دراسة مقارنة في تحصيل الطلبة الجامعيين الدارسين للغة الانكليزية لغة اجنبية في مادة التلفظ بين الاختبارات المقالية والاختبارات الموضوعية

رسالة تقدمت بها

طيف ابراهيم الكناني

باشراف

الاستاذ المساعد
الدكتورة فاتن خيري الرفاعي

٢٠٠٥

F

(وَهُوَ الَّذِي جَعَلَكُمْ خَلَائِفَ الْأَرْضِ وَرَفَعَ بَعْضَكُمْ فَوْقَ بَعْضٍ دَرَجَاتٍ لِّيَبْلُوَكُمْ فِي مَا آتَاكُمْ إِنَّ رَبَّكَ سَرِيعُ الْعِقَابِ وَإِنَّهُ لَغَفُورٌ رَّحِيمٌ)

سورة الانعام ،

الآية ١٦٥

DEDICATION

To...

Dr. Coleman,

My Parents,

and

My Brother,

with Love,

Gratitude and

Respect

Taif

الخلاصة

ان الالمام بالمادة و معرفتها التي هو شرط اساس في القياس الجيد من اي نوع كان.

وعلى الرغم من التخصص في اللغة الانكليزية فى المستوى الجامعي فان الطلبة الجامعيين الدارسين للغة الانكليزية لغة اجنبية يواجهون صعوبات اساسية في الوصول الى مستوى مقبول من التمكن فى كلا الجانبين النظري والعملي في التلفظ المكتوب.

وبمـا ان اختبـارات الـتلفظ تعـاني مـن بعـض الصـعوبات و المشـكلات فـان الدراسة الحالية تهدف الى الاجابة على الاسئلة التالية:

١. ما مستوى التحصيل الدراسي لدى الطلبة الجامعيين الدارسين للغة الانكليزية لغة اجنبية في الاختبارات المقالية؟

٢. ما مستوى التحصيل الدراسي لدى الطلبة الجامعيين الدارسين للغة الانكليزية لغة اجنبية في الاختبارات الموضوعية؟

٣. هل هنـاك ايـة فـروق ذات دلالـة احصـائية في تحصـيل الطلبـة الجـامعيين الدارسين للغة الانكليزية لغة اجنبية بين الاختبارين الموضوعي والمقالي؟

٤. اي الاختبارات الموضوعية يكون تحصيل الطلبة في التلفظ المكتوب اعلى من غيرها من الاختبارات؟

ولغرض تحقيق الاهداف اعلاه وضعت فرضيتان صفريتان وكما يأتي:

١. لا توجد فروق ذات دلالـة احصائية في تحصيل الطلبـة الجامعيين الدارسين للغة الانكليزية لغة اجنبية في التلفظ المكتوب بين الاختبارات الموضوعية والاختبارات المقالية.

٢. لا توجد فروق ذات دلالة احصائية في تحصيل الطلبة الجامعيين الدارسين للغة الانكليزية لغة اجنبية في التلفظ المكتوب بين جميع اساليب الاختبارات الموضوعية.

٣. تالفت عينة الدراسة من ١٥٠ طالبا وهم ٨٠ طالبا من كلية اللغات /جامعة بغداد ويمثلون العينة الاستطلاعية و ٧٠ طالبا من كلية الآداب في الجامعة المستنصرية ويمثلون العينة الاستطلاعية ايضاً.

يتكون الاختبار من جزئين ويغطي الاختبار الفصل الثامن والفصل التاسع من الكتاب المنهجي (English Phonetics and Phonology: A Practical Course by Roach (2000) يتكون الجزء الاول من الاختبار من خمسة اساليب مقالية وهي (عرّف، وميز، واكمل ما يأتي وناقش واجب عن الاسئلة باختصار. اما الجزء الثاني فيتكون من خمسة اساليب موضوعية وهي (صحح الخطأ واملأ الفراغات و ضع خطا تحت و اربط واعد ترتيب مايلي) وكلا الاختبارين يقيسان تمكن الطلبة من التلفظ النظري والعملي المكتوب.

وفيما يخص اداة القياس المستخدمة فقد تحقق الصدق الظاهرى وحسب معامل الثبات باستخدام طريقة التصحيح/ اعادة التصحيح للاختبار المقالي وكذلك استخدام طريقة كودر رتشردسن للاختبار الموضوعي.

حللت نتائج الدراسة الحالية ونوقشت باستخدام الوسائل الاحصائية المناسبة لحساب النتائج مثل الاختبار التائي بنوعيه وتحليل التباين ومعادلة اختبار توكي وكانت نتائج الدراسة الحالية كما يأتي:

١. لقد وجد ان مستوى الطلبة بالاختبارات المقالية متوسط.

٢. لقد وجد ان مستوى الطلبة بالاختبارات الموضوعية جيد.

٣. بينت النتائج ان تحصيل الطلبة الدارسين اللغة الانكليزية لغة اجنبية في ملء الفراغات افضل من تحصيلهم في الاساليب الموضوعية الاربعة الاخرى.

٤. ان اداء عينة الدراسة للاختبارين الموضوعي والمقالي ايجابي مما يدل على ان كلا النوعين من الاسئلة يجب استخدامهما جنباً الى جنب في بناء اي اختبار تحصيل دراسي في التلفظ المكتوب.

٥. ان نتائج الممتحنين في الاختبار المقالي تشير الى ان هنالك نوعا من الضعف في قدرتهم الكتابية مما يؤثر في ادائهم في هذا النوع من الاختبارات.

٦. ان الاساليب الموضوعية هي اساليب محفزة حيث ان الممتحنين في الدراسة الحالية قد اظهروا رغبتهم في الاجابة عليها خلال الاختبار.

٧. ان نتائج الاختبار في الدراسة الحالية تختلف من اسلوب الى اسلوب ضمن الاساليب الموضوعية وكذلك الذاتية وهذا يعود الى عوامل عدة منها تسلسل الاساليب في ورقة الاختبار اي تسلسل الاساليب الذاتية.

٨. ان الاساليب الموضوعية التي تعطي الممتحن الخيارات في الاجابة تحفز لديه التذكر اكثر من الانواع الاخرى من الاختبارات.

وبناءاً على نتائج الدراسة الحالية فان التوصيات و الاقتراحات المناسبة لدراسات مستقبلية قد اقترحت لاغناء حقل البحث الحالي.

I certify that this thesis has been prepared under my supervision at The University of Baghdad as a partial fulfilment of the requirements for the degree of Master in Education in (Methods of Teaching English as a Foreign Language).

Signature:

Supervisor: Assistant Professor Dr. Fatin Khairi Al-Rifa'i

Date:

In view of the available recommendations, I forward this thesis for debate by the Examining Committee.

Signature:

Name: Dr. Layla Al-Lami

Head of the Department of Educational and Psychological Sciences

Date:

We certify that we have read this thesis entitled "A Comparative Study of EFL College Students' Achievement in Pronunciation by Using Subjective and Objective Techniques" by Taif Ibrahim and as an Examining Committee we examined the student in its content and that, in our opinion, it is adequate as a thesis for the degree of Master in Education (Methods of Teaching English).

Signature   *Signature:*

Name: *Name:*

Date: *Date:*

     Chairman   *Member*

Signature:

Name:

Date:

     Member

     Approved by the Council of the College of Education for Womn.

     Signature:

     Dean of the College of Education for Women, The University of Baghdad

Date:

I certify that I have read this thesis entitled "A Comparative Study of EFL College Students' Achievement in Pronunciation by Using Subjective and Objective Techniques" by Taif Ibrahim submitted to the Council of the College of Education for Women, University of Baghdad in partial fulfilment of the requirements for the degree of Master in Education in (Methods of Teaching English as aForeign Language), and it is found linguistically adequate.

Signature:

Date:

I certify that I have read this thesis entitled "A Comparative Study of EFL College Students' Achievement in Pronunciation by Using Subjective and Objective Techniques" by Taif Ibrahim submitted to the Council of the College of Education for Women, University of Baghdad in partial fulfilment of the requirements for the degree of Master in Education in (Methods of Teaching English as a Foreign Language), and it is found scientifically adequate.

Signature:

Date:

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LIST OF ABBREVIATIONS

App	Appendix
C	Consonant
df.	Degree of freedom
DL	Difficulty Level
DP	Discriminating Power
EFL	English as a Foreign Language
FL	Foreign Language
Int.	Internet
Obj.	Objective
Pronun.	Pronunciation
Subj.	Subjective
V.	Vowel

LIST OF FIGURES

LIST OF PRONUNCIATION SYMBOLS

Vowels

I	as in 'pit' pIt		i:	as in 'key' ki:
e	as in 'pet' pet		a:	as in 'car' ka:
æ	as in 'pat' pæt'		o:	as in 'core' ko:
∧	as in 'put' p∧t		u:	as in 'coo' ku:
o	as in 'pot' pot		ɜ:	as in 'cur' k ɜ:
U	as in 'put' pUt			
ə	as in 'about, upper, əbaUt, ∧pə			

Diphthongs

eI	as in 'bay' beI		əU	as in 'go' gəu
aI	as in 'buy' baI		aU	as in 'cow' kau
oI	as in 'boy' boI			
Iə	as in 'peer' piə			
eə	as in 'pear' peə			
Uə	as in 'poor' puə			

Consonants

p	as in 'pea' pi:		b	as in 'bee' bi:
t	as in 'toe' təu		d	as in 'doe' dəu
k	as in 'cap' kæp		g	as in 'gap' gæp
f	as in 'fat' fæt		v	as in 'vat' væt
θ	as in 'thing' θIŋ		ð	as in 'this' ðIs
s	as in 'sip' sIp		z	as in 'zIp' zIp
∫	as in 'ship' ∫Ip			as in 'measure' meƷə
h	as in 'hat' hæt			
m	as in 'map' mæp		l	as in 'led' led
n	as in 'nap' næp		r	as in 'red' red
ŋ	as in 'hang' hæŋ		j	as in 'yet' jet
			w	as in 'wet' wet
t∫	as in 'chin' t∫In		dƷ	as in 'gin' dƷIn

(Roach, 2000: ix)

LIST OF TABLES

1.1 Statement of the Problem of the Study

The issue of language testing highlights an increased interest to language teachers, applied linguists, educators, etc. since testing is an integral and fundamental component of the process of evaluation, which in turn is a basic element in the whole teaching -learning process.

The principle then running through this study is the importance of using different types of techniques in testing pronunciation. It is supported by the fact that the purpose of testing pronunciation is not only to evaluate knowledge and award grades; but also to motivate students to be sensitive to this aspect of English (Dalton: 2000: 1).

Obviously, pronunciation is tested globally in different types of oral and written techniques such as conversational exchange, interview, reading aloud, pencil and paper, etc. that go on in the classroom (Bobda, 2000: 1).

In fact, written pronunciation tests are not easy to construct by the teacher or taken and answered by the students as well especially at the college level. It is found out by asking several college teachers that there is a common type of testing written pronunciation that is followed nowadays in the Departments of English which is the subjective type of testing. From the researchers experience as being one of the EFL undergraduate college students and also by asking other students of different

levels, It is found out that EFL college students suffer a lot and face problems when taking pronunciation tests. This is due to several reasons such as the difficulty of the teaching material, and the type of written pronunciation tests followed nowadays (i.e., the subjective tests).

Accordingly, traditional written subjective techniques for testing EFL college students' achievement in pronunciation is still prevailing in Iraq, despite the introduction of the objective testing techniques since 1970's. "For the first time, modern objective testing techniques, e.g. multiple choice, true/false, etc. have become known to the teacher of English in Iraq" (Al-Hamash and Younis, 1980: 26), while secondary school teachers of English are keen to use the objective testing techniques when testing written pronunciation, university teachers also need to necessitate objective testing techniques participation in written tests in addition to the subjective ones (ibid.)."Since a test has the purpose of measuring students' ability or knowledge". (Brown, 1994:4) . Care must be taken in any test to understand who the testees are, what their previous experience is, and to what extant the test is appropriate for them. Therefore, this study will primarily focus on the identification of possible objective testing techniques that could be used in the test administration to EFL college students when testing written pronunciation.

1.2Aims

This study aims at answering the following questions:-

1- What is the level of achievement of EFL college students in written pron. using the subj. test techniques?

