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THE PREPARATION AND TEACHING OF PRONUNCIATION
EXERCISES IN AMERICAN ENGLISH TO
ARABIC-SPEAKING STUDENTS

by

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ABSTRACT

The purpose of this study is to prepare simple pronunciation exercises in General American English which can be easily integrated with the normal English study to improve the English pronunciation of Arabic-speaking students of the first or second secondary grade level.

Following the current linguistic approach to the preparation of teaching materials, the writer attempts (1) to develop pronunciation exercises based on a contrastive analysis of the native language of the learner (Arabic), and of the language to be learned (English), (2) to teach the exercises in an authentic classroom situation, and (3) to evaluate their effectiveness by statistical means. As far as can be determined, this is one of the first attempts to subject such exercises, based on a contrastive analysis of Arabic and English, to a test by means of a scientifically controlled teaching experiment.

Chapter II presents a contrastive analysis of the segmental phonemes of Beirut Colloquial Arabic and General American English. The analysis pin-points the problem sounds and provides the basis for the selection of teaching materials. Chapter III outlines the step-by-step procedures followed in the (1) development, (2) teaching, and (3) testing of the pronunciation exercises. The linguistic principles

guiding each process are stated briefly.

Chapter IV presents an evaluation of two types: subjective and objective. The former represents the evaluations made by (1) the regular classroom teacher, (2) the students who were taught, and (3) the investigator. The objective evaluation is supplied by the statistical results from the individual ratings of three judges. On the basis of these evaluations, five conclusions are drawn:

1. A contrastive analysis of the language of the learner and of the language to be learned will help to determine the sounds which are likely to cause confusion, and the kinds of problems that may be expected.

2. Teaching materials should be based on the problems found as a result of the contrastive analysis; they should concentrate on weaknesses. Problem sounds should be introduced with similar and, if possible, familiar sounds. Production should be aided by simple, but meaningful explanation.

3. Pronunciation exercises may be integrated with the normal English study by means of well planned teaching materials. Exercises may be printed on large charts to avoid time delays caused by writing on the blackboard. Technical explanations may be minimized by using a face chart to show articulations of the tongue, and pictures to illustrate sound contrasts.

4. The sounds identified as problems by the contrastive analysis are the sounds to be tested. The production of significant sounds may be tested by forcing students to utter carefully worded sentences.

5. The exercises designed for this experiment produced improvement. The pronunciation of the experimental group was shown to be genuinely superior to that of the control group at the end of the fifteen-day teaching experiment.

Areas that require further research are (1) application of these exercises to a lower level, (2) analysis of the supra-segmental phonemes, (3) study of dialects other than Beirut Colloquial.

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CHAPTER I

LINGUISTIC APPROACH TO THE TEACHING OF PRONUNCIATION

This thesis is devoted to the preparation of simple pronunciation exercises in General American English, which can be easily integrated into the normal English classroom, to improve the English pronunciation of Arabic-speaking students of the first or second secondary grade level. The development of the exercises is based on a contrastive analysis of the native language of the learner (Arabic) and the language to be learned (English).

Specific Objectives: Underlying the problem, as stated above, are five questions which must be answered by this work:

1. How can the problem sounds be accurately determined?
2. How can these problem sounds best be put into lesson form?
3. How can these pronunciation lessons be presented in class, as an integral part of the normal English study?
4. How can the results of the pronunciation exercises be tested?
5. Will the exercises, based on a contrastive analysis of the two languages, produce improvement in pronunciation?

Delimitations: The scope of this study is strictly confined to the following:

1. The material designed for pronunciation is for use with Arabic-speaking students of the first or second secondary grade level.
2. The exercises are confined to improvement of selected segmental phonemes (consonants, vowels and semi-vowels) of General American English. The exercises are not concerned with the supra-segmental phonemes (the prosodic patterns such as pitch, stress and juncture).
3. The improvement desired of English pronunciation is limited to the correct or acceptable recognition and production of segmental phonemes as they occur in words.

Definitions: Certain terms are used frequently throughout this writing. It is vital to a clear understanding of the material presented, that the following definitions be made:

1. Dialect: Dialect is used here to mean "a manner of speaking, showing pronunciations, . . . used more or less uniformly throughout an area or a group of speakers, which manner differs from those of other speakers of the same language."¹

1. Robert Lado, Linguistics Across Cultures: Applied Linguistics For Language Teachers (Ann Arbor: University of Michigan Press, 1957), p. 22.

2. General American English: The General American dialect of English is said to be used by an over-whelming majority of the people of the United States in carrying on their affairs.²

3. Beirut Colloquial Arabic: This dialect represents the Colloquial Arabic spoken in Ras Beirut, particularly in the area in which the American University and International College are located.

4. Linguistics: Linguistics is the science of language, including among its fields phonetics, phonemics, morphology and syntax.

5. Phones: A phone is an individual speech sound. The words phones and sounds are used interchangeably throughout this writing.

6. Phonemes: Phonemes are the smallest group or class of phones in a language. They are used to distinguish meaning. The phonemes of a language contrast with one another: e.g. in English, pin differs from bin, tin, din, sin, gin, fin, by the contrast of a phoneme /p/ with other phonemes.

2. James F. Bender, "Ninety Million Speak 'General American'", The New York Times Magazine (August 27, 1944) pp. 17-29, quoted by Charles C. Fries, Teaching And Learning English As A Foreign Language, (Ann Arbor: University of Michigan Press, 1945), p. 4. "Dr. Bender insists that approximately 'eleven million Americans speak Eastern, twenty-six million speak Southern, and at least ninety million speak General American'".

Background of Pronunciation Work: Although a great deal of information is available on the broad area of pronunciation,³ it is perhaps appropriate to confine our investigation to work done specifically in Lebanon. Interest in the problem of pronunciation is relatively new in this country. The writings of previous investigators provide an insight into the type of work that has been done, and furnish a basis for the better understanding of the problem with which this thesis is concerned.

"Errors Made In Spoken English By Arabic-Speaking Students", by Amal Hakki,⁴ attempts to find answers to the following questions: (1) What are the words of greatest difficulty for pronunciation? (2) Why are the difficulties encountered? (3) What are the suggested methods for correction and prevention? Miss Hakki conducted her experiment with first year students of International College. She asked the students if words repeated in series were the same or different. After tabulating the student answers, she interviewed each student. The student was told his mistakes and asked why he thought he had made them. The conclusion suggests seven reasons for errors made in spoken English. These conclusions were based on student explanations, as tabulated by the writer. The study

3. The reader is referred to the bibliography for a complete list of sources used as a background to the study of pronunciation work.

4. Amal W. Hakki, "Errors Made in Spoken English by Arabic-Speaking Students" (Unpublished Master's thesis, Dept. of Education, American University of Beirut, 1951).

was not concerned with the development or the teaching of pronunciation exercises.

"Pronunciation"⁵ is the title given to a syllabus designed for use in the intensive program of the Special Form of the American University. This syllabus presents detailed explanation, diagrams and practice exercise drills in English pronunciation and intonation. The plan of this work depends on the use and understanding of phonetic script. The copy reviewed contained no introduction, and it is not possible to state the basis on which the exercises were developed. Although the exercises were used in the Special Form program for several years, no controlled experiment was made to test their effectiveness.

