, 40 (2), 120-123.

مرسي، فتح الله علي. (2005). أدوات الربط في لغة الصحافة العربية المعاصرة 1930 – 1998

رسالة دكتوراه من كلية الآداب قسم لغة عربية و آدابها، جامعة القاهرة

- Murison-Bowie, S. (1996). Linguistic corpora and language teaching. *Annual review of applied linguistics*, 16 (1), 182-199.
- O'Keeffe A, McCarthy M, Carter R. (2007) *From Corpus to Classroom: Language Use and Language Teaching*. Cambridge: Cambridge University Press.
- Dulger, O. (2007). Discourse markers in Arabic. *Selcuk University Social Sciences Institute Journal*, (18).
- Partington, A. (1998) *Patterns and Meanings: Using corpora for English language research and teaching*. Amsterdam, John Benjamins.
- Pearson, J. (1996). Electronic Texts and Concordances in the Translation Classroom. *TEANGA: The Irish Yearbook of Applied Linguistics*, 16, 85-95.
- Reppen, R., Fitzmaurice, & Biber, D. (Eds.). (2002). *Using corpora to explore linguistic variation* (Vol.9). John Benjamins
- Powell, R. R. (1997). *Basic research methods for librarians*. Greenwood Publishing Group.
- Ratnaparkhi, A. (1998). Statistical models for unsupervised prepositional phrase attachment. In *Proceedings of the 36th Annual Meeting of the Association for Computational Linguistics and 17th International Conference on Computational Linguistics-Volume 2* (pp. 1079-1085). Association for Computational Linguistics.
- Reppen, R. (2010) *Using Corpora in the Language Classroom*. Cambridge: Cambridge University Press
- Römer, U. (2006). Pedagogical applications of corpora: Some reflections on the current scope and a wish list for future developments. *Zeitschrift für Anglistik und Amerikanistik*, 54(2), 121-134.
- Römer, U. (2009). Corpus research and practice: What help do teachers need and what can we offer? *Corpora and language teaching*, 83-100.

- Römer, U. (2011). Corpus research applications in second language teaching. *Annual Review of Applied Linguistics*, 31, 205-225.
- Sanders, D. W. & Morrison-Shetlar, A. I. (2001). Student Attitudes Toward Web-Enhanced Instruction in an Introductory Biology Course. *Journal of Research on Computing in Education*, 33 (3), 251-62.
- Sankoff, G., Thibault, P., Nagy, N., Blondeau, H., Fonollosa, M. O., & Gagnon, L. (1997). Variation in the use of discourse markers in a language contact situation. *Language variation and change*, 9 (02), 191-217.
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford University Press.
- Sinclair, J. (1996). The search for units of meaning. *Textus*, 9 (1), 75-106.
- Sinclair, J. (1997). Corpus evidence in language description. In *Teaching and language corpora* (pp. 27-39). London and New York: Longman.
- Sinclair, J. (2004). *How to use corpora in language teaching* (Vol. 12). John Benjamins Publishing Company.
- Sripicharn, P. (2003). *Evaluating classroom concordancing : the use of concordance - based materials by a group of Thai students*. *Thammasat Review* 8, 203-236.
- Stevens, V. (1991). Concordance-based vocabulary exercises: A viable alternative to gap-fillers. *Classroom concordancing: English language research journal*, 4, 47-63.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (Vol. 46). Sage..
- Taylor, C. (2008). What is corpus linguistics? What the data says. *ICAME Journal*, 32, 179-200.
- Tellis, W. (1997). Application of a case study methodology. *The qualitative report*, 3 (3), 1-17.
- Teubert, W. (2005). My version of corpus linguistics. *International Journal of Corpus Linguistics*, 10 (1), 1-13.



- Thurstun, J., & Candlin, C. (1998) Concordancing and the teaching of the vocabulary of academic English. *English for Specific Purposes*, 17, 267-280
- Tognini-Bonelli, E. (2001). *Corpus linguistics at work* (Vol. 6). John Benjamins.
- Todd, R. W. (2001). Induction from self-selected concordances and self-correction. *System*, 29 (1), 91-102.
- Tomlinson, B. (Ed.). (2011). *Materials development in language teaching*. Cambridge University Press.
- Tribble, C., & Jones, G. (1990). *Concordances in the Classroom. A resource book for teacher*. Essex, Longman.
- Turnbull, J., & Burston, J. (1998). *Towards Independent Concordance Work for Students: Lessons from a Case Study*. *On-call*, 12 (2), 10-21.
- Wang, L. (2001). Exploring parallel concordancing in English and Chinese. *Language Learning & Technology*, 5 (3), 174-184.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language teaching*, 31 (02), 57-71.
- Weber, I. (2001) A concordance- and genre-informed approach to ESP essay writing *ELT Journal*, 55, 14-20.
- Willis, D., & Willis, J. (1996). Consciousness-raising activities. *Challenge and change in language teaching*, p. 63-76.