2- What is the level of achievement of EFL college students in written pron. using the obj. test techniques?

3- Are there any statistically significant differences in the achievement of EFL college students in written pronunciation between the subj. and the obj. test techniques?

4- In which of the obj. techniques, the testees' achievement in written pronun. is higher than the other techniques?

1.3 Hypotheses

It is hypothesized that:

1. there are no statistically significant differences in the achievement of EFL college students in written pronun. between the subj. test techniques and the obj.ones.

2. there are no statistically significant differences in the EFL college students' achievement in written pronun. among all types of the obj. test techniques.

1.4 Limits

1. The sample is limited to second year students of English, College of Arts, University of AL-Mustansiriyah and College of Languages, Universities of Baghdad during the academic year 2004-2005.

2. Only written pronunciation is the focus of the present study.

3. The material will be based on Roach (2000) and will be limited to the syllable and its types.

1.5 Procedures

The following procedures are adopted:

1. Selecting a random sample of second year students in the dept. of English at the college of Arts at the University of AL-Mustansiriyah and college of Languages, at the Universities of Baghdad.

2. Constructing a subj. test of five types of techniques with regards to its validity, reliability and item analysis.

3. Constructing an obj. test of five types of techniques with regard to its validity, reliability and item analysis.

4. Exposing the selected testees to the conducted test which consists of both subj. and obj. techniques.

5. Collecting and analyzing the data by using suitable statistical tools.

6. Deriving conclusions, recommendations and suggestions for further studies.

1.6 Value

It is hoped that the present study will be valuable for EFL college teachers of phonology in order to use the obj. techniques of testing into their phonology tests so as to increase their students' motivation and scores in phonology.

1.7 Plan

The present study includes five chapters. Chapter One includes the following sections: statement of the problem, aims, hypotheses, limits, procedures, value, plan, and definition of basic terms. Chapter Two and Three shed light on the theoretical background and related previous studies. Chapter Four is the methodology and procedures of the study. Chapter Five deals with the presentation and discussion of results as well as conclusions, recommendations and suggestions for further studies. At the end of the thesis, there is a list of the reference books i.e., the bibliography, along with the appendices and an abstract in Arabic.

1.8 Definition of Basic Terms

It is worth mentioning that all the definitions presented in 1.8 are adopted in the present study operationally. The following terms are defined as follows:

Test

Hills (1982:271) states that a test "constitutes a series of items for which a score is obtained". On the other hand, (Gipps, 1995:31) argues that the information of the test has a very important influence on teaching, curriculum design and on students' motivation.

Achievement Test

It is "a measure of what has been learned from what was taught in a particular course or series of courses…" (Henning, 198: 189-98).

Discrete-Point Test

Oller (1979:37) states that "a discrete-point test purports to assess only one skill at a time…and only one aspect of a skill". while Vallete (1977:12) stresses that "discrete-point tests measure whether the student has mastered specific elements of the language or not".

Subjective Test

"Such questions are usually general in scope and require lengthy written responses by test takers"(McIntire &Miller, 2000:19

Objective Test

Heaton (1987:11) mentions that "objective tests usually have only one correct answer, they can be scored mechanically…responsible for testing a large number of candidates".

Pronunciation

It is "The manner in which speech sounds, especially connected sequences, are articulated by individual speakers or by speakers generally" (Trask, 1996: 291).

Testing Written Pronunciation

It means testing both theoretical and practical aspects of pronunciation by using written types of tests only.

Syllable

Hornby (2000: 892) views the 'syllable' as "a minimum rhythmic unit of language consisting of a vowel or sustained consonant often accompanied by unsustained consonant(s)".

Comparative Study

"The relationship between two or more forms of the same test" (Davies et al., 1999: 199).

EFL College Students

They are the students at university level whose specialization is English Language.

Achievement

Davies et al., (1999:2) defines it as "the mastery of what has been learnt, what has been taught or what is the syllabus, text book materials, etc".

2.1 An Introductory Note

This chapter is concerned with language testing. It sheds light on the two types of tests, i.e., subjective and objective tests. In addition, it stresses the importance of testing language elements in general and the purpose of testing pronunciation, in particular

2.2 What is a Test?

A close look at the previous literature on the definitions of the term "test" shows that:

> **A test in plain, ordinary words is a method of measuring a person's ability or knowledge in a given area... There is a set of techniques, procedures, test items, that constitute an instrument of some sort and that method generally requires some performance or activity on the part of either the testee or the tester or both (Brown, 2004:2).**

Heaton (1987:2) states that the test which measures the students' performance, as fairly as possible, can be used to motivate the students and a well-constructed test will provide the students with the opportunity to show their abilities to recognize and produce correct forms of the language.

2.3 Language Testing: A Historical Perspective

Madsen (1983:21) indicates that "language testing has evolved through three major stages, which reflect people's attitudes towards the goal of language teaching and language learning", which are the intuitive,   scientific   and   communicative   stages.While

Savignon(1985:187) says that the selection of teaching materials is of course inextricably tied to testing. The recent history of second-language testing, which is called the "psychometric-structuralist period, is characterized by a widespread interest in the use of psychological measurement techniques to evaluate learners' mastery of discrete structural features of language" (Spolsky, 1978: 22).

Power(2004:6) raises the question "How do we design a test that mirrors the students abilities?" To answer this question, it is important to design a test that reflects what had been taught (Nunan, 1988:134). The test should be seen as working with the students not against them; it should offer a constructive help rather than non-directed criticism; it should show them how they were faring on the road to fluency and point the way forward; and it should be about assessment of individual abilities and improvement rather than a comparison of proficiency levels. The success of this test would be judged primarily by its effectiveness in favourably affecting the student's perception of his/her language abilities (Nantle -Bromley, 1995: 375).

2.4 Test Making and Test Taking

2.4.1 Test Making :The Construction of Test Items

- Gronlund (1981:155) states that:

The construction of good test items is an art. The skills it requires, however, are the same as those found in effective teaching. Needed are a thorough grasp of subject matter, a clear conception of the desired learning outcomes, a psychological understanding of pupils, sound judgment and a touch of creativity.

For the purpose of this value, the constructions of test items will be regarded as consisting of the following steps:

1. Planning the test which encompasses all of the varied operations that go into producing a test such as paying attention to the content of the test items, types of test items, directions to the testees, etc. (Lindquist,1974:119)

2. Writing the test items which is an art, and is essentially creative. Each item presents new problems and new opportunities.

3. Trying out the test in preliminary form and assembling the finished test after trying out. The test items must be tried out on a sample of testees. This sample should be as nearly like the population with whom the final form of the test is to be used.

4. Determining the procedures in scoring of tests items which include the scoring formula, the weight of items, the types of keys to be used, etc. (Ibid:.365).

On the basis of this issue, Horrocks and Schoonover (1968:511) mentions that tests are either made by the teacher (teacher made tests) or by a group of experts (standardized tests) and these types of tests differ in a number of ways.

Teacher- made tests are constructed by the teacher for use in a specific situation while the contents of standardized tests are generally applicable for any one at the age or grade level at which they are intended to be used. Directions are uniform, and, time is specified, and the scorer provides a key to the answers .All this

insures that each student taking the test takes it under "standardized" condition (Ibid.: 512).

2.4.2 Test Taking

Test taking needs every effort to be made so as to enable students to approach a test with a positive attitude and with recognition that the test supplies an opportunity for self- assessment and self-analysis. If the students view the test as a learning aid, much of the emotionality connected with test-making will be removed. In the Write Source (2000), there is a brief presentation of this skill with some practical procedures to be followed by any testee. In the fore- mentioned reference book it is stated that the key to doing well in any academic study is simple-be involved and be prepared. This is never more rue than when a student is about to be tested on what he/she has learned. Consequently there are several skills or guidelines which a student should follow to help him/her as to begin his/her preparation. The necessary test-taking skills are:

1. Organizing and preparing test material.

This step is achieved through the following:

1) asking questions about the material,

2) organizing the taken notes, and

3) thinking about the test by gathering old quizzes and exams, preparing an outline of every thing to be covered on the test, and then set aside a list of any question one needs to ask the teacher or another student.

2. Reviewing and remembering test material. This is achieved by the following steps:

    1) beginning to study early,

    2) using study aids such as lists, diagrams, flash cards, note cards, etc., and

    3) testing oneself by trying to imagine what questions will be on the test and then write answers to them.

3. Taking the test: This phase involves three major steps:

    1) before beginning phase: it is achieved by checking to see that all the materials (paper, pencil, books, etc.) needed to take the test are available.

    2) during the test phase: This step is conducted through the following sub-steps:

        1- Skimming the entire test quickly, estimating how much time needed for each question, then beginning the test and watching the time carefully,

        2- Reading the directions carefully,

        3- Reading all questions carefully, paying attention to words like only, all, and never, and

        4- Answering the questions one is sure of first, then moving to another question when one is really stuck.

4. Before finishing phase: This is done through the following:

    1) double-checking each section or page to make sure of doing

all the questions and checking the handwriting thoroughly, and

2) asking the teacher about any confusing question to be sure of the answer.

To sum up, two factors are related to test taking which take place during and after the test:

1) The relationship between what is studied and what students think they will be tested on is necessary to be recognized.

2) Students will learn what the teacher asks about and the level that is required rather than what is presented (Horrocks, 1968:513:Valette, 1977:23).

2.5 Characteristics of a Good Test

Most methodologists, if not all, such as (Andrew, 1980: 133-40; Grant, 1987:189-98; Harmer, 2001: 322, and Power, 2004: 2) generally believe that a good test is based on the ground of the following criteria:

1. **Validity**: A test is valid if it tests what it is supposed to test (Harmer, 2001:392). A question may be raised: How does one establish the validity of a test?

Statistical correlation with other related measures is a standard method. Lado (1969:169), for instance, mentions that "validity is often expressed as a coefficient of correlation between the test and the valid criterion". But ultimately validity can only be established by observation and theoretical justification .There is no final,

absolute, objective measure of validity. The test should accurately and sufficiently measure the testees for the particular purpose, or objectives or criteria of the test (Brown, 2004: 4). The three types of validity which are considered important. As Taeduck and Finch (1998: 13) list them, are as follows:

1. Face validity.

2. Construct validity.

3. Content validity.

2. Reliability: Davies, et al. (1999: 168) state that:

> **Test reliability is the actual level of agreement between the results of one test with itself or with another test. Such agreement ideally would be the same if there were no measurement error, which may arise from bias of item selection, from bias due to time of test or from examiner bias.**

It is worth mentioning that both validity and reliability are going to be defined and discussed thoroughly in Chapter Four.

3. **Practicality:** Another characteristic of a good test is its practicality or usability, i.e., the test is beyond the tester's means or facilities (Harris, 1969; 21). He (ibid.: 22) expresses that a number of practical considerations must be kept in mind in the preparation of a new test which are:

1. Economy

There should be economy in time, effort, and expenses. A good test should not be expensive, very long, and tiring.

2. Ease of Administration and Scoring

There should be full, clear directions so that the test administrator can perform the task quickly and efficiently.

2.6 The Principal Educational Uses of Language Tests

In its broadest sense, "Language tests have many uses in educational programms, and quite often the same test will be used for two or more related purposes" (ibid:.2)

They are used to:

1- determine readiness for instructional programms.
2- classify or place individuals in appropriate language classes.
3- diagnose the individual's specific strengths and weaknesses.
4- measure aptitude for learning.
5- measure the extent of students' achievement of the instructional goals.
6- evaluate the effectiveness of instruction.

2.٧ *Subjective Tests*

Subjective tests (henceforth Subj.tests) are any scoring procedure which involves the exercise of judgment by the scorer (Davies,et al. 1999:191).They may result in a range of possible answers, some of which are more acceptable than others (Power, 2004: 1).

Subj. tests give the test taker fewer cues and open wider areas for responses .Subj. tests require students to organize their own answer, expressed in their own words and this improve their writing ability (ibid.)

2.7.1 Advantages of Subjective Tests

Advantages of subj. tests are listed and briefly explained below:

1. Subj. tests provide a freedom of response that facilitates assessment and evaluation.(McIntire and Miller,2000:204).

2. They help the learner to focus on demonstrating what they have learned and do not limit them to specific areas.

3. They are easier to construct and revise (ibid.)

4. They measure students' ability to use the language correctly in their own writing (Lindquist, 1974:120).

5. They measure the various aspects of students' progress toward the acquisition of writing (Valette, 1977: 21).

6. They measure learning outcomes that cannot be measured by objective test items such as the ability to select, organize and

evaluate ideas (Ibid .: 220).