"The Phonemes, Morphology, And Syntax of Beirut Colloquial Arabic," by Yorkey and Maston,⁶ compares the sound system of Beirut Colloquial Arabic with that of Standard American English. As a result of this analysis, the authors point out where special attention must be concentrated when developing exercises in pronunciation. The work is confined to a descriptive analysis, however, and no exercise material is presented.

5. Frances Martin, "Pronunciation" (unpublished syllabus, Special Form, American University of Beirut.)

6. Richard Yorkey and Robert Maston, "The Phonemes, Morphology and Syntax of Beirut Colloquial Arabic" (Unpublished report, Dept. of English, University of Michigan, 1953).

A later work by Richard Yorkey, "A Study of the Practical Application of Structural Linguistics to the Teaching of English in Lebanese Elementary Schools,"⁷ investigates the ways in which the pedagogical procedures derived from the premises of structural linguistics can be applied to teaching English in Lebanese elementary schools. This writing is a very complete source which explains the type of teaching materials that are needed, and how these materials may be prepared.

"The Teaching of English To Arab Students"⁸ is a textbook designed to train teachers of English in the Arabic speaking world. The text provides a description of the language learning problems of Arabic speakers studying English, based on a linguistic comparison of the structural systems of English and Arabic. Pedagogical techniques are combined with the linguistic findings for the purposes of classroom teaching. Although this is a textbook, no detailed exercises are provided.

From the number and description of the above sources, it is apparent that the problem of pronunciation, as it specifically applies to the teaching of English in Lebanon, has neither been completely over-looked nor exhausted by previous study.

7. Richard Yorkey, "A Study of the Practical Application of Structural Linguistics to the Teaching of English in Lebanese Elementary Schools" (Unpublished Ed.D. dissertation, Dept. of English, University of Michigan, 1959.)

8. Raja Nasr, "The Teaching of English To Arab Students" (Beirut: unpublished book, 1959).

Each of the sources suggests an awareness that Arabic-speaking students do have problems in English pronunciation. Three, at least, show interest in determining the problems and their causes by means of a scientific analysis. Three either present exercises in pronunciation, or explain how these problems should be approached. None of the writers, however, prepared pronunciation exercises, taught them in a classroom, and tested their effectiveness. As far as can be determined, moreover, no attempt has been made, thus far, to subject carefully designed pronunciation exercises--based on a contrastive analysis of Arabic and English⁹--to a test by means of a scientifically controlled teaching experiment. It is in the area of teaching and testing, therefore, that this thesis work may contribute to a better understanding of the problem of pronunciation in this country.

Linguistic Approach to the Problem of Pronunciation:

Because the works cited did not supply the answer to the problem of this thesis, sources dealing with the problems of teaching English as a foreign language were consulted, and the current linguistic approach to the preparation of teaching materials was selected for use in this work. The guiding principle of this linguistic approach is stated by Fries:

9. The writer found no evidence of a scientifically controlled teaching experiment for Arabic and English. This does not mean that such experiments using English and other languages have not been made.

The most effective materials are those that are based upon a scientific description of the language to be learned carefully compared with a parallel description of the native language of the learner.¹⁰

In order to understand and appreciate this statement fully, one must be aware of three basic assumptions of linguistic theory:¹¹

1. Because language is systematic,¹² it can be described scientifically. The description of languages makes it possible to compare and contrast similarities and differences between linguistic systems.

2. When learning a foreign language we "tend to transfer our entire native language system in the process."¹³

3. "The speaker of one language listening to another does not actually hear the foreign language sound units-- phonemes. He hears his own."¹⁴

10. Fries, op.cit., p. 9.

11. Of course there are more than three assumptions used by linguistic theory. These have been cited as being particularly appropriate to the quotation given.

12. Edward Sapir, Culture, Language And Personality: Selected Essays, ed. David G. Mandelbaum (Berkeley: University of California Press, 1959), p. 4.

13. Lado, op.cit., p. 11.

14. Leonard Bloomfield, Language (New York: Henry Holt & Co., 1933), pp. 81-82.

These assumptions point out that the native language of the student is likely to interfere and possibly be transferred in the process of learning a foreign language. This problem is further complicated by the fact that although the sounds may be similar in two given languages, they are never identical.

We must assume that practically every 'sound' of a foreign language differs in some respect from any sound in our own language . . . he will have to learn a new mode of speech production . . . He will have to establish a new system as a habit.¹⁵

The learning of a foreign language, therefore, requires that the student assume a new set of language habits in contrast to a set of older language habits. In order to select and to arrange teaching materials, the teacher needs an effective, consistent and systematic method of comparing the two languages. Linguists suggest that the selection and arrangement of teaching materials can be most effectively and efficiently made by making:

1. A descriptive analysis of the language to be learned.
2. A similar descriptive analysis of the language of the learner.
3. A systematic comparison of these two descriptive analyses in order to bring out the similarities and differences of the structural patterns of the two systems.

15. Fries, op.cit., p. 10.

This linguistic analysis acts as the basis for the development of exercises. It points out the contrasts that must be mastered in the development of new language habits. The material of the linguistic analysis, however, is not the material to be taught.

Why Compare Languages? It is possible that teachers of long experience may question the value of the extensive work involved in the method of descriptive analysis. Such teachers, through years of experience, may have developed exercises which they feel provide their students with adequate help in pronunciation. Such exercises may have required years of trial and error methods, but it is quite possible that they overlook important problems.

The method of linguistic analysis is defended by linguists themselves from the standpoints of time and efficiency. The analysis that the linguist makes helps to show what the real problems for learning are, and helps the teacher to provide for correcting them. The analysis "pin-points" problems. The teacher does not need to waste time on items that are not problems. The analysis will help the teacher (1) to gear material to concentrate on weaknesses, (2) to draw attention to similar sounds (if they exist) to simplify study, and (3) to supply needed materials, not provided in the textbook.¹⁶

16. Lado, op.cit., pp. 2 & 3.

Application of Linguistic Theory to this Work: The application of the principles of linguistic theory to the preparation, teaching and testing of pronunciation exercises in General American English for Arabic-speaking students will be described in the remaining chapters of this work. Before any of these principles could be applied, however, two very fundamental questions had to be answered:

1. In comparing the two sound systems, which dialect of English and of Arabic should be considered?

2. For what age and academic level are the exercises in pronunciation to be prepared?

Two years of experience as an English teacher of the first year class at International College played an important part in determining both the dialect to be used in the analysis, and the level for which the exercises were to be prepared. Personal interest based on this experience led to the decisions that were made.

1. Level: The following observations served as a basis for selecting the first or second year as the level on which the exercises would be used:

- a) First year students (12-14 years of age) are, by nature, enthusiastic. With a reasonable amount of interest, creativity, and encouragement on the part of the teacher, the students of this level are easily motivated to learn.

- b) Pronunciation work, to be effective, should begin as early as possible, before incorrect habits have been deeply formed.
- c) It was felt that the first year of secondary school was the lowest level on which the exercises and articulation descriptions could be successfully presented by the investigator, entirely in the English language.