## I. Appendix

Connective	English equivalent	Syntactic category	Type	Buck-walter	ATB tag	Freq
و	and	Coordinating conj	Simple	wa	CONJ	3826
ل	for/of/in order to	Preposition	Clitic	li	PREP	261
لكن	but	Coordinating conj	Simple/clitic	lkn	CONJ	208
بعد	after	Adverbial	Simple/clitic	bEd	PREP	167
ف	then	Coordinating conj	Clitic	fa	CONJ	91
لان	because	Subordinating conj	Simple/clitic	lAn	CONJ	82
قبل	before	Adverbial	Simple	qbl	PREP	79
اثر	after	Subordinating conj	Simple	Avr	PREP	63
ب	due to/because	Preposition	Clitic	bi	PREP	63
كما	as/and/similarly	Coordinating conj	Simple	kmA	CONJ	60
منذ	since	Adverbial	Simple	mn*	PREP	59
بسبب	because of	Prepositional phrase	Simple/Paired	bsbb	PP.PREP _NOUN/PREP	45
عندما	when/due	Adverbial	Simple	EndmA	CONJ	44
الا ان	however	Subordinating conj	Simple	AIA An	EXCEPT-PART _FUNC-WORD	42
في حال	in case/if	Prepositional phrase	Simple	fy HAI	PREP.NOUN	36
فيما	while/as	Subordinating conj	Simple	fymA	PREP _REL-PRON	36
اذا	if	Subordinating conj	Simple/Paired	A*A	CONJ	31
ثم	then	Coordinating conj	Simple	vm	ADV	30
او	or	Coordinating conj	Simple	Aw	CONJ	29
رغم	although	Subordinating conj	Simple/Paired	rgm	PREP	29
في حين	while/in the same time	Prepositional phrase	Simple/Clitic	fy Hyn	PREP.NOUN	26
اما	while/as	Subordinating conj	Simple	AmA	PREP	25
اذ	because	Coordinating conj	Simple	A*	CONJ	21
مما	therefore	Subordinating conj	Simple	mmA	PP.PREP _REL-PRON	21
خصوصا	especially	Adverbial	Simple	xSwSA	ADV.SSUFF	18
بينما	while/as	Subordinating conj	Simple	bynmA	CONJ	17

Table 4: The most frequent connectives in LADTB

## II. Appendix

Set one Conventional approach	Set two Concordance line approach
بعد	لكن
قبل	لأن
كما	إثر
بسبب	منذ
إلا أن	عندما
فيما	في حال
ثم	إذا
رغم	أو
أما	في حين
مما	إذ
بينما	خصوصا

Adapted from Al-Saif, A. & Markert, K. (2010). The Leeds Arabic Discourse Treebank: Annotating Discourse Connectives for Arabic. In LREC.

### III. Appendix

This Book's Arabic Transliteration Scheme

Arabic	Transliteration	Buckwalter
ء	'	'
	Ā	
أ	Ĥ	>
ؤ	ŵ	&
إ	Ǻ	<
ئ	ŷ	}
ا	A	A
ب	b	b
ة	ḥ	p
ت	t	t
ث	θ	V
ج	j	J
ح	H	H
خ	x	X
د	d	D
ذ	ð	*
ر	r	R
ز	z	Z
س	s	S
ش	š	\$
ص	S	S
ض	D	D
ط	T	T
ظ	Ǿ	Z
ع	ç	E
غ	γ	G
ف	f	F
ق	q	Q
ك	k	K
ل	l	L
م	m	M
ن	n	N
\	h	H

و	w	W
ى	y	Y
ي	y	Y
ا	a	A
و	u	U
ي	i	I
آ	ã	F
ؤ	ũ	N
ك	ĩ	K
~	~	~
	—	—

Adapted from Habash, N., Soudi, A., & Buckwalter, T. (2007). On Arabic Transliteration. In Arabic computational morphology (pp. 15-22). Springer Netherlands.

## IV. Appendix

### Conventional Teaching Approach



مظاهرات طلاب الإخوان تتواصل:

مظاهرات محدودة بالجامعات .. فصل ٣ طلاب بحقوق الزقازيق .. وإحالة ٢٠ طالبة بالأزهر  
للتحقيق

الأربعاء 11 من صفر 1436 هـ 3 ديسمبر 2014



الهدوء يخيم على جامعة عين شمس

نظم أمس طلاب جماعة الإخوان المسلمين مظاهرات محدودة بجامعة القاهرة، والأزهر، و حلوان، بعد براءة الرئيس السابق مبارك ورموز نظامه في القضية المعروفة إعلامياً بـ"محاكمة القرن".  
في جامعة القاهرة نظم العشرات من طلاب حركة "طلاب ضد الانقلاب" سلسلة بشرية أمام المجلس الأعلى للجامعات بجامعة القاهرة استمرارًا وتأكيدًا لرفض الأحكام الصادرة ببراءة الرئيس السابق مبارك، ورفع الطلاب لافتات تطالب بإعادة المحاكمة، و قاموا برفع صور لشهداء ثورة يناير كما رددوا هتافات مناهضة للجيش والشرطة.

و فى جامعة الزقازيق قرر رئيس الجامعة الدكتور أشرف الشيحى، فصل ٣ طلاب بالفرقة الثالثة بكلية الحقوق لمدة عام دراسى بسبب قيامهم بخرق قانون التظاهر وإثارة الشغب داخل الحرم الجامعى وتعطيل الدراسة .

فىما قرر رئيس نفس الجامعة إحالة طالبتين بكلية الحاسبات والمعلومات لمجلس التأديب لتظاهرهما داخل الجامعة وترديد العبارات المناهضة والمسيئة لمؤسسات الدولة .

أما فى جامعة الأزهر تم إحالة ٢٠ من الطالبات إلى التحقيق على خلفية مشاركتهن فى المظاهرات المنذدة بمؤسسات الدولة وإدارة الجامعة، وترديد العبارات المسيئة، وتم رفع مذكرة بأسمائهن لرئيس الجامعة تمهيداً لاتخاذ الإجراءات اللازمة .