7. They can be presented on chalkboard.

8. They can give a piece of evidence of depth of comprehension.

9. They offer a chance to describe relevant applications (Horrocks & Schoonover, 1968: 529).

2.7.2 Disadvantages of Subjective Tests

The following disadvantages of subj. tests are considered:

1- Subj. tests require lengthy written responses by the test takers (Gronlund, 1981: 223).

2- The scorer judgments can be influenced by writing skills ranging from legibility to graceful phrasing and such considerations can lead to inaccurate test scores.(ibid.)

3- It is up to the tester to decide what is a good or poor answer because students may give a variety of responses each some - what different from the others (Valette, 1977:10).

4- Subj. tests are more difficult; they require independent scoring by two experts to increase reliability and accuracy (Power, 2004: 6).

5- The tests are time-consuming to score.

6- The tests provide a limited sampling of information.

7- Reliability is low in subj. tests.

8- The verbally facile students may depend upon quantity of production not quality.

9- Validity may be low because of the limited sampling and

reliability.

10- The testees require a long time to respond only to a few items.

11- The questions are not sufficiently specific and encourage "glittering generalities"

(Horrocks & Schoonover, 1968:529).

2.7.3 Scoring Subjective Tests

On the theme of scoring subj. tests, the following points are taken into consideration:

1. The scorer awards points based on how closely the test takers' response matches a predetermined correct response (Mclntire & Miller, 2000: 196).

2. The scorer can use the "global quality sealing" by putting in rank order after a quick scan (Power, 2004: 7).

3. The scorer can assess in categories (e.g. vocabulary, grammar, content and form) 5 marks to each; total mark out of 20 (ibid).

4. The scorer can divide the answer into sense groups, i.e., the marking system can be based on communication and correctness as two separate criteria (Valette, 1977: 217).

2.7.4 Types of Subjective Tests

Subj. tests are categorized into the following:

1. Transformation items: students are asked to transform

sentences or passages according to a specific pattern.

2. Directed questions.

3. Translation.

4. Controlled or guided composition and free composition (Valette ,1977:234).

2.7.5 Techniques of Written Subjective Tests

2.7.5.1 Essay Tests

These tests are popular subj. tests. They are usually general in scope and require lengthy written responses by test takers. These kinds of tests provide a freedom of response, i.e., the responses generated can vary in terms of width and depth of topic (McIntire & Miller, 2001: 196).

2.7.5.2 Sentence Completion

The students are required to express the best way of completing   a sentence in terms of grammar, dictation, tone, sense and information. Harris (1969: 74) indicates that "This item type provides an excellent method of measuring a wide range of problems relating to the effective use of written English".

Completion tests consist of an incomplete piece of writing, and the tester asks the students to complete it. This kind of test has three major weaknesses. First, it is the difficulty of preparing a context that will allow only one possible answer. Second, the time

required for scoring. Finally, the difficulties of spelling that the students may face when writing (power,2004 : 6).

2.7.5.3 Composition Test

Davies et al. (1999: 20) comment that "composition tests are common in tests of English for academic purposes, where the purpose of the test is to predict which candidate will best be able to cope with the demands of academic essay writing".Lado(1962:250) states that the virtues claimed for this technique are the realistic nature of the response and the fact that it can show how well a student can think in the language, while the shortcomings of this technique are the difficulty of scoring the responses objectively.

2.7.5.4 Restricted Response Questions

The restricted response questions tend to limit both the content and the form of student's response. The content is usually limited by restricting the scope of the topic to be discussed. On the other hand, the form of responses is restricted through the statement of question. (Gronlund,1981: 223). There are several types of restricted questions such as:

1. Answer briefly [summarize the contents of ….].
2. Describe with examples [analyze and apply].
3. Why do you think [explain or justify].
4. List [create as many ways as you can think of….].

5. Define [state the main points included in …..].

2.7.5.5 Extended Response Questions

As a matter of fact, these questions provide a very wide range of latitude, i.e., the students are free to select any information that they think is important, to organize the form of the answer to evaluate and to integrate the ideas (Ibid.: 224). There are several types of extended response questions such as:

1. Compare (Describe the similarities and differences).
2. Write a scientific evaluation [evaluate and relate cause and effect].

2.9 Objective Tests

Generally speaking, educators look at objective tests (henceforth obj. tests) from the marking point of view ,i.e., it has only one correct answer. Davies et al. (1999:129) say that:

> **An objective item call for the choice of a correct answer out of several provided for each question. or, one clearly specifiable correct response-objective items typically contain a stem, which presents the problem clearly and then two or more choices. Only one of which is correct.**

It is worth noting that it is not the test which is obj. but the system by which it is marked. An obj. test is made up of items each of which is discrete in itself, but shown to contribute to the total

performance of the test.

Obj. tests tend to point towards measures of receptive learning, i.e., learners do not have to produce language, in many of the tests items (Power, 2004:3).

2.9.1 Advantages of Objective Tests

1. Actual marking is easy.
2. Marking can be done mechanically or by over lay (Heaton, 1987:12).
3. The test can be pretested.
4. Large population can be tested.
5. The tests can be compared over different years

(Gronlund, 1981:220).

6. A good deal of judgment has been used in developing setting and accepting the tests items.
7. A much wider sample of grammar, vocabulary and phonology can generally be included in an objective test

(Davies et al.,1999: 129).

8. Test takers spend less time and effort in answering the items of the test (Power, 2004: 3).

2.9.2 Disadvantages of Objective Tests

The following points are regarded as the disadvantages of obj. tests:

1. They invite guessing (Davies et al., 1999:129).

2. They cannot test students ability to communicate in the target language .There is no production of language.

3. They cannot evaluate actual performance

(McIntire & Miller, 2000: 195).

4. Obj. test items are limited to measure simple learning out-comes, the main exception to this seem to be in distinguishing between fact and opinion.

5. An obj. test may have a variety of answers of varying degree of correctness.

6. Obj. test items are restricted to the measurement of factual information based on route learning.

7. It is highly susceptible to the presence of irrelevant clues

(Gronlund,1981:175).

2.9.3 Scoring Objective Tests

The following points are born in mind when scoring obj.tests:

1. In an obj. test correct answers are clearly specified.

2. Test makers do not have to make judgments.

3. A list of keys gives the only correct answer (Davies et al., 1999: 130)

2.9.4 Types of Objective Tests

Obj. tests are classified into the following:

1True/ False.

2Filling-in-the Blanks

1. Completion

2. Short answer

3. Alternative answer

4. Multiple-choice (which is used to measure the students' ability to identify the facts).

5. Matching

6. Regrouping

7. Identifying

8. Multiple hot spots:(moving lable to appropriate place on an image).

9. Sequence(placing   items   in   to   a   particular sequence)(Gronlund,1981:155)

2.9.5 Techniques of Written Objective Test

2.9.5.1 True/False

The true/false test is one of the most widely used tests. It is of considerable use in assessing the student's progress chiefly because they can be constructed easily and quickly.

Davies et al. (1999: 215) state that a true/false item is "**A dichotomously scored test item, where only two options about a statement ("true" or "false") are offered to the test taker, although**

objectively marked, it has the disadvantage that a guess gives the candidate a 50% chance of answering the item correctly".

In constructing a true/false item, the following points should be considered:

1. The stem: It usually asks "Which of the following is True?"

2. The statements: They follow the stem and they can be either true or false statements. The true-false question has only two options. The odds are always 50-50 with this type of items. In order for a statement to be true, it must be so 100% of the time i.e. each part of the question must evaluate the trueness of how, what, where, when, and who for each statement.

3. Words like (never, always, usually, not usually and some) give specific meanings and make confusion to the students (Mallory, 2002: 2).

2.9.5.2 Fill-In the Blanks

Such tests differ from similar completion tests because sufficient clues are provided both in the sentence and in the list of words provided in the brackets and "These clues enable the student to know exactly which word is required" (Heaton, 1983: 143). This type of tests consists of a sentence, from which a word(s) has been removed, and a group of words may be given before the sentences that have the missing words, the testee has to supply the most appropriate word(s) to fill in the blanks (Al-Jarah, 1991: 45).

2.9.5.3 Underline

This test is another type of obj. tests in which the testee is required to recognize certain sound(s) of a word, i.e., these tests require the ability to discriminate between English phonemes.

Although basically the testing of sound perception and recognition is not difficult in scoring, it needs instructions for the testee and requires certain standards of form, validation, etc. that call for additional consideration when preparing the test (Lado, 1962: 71).

2.9.5.4 Matching

Generally speaking, this test is the simplest form. It consists of two lists of words, phrases, symbols, facts, etc. The students should match between the items to produce a correct answer. Alderson, et al., (1999: 51) state that "By "matching" we mean items where students are given a list of possible answers which they have to match with some other lists of words, phrases, sentences, paragraphs, or visual clues".

Obviously, the disadvantage of this item is that "once three of the four items have been accurately matched the fourth pair is correct by default" (Ibid.: 52). To avoid this, more alternatives

should be given to the student. It is worth noting that in matching tests the tester must be sure that each item in the first column only matches one item in the second column (Power, 2004: 5).

2.9.5.5 Re-groupging

In a rearranging test the students are asked to put a group of words, phrases, sentences, or paragraphs in order. The test items are difficult to construct, i.e., it is not easy to provide words or phrases which only make sense in one order (Alderson et al., 1999: 52).

2.10 A Comparison between Subjective and Objective Tests

The issue of comparing subj. and obj. tests highlights the major strengths and weaknesses associated with these types of tests as shown below:

1. Sampling: "objective tests provide ample opportunity to sample the test universe" (McIntire & Miller, 2000:197). The test maker can cover a very wide array of the subject matter and that increases the content validity of the test, while subj. test maker is limited to the number of items or questions to which the test taker can respond in one session and this leads to the weakness of content validity (Ibid.).

2. Difficulty: subj. tests are more difficult to control than obj. tests. The scorer judgments depends on some strategies, thus the results depend on the same strategies (Morton, 1991:4).

3. Construction: obj. tests require extensive thought, development

and time to balance responses in terms of content depth, length and appeal to the test takers .On the other hand, subj. tests need fewer items that are easier to construct and revise (Power, 2004: 4).

4. Response sets: Test takers can guess the correct answer in obj. tests or they can choose socially desirable responses. But in subj. tests the responses might bluff or pad answers with superfluous or excessive information (McIntire & Miller, 2000. 197).

5. Test developers prefer subj. to obj. tests on some occasions ,because subj. tests give the test taker fewer cues and open wider areas for response while obj. tests nly on cues provided by the test and produce no language at all(power,2004:1).

2.11 Testing Language Elements

The components of language can be isolated to the following elements:

1. Phonology (concerned with pronunciation, stress and intonation).

2. Vocabulary (concerned with word meanings and word arrangements), and

3. Grammar.

(Lefrancois, 1999:57)

Heaton (1987:4) mentions that test items that are designed to test phonology should assess at the same time the ability to:

1- Recognize and pronounce the different sounds of the language,

2- Recognize and use the stress patterns of a language, and

3- Hear and produce the melody of a language (i.e., the rise and fall of the voice).

Although the sound system of a language is the same for the speaker and the hearer, Lado (1962:4) states that "the techniques used to test recognition…will differ from those used to measure production of the sounds of the foreign language". Moreover, speaking is just as writing (a complex skill) which requires the simultaneous use of a number of different abilities which often develop at different rates(ibid).

2.12 Techniques in Testing Pronunciation

Pronunciation is tested globally by different techniques, which are either oral or written as the interview, conversational exchange, reading aloud oral drills, using pictures for oral productions, the short talk, and different types of written tests (see pp.17-28)to provide students with an understanding of how pronunciation contributes to communication (Rogerson & Gilbert, 1990: 40).

2.13 Related Previous Studies

Through reviewing the previous studies concerning testing pronunciation, the researcher has found some studies which tackle problems and/or use prodedure, data collection similar to those of the present study. The following studies are found to be of some relation to the present one:

2.13.1 Wadi (1994)
The study aims at:

1. investigating the need for defining a targit level of proficiency in English pronunciation at the development of the means measuring prospective teacher's comprehensive proficiency in pronunciation.