2. Dialects: Beirut Colloquial was selected as the Arabic dialect to be used in the analysis for the following reasons:

- a) This dialect is spoken in the Ras Beirut area where International College is located.
- b) The majority of the students in a given class come from this dialect area.
- c) This dialect (as opposed to the Classical) is used in the daily conversation of the students selected for use in this study.

General American was selected as the dialect of English for these reasons:

- a) This dialect is used by the majority of the people of the United States in carrying on their daily affairs.
- b) This is the dialect spoken by the investigator.

The preliminary restrictions of dialect and age level made it possible to limit this thesis work to a reasonable size. It must be emphasized that these restrictions were made far in advance of any actual work on the pronunciation exercises, and were fundamental to the approach to each problem. Therefore, although the principles of linguistic theory were followed closely in preparing the material that follows, each method was adapted to fit the specific problems faced by a specific group of students. Fries emphasizes the necessity of this limitation from the standpoint of linguistics:

'Foreign' language teaching is always a matter of teaching a specific 'foreign' language to students who have a specific 'native' language background. Specific problems will demand special and different emphases but the principles of approach, the fundamental considerations, have validity, we believe, for all language learning and language teaching.¹⁷

Summary: Although pronunciation has been a topic of concern for other writers, no evidence can be found of a scientifically controlled teaching experiment, concerned with English pronunciation for Arabic-speaking students. Linguistic science furnishes a method by which pronunciation materials can be scientifically developed, by means of a contrastive

17. Fries, op.cit., p. vi.

analysis of the native language of the students and of the language to be learned. Following the latest linguistic principles, this study develops pronunciation exercises based on such an analysis, describes their teaching in an authentic classroom atmosphere, and evaluates their effectiveness by means of statistical tests.

It has been the purpose of this chapter to (1) acquaint the reader with the thesis problem in view of work that has gone before, and (2) establish an understanding of the linguistic method of comparing languages which is to be used in carrying out the work of the remaining chapters.

Chapter II presents, in detail, the descriptive statements and the phonemic charts that resulted from the phonemic analysis of Beirut Colloquial Arabic. The phonemic chart of Beirut Colloquial Arabic is followed by a similar chart showing the phonemes of General American English. In order to make the distinctions in the two phonemic systems more clear, the two charts are combined to provide a visual contrast of the two phonological systems. Statements concerning the sounds which are likely to cause confusion, and the kinds of problems that may be expected, follows both the consonant and the vowel sections. Chapter II pin-points the problem sounds, and provides the basis for the selection of the materials to be used in the exercises.

Chapter III is divided into three sections: The (1) development, (2) teaching, and (3) testing of the pronunciation exercises. A brief statement is made concerning the linguistic principle guiding each process. Special reference is made to the application of these principles to meet the needs of the age and level of the students used in the experiment. This chapter presents the step-by-step procedure which was followed in the development, teaching and testing of the pronunciation exercises.

Chapter IV presents an evaluation of this study, and the conclusions that may be drawn from it. The evaluation is divided into two sections: subjective and objective. The former presents the evaluations made by (1) the regular classroom teacher who observed each of the pronunciation lessons, (2) the students who were taught, and (3) the writer's observations as recorded after each class session. The objective evaluation is supplied by the statistical results from the individual ratings of three judges. The chapter concludes with a summary of the conclusions, and a statement of the unanswered problems which remain for future research.

CHAPTER II

A CONTRASTIVE ANALYSIS OF BEIRUT COLLOQUIAL ARABIC AND GENERAL AMERICAN ENGLISH

According to the findings and teachings of structural linguistics, a descriptive analysis of the native language of the learner (in this case, Arabic) compared with a similar analysis of the language to be learned (English) is the most scientific and efficient way of studying a sound system.¹

A phonemic analysis of Beirut Colloquial Arabic was made to serve as a basis from which pronunciation exercises for this experiment could be scientifically developed. Although the material resulting from this analysis was basic to the total plan of the work that follows, it was prepared with the first objective of this thesis in mind: How can the problem sounds for the Arabic-speaking student learning English be determined accurately?

1. Charles C. Fries, Teaching And Learning English As A Foreign Language (Ann Arbor: University of Michigan Press, 1945), p. 9.

Robert Lado, Linguistics Across Cultures: Applied Linguistics For Language Teachers (Ann Arbor: University of Michigan Press, 1957), p. 1.

Richard C. Yorkey, "A Study of the Practical Application of Structural Linguistics to the Teaching of English in Lebanese Elementary Schools" (unpublished Ed. D. dissertation, Dept. of English, University of Michigan, 1959), p. 119.

Selection of Informant: The preliminary restriction of Beirut Colloquial as the dialect of Arabic to be analyzed also placed a restriction on the informant to be used in gathering the Arabic sound data: The dialect of the informant must be typical of the colloquial Arabic spoken in the Ras Beirut area where the American University of Beirut and International College are located. The dialect of the informant selected was regarded as typical for the following reasons:

1. The informant was born and raised in the Ras Beirut area specifically defined.
2. Beirut Colloquial Arabic is the dialect used in his daily conversations.
3. He is understood by all with whom he communicates in this dialect.

In answer to the question of whether one informant provides sufficient and accurate material from which to base teaching materials, it must be pointed out that, "in any given dialect at any time there is one phonemic system but may be several phonemic analyses."²

2. Raja T, Nasr, "Velarization in Lebanese Arabic", Phonetica: International Journal of Phonetics, Vol. 3, No. 4 (1959), p. 203.

Method of Phonemic Analysis: The phonemic analysis prepared for this study, very briefly stated, consisted of five basic procedures:³

Procedure 1: A Beirutí was selected as informant for the Beirut Colloquial Arabic. Objects were pointed out, or single English words were given to the informant.⁴ He was instructed to respond immediately with the word that he would normally use in everyday conversation. All Arabic responses were recorded on tape.

Procedure 2: After the sound data were gathered, the investigator listened to the recording in order to transcribe the Arabic as accurately as possible into phonetic script. These separate sounds or phones were then described.

3. The methods used in preparing a phonemic analysis are far too detailed to be presented in a paper of this kind. For a more complete understanding of the procedures described above, however, the following sources are recommended:

Kenneth L. Pike, Phonemics: A Technique for Reducing Languages to Writing (Ann Arbor: University of Michigan Press, 1957), pp. 67-202.

Bernard Bloch and George L. Trager, Outline of Linguistic Analysis (Baltimore: Linguistic Society of America Waverly Press, Inc., 1942), chaps. 2 & 3.

Nelson W. Francis, The Structure of American English (New York: Ronald Press Co., 1958), pp. 119-150.

Henry A. Gleason, An Introduction to Descriptive Linguistics (New York: Henry Holt and Co., 1955), chap. 13.

4. Because this work is strictly limited to the study of segmental phonemes, it was felt that sufficient material could be gained by using isolated words. The informant was not given a written passage in Arabic to read because it was feared that Arabic writing would encourage his use of the Classical dialect of speech, rather than Colloquial.

Procedure 3: In order to determine the phonemic structure of Beirut Colloquial Arabic, tests of phonetic similarity, complementary distribution and free variation were applied to all phone types, combining them into phonemes wherever the evidence permitted.