فى السياق نفسه قررت نيابة قسم ثانى الزقازيق بإشراف المستشار أحمد دعيبس المحامى العام لنيابات جنوب الشرقية، حبس ٥ من طلاب الإخوان ١٥ يوماً على ذمة التحقيقات، لقيامهم بإثارة الشغب وتحطيم واقتحام مبنى الأمن ثم رشقه بالمولوتوف.

Adapted from Al-Ahram Newspaper website

Choose the correct answer:

(The objective here is to incorporate distractors in the exercise to figure out whether students can identify and use the required discourse connective or not)

1- قام طلاب الإخوان بتعطيل الدراسة وتحطيم المباني..... قامت طالبات الجماعة بترديد العبارات المسيئة لمؤسسات الدولة.

أ- بسبب

ب- بعد

ج- كما

2- قام رئيس جامعة الزقازيق بالتحقيق مع بعض الطلاب..... فصلهم لمدة عام دراسي كامل.

أ- ثم

ب- فيما

ج- بعد

3- اتهم طلاب الإخوان قوات الأمن باستخدام العنف ..... نفت الشرطة هذه الافتراءات .

أ- فيما

ب- أما

ج- كما

4- إلتزم معظم الطلاب بقوانين الجامعة..... طلاب الإخوان فقاموا بتعطيل الدراسة وتخريب المنشآت.

أ- ثم

ب- أما

ج- فيما

5- تعطلت الدراسة في بعض الجامعات ..... مظاهرات طلاب الإخوان .

أ- أما

ب- كما

ج- بسبب



6- بدأت مظاهرات طلاب الإخوان في الجامعات المصرية ..... الحكم ببراءة الرئيس السابق مبارك.

أ- فيما

ب- بعد

ج- ثم

Use the following connectives to fill in the blanks:

(The objective here is to recognize the precise meaning of each discourse connective in order to use it correctly in the given contexts)

أما - كما - بعد - فيما - ثم - بسبب

1- فشلت مظاهرات طلاب الإخوان في الجامعات المصرية..... فشلت كل المظاهرات التي سبقتها.

2- المظاهرات في الجامعات الحكومية كثيرة..... في الجامعات الخاصة فهي أقل بكثير.

3- مستقبل طلاب مصر مههد بالضياع..... ممارسات جماعة الإخوان داخل الجامعات.

4- قامت قوات الأمن بالقبض على بعض طلاب الإخوان ..... أن أتلّفوا المباني والمنشآت الجامعية.

5- رفع طلاب الإخوان صور الشهداء أولاً..... قاموا بالهتاف ضد الجيش والشرطة.

6- خرج الرئيس السابق مبارك من محبسه ..... ظل الرئيس المعزول مرسي خلف القضبان

للمحاكمة.

Compete the following:

(The objective here is to test students' retention and correct usage of the learned discourse connectives without any means of guidance)

1- شارك الإخوان في الإنتخابات البرلمانية ..... شاركوا في الإنتخابات الرئاسية.

2- لا أحب طريقة الإخوان في التعبير عن رأيهم ..... أنني لا أحب عداوتهم وعنفهم.

3- احترم رئيس بلادي..... قراراته ومواقفه الإيجابية.

4- قامت الثورة ..... انتشار الفساد والظلم بين كافة أطياف المجتمع.

5- نظم الطلاب وقفات احتجاجية أمام إدارة الجامعة..... نظمت الطالبات مسيرات صامتة داخل

الحرم الجامعي.

6- كانت العلاقة بين الشرطة والشعب قبل ثورة 25 يناير سيئة للغاية ..... الآن فالعلاقة بينهما

قوية ومستقرة.

من حرك يعرف  
المصري اليوم  
www.almasyalyoum.com

**غياب مظاهرات < الإخوان > في الجامعات:**

**تشديدات أمنية بالقاهرة .. تفتيش بعين شمس .. تمرد بطوان .. وهدوء بالأزهر**

**الجمعة 13 من صفر 1436هـ 5 ديسمبر 2014**



سيطرت حالة من الهدوء التام على جامعات القاهرة وعين شمس و حلوان أمس , وسط انتظام العملية التعليمية , وغياب لافت لمظاهرات الإخوان والحركات السياسية , فيما كثفت الشرطة وجودها في محيط الجامعات وشدت أفراد الأمن من إجراءات التفتيش على البوابات قبل دخول الطلاب.

في جامعة القاهرة شهد الحرم الجامعي حالة من الهدوء وسط وجود مكثف لقوات الشرطة , وانتظمت العملية التعليمية بجميع الكليات بشكل طبيعي. فيما شدد أفراد الأمن من عملية تفتيش حقائب الطلاب للتأكد من خلوها من أية أسلحة كما قاموا بالتحقق من هويات الطلاب للتأكد من انتمائهم للجامعة. أما في جامعة عين شمس , سيطرت حالة من الهدوء التام على كل الكليات ومحيط الجامعة وسط إجراءات أمنية مشددة على البوابات إلا أن بعض الطلاب حاولوا إثارة الشغب والعنف ولكن قوات الأمن تمكنت من التعامل معهم على الفور.

وخلت الجامعة من أي احتجاجات أو مظاهرات سواء من طلاب الإخوان أو طلاب الحركات السياسية الأخرى رغم اعلانهم التظاهر طوال أيام الاسبوع الجاري تحت شعار <فك الحصار> وذلك تنديدا بحكومة 30 يونيو بالإضافة إلى رفضهم أحكام البراءة الصادرة في محاكمة القرن الاسبوع الماضي.