The sample of the study includes students at the Department of English, College of Education for women and Ibn-Rushd at the University of Baghdad. The sample of the pilot study is (20) students who are randomly chosen from the fourth year students of the College of Education Ibn-Rushd while the experimental group is (161) students of Colleges of Education for women and Ibn- Rushd.

The measure consists of 3 parts:

1. The first part measures students' theoretical knowledge about English pronunciation by using subj. questions such as define and answer the following.

2. The second part measures students' articulation of English segmentals and supra-segmentals, and

3. The third part measures the students' proficiency in phonetic transcription by using oral and written obj. questions.

The following outcomes are found out:

1. The measuring system that has been constructed covers the English pronunciation components that are needed for successful TEFL.

2. Pronunciation, theoretically and practically, constitutes a big problem of the student teachers of English at the University of Baghdad, and that Supra-segmental characterizes much more problematic for the students.

2.13.2 Ahmed (2004)

This research aims at investigating the M. A. EFL students'mastery of redundancy in writing phonology.

The sample of the study is 18 M. A. students forming four sessions in the Department of English, at the University of Al-Mustansiriyah. A written test which includes four subj. techniques such as define, what are the kind of, explain and discuss, is adopted to determine the M. A. students' mastery of the concept tested ,i.e redundancy. The statistical tool used to compute the results is the percentage.

The following conclusions are drawn from the discussion of results:

1. Students' achievement in the entire subj. techniques is satisfactory.
2. There are statistically significant differences among the M. A. students' achievement in the four types of the subj. techniques.
3. There are significant differences among the M.A students' achievement of the four sessions.

2.13.3 Mahdi (2000)

This study aims at finding out the extent of the linguistic awareness of EFL college students in the area of pronun. and spelling.

The sample of the study is 150 2nd year college students, Departments of English, colleges of Education (for Women and Ibn-Rushd) and Arts at the University of Baghdad.

A written test which includes obj. recognition testing techniques is adopted and all its items are taken from the prescribed textbook (Roach, 2000), and the items have been selected to cover all the consonants, vowels, diphthongs, and triphthongs. It is worth mentioning that the sample are required to listen to English words taken from the prescribed textbook then identify the sounds.

The findings of the study concerning pronun. indicate that the students still make different kinds of errors in pronun.

2.13.4 Discussion of Related Previous Studies

As mentioned before the studies surveyed have some kind of relation to the present work in one way or another. Therefore, the discussion of the related previous studies involves the folllowing points:

2.13.4.1 Aims and Hypotheses

In respect to Wadi's , the study aims at identifying the level of proficiency in English pronoun .of EFL college students and then designing a quality control measure for graduating prospective teachers of English . Here the first aim in line with the aim of the present study. As for Ahmed's, the aim is to investigate EFL M.A. students' mastery of redundancy in written phonology. Concerning Mahdi's the aim is to find out the extent of linguistic awareness of EFL College students in the area of pronun. and spelling. It is worth noting that Wadi used no hypotheses, while Ahmed and Mahdi used hypotheses in there studies.

2.15.2 Population and Sample

Concerning Wadi's, the population is the EFL College students of the 4th Year, whereas the sample consists of 141 EFL College students of the 4th year from college of Education (Ibn Rushd) and (for Women).

It is worth mentioning that Wadi's sample is not representative because of the sex variable. Further more, Ahmed's sample includes 18 M.A students with no reference to the population of the study. Her sample is of a small number .As for Mahdi, the sample includes 250 of the 2nd year EFL college students majoring at the colleges of Arts and Education at the university of Baghdad .The population is the EFL college students 2nd year.

From his presentation, it is clear that Wadi's and Mahdi's samples are inline with the present study sample, while Ahmed's is not.

2.15.3 Procedures and Statistical Methods

In surveying the procedures of each study, the following points are found out:

1. All the studies are descriptive in nature, i.e. there is no experimental procedure where it could be found as experimental and control groups although there is a common mistake in describing some of the studies as experimental as in Wadi's.

2. In respect to the tools used to achieve the aims of each study, Wadi used oral and written tests, Ahmed used four subj. Written techniques, while Mahdi used a written obj. test. The material of Mahdi is the prescribed textbook (Roach, 2000) which corresponds with the material of the present study.

3. Concerning the statistical tools used to compute results, Ahmed used only the percentage to compute data while Wadi and Mahdi used many types of statistical tools such as Pearson's

correlation coefficient and t-test etc. so as to achieve validity, reliability and collecting other data. It is worth noting that the measuring system which has been outlined by Wadi's and Mahd's is exposed to some experts in English in order to be validated i.e. face validity is used to measure the validity of Wadi's and Mahdi's tests and that corresponds with the validity of the measuring system of the present study. In addition, Wadi used three methods to determine the reliability of the test which are: test-retest method, split-half method and mark-remark method, so the third method corresponds with method used to achieve the reliability of the subj. test of the present study, while Mahdi used the test-retest method to determine the reliability of his test.

3.1 An Introductory Note

This chapter is concernd with the English syllable. It primarily deals with the definitions, structure, parts, phonotactics, syllable division and classification.

3.2 Pronunciation: General Theoretical Framework

3.2.1 Definition of Pronunciation

In its broadest sense, Roach (2002:61) views pronunciation As shown in the following lines:

> **Pronunciation is the acts of producing the sounds of a language. The things that concern most people are (1) standards of pronunciation and (2) the learning of pronunciation.**

3.2.3 The Main Features of Pronunciation

The main features of pronunciation. In this regard, Kelly (2000:1) provides us with a diagram illustrating the main features of pronun . (see Figure 1)

The Main Feature of Pronunciation

Phonemes   Suprasegmental

37

Features

Constants Vowels

Voiced Unvoiced Single Vowels Diphthongs

Intonation Stress

Short Long

Word Stress Sentence Stress
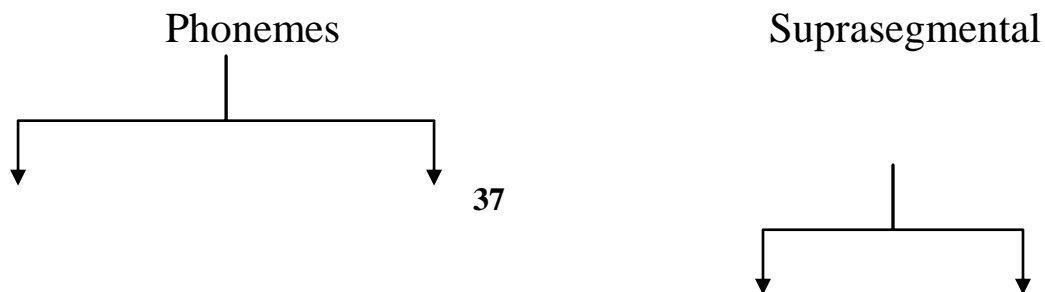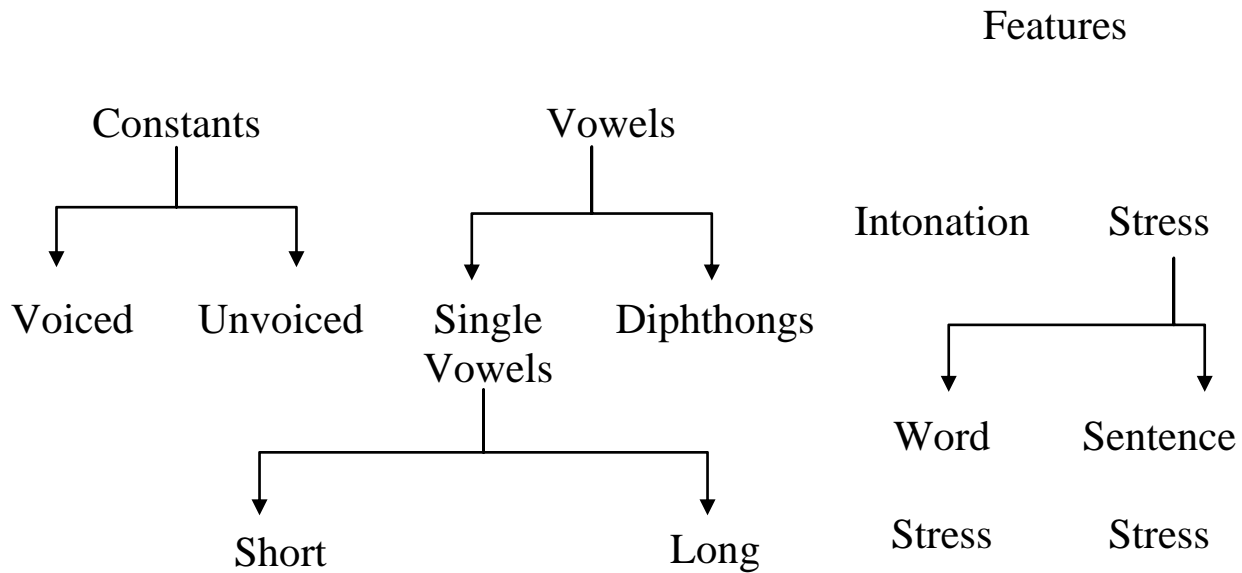
Figure 1
Taken from Kelly (2000; 1)

3.3 The Syllable: Definitions

In its broadest sense, the term 'syllable' is looked at from the phonetic and phonological point of view (Hartmann & Stork, 1976: 227-8; Trask, 1996: 345). In his turn, Crystal (2003: 373) defines the syllable as: "A unit of pronunciation typically larger than a single sound and smaller than a word."

"It should be born in mind that the syllable is found in languages all over the world and can be put into units, i.e., syllables. Humans seem to need syllables as a "way of segmenting the stream of speech…" (Ibid.).

To recapitulate, two different approaches are used in dealing with the syllable, i.e., the phonetic approach and the phonological approach.

The first and for the while the most popular, phonetic definition of the syllable was given by "Stetson (1928) who argued that each syllable corresponds to an increase in air pressure… the pulse or motor theory of syllable production". A number of phoneticians like (Sweet, 1971: 229; Abercrombie, 1967: 35; Brosnhan & Malmberg, 1970: 170; Jones, 1969: 55; Ladefoged, 1993: 248), among others, look at the syllable from articulatory, acoustic and auditory points of view) i.e., the phonetic approach. Abercrombie (1967: 39) points out that:

> **The basis of the syllable is a sudden brief contraction of the respiratory muscles and this construction expels a small amount of air from the lungs. This air so expelled needs for its escape to the outer air a relatively free and unrestricted passage through the vocal tract, and it is this movement of lead restriction in the sequence of movements that makes up the syllable.**

Gimson (1989: 52) takes the same view when he states that the syllable is a "Unit that is defined by counting peaks of activity of the breathing muscles". Viewing the 'syllable' acoustically, O'Connor & Arnold (1973: 200) mention that "the highly inter-related acoustic activity within short stretches of syllable length…" The syllable is also defined auditorily. Jones (1972: 134), for

instance, explains that "in every word made up from more than a single sound; at least one of the sounds is heard to be more 'prominent' than the other(s). If there is only one such 'prominent' sound, the sequence is said to consist of a single syllable". Schane (1973, 9) argues that "the vowels… are more capable of being heard than consonants…".

1. On the other hand, (O'Connor & Trim 1953: 295; Robins, 1964: 137; Fudge, 1984: 29 and Lass, 1988: 250) discuss the syllable from the phonological point of view. In this respect, Crystal (2003: 374) observes that **"the** phonological approach the of Hyman (1975: 188) illustrates that "the most discussed suprasegmental features is the syllable". Katambas' (1989: 153) words are worth quoting where he believes that "The syllable is at the heart of the phonological representation. It is the unit in terms of which phonological systems are organized".

Some writers believe that there is still no sufficient or adequate definition to the term 'syllable'. In this regard, Abercrombie (1976: 34) expresses that "It is believed that a syllable is unit which can be apprehended but cannot be easily defined".