Procedure 4: The phonemes of Beirut Colloquial Arabic were compared with the phonemes of General American English,⁵ and a table of contrasts was drawn to show clearly the similarities and differences between the segmental phonemes of the two sound systems.

Procedure 5: From the contrastive chart, it was possible to pin-point and to describe the trouble spots in pronunciation of segmental phonemes that an Arabic-speaking person learning English would be expected to encounter.

Upon the completion of the procedures outlined above, a certain amount of interesting, but unaccounted for material remained; all such unexplained material was termed "residue". In an attempt to report the findings of this investigation as accurately as possible, all "residue" has been inserted immediately following the description of the pronunciation problems.

5. The descriptive statements for the consonant and vowel phonemes of General American English were taken from Charles K. Thomas, An Introduction To The Phonetics of American English (New York: Ronald Press Co., 1947) The symbols used in the phonemic charts were taken from Kenneth L. Pike, Phonemics: A Technique for Reducing Languages to Writing (Ann Arbor: University of Michigan Press, 1957). The combination of the two sources was made for clarity and simplicity.

Arrangement of Material: The descriptive statements and the phonemic charts that resulted from this analysis of Beirut Colloquial Arabic are presented in the pages that follow. In order to fully understand the arrangement of the material presented in the descriptive statements, these explanations are necessary:

1. The English words given to the informant are shown in single quotation marks. 'neck'
2. The phonetic transcription of the Arabic word for neck is shown in brackets. [ʔaː.biː]
3. The phonemic transcription of the Arabic word appears between slant lines. /raː.bi/

To indicate the occurrence of a specific phoneme or allophone in initial, medial or final position in words, three separate columns have been used. The placement of the word examples (described above) in the specific columns indicates the following:

<u>Column</u>	<u>Sound Occurs In</u>
far left hand	word initial position
middle	word medial position
far right hand	word final position

It is hoped that this arrangement of material will facilitate understanding of the analysis presented in the remaining pages of this chapter.

DESCRIPTIVE STATEMENTS OF CONSONANT PHONEMES
IN BEIRUT COLLOQUIAL ARABIC⁶

/b/ [b] Voiced bilabial stop. The sound occurs in initial, medial and final positions in words.

'house'	'cauliflower'	'clerk'
[béyt ^h]	[ʔaʕ.nə.biyt ^h]	[ké.tib]
/bét/	/ʔar.nə.biʔ/	/ké.tib/

'duck'	'neck'	'dog'
[baʔ.tə]	[ʕaʔ.bi]	[kəlb]
/baʔ.tə/	/raʔ.bi/	/kəlb/

[p] Voiceless bilabial stop. The sound occurs in word initial position before /t/, /h/ and /x/.

'she eats'

[ptey.kul]

/bté.kul/

'Bhamdoun' (name)

[phám.dùn]

/bhám.dùn/

6. This analysis is limited to the study of segmental phonemes only; therefore, the matter of stress has been ignored. However, if the reports of Nasr and Yorkey are correct, stress is predictable and non-phonemic. For further explanation of stress see Raja T. Nasr, "The Predictability of Stress in Lebanese Arabic", *Phonetica: International Journal of Phonetics*, Vol. 4, No. 2 and 3 (1959) pp. 89-94. See also, Richard C. Yorkey, "The Phonemes of Beirut Colloquial Arabic" (unpublished report prepared for Kenneth L. Pike, University of Michigan: 1953), p. 17.

[p] 'Good-bye' (f.)

[pxá.tʃíyk^h]

/bxá.trík/

/t/ [t] Voiceless dental stop, unaspirated. The sound occurs in initial and medial positions in words.

'skirt'

[tən.nuř.ə]

/tən.nuř.ə/

'copybook'

[dæf.tɛʃ]

/dæf.tɛr/

'mouth'

[tím]

/tím/

'book'

[kɪ.tɛyb]

/kɪ.tɛb/

[t^h] Voiceless dental stop, aspirated. The sound occurs at word final position only.

'jacket'

[ʒæ.két^h]

/ʒæ.két/

'coat'

[kəb.bút^h]

/kəb.bút/

/d/ [d] Voiced dental stop. The sound occurs in initial, medial and final positions in words.

'arm'

[dʃá*]

/dʃá*/

'butter'

[zíb.díy]

/zíb.dí/

'hand'

[ʔíyd]

/ʔíd/

/d/ [d] 'ear' 'tomatoes' 'cold' (adj.)
[dey.niy] [bæn.e.duʔ.e] [bə.ʔid]
/de.ni/ /bæn.e.duʔ.e/ /bə.rid/

/k/ [k] Voiceless velar stop, unaspirated. The sound occurs in initial and medial positions in words.

'chair' 'bookcase' (or bookshop)
[kiʔ.siy] [mæk.tæ.biy]
/kiʔ.si/ /mæk.tæ.bi/

'matches' 'she eats'
[kib.ʔiyt^h] [ptey.kul]
/kib.rit/ /bté.kul/

[k^h] Voiceless velar stop, aspirated. The sound occurs at word final position only.

'Good-bye' (f.)
[pxá.tʔiyk^h]
/bxa.trik/

'window'
[ʃib.beyk^h]
/ʃib.bék/

/t/ [t] Voiceless velarized⁷ stop, unaspirated. The sound occurs in initial and medial positions in words.

7. Raja T. Nasr makes this distinction between the terms "velar" and "velarized": "Velar refers to the point of articulation. Velarized refers to the shape of the tongue, which is flattened and grooved from the mid back. The area where the flatter and grooving take place is contiguous to the velar point of articulation." (Interview with Dr. Nasr, 23 May 1961.)

/t/	[t]	'table'	'dress'
		[tá ^w .liy]	[fús.tán]
		/tá ^w .li/	/fús.tán/
		'cooking pot'	'hat'
		[tən.zə ^h .ə]	[bè ^h .ná ¹ .tə]
		/tən.zə ^h .ə/	/bè ^h .ná ¹ .tə/

[t^h] Voiceless velarized stop, aspirated. The sound occurs at word final position only.

'shoe'
[ʂəb.bá ^h t ^h]
/ʂəb.bá ^h t ^h /

/d/ [d] Voiced velarized stop. The sound occurs in initial, medial and final positions in words.

'light'	'room'	'things' (possessions)
[dá ^w]	[ʔú.də]	[g ^h rád]
/dá ^w /	/ʔú.də/	/g ^h rád/
'he hit'	'ashtray'	'floor' (ground)
[dā ^h .əb]	[mən.fə.də]	[ʔá ^h d]
/dā ^h .əb/	/mən.fə.də/	/ʔá ^h d/

/ʔ/ [ʔ] Voiceless glottal stop. The sound occurs in initial, medial and final positions in words.

/ʔ/	[ʔ]	'floor'	'neck'	'papers'
		[ʔaʔḍ]	[ʔaʔ.biʔ]	[waʔ.aʔ]
		/ʔaʔḍ/	/raʔ.bi/	/waʔ.aʔ/

		'lighter'	'weather'	'no'
		[ʔid.dé.hà]	[tá.ʔs]	[laʔ]
		/ʔid.dé.hà/	/tá.ʔs/	/laʔ/

/ǧ/ [ǧ] Voiced velar fricative. The sound occurs in initial, medial and final positions in words.