و في جامعة حلوان شهدت العملية الدراسية انتظاما وإقبالا متوسطا في ظل غياب مظاهرات طلاب الإخوان بينما سادت حالة من الهدوء داخل جامعة الأزهر بفرعي البنين والبنات وسط وجود أمني مكثف من الشرطة وأفراد الأمن مما نتج عنه عدم تعطل الدراسة وانتظام الطلاب في محاضراتهم.

Adapted from Al-Masryalyoum Newspaper website

Choose the correct answer:

(The objective here is to incorporate distractors in the exercise to figure out whether students can identify and use the required discourse connective or not)

1- تعطلت الدراسة في بعض الجامعات ..... تسبب في ضياع مستقبل بعض الطلاب .

أ- قبل

ب- إلا أن

ج- مما

2- افرجت وزارة الداخلية عن بعض طلاب الإخوان في جامعة القاهرة أمس..... اعتقلت آخرون في جامعة عين شمس.

أ- مما

ب- بينما

ج- رغم

3- توقفت الحركة المرورية في بعض الشوارع بسبب مظاهرات طلاب الإخوان..... انتشار قوات الأمن في كل مكان.

أ- رغم

ب- مما

ج- بينما

4- دفعت وزارة الداخلية بالمدربات وسيارات الأمن المركزي في محيط جامعة القاهرة .....بداية فاعليات <أسبوع فك الحصار>

أ- مما

ب- قبل

ج- إلا أن

5- ساد الهدوء معظم الجامعات المصرية..... رئيس جامعة المنيا قرر فصل 3 طلاب لتظاهريهم داخل الجامعة دون إذن.

أ- بينما

ب- إلا أن

ج- رغم

Use the following connectives to fill in the blanks:

(The objective here is to recognize the precise meaning of each discourse connective in order to use it correctly in the given contexts)

قبل - إلا أن - رغم - بينما - مما

1- الوضع الأمني في الجامعات المصرية مستقر ..... بعض وكالات الأنباء العالمية تنقل الأخبار للخارج بشكل غير دقيق.

2- كَتَبَ طلاب الإخوان عبارات مسيئة ضد الجيش والشرطة على جدران الجامعة ..... هتفت الطالبات هتافات منددة للحكومة والقائمين عليها.

3- وقعت مشادات عنيفة بين طلاب الإخوان وقوات الأمن ..... أدى إلى تعطيل الدراسة داخل الجامعة.

4- يجب تفتيش جميع الطلاب والطالبات ..... دخولهم إلى الحرم الجامعي.

5- يقوم طلاب الإخوان بتنظيم مظاهرات و وقفات احتجاجية ..... استقرار أحوال البلاد.

Complete the following:

(The objective here is to test students' retention and correct usage of the learned discourse connectives without any means of guidance)

1- واصل طلاب الإخوان احتجاجاتهم لليوم السادس على التوالي ..... ترتب عليه زيادة اعداد

قوات الأمن داخل الجامعات والمنشآت العامة.

2- استعمل طلاب الإخوان المولتوف و الأسلحة ضد قوات الأمن ..... قلة عددهم.

3- دفعت وزارة الداخلية بالمدركات وسيارات الأمن المركزي داخل الجامعات ..... وفرت وزارة

الصحة سيارات الإسعاف تحسبا لأي أعمال عنف.

4- تم نقل الطلاب المشاغبيين إلى السجن ..... معظمهم حصل على البراءة بعد فترة قصيرة.

5- يجب الحصول على أدلة وبراهين كافية..... إدانة أي شخص.

## V. Appendix

### Concordances Teaching Approach

Students will be given a printed sample of a deliberately chosen concordance lines that targets a certain connective prior to navigating the electronic concordances (see the below figure). They will be asked to answer questions such as:

- Can you guess the meaning of this connective?
- Can you extract any information that may help understand how/when this connection is being used?
- What usually follows this connective?
- Does it collocate with anything?
- What are the word forms of this connective?

The reason why students are analyzing these sentences before the actual use of electronic concordances is: a) get them used to how concordances lines look like, b) help them know what to look for, c) reduce their level of frustration as concordances contain a huge various compilations of sentences. As a result, students will try to extract as much information as they can from the printed lines, they will then try to confirm/modify their findings through the use of concordances.

Note: This process will be repeated with each connective being learned.

### إذ

وفى طريق العودة زرنا ما يعرف ب«العين السخنة» إذ يخرج منها ماء ساخن درجة حرارته 40، دون أن يعلم

يخضع هذا المفاعل للتفتيش من قبل الوكالة الدولية للطاقة الذرية، إذ لم توقع إسرائيل على معاهدة حظر انتشار الأسلحة النووية، مما

هانى عزيز: إن شهر رمضان المبارك من أجمل شهور السنة، إذ فيه تتوق كل نفس بشرية إلى عمل الخير والبعد عن

أن انسحاب المعارضة يقضى أيضا على الشكل الديمقراطى للانتخابات السودانية، إذ إن طبيعة التركيبة السودانية تفرض قدرا من الديمقراطية

أتناول ثمرة الفاكهة وهى مسألة مهمة جدا فى التمثيل الغذائى إذ ليس صحيحا تناول الفاكهة عقب الوجبة مباشرة.