3.3.1 The Structure of the English Syllable

It is worth noting that in a particular language, or in languages generally, the requirements and constraints which determine the shapes of possible syllables, usually formulated in terms of sequences of consonants and vowels, and also in terms of onset plus rhyme, or onset plus nucleus plus coda (Trask, 1996: 346). In this regard, Kreidler (2003: 74) asserts that when discussing syllables, two kinds of facts are important:

1. the structure of the syllable, and

2. the relative prominence of the syllable.

Every syllable has a structure that can be divided into two parts. Consider the following figure which diagrammatically illustrates the division:
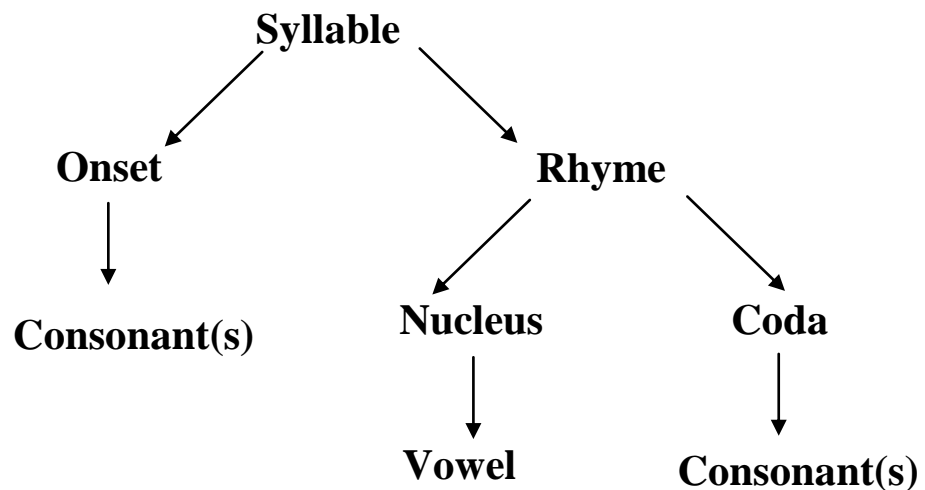
Figure 2

Typical Syllable Structure

Taken from Hogg & McCully (1989; 36)

It is significant to point out that not all syllables have all these parts; the smallest syllable may contain a nucleus only. Simply, onset means the beginning sound(s) of the syllable; the one(s) preceding the nucleus. These are always consonants in English (Roca & Johnson, 2000: 239).

The term 'Rhyme' consists of "the vowel that is treated as the nucleus, as well as any following consonant(s) treated as the coda" (Hogg & McCully, 1989: 369). The essential part of the syllable is called 'the nucleus'. The term 'peak' is used interchangeably (Kreidler, 2003: 74). Similarly, Rogers (2000: 88) points out that "the vowel is a syllable, and any following semivowel, is regarded as the nucleus or center of the syllable. Coda is the closing segment of a syllable.

3.4 Syllable Structure Analysis

The internal structure of a simple syllable, for example: 'read' is analysed phonologically as follows:

read: one syllable

onset: [r]

rhyme: [i:d] (within the rhyme)

nucleus :[i:]

coda:[d]

If the word contains more than one syllable, e.g. 'window', it is analysed phonologically as shown below:

window: two syllables

first syllable: [win]

rhyme: [in]

nucleus: [i]

coda: [n]

second syllable:[dow]

onset: [d]

rhyme: [ow]

nucleus: [əu]

(This syllable has no coda)

<div align="right">(Rubba, 2000: 2)</div>

A syllable may not have a vowel in special cases as when syllabic consonants are used, for example, ($l̩,m̩,n̩,ŋ̩,r̩$). To exemplify, the word 'middle' is made up of two syllables though it has only one vowel and pronounced with a final syllabic consonant [midl̩] (Brandford, 1967: 32). Rogers (2000: 88-9) states that syllables with an empty coda are called 'open syllables' e. g. tree /tri:/; while those with final coda are called 'closed syllables' e. g. sweet /swi:t/ (Yule, 1998: 57). Thus, the basic syllable structure is as follows:

Consonant(s)   Vowel   consonant(s)   or in short: CVC

(Thornborrow and Wareing, 1998: 26).

In every language there are restrictions on the sequences of phonemes that are used, and studying the syllables of the language helps to analyse what the restrictions and regularities are in a particular language. For example, no English word begins with the consonant sequence zbf or ends with the sequence ah. (Ibid.: 45).

It is necessary to have a look at the following maximum phonological structure as seen below:

Pre-Initial	Initial	Post-initial	Vowel	Pre-final	final	Post-Final 1	Post-Final 2	Post-Final 3

Onset   Coda
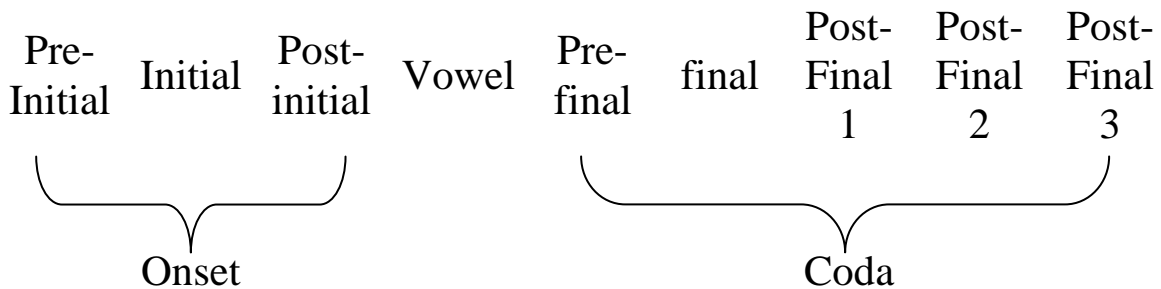
Figure 2

The Maximum Phonological Structure of the syllable

Taken from Roach (2000: 76)

3.5 Transcription

Roach (2000:41) states that transcription is a number of symbols of several different sorts. As a matter of fact . English transcription is of two kinds:

1. Phonemic Transcription

It is the kind of transcription" where every speech sound must be identified as one of the phonemes and written with the appropriate symbol. " (Ibid.:41-42).

2. Phonetic Transcription

A phonetic transcription "containing a lot of information about the exact quality of the sounds would be called a narrow phonetic transcription, while the one which only include a little more information than a phonemic transcription would be called a broad phonetic transcription "(Ibid.:42-43).

3.6 Phonotactics

Looking at syllables from the phonological point of view, i.e., "the possible combinations of English phonemes of a language… are called phonotactics" (Roach, 2000: 71).

Fromkin and Rodman (1988: 83) indicate that "speakers know more about the phonological system of their language". While Carr (1993: 193) stresses that "the phonotactics of a language… are enforced by the phonological rules". It is generally agreed that the syllable is a central unit in phonotactic description. "In describing the phonotactics (pattering of phonemes) of English syllables, linguists focus on absolute restrictions concerning which phonemes may occupy which slots of the syllable" (Wells, 2000: 5, Kessler, 2002: 1).

3.6.1 Consonant Cluster

With respect to the definition of the term 'consonant cluster', Roach (2000, 71) defines that "a consonant cluster is a combination of two or more consonants without the interference of a vowel". Consonant clusters in English fall into different categories. They are:

3.5.1.1 Initial Two Consonant Clusters

With reference to initial consonant clusters, Roach (2000: 71) refers to the cluster of two categories in English, e.g. 'smoke' /sm∂uk/. The **s** is called the pre-initial consonant and the **m** is called the initial consonant (see table 1).

Table 1
Two Consonant Clusters with Pre-initial **s**

Pre-initial	Initial																
s plus	p	t	k	b	d	g	f	θ	s	ʃ	H	V	∂	z	ʒ	m	n	ŋ
	spɪm	stɪk	skɪm	-	-	-	sfɪ∂	-	-	-	-	-	-	-	-	smel	sn∂ʊ	-

(Taken from Roach, 2000: 72)

The other sort begins with one of a set of about fifteen consonants, followed by one of the set I, r, w, j, the first consonant of these clusters is called the initial consonant and the second is the post-initial e.g., 'play' /pleɪ/, 'try' /traɪ/, 'quick' /kwik/, 'few' /fju:/, (Ibid.: 73).

3.6.1.2 Initial Three Consonant Clusters

This type of initial cluster usually begins with **s** e.g. 'split, 'stream' /stri:m/, 'square' /skwe∂/.   The **s** is the pre-initial consonant, the p, t, k, follow **s** in the three words are the initial consonants, and the I, r, w are post –initials as shown in table 2:

3.6.1.3 Final Three Consonant Clusters

As far as final three consonant clusters are concerned, there are two types as illustrated in the tables 3,4and5:

3.6.1.4 Final Four Consonant Clusters

Examination of the table 6 shows two sorts of final–four consonant clusters:

Table 2
Three Consonant Clusters with Pre-initial s
Taken from Roach (2000 :73)

Post-initial		I	R	W	J
	p	'splay'	'spray'	-	'spew'
S plus initial	t	-	'sting'	-	'stew'
	k	'sclerosis'	'screen'	'squeak'	'skewer'

Table 4
Final Three Consonant Clusters with Pre-final

		Pre- final	Final	Post-final
'helped'	he	l	p	t
'banks'	ba	ŋ	k	s
'bonds'	bo	n	d	z
'twelfth'	twe	l	f	θ

Table 5
Final Three Consonant Clusters with out Pre-final

		Pre-final	Final	Post-final1	Post-final2
'fifths'	fi	-	f	θ	s
'next'	ne	-	k	s	t
'lapsed'	la	-	p	s	t

Table 6

Final Four Consonant Clusters

		Pre-final	Final	Post-final 1	Post-final 2
'twelfths'	twe	l	f	θ	s
'prompts'	pro	m	p	t	s

Table 7
Four Consonant Clusters with no Pre-final but Three Post-finals

		Pre-final	Final	Post-final 1	Post-final 2	Post-final 3
'Sixths'	sɪ	-	k	S	θ	s
'texts'	te	-	k	S	t	s

3.7 Stress

Stress is also seen from the phonetic and phonological points of view. Jones (1969:245) defines 'stress' as" the degree of force with which a sound or a syllable is "uttered". Hyman (1975:204) emphasizes the function of stress, i.e., a word receives only one primary stress ' . Words with several syllables receive primary stress and secondary stress ' . Unstressed syllables, as stated by Heffner (1975:226), are "used loosely for minimally stressed and always understood in that sense".

English word stress is part of the language; it is used to communicate rapidly. To exemplify, the words 'photography' and 'photographer' are distinguishable according to the position of stress (Roach, 2002: 89). Hyman (1925:205) puts forward two criteria that determine stress patterns in all languages: a grammatical criterion, and a phonological one.

Sentence stress, at the other extreme, depends on the important words. In other words, the most important lexical stress, i.e., noun, verb, adjective . and adverb in a given sentence can carry stress (Ibid.: 20).

Stress placement within a word is either unpredictable as adopted by Jones (1969) or predictable as adopted by Chomsky and Hallé (1968). Aitchison (1994:12) believes that a basic feature of the skeleton is the number of syllables".

3.8 Syllable Division

On syllable division, Kreidler (2003:84-6) stresses the fact that the English language has stress timing, i.e., certain syllables are louder and longer; others are softer and shorter and usually have a reduced vowel. It is easy to indicate and clarify the beginning of the strong syllable, but it is too difficult to tell where a weak syllable begins unless it is an initial syllable. It is possible to get information about how a written word should be syllabified from a dictionary, the dictionary indicates syllable division according to certain conversation that are based on two principles (1) recognition of certain prefixes and suffixes which are not divided (mis. treat, un.able, free. dom, work. ing), and

(2) different treatment according to whether the vowel letter A, E, I (or Y), if the vowel is 'long', it ends with a syllable and the next letter goes in the following syllable, but if the vowel is 'short' the next letter goes with a preceding vowel letter . Thus as in writing:

ra. dical. Sa.vor   but rad. ic. al

le. gal, me. di. um but   leg. a. cy, med.i.cine

fi. nal, ri. val   but   fin. ish, riv. er

co. pi. ous, so. lo   but   op.er.a, sol.id

pu. ny, stu. di. ous   but   punish, stud. y

Generally speaking, the rules for syllabifying spoken English words are:

1- If two vowels occur in a sequence, the syllable break is between the vowel (v,v): ne. on, cha. os, cru.el (ty), bi.o (logy), re.a(lity).