		'rich' (m.)	'loaf'	'he dyes'
		[ǧa.niʔ]	[ʔǧiʔf]	[yis.buǧ]
		/ǧa.ni/	/rǧiʔf/	/yis.buǧ/
		'things'	'languages'	'jeweler' (name)
		[ǧʔaʔ]	[lə.ǧaʔh]	[saʔ.yiǧ]
		/ǧʔaʔ/	/lə.ǧaʔ/	/saʔ.yiǧ/

/s/ [ṣ] Voiceless velarized grooved fricative. The sound occurs in initial, medial and final positions in words.

		'plate'	'onions'	'shirt'
		[ṣə.hən]	[baʔ.ṣəl]	[ʔa.miʔṣ]
		/ṣə.hən/	/baʔ.ṣəl/	/ʔa.miʔṣ/
		'correct'	'simplicity'	'chick'
		[ṣə.hiʔh]	[bè.ṣa.tə]	[ṣuṣ]
		/ṣə.hiʔh/	/bè.ṣa.tə/	/ṣuṣ/

/f/ [f] Voiceless labio-dental fricative. The sound occurs in initial, medial and final positions in words.

'cup'	'ashtray'	'ceiling'
[fɪn.ʒən]	[mən.fə.də]	[sæ.ʔf]
/fɪn.ʒən/	/mən.fə.də/	/sæ.ʔf/
'dress'	'copybook'	'shelf'
[fʊs.tən]	[dʌf.təʃ]	[ʃɛf]
/fʊs.tən/	/dʌf.tər/	/ʃɛf/

/s/ [s] Voiceless dental grooved fricative. The sound occurs in initial, medial and final positions in words.

'time'(or clock)	'sock'	'head'
[sey.*ə]	[kəl.sɪy]	[ʰæs]
/sé.*ə/	/kəl.sì/	/rás/
'rug'	'chair'	'lettuce'
[sɪʒ.ʒey.dɪy]	[kɪʃ.sɪy]	[xæss]
/sɪʒ.ʒé.di/	/kír.sì/	/xæss/

/z/ [z] Voiced dental grooved fricative. The sound occurs in initial, medial and final positions in words.

'flowers'	'handbag'	'rice'
[z.hʊʃ]	[ʒɪz.deyn]	[ʰɪzz]
/z.húr/	/ʒɪz.dén/	/rɪzz/

'butter'	'scale'	'banana'
[zib.díy]	[miy.zæn]	[mo ^w z]
/zib.dí/	/mí.zæn/	/móz/

/š/ [š] Voiceless palatal grooved fricative. The sound occurs in initial, medial and final positions in words.

'window'	'comb'	'grass'
[šib.beyk ^h]	[mušt ^h]	[hə.šiyš]
/šib.bék/	/mušt/	/hə.šíš/
'umbrella'	'brush'	'(you)spray' (m.)
[šam.síy.yey]	[fəš.šey.yiy]	[řišš]
/šam.sí.ye/	/fəř.še.yi/	/říšš/

/ž/ [ž] Voiced palatal grooved fricative. The sound occurs in initial, medial and final positions in words.

'jacket'	'rug'	'steps'
[žə.két ^h]	[siž.žey.diy]	[de.řež]
/žə.két/	/siž.že.di/	/de.řèž/
'newspaper'	'cup'	'snow'
[žə.řiy.diy]	[fín.žæn]	[telž]
/žə.ří.di/	/fín.žæn/	/telž/

/x/ [x] Voiceless velar fricative. The sound occurs in initial, medial and final positions in words.

'lettuce'	'pillow'	'kitchen'
[xɛss]	[m.xəd.diy]	[mat.bax]
/xɛss/	/m.xəd.di/	/mat.bax/

'plums'	'nose'	'melons'
[xoʷx]	[mʊn.xaʃ]	[ba.tiyx]
/xox/	/mʊn.xaʃ/	/ba.tix/

/ʒ/ [ʒ] Voiced glottal fricative, fortis. The sound occurs in initial, medial and final positions in words.

'eye'	'doll'	'arm'
[*a ¹ n]	[læ*.biy]	[dʒa*]
/*a ¹ n/	/læ*.bi/	/draʒ/
'Aida' (name)	'mint'	'spring' (season)
[*a ¹ .de]	[na*.na*]	[ʒe.biy*]
/*a ¹ .de/	/na*.na*/	/re.biʒ/

/h/ [h] Voiceless velar fricative. The sound occurs in initial, medial and final positions in words.

'ink'	'plate'	'salt'
[hɛb.əʃ]	[sɛ.hən]	[mɪl.h]
/hɛb.ər/	/sɛ.hən/	/mɪl.h/
'wall'	'correct'	'ghost'
[hɛyʰt]	[sɛ.hiʰ]	[ʒɛb.əh]
/hɛt/	/sɛ.hiʰ/	/ʒɛb.əh/

/h/ [h] Voiceless glottal fricative. The sound occurs in initial, medial and final positions in words.

'he'	'pepper'	'he hated'
[huw.wey]	[p.haʃ]	[kiʃ.iyh]
/huw.wè/	/b.haʃ/	/kir.ih/
'he praised' (God)	'meat'	'resemblance'
[hæl.ləl]	[lah.mey]	[ʃeb.ah]
/hæl.ləl/	/lah.mè/	/ʃeb.ah/

/m/ [m] Voiced bilabial nasal. The sound occurs in initial, medial and final positions in words.

'ashtray'	'shirt'	'mouth'
[mən.fe.de]	[ʔa.miyʃ]	[tim]
/mən.fe.de/	/ʔa.mis/	/tim/
'magazine'	'handkerchief'	'Sleep!' (m.)
[mè.ʒəl.iy]	[mah.ʃə.miy]	[neym]
/mè.ʒəl.i/	/mah.rè.mi/	/ném/

[m] Syllabic voiceless bilabial nasal. The sound occurs in initial and final positions in words.

'we eat'	'bone'
[m.ney.kul]	[*əd.m]
/m.ne.kul/	/*əd.m/
'fans'	'servant'
[m.ʃa ^w .wiyh]	[xad.m]
/m.ra ^w .wih/	/xad.m/

/n/ [n] Voiced dental nasal. The sound occurs in initial, medial and final positions in words.

'mint'	'ashtray'	'plate'
[nə*.nə*]	[mən.fə.də]	[sə.hən]
/nə*.nə*/	/mən.fə.də/	/sə.hən/
'sleepy'	'cup'	'handbag'
[nə.sən]	[fɪn.ʒən]	[ʒɪz.dən]
/nə.sən/	/fɪn.ʒən/	/ʒɪz.dən/

[n̥] Syllabic voiceless dental nasal. The sound occurs in word initial and word final positions.

'Pay attention!'	'chin'
[n̥.tɪb.iyh]	[dʌʔ.n̥]
/n̥.tɪb.ih/	/dʌʔ.n̥/
'God willing'	'son'
[n̥.ʒallə]	[ʔɪb.n̥]
/n̥.ʒallə/	/ʔɪb.n̥/

/l/ [l] Voiced dental lateral. The sound occurs in initial, medial and final positions in words.