فإن الرهان الفلسطينى فى المفاوضات يتركز على الدور الأمريكى، إذ لا ثقة لهم فى نتياهو، وفى المقابل، فإن الجانب الأمريكى

## Applying

Re-write using إذ and make necessary changes:

- لن اذهب إلى الجامعة اليوم بسبب مرضي.
- تحسّن الوضع الأمني في مصر بعد وقوف الجيش والشرطة معاضد الإرهاب.
- 

## Creating

Form 2 sentences of your own using إذ :

-

-

## لأن

- أنا ضد الفكرة لأن سيناء خط أحمر و التملك فيها يجب أن يكون للمصريين فقط،  
أهم ما في تلك المحطة في شتوتجارت هو حداثة الفكرة، لأن محطة شتوتجارت تشبه لحد كبير محطة مصر  
في رمسيس، تأتي
- أوضح الرئيس الفلسطيني أنه كان يتمنى أن تتم هذه الصفقة لأنها كانت ستؤدي إلى إطلاق سراح ألف  
أسير فلسطيني، لكن المفاوضات
- او في العادة تكون زيادة الأسعار أكبر من زيادة الأجر لأن الأسعار تصعد بالأسانسير، و لكن الأجر  
تصعد بالسلالم، و في هذه الحالة
- لن يكون هناك مقابل مادي في البداية لتجميع هذه الأجهزة لأن هذا يعتبر اتجاه قومي اتجاه البيئة،  
وأنهفيمابعدإذا
- هذا لا يعنى أنني سأتعامل مع كل الناس بهذه الطريقة لأن هناك كثيرين يحتاجون  
إلى دعم مادي مباشر، والحكومة التي اتهمت

## Analyzing

Re-write eliminating لأن and make necessary changes:

- فشلت حكومة مبارك لأنها لم تغير من أسلوبها التقليدي على مر السنين.
- أهالي سوريا يهربون من بيوتهم لأن هجمات داعش والجيش الحر تهدد حياتهم.



## Synthesizing

Arrange the following to form one meaningful sentence:

- لأننا شعب / لنسمح / قوي / بتدمير وطننا
- الشعب الفلسطيني / تحت رحمة اسرائيل / يعيش / العرب غير متّحدين / لأن

## إثر

8 أشخاص مصرعهم، وأصيب 22 بينهم سائحتان روسيتان بجروح طفيفة، **إثر** وقوع عدة حوادث طرق بمحافظة سوهاج وقنا والغربية والبحر الأحمر.

وانتحر عاطل **إثر** إطلاقه عيارا ناريا على نفسه من طبنجة خاصة به بسبب

لم تنضم إلى الاتفاق الأمني الذي عقد بين أمريكا وإسرائيل **إثر** محرقة غزة و قبيل انتهاء ولاية بوش لوقف تهريب البضائع إلى

قوات أجنبية إلى أراضيها لمحاربة المتطرفين من تنظيم القاعدة، وأضاف **إثر** لقاء عقده مع نظيره الكندي لورانسكانون إن الصراع مع

واشتعلت على **إثر** ذلك أزمة حادة بين أعضاء مجلسي الشعب والشورى، والدكتور حاتم

والحزن الشديد بعد خروج الفريق من الدور التمهيدي لكأس مصر **إثر** الهزيمة غير المتوقعة أمام مطروح الصاعد هذا الموسم إلى الدوري

## Synthesizing

Arrange the following to form one meaningful sentence:

- اندلاع مظاهرات الربيع العربي / إثر / في المنطقة / سادت / حالة من الرضا
- قوات الأمن / إثر / غضب الطلاب / استخدام / الغاز المسيل للدموع

## Creating

Form 2 sentences of your own using **إثر**:

-  
-

## لكن

وليس هناك من عيب في خطاب الرئيس، **لكن** العيب أن تظل هذه الأهداف النبيلة حبيسة خطابات الرئيس، لا

إلا أن أوباما كان في الانتخابات في المرة الأولى وطنيا، **لكنه** تغير الآن و أصبحت لديه رغبة في البقاء في السلطة.

لم أكن أتوقع أنه سيتم تعييني شيخ الأزهر بشكل حاسم، **لكن** كان يتردد هذا الأمر، وكنت أتوقع أنى لن أكون كذلك

أنك عرضت مجموعة من المشروعات على بعض المسؤولين في مصر، **لكن** ما التعاون المطلوب؟

«المصر باليوم» حاولت رصد هذه الأزمة و تصويرها، **لكن** أحد الضباط الموجودين لمنع الاشتباك أمام الشركة اعتدى على الزميل محمد إبراهيم،

مصر سباقه في مد يد العون لا من باب التعالي **ولكن** من باب الإيمان كما قلت بالعمق الاستراتيجى لها في القارة.

## Synthesizing

لكن: Connect the following sentences using

- الجو جميل في مصر . لن أسافر إليها.

- أختي تريد النجاح في كل الامتحانات. أختي لا تذاكر أبداً.

## Inferring

لكن : Conclude the nature of the situation (good/bad) and re-write using

- سأذهب إلى الأسكندرية بالرغم من حالة الجو.

- من ناحية، المظاهرات في أي بلد متحصّر تحتاج لإتصريح ومن ناحية أخرى أمريكا ضد تطبيق هذا القانون في مصر.