2- If one consonant occurs between vowels and the second is strong, the consonant is part of the second syllable whether the second vowel is stressed or not. e.g, re'.pent, va' ca (tion).

3- If two vowels are separated by a consonant cluster, syllable division depends on the consonant in the cluster. If the cluster is of the type (sc-, cr-, cl- ,cw-, scr-, etc.) that can occur word initially and followed by a vowel which is strong , the whole cluster is part of the syllable with the strong vowel : pa. tri (cia), de. 'c'line, re. 'q'uire, s'u. 'spect etc.

4- The consonants are divided in such a way that the second syllable begins with a single consonant or cluster that can occur initially if the consonant cluster is one that cannot occur in initial position e.g. can. dy.lat, shel. ter, a. car. pen. ter (Ibid.).

3.9 Classification of the English Syllable

The classification of the English syllable has been acknowledged in a large number of linguistic and phonetic studies. Thus, syllables are categorized in terms of three criteria: quality (strong and weak), number (monosyllabic, disyllabic and polysyllabic) and complexity (complex and simple).

3.9.1 Strong (Heavy) and Weak (Light) Syllables

Laver (1994:517) distinguishes between heavy syllables and light syllables saying that a light syllable is one whose rhyme is made up of a nucleus consisting of a short vowel, followed by a maximum of one short consonant. A heavy syllable is any other type of syllable, and its phonological length is greater than mora".

Another important fact is that strong syllables are stressed while weak syllables are unstressed; any strong syllable has in its peak one of vowel phonemes (or triphthong). If the vowel is short, the strong syllable will have a coda (Roach, 2000:81). Heavy syllables always have more quantity than light ones (Ohsieck, 1978:35).

Weak syllables, on the other hand, can only have one of a very small number of possible peaks (Ibid.).

Kreidler (2003:81) points out that the strong unstressed syllables are similar to stressed ones in certain ways:

1. Strong syllables never contain a schwa.

2. The onset of a strong medial syllable is much clearer than the onset of weak medial syllable.

3. Voiceless stops at the onset of the strong unstressed syllables are aspirated just as they are at the onset stressed syllables.

4. A strong syllable is a stressed syllable.

A weak syllable, on the other hand, is potentially an accented syllable. Roach (2000:82-6) identifies the different types of weak syllables as follows:

1. The vowel (∂) schwa.

2. A close front rounded vowel, i.e., in the general area between /i:/ and /i/.

3. A close back rounded vowel i.e, in the general area between /u:/ and /u/.

4. A syllabic consonant e.g., [$\overset{n}{}$] and [$\overset{l}{}$] etc.

3.9.2 Monosyllabic, Disyllabic and Polysyllabic

Trask (1996: 226) defines monosyllabic as "A word consisting of a single syllable e.g. cat, dog, is, try, black, when, strength." While the longest complex monosyllabic English words are: scratched, stretched, scrunched, straights, strengths (the Free Encyclopedia, 2005: a Int.). In one syllable lexical word, the primary stress is actually unmarked because it is predictable (Tathem, 1998:1). Disyllabic is a word consisting of two syllables e.g. money, delay, trouble, happy, believe, teacher etc. Polysyllabic is a word consisting of three or more syllables, e.g.:

generous /gen∂r∂s/

ambassador /∂mbas∂d/

opportunity /op∂tjun:n∂ti/

particular / p∂tikj∂l∂/

Roach (2000).

3.9.3 Simple and Complex Syllables

Syllables are classified in terms of complexity. Singh and Singh (1977:170) differentiate between a simple syllable and a complex one saying that a simple syllable is "one with a vowel or vowel accompanied by a single consonant or a vowel preceded and followed by a single consonant. All other syllable types are called complex syllables i.e., one with consonant clusters in the onset and/ or the coda" the symbol 'c' is used to refer to consonant whereas the symbol 'V' stands for a vowel e.g. see/si:/ , the letter s is represented by the symbol 'C' and the double letter ee are represented by the symbol 'V' (Stetson , 2003:1).

The following table illustrates the distinction between simple and complex syllables by Singh and Singh (1979: 38)

Table 8

Simple and Complex Syllables

Syllable type		example
Simple	V	a/ ∂/or/o:
	CV	the / ђ∂, ђe/
	VC	it /it/
	CVC	sit /sit/

Complex	CCV	tree /tri:/
	VCC	east /i:st/
	CCVC	stood /stud/
	CCCVC	street /stri:t/
	CCCVCC	streets /stri:ts/
	CCCVCCC	strength /streђkθ/
	CVCC	sips /sips/
	CCVCC	treats /tri:ts/
	CVCCC	depths /depθs/
	CCCV	screw /skru:/
	VCCC	asks /a:sks/

Roach (200:20-1) argues that: simple syllables are of the following categories:

I. A minimum syllable would be a single vowel in isolation, e.g. the words 'are' (strong form) a: :, 'or' o: , 'err' 3: these are preceded and followed by silence. Isolated sounds such as m, which is some times produced to indicate agreement, or ʃ to ask for silence, must also be regarded as syllables.

2. Some syllables have an onset (i.e., they have more than just silence preceding the centre of the syllable (CV) e.g.:

'bar' ba: 'key' ki: 'more' mo: .

3. Syllables may have no onset but have a coda (VC) e.g.: 'æm' am 'ought' o:t 'ease' i:z.

4. Some syllables have onset and coda (CVC) e. g.: 'run' rʌn 'sat' 'fill' fil(Ibid.).

Cox, Harrington and Mannel (2000: 6) affirm that the open syllable has the structure CV as in 'die' /dai/. On the other hand, closed syllables are those which end with the 'coda', the most common closed syllable has the structure (CVC) as in 'died' /daɪd/. (Keshavarz: 2003; 47-50).

The different structures of the open and closed syllables are :

A- Open Syllables:

V	I	/ a i /
CV	tea	/ ti: /
CCV	spy	/ spai /
CCCV	spray	/ sprei/

B-Closed Syllables:

VC	am	/æm /
VCC	ant	/ænt/
VCCC	ants	/ænts/
VCCCC	pre-empts	/primpts/
CVC	man	/mæn/
CVCC	band	/bænd/
CVCCC	bands	/bændz/
CVCCCC	sixths	/ siksθs/
CCVC	brag	/ bræg /
CCVCC	brags	/ bragz /
CCVCCC	plants	/ plænts /
CCCVC	spring	/ spring /
CCCVCC	springs	/ springz /
CCCVCCC	splints	/ splints /
CCCVCCCC	strengths	/ strerykθs/

(Ibid.)

3.10 Related Previous Studies

3.10.1 Trienman (2000)

This study aims at determining whether the vowel and the coda are more strongly associated with each other than the vowel and the onset. The data is collected from words consisting of 24 onsets, 15 vowels and 21 codas which are tested and then analysed.

The result of this study indicates that there is a stronger connection between a vowel and a coda than between a vowel and an onset.

3.10.2 Kessler (2004)

This study aims at finding out whether there are significant differences in the frequency of occurrence of the different consonants depending on whether they are in the onset or coda. The researcher analyzed 2001 mono morphemic CVC words found in the Random House Dictionary (Elexner 1987)

Grammars coefficient is used to find out the association between consonant type and syllable position which is found to be a strong association in this study.

The findings of this study are:

1. Glides (/h/,/j/,/w/,) can only occur in the onset.

2. /z/,/t/,/l/and/k/ show a significant preference for the coda.

3. /b/,/s/and/r/ show a significant preference for the onset

3. **ObjectiveTtest**

1. A strong syllable is a stressed syllable.

3.9.1 Strong (Heavy) and Weak (Light) Syllables

Laver (1994:517) distinguishes between heavy syllables and light syllables saying that a light syllable is   one whose   rhyme is made up of a nucleus consisting of a short vowel, followed by a maximum of one short consonant. A heavy syllable is any other type of syllable, and its phonological length is greater than mora".

Another important fact is that strong syllables are stressed while weak syllables are unstressed; any strong syllable has in its peak one of vowel phonemes (or triphthong). If the vowel is short, the strong syllable will have a coda (Roach, 2000:81). Heavy syllables always have more quantity than light ones (Ohsieck, 1978:35).

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Roach (200:20-1) argues that: simple syllables are of the following categories:

I. A minimum syllable would be a single vowel in isolation, e.g. the words 'are' (strong form) a: :, 'or' o: , 'err' 3: these are preceded and followed by silence. Isolated sounds such as m, which is some times produced to indicate agreement, or ʃ to ask for silence, must also be regarded as syllables.

2. Some syllables have an onset (i.e., they have more than just silence preceding the centre of the syllable (CV) e.g.:

'bar' ba: 'key' ki: 'more' mo: .

3. Syllables may have no onset but have a coda (VC) e.g.: 'æm' am 'ought' o:t 'ease' i:z.

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The different structures of the open and closed syllables are :

11 Discussions of the Related Previous Studies

From the survey of the two mentioned previous studies, The following major points are found:

1. Both Trienman's and Kessler's deal with English syllable structure. This aim goes inline with the present study aims.

2. No reference concerning the selection of the testing material is found in Trienman's, whereas Kessler's depended on the Randon House Dictionary by Elexner (1987).

3. The main tool used in achieving the aims of the surveyed studies is the analysis of English words taken from the referenced book mentioned in each study. In the present study, the tool is completely different. A test has been constructed and applied on a sample of testees which consists of two parts (see app. 3).

4. Both Trienman's and Kessler's are interested in studying English syllable structure. This aim goes inline with the present study aims.

5. No reference concerning the selection of the testing material is found in Trienman's, whereas Kessler's depended on the Randon House Dictionary by Elexner (1987).

6. The main tool used in achieving the aims of the surveyed studies is the analysis of English words taken from the referenced book mentioned in each study. In the present study, the tool is completely different. A test has been constructed and applied on a sample of testees which consists of two parts (see app. 3).

4.1 An Introductory Note

This chapter discusses the practical work that has been carried out, i.e. the population and sample selection 'procedures, the construction of the test and its validity, reliability, and analysis of items, application, and statistical tools used in this study.

4. 2 Population and Sample Selection

The population of this study is the students of Second Year, Departments of English, Colleges of Arts, Education (Ibn-Rushd, for Women), Languages and the Basic Education at the Universities of Baghdad and Al- Mustansiriyah. The sample is randomly chosen from the College of Arts at the University of Al-Mustansiriyah and from the College of Languages at the University of Baghdad[*] during the academic year 2004/2005. The total number of the sample is 150 where Arab students and repeaters of the year are excluded.

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[*]College of Languages represents the pilot sample of the present study, but after analyzing the testees' responses, it is found out that all the items of the tests are valid and reliable and that no item is dropped out, therefore, the testees of the College of Languages are added to the total sample of the study .

4.3 Construction and Description of the Test

Essentially, the main procedure adopted in the present study is to construct an achievement test in order to achieve the aims of the study.

Technically, the test consists of two parts of testing techniques where each part consists of five techniques .Part one deals with the subj. type, while part two deals with the obj. one.

As a matter of fact, the subj. techniques are the techniques used by the university teachers nowadays in testing written pronun. , while the obj. ones are the suggested alternative, which deal with written pronun. as well.

It is worth mentioning that the two types of techniques deal with the same data (English syllable and its types) i.e., both techniques measures EFL college students' achievement in pronun.