'doll'	'dog'	'to carry'
[lə*.biy]	[kɛlb]	[lə.yəh.mul]
/lə*.bɪ/	/kɛlb/	/lə.yəh.mul/
'languages'	'table'	'(you) hurry!' (m.)
[lə.ɡat ^h]	[tə ^w .liy]	[stə.ʒɪl]
/lə.ɡat/	/tə ^w .li/	/stə.ʒɪl/

- [l] Voiced retroflexed lateral. The sound occurs in medial and final positions.

'We thank God!'	'he stayed'
[nuʃ.keʃ.ɛll̩]	[d̩ell̩]
/nuʃ.keʃ.ɛll̩/	/d̩ell̩/
'Abdullah' (name)	
[*b.d̩elle]	
/*b.d̩elle/	

- [l̥] Syllabic voiceless dental lateral. The sound occurs in initial and final positions in words.

'the girl'	'parents'
[l̥.bíntʰ]	[ʔéh.l̥]
/l̥.bíntʰ/	/ʔéh.l̥/
'the boy'	
[l̥.wá.l̩əd]	
/l̥.wá.l̩əd/	

- /r/ [ʀ] Voiced flapped palatal. The sound occurs in initial, medial and final positions in words.

'head'	'chair'	'pig'
[ʀás]	[kíʀ.síy]	[xán.zíyʀ]
/rás/	/kír.sí/	/xán.zír/
'neck'	'curtain'	'fire'
[ʀáʔ.bíy]	[bèʀ.déy.yíy]	[náʀ]
/ráʔ.bí/	/bèr.dé.yí/	/náʀ/

[r̥] Syllabic voiced, flapped palatal. The sound occurs in initial and final positions in words.

'cheap'
[r̥.xiys]
/r̥.xis/

'age'
[*əm.r̥]
/*əm.r̥/

SEMI-VOWELS

/w/ [w] Bilabial velar semi-vowel. The sound occurs in initial and medial positions in words.

'papers' 'coffee'
[waʔ.aʔ] [ʔah.wey]
/waʔ.aʔ/ /ʔah.we/

'one' 'he'
[wa.had] [huw.vey]
/wa.had/ /huw.we/

/y/ [y] Palatal semi-vowel. The sound occurs in initial and medial positions in words.

'day' 'she'
[yoʷm] [hiy.yey]
/yom/ /hi.ye/

'it means' 'umbrella'
[yaʔ.niy] [šam.siy.yiy]
/yaʔ.niy/ /šam.sí.yi/

CONSONANT PHONEMES OF BEIRUT COLLOQUIAL ARABIC
AND GENERAL AMERICAN ENGLISH

The descriptive analysis on the preceding pages was made in order to identify the consonant phonemes of Beirut Colloquial Arabic so that they could be compared with the consonant phonemes of General American English. The phonemic information necessary for the comparison of the consonants of the two sound systems was recorded on the three phonemic charts, which are shown on the following pages. The consonant phonemes of Beirut Colloquial Arabic, identified by this analysis, are shown in Figure 1 on page 34. The consonant phonemes of General American English as identified by Thomas⁸ are shown in Figure 2 on page 35. In order to show clearly the similarities and differences between the consonant phonemes of Beirut Colloquial Arabic and General American English, the two phonemic charts were combined. This contrast of consonant phonemes in the two sound systems is shown in Figure 3 on page 36. A careful study of Figure 3 will reveal those consonants which serve as phonemes in one language, but not in the other. For the purposes of this study, consideration is confined to those consonants of English which do not occur as phonemes in Arabic.

8. Thomas, loc.cit.

The data shown in Figures 1, 2, and 3 made it possible to predict the consonant problems in English pronunciation that an Arabic-speaking student would be expected to encounter.

FIGURE 1
 CONSONANT PHONEMES OF BEIRUT COLLOQUIAL ARABIC

	Bilabial	Dental	Velar	Velarized Glottal
STOPS	b	t	k	t̤

	Labio-Den.	Dental	Palatal	Velar	Velarized Glottal
FRICATIVES	f	s	ʃ	x	ħ

	Bilabial Alveolar		Dental
NASALS	m	n	l

	Bilabial	Palatal	Alveolar
SEMI-VOWELS	w	y	r

FIGURE 2

CONSONANT PHONEMES OF GENERAL AMERICAN ENGLISH

Bilabial Alveolar Velar			
STOPS	p b	t d	k g

Labio-Dent. Dental Alveolar Palatal Palatal Glottal										
FRICATIVES	f v	θ ð	s z	ʃ ʒ	ʃ ʒ	h				

Bilabial Alveolar Velar				Alveolar	
NASALS	m	n	ŋ	LATERALS	l

Bilabial Palatal Alveolar			
SEMI-VOWELS	w	y	r

FIGURE 3

CONTRAST OF CONSONANT PHONEMES
GENERAL AMERICAN ENGLISH AND BEIRUT COLLOQUIAL ARABIC

STOPS Bilabial Dental Alveolar Velar Velarized Glottal

	Bilabial	Dental	Alveolar	Velar	Velarized	Glottal
English	p b	t d	k ɡ			
Arabic	b	t d	k		ṭ ḍ	ʔ

FRICATIVES Labio-Dent. Dental Alveolar Palatal Velar

	Labio-Dent.	Dental	Alveolar	Palatal	Palatal	Velar
English	f v	θ ð	s z	ʃ ʒ	ʃ ʒ	x ɣ
Arabic	f		s z		ʃ ʒ	x ɣ

Velarized Glottal

Velarized	Glottal
	h
ḥ ṣ	h *

NASALS Bilabial Alveolar Velar LATERALS Alveolar Dental

	Bilabial	Alveolar	Velar	LATERALS Alveolar	Dental
English	m	n	ŋ	l	
Arabic	m	n			l

SEMI-VOWELS Bilabial Palatal Alveolar

	Bilabial	Palatal	Alveolar
English	w	y	r
Arabic	w	y	r

CONSONANT PROBLEMS
FOR ARABIC-SPEAKING STUDENTS LEARNING GENERAL
AMERICAN ENGLISH

On the basis of the contrastive analysis of General American English and Beirut Colloquial Arabic, the following phonemes are identified as specific consonant problems in English pronunciation that Arabic-speaking students will be expected to encounter:

- /p/ Voiceless bilabial stop. The voiced Arabic /b/ will tend to be substituted for the English /p/.
- /g/ Voiced velar stop. The voiceless Arabic /k/ will tend to be substituted for the English /g/.
- /v/ Voiced labio-dental fricative. The Arabic /f/ will tend to be substituted for the English /v/.
- /θ/ Voiceless dental fricative. The Arabic voiceless dentals /s/ and /t/ will tend to be substituted for the English /θ/.
- /ð/ Voiced dental fricative. The Arabic voiced dentals /z/ and /d/ will tend to be substituted for the English /ð/.

- /ç/ Voiceless alveolar affricate. The voiceless Arabic /š/ will tend to be substituted for the English /ç/.
- /ʃ/ Voiced alveolar affricate. The voiced Arabic /ž/ will tend to be substituted for the English /ʃ/.
- /ŋ/ Velar nasal. The Arabic nasal /n/ will tend to be substituted for the English /ŋ/.