## منذ

تقدمت بحل علمى لحل المشكلة **منذ** عام 1962 عن طريق عمل شرائح بلاستيكية تغطى البحيرة لحماية المياه

وزير الثقافة فى التحقيقات التى استمرت، ساعتين، أنه زار المتحف **منذ** فترة و لاحظ أن أرضية المتحف سيئة وكذلك الستائر و طلب من شعلان

المهندس حسن صقر.. وزير الرياضة.. أسرع قرار أصدره **منذ** توليه العمل منذ خمس سنوات هو قرار استبعاد الكابتن أحمد رفعت نجم

من الأزمات التي وقعت على خلفيات عرقية في الولايات المتحدة **منذ** أن تولى باراك أوباما، أول رئيس أسود، السلطة في البلاد.

على مر العصور، ونحن نعلم أن قيام الدولة المصرية القديمة **منذ** أكثر من خمسة آلاف عام اعتمد على النيل كطريق يربط شمالها بجنوبها

الآن، و بعد مرور حوالي 9 أشهر **منذ** بدء الإعلان عن المرض، تغير الوضع كثيرًا عن الشهور السابقة

### Applying

Re-write using منذ and make necessary changes:

- مرّت سنين كثيرة. لا أتذكر متى كان آخر لقاء بيننا.
- تولنا لكابتن حسام حسن تدريب نادي الزمالك. لم يكسب نادي الزمالك أيّ مباراة حتى الآن.

### Analyzing

Re-write eliminating منذ and make necessary changes:

- انخفض سعر البترول منذ ارتفاع المخزون الاستراتيجي الأمريكي .
- تم توقيع اتفاقية شراكة منذ أيام بين مصر و الإمارات العربية.

### إذا

أتوقع من كل الدول العربية أن تقف إلى جانب الجنوب **إذا** انفصل، خاصة الدول التي لها مصالح في استمرار علاقتها معه، ومصر مثال

أردوجان بمقدوره أن يحقق المعجزة، ويغير من صورة تركيا تماما **إذا** استطاع خلال الفترة المقبلة أن ينزع من الجيش أدواته التي

أن نسبة التبرعات كانت ستقل «مليون المية» - حسب تعبيره - **إذا** لم يتم استخدام مشاهد واقعية للأطفال المرضى في إعلانات التبرعات،

توفر العدد الكافي من العلماء والمهندسين المدربين، والدول المتقدمة تعلم **إذا** لم يكن لديها القدرة على الإبداع والابتكار، فلن يكون لها

الترزى الذى يصنع لباسا لإنسان لا يصلح إلا له بحيث **إذا** لبسه إنسان آخر ظهر لكل من يراه أنه غير خاص

يكون لطيفا مع امرأته وهو يكافح فى الدنيا وهى بجانبه **إذا** نجح وتآلق تغيرت أحواله فيدهمه الغرور والاستكبار ويعامل الناس من

### Inferring

Conclude the nature of the outcome (affirmative/negative) and re-write using **إذا** making the necessary changes:

- أنا مريض جدا، يجب أن أخذ دواء فعّال قبل الذهاب للإمتحان.

- الجو ممطر، من الأفضل تأجيل السفر إلى الغد حتى نصل بأمان.

### Creating

Form 2 sentences of your own using **إذا**

-

-

### فى حال

قائلا: إن مصر وجهت رسالة واضحة إلى إيران أنه **فى حال** استمرار التدخل فى مصر، ستتدخل مصر بالتبعية فى شؤون طهران، وأنها

الصحيفة أن برشلونة يبدو قريبا من ضم فابريجاس (22 عاما) **فى حال** فشل أرسنال فى إحراز بطولة هذا الموسم، وهو السيناريو الذى يبدو

ابنها من تحديد هويته مع الأيام ليختار الذكورة أو الأنوثة و **فى حال** اختياره الثانية، يمكنهم حينها التدخل طبيا لمساعدته، وذلك بإجراء عملية جراحية

لناس ويمكنك أن تمنحي دمك كل أصحاب الفئات الأخرى ولكن **فى حال** حاجتك إلى الدم لا يقبل جسدك غير دم من فئتلك بعبارة أخرى، أنت

و **فى حال** استمر تراجع الاسعار يمكن ان تواجه السعودية وغيرها من الدول الخليجية

قدمت الولايات المتحدة هذه الأدلة «سنتمكن من محاكمته في أفغانستان و **في حال** لم ترض امريكا بذلك فاننا مستعدون لاجاد طريقة اسلامية لمحاكمته.»

### Applying

Re-write using **في حال** and make necessary changes:

- ستقوم ثورة شعبية إذا تم الافراج عن الاخوان المجرمين
- ماذا سيحدث إذا انسحبت روسيا من أوكرانيا دون شرط أو قيد؟

### Synthesizing

Arrange the following phrases to form one meaningful sentence:

- **في حال** / سيغضب الشعب المصري كثيراً / في الانتخابات البرلمانية المقبلة / فاز الاخون بأيّ مقاعد
- تعليق العقوبات المفروضة / تعاونها في القضية الاوكرانية / على روسيا / يبحث الاتحاد الأوروبي وامريكا / في حال

### عندما

- هل تعرف من يدير البلاد **عندما** ينام الرئيس؟.. سؤال لم يخطر على بال أحد.. وربما يكون رفاهية
- إن زوجها مصاب بجروح قطعية في الرأس وتم حجزه بالمستشفى و **عندما** حاولت الدخول للاطمئنان عليه منعه من الدخول - وعلى حد قولها
- عندما** تخرجنا في كليتنا لم نكن نعرف أين نتجه، وماذا نحب أن
- مسجد الأنبياء على مدخل البلدة وقاموا بحرقه وكتابة شعارات بالعبيرية، و **عندما** رأى الناس النار في المسجد هرعوا إليه لإطفائها، ولكنها كانت قد
- طريق موظفة، أو مشرفة أمن، فرفضوا ذلك، وحاولوا تفتيشنا بالقوة، و **عندما** رفضنا انهالوا علينا بالضرب.
- وإنه كان صبيا صغيرا لم يكد يتم عامه الثاني عشر، **عندما** توفي والداه تاركين له ثروة كبيرة فتبرع بها للفقراء، وأعلن اعتناقه

### Synthesizing

Connect the following using عندما:

- سقوط الأمطار. تنمو النباتات والأزهار.