Table 9

Description of the Test

Types of tests	Techniques	Items
1. Subj.	1. Define	4
	2. Discuss the following briefly :	2
	3. Distinguish between :	2
	4- Complete the following :	4
	5- Answer the following questions briefly:	2

2. Obj.	1. True\false	5
	2. Fill in the blanks	4
	3. Underline	4
	4- Matching	5
	5- Regrouping	10

4.4 Selection l of the Test Items Material

Concerning the two types of techniques i.e. the subj. and the obj., it is worth stating that both types of techniques are used in testing the English syllable and its types which are found in chapter 8 and 9 in a prescribed textbook which is taught to 2nd year college students at the Department of English, which is entitled "English Phonetics and Phonology: A practical course" written by Peter Roach (2000). Therefore, the items of the tests are constructed depending on the topics, stated in chapters 8 and 9, and table 9 shows each point and sub- point related to it:

Table 10

Specification of the points and sub-points related to chapters 8 and 9 situated in Roach (2000)

No. of Units	Sub -headings	Items
Unit (8)	1- The nature of the syllable	1. Minimum syllable 2. Onset and coda. 3. Phonotactics 4. Zero onset and zero coda
	2. The structure of the English syllable	1. Consonant cluster 2. Pre-initial consonants 3. Initial consonants 4. Post-initial consonants 5. Final consonants 6. Pre-final consonants 7. Post-final consonants
	3- Syllable Division	1. Onset 2. Rhyme, Peak Coda 3. Maximum onsets principle
Unit(9)	4- Strong and weak syllables	1. Strong and weak syllables 2. Syllabic consonants: definition
	5- The (schwa)	1. The /ə/vowel (schwa) 2. Close front and close back vowels
	6- Syllabic consonants	Syllabic consonants /l̩ /, /n̩ /, /m̩ / /ŋ̩ /, /r̩ /
	7- Combination of syllabic consonants	Examples of combinations of syllabic consonants

4.5 Face Validity of the Tests

To achieve face validity of the tests, the items should be given to a jury of specialists in English language (Harris, 1969:18). "A valid test measures what it ought to be testing" (Al-Mutawa and Kailani, 1989: 146). While Ingram (1977:18) defines face validity as the "surface credibility or public acceptability".

In fact, the judgments of the jury are usually holistic referring to the test as a whole, although attention may be given to particular items. Therefore, the tests have been given to a jury of 24 specialists in English language teaching, linguistics, and measurement and evaluation(see app.4) to point out their remarks and suggestions concerning the suitability of the test items to the level of the sample, and to find out whether they achieve the aims of the present study or not (see App.1,2)). It is necessary to note that the tests items as a whole are judged valid by all the jurors and this means 100% agreement.

4.6 Pilot Study and Item Analysis of the Tests

It is highly desired to run a pilot-testing on the test design and to revise it according to the results of the test. Pilot-testing "attempts to determine whether the test items pass the desired qualities of measurement and discriminability" (Tuckman, 1972:197). The aims of the pilot study are to find out the discriminating power and the difficulty level of each item,

estimate the time needed to answer the test, and determine the reliability coefficient of the whole test, as well. Pilot-testing serves to establish the potential range of performance on the test and highlight any problems of administrations and scoring (Power, 2004:5).

For the purpose of conducting a pilot–study, eighty students were assigned to be the members of the test. All are randomly drawn from the second stage, Department of English, College of Languages, University of Baghdad*. Instructions concerning what the testees are to do during taking the tests are explained by the researcher herself so that no misunderstanding could occur. The testees are requested to answer the subj. techniques first; the time, given to answer the subj. techniques, is free. The same testees are then given a break of 10 minutes, and then they are requested to answer the obj. techniques with a free time, as well. The average time needed to answer the subj. questions is 45 minutes, while the average time needed to answer the obj. ones is 35 minutes. As a result the total average time needed to answer the whole test is found out to be 80 minutes, which means that the time of one lecture is enough for taking the subj. techniques, and another lecture is also enough for the obj. ones (see table 11). It also shows that the directions of the test are clear and easy to understand.

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* Who are then added to the total number of the sample.

Table 11

The Required Average Time to Answer the Tests
Items Plus the Break Time

Type of activity	Time required
Taking the subj. test	45 minutes
Break[*]	10 minutes
Taking the obj. test	35 minutes
Total	90 minutes

4.7 Item Discriminating Power

Theoretically speaking, calculating the discriminating power (henceforth DP) of a test means separating the high-scoring and the low-scoring groups who answer the items correctly and which should constitute about 27 percent of a group (Lindquist, 1974: 289). By ordaring the papers according to the scores on each part of the test, the papers are divided into three groups: the high scores (22 papers), the middle scores (36 papers) and the low scores (22 papers).

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[*] The break is found to be necessary to get rid of monotony, bordome and routine of the activity of taking a test for two continuous lectures.

Anastasy (1976:114) states that "if the discriminating power of an item is 0.30 and above, the item is acceptable and if it is less than 0.30 then it is weak and should be changed".

Results of applying the DP formula to the test items are demonstrated in table 11. The DP of the subj. test items ranges between 0.41-0.78, so they are considered acceptable, while the DP of the obj. test items ranges between 0.46-0.81, therefore they are also considered acceptable.

4.8 Item Difficulty Level

The benefit of items difficulty level (henceforth DL) is that it "permits the identification of items which are too difficult or too easy (outside the range of 0.25-0.75) or which fail to discriminate strongly enough between candidates" (Baker, 1989: 54).

Accordingly, the optimum rate of the DL of all items ranges between 50% - 60%. On the basis of the results of using the DL formula, the DL of the subj. test items ranges between 0.43-0.73 while the DL of the obj. test items ranges between 0.46-0.73 as shown in table11.

Table 12

The DL and the DP Values of the Testees in the Subj. and Obj. Tests

Types of test	Technique	Item No.	D L	D P
Subj.	Define	1	0.67	0.59
		2	0.61	0.68
		3	0.46	0.69
		4	0.61	0.77
	Discuss	5	0.70	0.41
		6	0.61	0.41
	Distinguish	7	0.50	0.55
		8	0.57	0.59
	Complete	9	0.73	0.55
		10	0.49	0.68
	Answer the following	11	0.48	0.78
		12	0.43	0.78
		13	0.48	0.68
		14	0.46	0.64
Obj	True \ false	1	0.55	0.55
		2	0.50	0.69
		3	0.70	0.50
		4	0.57	0.59
		5	0.55	0.64
	Filling the blanks	6	0.61	0.68
		7	0.62	0.59
		8	0.73	0.55
		9	0.46	0.73
	Underline	10	0.62	0.50
		11	0.62	0.56
		12	0.68	0.55
		13	0.55	0.73
	Matching	14	0.59	0.46
		15	0.59	0.64
		16	0.55	0.73
		17	0.62	0.64
		18	0.67	0.59
	Regrouping	19	0.55	0.64
		20	0.68	0.64
		21	0.59	0.73
		22	0.64	0.73
		23	0.57	0.68
		24	0.62	0.68
		25	0.64	0.73
		26	0.62	0.68
		27	0.48	0.68
		28	0.59	0.81

4.9 Reliability of the Tests

The reliability coefficients of the tests are obtained according to the following methods:

4.9.1 Reliability of the Subjective Test

The method which is used to find out the reliability coefficient of the subj. test is the Mark\Remark method, so as to indicate the extent to which the same scores are obtained if the same test sheets are marked by two or more different scorers or by the same scorer on different occasions (Lindquist, 1974: 560). To compute the reliability coefficient, a sample of testees papers are corrected twice, first by the researcher then by a professor[*] who is professional in phonology. The total number of the papers to be corrected is 50 which are randomly chosen from the total number of the testees papers which is 80[**].

Generally speaking, the test reliability coefficient would be acceptable if it is not less than 0.50 (Hedges, 1966: 22; Nunnaly, 1972: 226). Therefore, Pearson's correlation coefficient is used to estimate the reliability coefficient of the subj. test. As a result, the reliability coefficient is found out to be 0.88 which is considered an acceptable coefficient according to (Ibid.).

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[*] Prof. Bushra Mustafa Nori, Dep. of English, College of Arts, University of Al-Mustansiryah.

[**] This is the total number of the testees who participate in the pilot-study, for further information see (4.6).

4.9.2 Reliability of the Objective Test

To obtain the reliability of the items of the obj. techniques, Kuder -Richardson reliability coefficient No.21 formula is used. "This formula provides a measure of internal consistency" (Gronlund, 1981: 99). This means that the items in a test are homogeneous in the sense that every item measures the same general factor …, as do the others (Thorndike & Hagain, 1955: 130).

Therefore, the reliability coefficient of the obj. items of the present test is found out to be 0.82 which indicates that the consistency of the test items is acceptable i.e., all the items of the obj. test measure the same factor which is memorization and knowledge.

4.10 Final Application of the Test

The test was applied in January/2005; it has been administrated to 83 testees of the second year, Department of English, College of Arts at the University of Al-Mustansiriyah. The researcher has managed to get the assistance of two lecturers to monitor the testees who were gathered in one examination hall.

Consequently, the testees are required to answer all the subj. questions in 45 minutes i.e., one lecture then they took a break of 10 minutes. After that, the same testees are requested to answer the obj. questions in 35 minutes.

Finally, the papers of the testees are gathered by the researcher with the help of two other lecturers.

4.11 Scoring Scheme

AL-Hamash *et al*. (1982: 23) stress that for the purpose of objectivity and reliability, an accurate scoring scheme should be developed for the whole test.

In respect to the subj. techniques, the testees' answers are scored according to a specific scoring key as seen in table 12. The scorer adopted the analytical method of scoring suggested by Davis *et al.* (1999: 9) where each element of the writing skill i.e. (grammar, spelling, punctuation, sequence of ideas, the information and relevance) is given 1 mark out of 5. It is worth mentioning that if the relevance and the information are not correct, the testees get zero out of 5 even if the other elements are correct. In respect to the obj. techniques, the testees answers are scored according to another scoring key where each item has two possibilities i.e., a correct answer gets 1 mark and an incorrect answer gets zero.

Table 13

Scoring keys for the Subj. and Obj. Tests

Techniques	Questions	Marks	Items	marks
Subj.	Define	20	4	5 marks for each item. One mark for each of the following per item: grammar, spelling, sequence of ideas, the information and relevance
	Discuss	10	2	
	Distinguish	10	2	
	Complete	20	4	
	Answer the following	10	2	

Obj.	True/false	5	5	1 mark for each correct answer and zero for each incorrect answer
	Fill in the blanks	4	4	
	Underline	4	4	
	Matching	5	5	
	Regrouping	10	10	

It is worth saying that the subj. techniques are scored out of 70 marks while the obj. ones are scored out of 28 marks. For the purpose of the statistical results, scores are changed as a whole i.e., the scores of each subj. and obj. technique and the scores of subj. and obj. tests are to be out of 100 by using the following key:

Scores of the subj. and obj. tests:

Out of 70 becomes out of 100: subj. techniques

Out of 28 becomes out of 100: obj. techniques

Scores of the obj. techniques:

(True/false, fill in the blanks, underline, matching and regrouping).

Out of 5 becomes out of 100: True/false and matching testing techniques.

Out of 4 becomes out of 100: Fill in the blanks and underline testing techniques.

Out of 10 becomes out of 100: Regrouping testing techniques.

To achieve the aims of the present study and for the purpose of unity, all the scores of the subj. and obj. testing techniques as well are changed to be out of 100 as shown above. This procedure is adopted in order to make the comparison of EFL College students' achievement in written pronun. between subj. and obj. test techniques, and among all types of obj. test techniques, easier, clearer and more practical.

4.12 Statistical Tools

The following statistical tools are used:

1. Item discriminating power to calculate the DP of each subj. and obj. item. The following formula is used:

$$DP = \frac{Ru - Rl}{1/2T}$$

Where:

DP = discriminating power.

R U = the number of testees in the upper group who answered the item correctly.

R L = the number of testees in the lower group who answered the item correctly.

T = the total number of testees included in the item analysis.

<div align="right">(Gronlund, 1976:211)</div>

2. Difficulty level formula is used to calculate the DL of each subj. or obj. item. The following formula is used:

$$DL = \frac{Hc - Lc}{N}$$

Where

HC = high correct

LC = low correct

N = total number of testees

<div align="right">(Bloom, 1971:181)</div>

3. Pearson product moment correlation coefficient is used to estimate the reliability of the subj. test. The following formula is used:

$$r = \frac{\Sigma \times y - \dfrac{(\Sigma x)(\Sigma y)}{n}}{\sqrt{\left[\Sigma x^2 - \dfrac{(\Sigma x)^2}{n}\right]\left[\Sigma y^2 - \dfrac{(\Sigma y)^2}{n}\right]}}$$

<div align="right">(Ferguson, G. & Takane, Y, 1989: 88)</div>

4. T-test for two dependent samples is used to find out the significant differences between subj. and obj. techniques in the testees achievement. The following formula is used:

$$t = \frac{Md}{\sqrt{\dfrac{\varepsilon X^2 d}{N(N-1)}}}$$

Where:

Md = mean of the scores

Xd = deviation

N= number of pairs samples

<div align="right">(Guilford, 1965:185)</div>

5. T-test for one dependent sample is used to find out the level of the achievement of the EFL College students in the subj. and obj. testing techniques

$$t = \frac{\overline{X} - \mu}{S / \sqrt{N-1}}$$

Where:

$\overline{X}$ = Mean

S = Standard deviation

N= Number of subjects

<div align="right">(Guilford, 1965:185)</div>

6. Analysis of variance: one – way classification ANOVA is used to find out the significant differences among the means of the obj.questions. (Runyon & Haber, 1971: 222-224)

7. Tukey test is used to find out the significant differences between each pair of means of the obj. ones. The following formula is used

$$HSD = q\alpha \sqrt{\frac{sw^2}{n}}$$

Where:

sw^2 = the variance estimate within-subjects

n= number of subjects

$q\alpha$ tabled value for a given α - level found in table P (table P shows percentage points of the studentized range)

(Ibid.)