CONSONANT RESIDUE

After the phonemic analysis was completed, a certain amount of interesting, but unaccounted for material remained; such material has been termed residue, and is given here in an attempt to report as accurately and as completely as possible the findings of this investigation.

The reader will note that the English phonemes /g/, /ʒ/, /ç/ and /ŋ/ are listed among the consonant problems that the Arabic-speaking student learning English may be expected to encounter. These four phones did appear in the phonetic transcription of Beirut Colloquial Arabic. The evidence gathered for this study, however, was not sufficient to classify these phones as either phonemes or allophones in the sound system of this dialect. There is in this work, therefore, no adequate explanation of their occurrence.

All information pertinent to these phones is recorded in the belief that the material may be of help in classroom pronunciation work. It is also hoped that this information may lead to future investigation by another writer.

/g/ Voiced velar stop. The sound appears in medial position only. The first two examples show the sound in words "borrowed" from other languages. The third example

(insure), recognized as a verb in Beirut Colloquial Arabic, may also be related to the Spanish form, seguro.

'cigarette'

[siy.gaʃ.ə]

'English'

[ʔiŋ.gliy.ziy]

'(you) insure'

[saʷ.giʃ]

/ʃ/ Voiced alveo-palatal affricate. The sound appeared in the phonetic transcription in initial and medial positions in words. The occurrence in medial position was confined to the third person feminine singular and appears to be the result of the combination of phones /t/ and /ʒ/. No explanation can be made for the single occurrence of /ʃ/ in initial position. The phone was not, therefore, classified as an allophone of the Arabic phoneme /ʒ/.

'chicken'

[ʃeʒ.ey]

'She drives me "mad".'

[bit.ʃen.in.niy]

'chickens'

[ʃeʒ]

'Why don't you bring?' (f.)

[leʃ.ma.bit.ʃiyb]

'becomes ice'

[bit.ʃel.iyd]

/č/ Voiceless alveo-palatal affricate. The sound appeared in the phonetic transcription in initial and medial positions in words. It appears to be the result of the combination of the phonemes /t/ and /š/.

'choked'
[čəʃ.ɔəʔ]

'It is raining'
[ʔam.bit.čət.tiy]

'He went into partnership'
[čəʃ.ək]

/ŋ/ Voiced nasal velar, frictionless. The sound appeared in phonetic transcription in medial position in a word "borrowed" from English.

'English'
[ʔiŋ.gliy.ziy]

VOWEL EXPLANATION

The vowels of Beirut Colloquial Arabic are modified or changed slightly by certain consonants which precede or follow them. The modifying consonants of Beirut Colloquial Arabic are: /t̤/, /d̤/, /h̤/, /s̤/ and /x/.

No attempt has been made to record or to describe these modified vowel sounds of Arabic because they are predictable and, therefore, non-phonemic. The change in vowel quality should be noted in teaching, however, if a student substitutes his Arabic velarized consonants for the corresponding English sounds.

None of the vowels of Beirut Colloquial Arabic occur in word initial position without being preceded by the glottal stop /ʔ/. Example: 'coffee' - [ʔá.h.wèy]. None of the Arabic vowels appear, therefore, in initial position in the phonetic and phonemic transcriptions.

The above two points should be kept in mind while reviewing the vowel analysis presented in the pages that follow.

DESCRIPTIVE STATEMENTS OF VOWEL PHONEMES
IN BEIRUT COLLOQUIAL ARABIC

/i/ [iy] High, front, tense vowel. The sound occurs in medial and final positions in words.

'Arabic letter "s"'	'pillow'
[siyn]	[m.xəd.diy]
/sin/	/m.xəd.di/
'hand'	'table'
[ʔiyd]	[ta ^w .liy]
/ʔiyd/	/ta ^w .li/

The phonemes /i/ and /e/ are in free variation at utterance final.

/i/ [i] High, front, lax vowel. The sound occurs only in medial position in words.

'tooth'
[sin]
/sin/
'window'
[šib.beyk ^h]
/šib.bek/

/e/ [e] Lower mid-front lax vowel. The sound occurs in medial position in words.

'vinegar'

[xéɪ]

/xéɪ/

'dog'

[kɛɪb]

/kɛɪb/

/æ/ [æ] Low, front, lax vowel. The sound occurs only in word medial position.

'uncle'

[xæɪ]

/xæɪ/

'he saw'

[ʃæf]

/ʃæf/

/e/ [ey] Mid, front, tense vowel. The sound occurs in medial and final positions in words.

'summer'

[.sɛy̆]

/sɛy̆/

'coffee'

[?ah.wɛy̆]

/?ah.wɛy̆/

'brush'

[fɛʃ.ʃey̆.yi]

/fɛʃ.ʃé.yi/

'meat'

[lah.mey̆]

/lah.mè/

The phonemes /e/ and /i/ are in free variation at utterance final.

/u/ [u] High, back, tense vowel, rounded. The sound occurs in medial and final positions in words.

'wool'	'What?'
[ʃuːf]	[ʃuː]
/ʃuːf/	/ʃuː/
'Look!' (m.)	'he wants'
[ʃuːf]	[bɛd.ɔː]
/ʃuːf/	/bɛd.ɔː/

The phonemes /u/ and /o/ are in free variation at utterance final expressing masculine endings.

/u/ [u] High, back, lax vowel with less rounding than for /u/. The sound occurs only in word medial position.

'put in order' (chronological)
[sʊf]
/sʊf/
'dining room'
[sʊf.rə]
/sʊf.rə/

/o/ [o^w] Mid-high, back, tense vowel, rounded. The sound occurs in medial and final positions in words.

'Study!' (m.)	'he wants'
[dʒoːs]	[bɛd.ɔː]
/dʒoːs/	/bɛd.ɔː/

'voice'	'his future'
[so ^h ʷtʰ]	[mɪs.tæʔb.lo ^W]
/sot/	/mɪs.tæʔb.lo/

The sound occurs in medial position for masculine objects and masculine commands. The occurrence in final position represents masculine endings.

The phonemes /o/ and /u/ are in free variation at utterance final expressing masculine endings.

/a/ [a] Low, back, lax vowel, with slight degree of lip-rounding. The sound occurs in medial and final positions in words.

'he put'	'time' (or clock)
[hath]	[sey.*a]
/hat/	/sé.*à/
'dress' (n.)	'cooking pot'
[fus.tan]	[tən.žəʔ.a]
/fus.tan/	/tən.žər.a/

The phonemes /a/ and /e/ are in free variation.⁹

9. From the evidence available, based on material supplied by a single informant, it was necessary to resolve these two phones as separate phonemes. The evidence in this study did not support a conclusion based on either stress or sound environment suggested by the interpretations of Nasr and Yorkey. For further explanation see, Raja T. Nasr, The Teaching of English To Arab Students, (Beirut: unpublished book, 1959), p. 44. See also, Richard C. Yorkey, "The Phonemes of Beirut Colloquial Arabic" (unpublished paper prepared for Kenneth L. Pike, University of Michigan, 1953), p. 13.

/ə/ [ə]

Mid-central, lax vowel, unrounded. The sound occurs in medial and final positions in words.

'Putt' (m.)

[hət]

/hət/

'room'

[ʔud.ə]

/ʔud.ə/

'jam'

[m.ʔəb.bə]

/m.rəb.bə/

'yellow' (f.)