- انتخاب الإخوان للرئاسة. ظلّم المصريون أنفسهم.

### Applying

Re-write using عندما and make necessary changes:

- بينما كنت جالساً أشاهد المباراة، دقّ جرس الباب.

- صديقي يأكل عشاءه كل يوم أمام التلفزيون.

### خصوصاً

للجماهير وأعرب عن أمله في أن يمتلئ الأستاذ عن آخره، **خصوصاً** أن الدخول سيكون مجاناً، وقال:  
أتمنى أن يسهم كل مشجع أسهمت

في أقواله، لأن ذلك سوف يؤخذ عليه في نهاية الجلسات، **خصوصاً** أنه يواجه اتهامات من قبل  
محامي والدته زوجته.

خاطئ ويعد انتكاسة لحقوق الإنسان، معتبرة أنه يساعد على التطرف **خصوصاً** في ظل الهجوم  
الغربي على الإسلام والمسلمين، ومحاولة حرق المصحف.

النظام العلماني والحكومة لا يزال قائماً وإن وجدت النية في التهدة **خصوصاً** بعد قول أردوجان  
الصريح: «لا أحد فوق القانون» موجها حديثه إلى

لم يكن الإصرار على التعليم، **خصوصاً** تعليم الفتيات، هو الدافع الوحيد لاختيار هذه السيدة أما مثالية،  
فقد

وهو ما انعكس على كل الحاجات الأساسية في البلاد، **خصوصاً** الكهرباء والتدفئة.

### Creating

Form 2 sentences of your own using خصوصاً :

-

## Analyzing

Re-write eliminating خصوصاً and make necessary changes:

- يستهدف تنظيم داعش حقول البترول لتمويل نفسه خصوصاً الواقعة في ليبيا والعراق.
- أشعر بسخط شديد تجاه الاخوان المسلمين خصوصاً بعد أن قتلوا الكثير من الابرياء.

## في حين

- وأشار الى مقتل 15 جندياً على الفور **في حين** توفي أربعة في المستشفى .
- تقوم على مبدأ عدم التدخل في الشؤون الداخلية للدول الاخرى **في حين** أن العراق و الذي ارتكب جريمة الغزو والعدوان غير المسبوق في
- واعتقل الرجال الثلاثة وهم من الجزائر والمغرب يوم الاثنين **في حين** يبحث مكتب التحقيقات الاتحادي عن رجل رابع اسمه نبيل المراح والذي
- فتشهد بطولة انجلترا خصوصاً لقاء قمة بين ليفربول وليدز يونايتد **في حين** تبرز مباراة برشلونة وفالنسيا في بطولة اسبانيا.
- بشأن تصريحات ادلوا بها واصدر احكاما بالسجن على عدد منهم، **في حين** أن الدستور الايراني لا ينص صراحة على اي حصانة للنواب.
- مع اسرائيل، مبينا أن الشعب الأردني يقف كله ضد التطبيع، **في حين** من يمارس التطبيع هم قلة، يسعون الى الربح الشخصي على حساب

## Synthesizing

Arrange the following phrases to form one meaningful sentence:

- في حين / انضمام تركيا إلى الاتحاد / رفضت معظم دول الاتحاد الأوروبي / وافق عدد قليل على انضمامها
- أنها تحارب أفكاره على الملأ / السؤال هو لماذا / تساعد أمريكا تنظيم داعش في الخفاء / في حين

## Creating

Form 2 sentences of your own using في حين :

-

-

### أو

عملية تضم في طياتها العديد من المزايا والفوائد وليست قيودا **او** شروطا، حيث عكفت الشركة على دراسة وازالة كافة المعوقات التي

قد نتفق **او** نختلف حول شخصية السادات او عبد الناصر لكن العمل الفني شيء

صناعية بحيث يتم من خلالها بيع المنتجات ويترتب على نجاحها **او** فشلها نجاح او فشل المؤسسة.. ومحور المواصفات والمقاييس، ومحور

شكل كبير جدا سواء على مستوى اعضاء الكونغرس الذين قابلناهم **او** على مستوى الشارع حيث اقمنا المسيرات هناك لاكثر من مرة

الدولي سياسيا واقتصاديا واجتماعيا وبدون تمييز بين دولة او قارة **او** حضارة او دين او عرق.

والآن، من هم حلفاء الخندق المقابل، **او** من هم خصوم الرئيس؟

## Creating

Form 2 sentences of your own using او:

-

-



## VI. Appendix

### Focus group questions

- Do you feel that arabiCorpus website enhanced your autonomous learning?

How?

- Did the website reduce the time you used to spend in studying connectives?

How?

- Did the website help you recall the connectives learned easily compared to conventional ways?

- Did presenting target connectives in context enhance your guessing strategies?

How?

- Did the website accessibility only through internet affect your studies?

- Was the website easy to navigate?