8. Kuder-Richardson No. 21 is used for estimating the reliability coefficient of the obj. test, the following formula is used:

$$K\text{-}R21 = \frac{n}{n-1}\left[1 - \frac{\overline{X}(n-\overline{X})}{nSx^2}\right]$$

Where:

n= number of items of the test

x= mean of responses

sx= variance

(Ferguson, & Takane, 1989: 88)

5. 1 An Introductory Note

This chapter is devoted to the presentation of the results of the tests and their discussion. The analysis of the collected data is computed by using suitable statistical tools, each achieves one of the aims of the present study.Conclusions are drawn in the light of the results, recommendations are presented, and finally suggestions for further studies are proposed.

5.2 TheResults

5.2.1The Presentationof Results

After administering the test which consists of the subj. and the obj. testing techniques, testees' responses are analysed to determine whether there are statistically significant differences in the achievement of the testees when taking the subj. techniques or the obj .ones .

Consequently, the results of the testees indicate that there are statistically significant differences in the EFL college students' achievement in written pronun. when taking the subj. testing techniques and the obj. ones.

5.2.1.1 Achieving the First Aim

The first aim of the present study inquires the level of the achievement of the EFL college students in the subj. test . t-test formula for one sample is used and results are computed as shown in Table 14.

Table 14

Results of t-Test in Respect to the Level of the EFL

College Students in the Subj. Test

Type of test	No. of Sample	$\overline{X}$	SD	Theoretical Mean	Computed t-value	Table t-value	Level of significance
Subj.	150	60.253	13.8754	50	9.40	2.58	0.01

As seen in table 13, the computed mean scores is 60.253, whereas the theoretical mean is 50[*]. This shows that the computed mean is higher than the theoretical one, which signifies that the testees total mean in the subj. test is higher than the degree of success which is 50 out of 100.

By comparing the computed t-value which is 9.40 with the table t-value which is 2.58, it is found out that the former is higher than the latter. This signifies that it is statistically significant on the level of 0.01 which is adopted because of the high value of the computed t-value.

This result shows that EFL college students' level in the subj. test techniques is of a medium level.

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[*] The theoretical mean is found out by the following equation:

$$\text{Theoretical mean} = \frac{\text{Higher score} + \text{Lower Score}}{2}$$

5.2.1.2 Achieving the Second Aim

To achieve the second aim of the study which is inquiring the level of EFL College students' in the obj. test techniques, one sample t-test formula is also used and results are computed as shown in the Table 15.

Table 15

Results of t-Test in Respect to the Level of the EFL College Students in the Obj. Test

Type of test	No. of Sample	$\overline{X}$	SD	Theoretical Mean	Computed t-value	Table t-value	Level of significance
Obj.	150	70.606	16.5819	50	15.218	2.58	0.01

Table 15 shows that the computed mean scores is 70.606, whereas the theoretical mean is 50. This shows that the computed mean is higher than the theoretical one, which signifies that the testees' total mean scores in the obj. test is higher than the degree of success which is 50 out of 100.

By comparing the computed t-value which is 15.218 with the table t-value which is 2.58, it is found out that the former is higher than the latter. This signifies that it is statistically significant on a level of 0.01 .

This result shows that the EFL college students' level in the obj. test techniques is of an average level.

5.2.1.3 Achieving the Third Aim and Verifying the First Null Hypothesis

The third aim focuses on finding out whether there are any statistically significant differences in the achievement of EFL college students in written pronun. between the subj. and the obj. test techniques. This aim is achieved by using the t-test formula for two dependent samples and the results are computed as shown in Table 16.

Table 16

The Difference in the Sample Level in Written Pronun.between the Subj. and Obj. Tests Techniques

Type of test	No. of Sample	$\overline{X}$	The Standard error of the Mean differences	Computed t-value	Table t-value	Level of significance
Subj.	150	60.253	1.7	6.117	2.576	0.01
Obj.	150	70.606				

Table 16 shows that since the computed t-value which is 6.117, is found out to be higher than the table t-value which is 2.576 on a level of 0.01, there is a staistically significant difference between the two mean scores in favour of the obj. test techniques. This fact shows that EFL college students' level in the obj. test techniques is higher than that in the subj. ones. Accordingly, the first null hypothesis is rejected and the alternative one which states that "there are statistically

significant differences in the acheivement of EFL college students in written pronun. between the subj. test technique and the obj. ones"is accepted.

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5.2.1.4 Achieving the Fourth Aim and Verifying the Second Null Hypothesis.

The fourth aim is concerned finding out in which of the obj. test techniques the testees' achievement in written pronun. is higher than the other ones. This aim is achieved by using the analysis of variance ANOVA. The results are presented in Table 17.

Table 17

Results of the ANOVA of the Comparison among the Obj. Testing Techniques

Source of variance	Sum of squares	d. f	Variance Estemate	Computed F-ratio	Table F-ratio	Level of significance
Between subjects	85131.87	149				
Within subject	583837	600		9.3	3.36	0.01
Between five Obj. techniques	35896.54	4	8974.14			

Remainder	547940.46	596	962.99		
Total	668968.87	749			

Table 17 shows that since the computed F-ratio is higher than the table F-ratio which is 3.36 on two degrees of freedom which are 4 and 596 , and a level of statistically significance of 0.01. Accordingly, there are statistically significant differences among the five obj. testing techniques.

In order to show the source of difference among the five obj. techniques, multi-post comparisons are applied by using Tukey formula as shown in Yable 18.

Table 18

Differences among the Five Obj. Techniques and their Significance

Obj. techniques	$\bar{X}$	Comparison of Means*	Computed Tuckey-value	Table Tuckey-value	Level of significance
True/False	$\bar{X} =61.3$	$\bar{X}1-\bar{X}\ ٢$	20.8		
Fill in the blanks	$\bar{X}= 82.1$	$\bar{X}1-\bar{X}\ ٣$	6		
Under line	$\bar{X} =67.3$	$\bar{X}1-\bar{X}\ ٤$	12.6	11.66	0.01
Matching	$\bar{X} =73.9$	$\bar{X}1-\bar{X}5$	9.9		
Re-grouping	$\bar{X} =71.2$	$\bar{X}2-\bar{X}3$	14.8		
		$\bar{X}2-\bar{X}4$	8.2		
		$\bar{X}2-\bar{X}5$	10.9		

*Each number refers to the number of the obj. technique compared with another one.

		$\bar{X}3-\bar{X}4$	6.6		
		$\bar{X}3-\bar{X}5$			
		$\bar{X}4-\bar{X}5$	2.7		

Table 18 shows that the comparison among the five obj. techniques is in favour of the Fill in the Blanks technique. This means that college students   achievement on this technique is better than on the other four ones. Consequantly the second null hypothesis is rejected and lternative ypothesis
which states that "there are statistically significant differences among the five types of the obj. technique when testing English pronun."is accepted.

achievement on this technique is better than on the other four ones. Consequantly the second null hypothesis is rejected and lternative ypothesis
which states that "there are statistically significant differences among the five types of the obj. technique when testing English pronun."is accepted.

5.2.2 *Discussing the Results*

The application of the test to a sample of (150) second year students at the Dept. of English at college of Languages and college of Arts yields the following results :

1. The testees' performance in both the subj. and obj . techniques in testing written pronun. is satisfactory .

2. The achievement of the subjects in the obj .techniques is higher than their achievement in the subj. ones.

3. Students' achievement differs from one testing technique to another among the obj. techniques .

The reasons behind these results from the researcher's view point are the following factors:

1- The obj. techniques which supply the testees with options i.e.,fill in the blanks and matching, give them an opportunity to be sure of the information they chose and this gives them more self confidence .

2- The testees' achievement in the obj. techniques is higher than in the subj. ones and this is partly due to the fact that the responses of the testees in the obj. techniques are quick and easy to write ,i.e. this reduces the grammatical and spelling mistakes, and the time needed in addition to the effort.

5.8 Conclusions

From the results of the present study, the following conclusions can be obtained:

The subjects of the present work have dealt positively with both the subj. and obj. testing techniques inspite the fact that the results of the testees in the subj. techniques indicate that there is somewhat a deficiency or weakness in the testees writing skill which affects their performance in these

techniques.This deficiency includes mistakes in spelling, grammar,punctuation,and style

3. Obj. techniques are interesting and motivating since the testees of the present study have shown to be enthusiastic in doing them during taking the test.

4. The obj. techniques which give the testees options of responses enhance the testees memorization more than the other types of techniques.

5.4 Recommendatoins

In the light of the results and conclusions obtained in this study, the following recommendations are drawn:

1. It is recommended to use obj. techniques side by side with subj. ones in testing written pronun.because it is highly important to use various types of techniques in one test.

2. More care, attention and time should be given to the grammatical and spelling mistakes in addition to the information and the sequence of ideas to enable the students to develop their writing skills. It is a well known fact that writing stands as an important skill for EFL college students.

3. EFL college teachers are recommended to expose their learners to differenet kinds of test – taking skills .

4. All department of English in Iraq are invited to use modern techniques in testing as well as in teaching in order to encrease Iraqi EFL learners' abilities and proficiency in English . They are also required to involve their learners in various intensive courses in respect to acquiring good test taking skills .

5.15 Suggestions for Further Studies

On the bases of the findings of the present study the following suggestions are put forward to enrich future researches:

1. A study is needed to make a comparative study between subj. and obj. testing techniques in other aspects of English pronunciation such as the stress,intonation,etc.

2. A study is suggested to compare between subj. and obj. testing techniques in respect to other English language elements .

Appendix: 2

University of Baghdad
College of Education for Women
Dep. of Educational and
Psychological Sciences
Higher Studies

Dear Mr. / Mrs.,

The researcher is conducting an M.A. study entitled "A Comparative Study of EFL College Students' Achievement in Pronunciation by Using Objective and Subjective Techniques ".The main aim of the study is to make a comparison between the two types of tests on EFL College students' achievement in pronunciation. The sample of the investigation is second Year University students of English .The data of the study is based on a text book entitled" English Phonetics and Phonology: A Practical Course "by Peter Roach (2000) which is the prescribed text book for the sample of the present study. The test contains two sections .Section one is devoted to subjective types of questions. Section two, on the other hand, is concerned with objective types of questions. Both subjective and objective questions deal with the English syllable and its types.

Please, examine the questions and comment on the validity of the test as a measure of students' achievement.

Your comments are highly appreciated, and thank you in advance for your cooperation.

Taif Ibrahim
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In Methods of Teaching
English
2004-2005

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Table 3
Two-consonant clusters with post-initial l, r, w, j

Post Initial	p	t	k	b	d	g	f	θ	s	ʃ	h	v	ð	z	ʒ	m	n	ŋ	l	r	w	j
l	pleɪ	-	kleɪ	blæk	-	glu:	flaɪ	-	slɪp	-	-	-	-	-	-	-	-	-	-	-	-	-
r	preɪ	treɪ	kraɪ	brɪŋ	drɪp	grɪn	fraɪ	θrəʊ		ʃru:	-	-	-	-	-	-	-	-	-	-	-	-
w	-	twɪn	kwɪk	-	dwel		-	θwo:t	swɪm		-	-	-	-	-	-	-	-	-	-	-	-
j	pjo:	tju:n	kju:	bju:ti	dju:		fju:		sju:	-	hju:dʒ	vju:	-	-	-	mju:z	nju:z	-	lju:d	-	-	-