- Did using the website result in any technical difficulties? If yes, what were they?

- Did the website facilitate your learning process more than books?

- What is your overall opinion regarding the use of concordances as an educational tool?

- From your experience what are some of the positive and negative aspects of learning through concordances?

Adapted from Essam, R. (2010). *Software Application for Computer Aided Vocabulary Learning in a Blended Learning Environment* (Master's Thesis).

## VII. Appendix

### Focus group responses

The five participants of this study participated in this focus group in order to reveal their perceptions about the use of arabiCorpus concordancer. Each participant was assigned a number, for privacy purpose.

Focus group results of participant number one showed that, when utilizing the concordances, he had no choice but to push his mind hard to extract a rule or understand a function. “Corpora provide no easy answer, I guess pain no gain”. He admits that his autonoums learning improved, yet, arabiCorpus concordancer worked best for him when he used it with the researcher. He felt that without the approporaite guidance he would stop concordancing. Participant one was enthesiastic about the corpora technique before, during, and after the treatment.

Results of participant number two, on the other hand, showed that, regardless of the fact that concordances affected his spirit of inquiry positively. He said that, “my mind is working twice as hard to reach a result. I need double the time I usually need to reach something meaningful”. He did like the challenge sometimes, but other times it really annoyed him. He did not know which teaching teachnique is better for him. “I guess I am ok with both”. Participant reported that, despite his struggle sometimes with concordances, he still used it in his classes assignments and presentations. The most feature used in arabicorpus by him was the collocations section.

Participant number three, showed a negative attitude toward concordancing since the beginning of the study. He continued to report discomfort even after learning how to use arabiCorpus concordancer. "I feel that I am wasting a lot of valuable time on things that I can learn more easily using a grammar book, a textbook or dictionaries". He, asserted that his usage and retention of ADCs after the conventional teaching will definitely surpass the concordancing usage and retention.

Participant number four revealed that, the concordances enhanced his understanding of the Arabic linguistic system, yet he did not feel that his spirit of inquiry benefited much from the experience. He mentioned that it was moderately affected by the approach. "Yes, I like technology, and I enjoy learning through it, but I am not sure how effective is it when used alone or without guidance". He added, "I can use and retain more ADCs from after the concordancing teaching. I can recall the examples and what was said about them".

Participant number five revealed that, the use of concordances enhanced his understanding to Arabic to a great deal. The way he was exploring arabiCorpus citations and analyze them improved his spirit of inquiry as well as his guessing skills. He said that, "when I discover the rule myself, I hardly forget it"

All participants reported that the use of corpora facilitate acquisition especially, while learning "tricky or ambiguous" linguistic items. They also reported initial technical difficulties with arabiCorpus concordancer, but after a short training they found it easy to access and navigate. Using the chosen corpora while only on line did not seem to bother them significantly. They argued that, internet is available nearly everywhere. But, they did agree on, using the concordances partly. They expressed their need of having a traditional

book to refer to when they are not with their teacher. For them, concordances did not seem to be of much help when they were alone. It is worth highlighting though, that they did use it to form collocations, extract rules, and exploring language patterns and structures.

## VIII. Appendix

### Questionnaire

Dear students,

This is a questionnaire that is needed for research purposes. You are requested to fill it and to express your thoughts about your concordances learning experience.

Directions: In section one, two, three, and four of the questionnaire, please, rate each of the following statements, by circling a number (ranging from 1 to 3) which best expresses your beliefs about teaching and learning through concordance lines.

In section five and six of the questionnaire, please respond to the given questions based on your experience in your context.

Items	Agree	Moderate	Disagree
<b><u>Section 1</u></b>			
<i>Enjoyment and choice:</i>			
a) I enjoy using language corpora in my studies.	1	2	3
b) I would choose to use concordance lines in my studies if I had the option.	1	2	3
<b><u>Section 2</u></b>			
<i>Benefits:</i>			
c) I feel my learning experience, in general, benefited from the integration of concordance lines in this course.	1	2	3
d) I feel my understanding of language systems benefited from the integration of concordance lines in this course.	1	2	3
e) I feel my spirit of enquiry and research benefited from the integration of concordance lines in this course.	1	2	3

<p><b><u>Section 3</u></b></p> <p><i>Technical difficulties:</i></p> <p>f) I had initial difficulties with the technical aspects of using the chosen concordance.</p>	<p>1                      2                      3</p>
<p>g) I still have difficulties with the technical aspects of using the chosen concordance.</p>	<p>1                      2                      3</p>
<p><b><u>Section 4</u></b></p> <p><i>Linguistic and conceptual difficulties:</i></p> <p>h) I had initial difficulties with the linguistic and conceptual aspects of using concordance lines.</p>	<p>1                      2                      3</p>
<p>i) I still have difficulties with the linguistic and conceptual aspects of using concordance line.</p>	<p>1                      2                      3</p>
<p><b><u>Section 5</u></b></p> <p><i>Views, opinions, and perceptions:</i></p> <p>j) From your experiences what are the positive and negative aspects of learning through the use of corpora?</p>	
<p>k) Are you using concordance lines while studying? If so, for what purpose?</p>	

<p><b><u>Section 6</u></b></p> <p><i>In relation to your own future learning, please answer the following questions:</i></p> <p>l) Do you think you will use concordance lines as a resource in the preparation of your homework, assignments, and presentations? Why?</p>	
<p>m) Would you initiate or recommend the use of computer-based concordances in your institution which already has computer facilities for students?</p>	