[səf.ʔə]

/səf.rə/

The phonemes /ə/ and /a/ are in free variation.

DIPHTHONGS

/a¹/ [a¹] The phonetic symbol [a¹] represents a continuous vocalic glide within a single syllable. The double letter symbol shows the approximate points at which the glide begins and ends. This diphthong occurs in medial and final positions in words.

'hat'	'water'
[bè ¹ .na ¹ .tə]	[ma ¹]
/bè ¹ .na ¹ .tə/	/ma ¹ /
'feast'	'tea'
[*a ¹ .iyd]	[ša ¹]
/*a ¹ .id/	/ša ¹ /

/a^w/ [a^w] The phonetic symbol [a^w] represents the approximate beginning and ending of a continuous glide within a single syllable. The diphthong occurs in medial and final position in words.

'table'	'light'
[ta ^w .liy]	[da ^w]
/ta ^w .li/	/da ^w /
'voice'	'or'
[sa ^w th]	[ʔa ^w]
/sa ^w t/	/ʔa ^w /

In word medial position /a^w/ and /o^w/ are in free variation after /s/ in the single word "voice".

VOWEL PHONEMES OF BEIRUT COLLOQUIAL ARABIC
AND GENERAL AMERICAN ENGLISH

The descriptive analysis on the preceding pages was made in order to identify the vowel phonemes of Beirut Colloquial Arabic so that they could be compared with the vowel phonemes of General American English. The phonemic information necessary for the comparison of the two sound systems is shown in Figures 4 and 5 on page 50 . Figure 4 shows the vowel phonemes of General American English. Figure 5 shows the vowel phonemes of Beirut Colloquial Arabic, as identified by this analysis. A careful study of the two figures reveals the English vowel phonemes which do not exist in Arabic.

The data shown in Figures 4 and 5, combined with the material supplied by the descriptive statements, made it possible to predict the problems with English vowels that an Arabic-speaking student would be expected to encounter.

FIGURE 4

VOWEL PHONEMES OF GENERAL AMERICAN ENGLISH

	Front	Central	Back
High tense	i		u
High lax	ɪ		ʊ
Mid tense	e		o
Mid lax	ɛ	ə	
Low tense	ɛ	ə	o
Low lax	æ	a	

American English
Diphthongs

/a^ɪ/ /a^w/ /oɪ/

FIGURE 5

VOWEL PHONEMES OF BEIRUT COLLOQUIAL ARABIC

	Front	Central	Back
High tense	i		u
High lax	ɪ		ʊ
Mid tense	e		o
Mid lax	ɛ	ə	
Low tense			
Low lax	æ	a	

Beirut Colloquial
Diphthongs

/a^ɪ/ /ɛ^w/

VOWEL PROBLEMS¹⁰
FOR ARABIC-SPEAKING STUDENTS LEARNING
GENERAL AMERICAN ENGLISH

In an attempt to make the explanations on this page as clear as possible, the reader's attention must first be directed to two important points made earlier.

1. All initial vowels in Arabic are preceded by the glottal stop /ʔ/. None of the Arabic vowels, therefore, appeared in initial position in the descriptive statements listed on the preceding pages. For the purposes of English pronunciation, however, this should not cause a problem. The insertion of the glottal stop before an initial vowel, by an Arabic-speaking person, will not cause a block in communication for the native speaker of English; it will merely call attention to a foreign accent.

2. All Arabic vowels are modified slightly when preceded or followed by the Arabic consonant phonemes /ṭ, ḍ, ṣ, ḥ, x/. This change in vowel quality will cause a problem in English pronunciation only if a student substitutes his Arabic consonants /ṭ, ḍ, ṣ, ḥ, x/ for the corresponding English sounds. This substitution is unlikely, however, as the phonemes /t, d, s, h/ are also common to Beirut Colloquial Arabic.

10. Because the Vowel Residue represents a set of personal questions, it has been inserted in Appendix A, rather than immediately following this section.

With the above two points in mind, and on the basis of the contrastive analysis of General American English and Beirut Colloquial Arabic, the following phonemes are identified as specific vowel problems in English pronunciation that Arabic-speaking students will be expected to encounter.

English

- /e/ Mid, front, tense vowel. Because Arabic /e/ and Arabic /i/ are in free variation at word final, e.g. /šàm.sí.ye/ 'umbrella', /šàm.sí.yi/ 'umbrella', there may be free variation in English in this position.
- /i/ High, front, tense vowel. Because Arabic /i/ and Arabic /e/ are in free variation at word final (see above), there may be free variation in English in this position.
- /u/ High, back, tense vowel, rounded. Because Arabic /u/ and Arabic /o/ are in free variation at word final, e.g. /béd.dù/ 'he wants', /béd.dò/ 'he wants', there may be free variation in English in this position.
- /o/ Mid-high, back, tense vowel, rounded. The Arabic /o/ and the Arabic /u/ are in free variation at word final (see above). There may be free variation in

English in this position. The Arabic /o/ will also tend to be substituted for the English /o/, which does not exist in Beirut Colloquial Arabic.

/a/ The low, back, lax vowel /a/, and the mid-central,
/ə/ lax vowel /ə/ occur as phonemes in both English and Arabic. They should cause no problem, except possible interchanging due to free variation in Arabic.

/ɔ/ Low, back, tense vowel, rounded. Because /ɔ/ does not occur in Beirut Colloquial Arabic the student will have to be taught to hear and to produce the sound. The Arabic /o/ will tend to be substituted for the English /ɔ/.

/ɔɪ/ The phonetic symbol used for this diphthong /ɔɪ/ represents the approximate beginning and ending of a vocalic glide within the limits of a single syllable. This diphthong does not occur in Beirut Colloquial Arabic. The student must be taught to hear and to produce the sound.

Summary: Linguists suggest that the most effective and efficient teaching materials are those based upon a scientific description of the native language of the learner compared with a similar description of the language to be learned. Following the analytical procedures outlined by linguistics, a descriptive analysis of Beirut Colloquial Arabic was made. The phonemes identified by this analysis were compared with the phonemes of General American English in order to determine the similarities and differences in the two sound systems. From this contrastive analysis it was possible to predict the sounds that would cause problems for the Arabic-speaking student learning English.

The contrastive analysis of Beirut Colloquial Arabic and General American English, presented in this chapter, serves two main functions in the whole of this thesis study: The contrastive analysis (1) points out the problem sounds, and (2) provides the basis for the selection of teaching materials.

CHAPTER III

THE DEVELOPMENT, TEACHING AND TESTING OF THE PRONUNCIATION EXERCISES

The contrastive analysis of Beirut Colloquial Arabic and General American English, presented in Chapter II, was made in order to determine the English sounds that are likely to cause confusion for the Arabic-speaking student, and the kinds of problems that may be expected. The material presented by this analysis was of fundamental importance to the (1) development, (2) teaching, and (3) testing of the pronunciation exercises designed for this study.

The selection of the material to be used in the pronunciation exercises was the result of a careful study of the descriptive statements and the phonemic charts of Beirut Colloquial Arabic. The development of this material into lesson plan form was based on linguistic techniques which take advantage of the systematic nature of the sound system.

Because it was hoped that the exercises could be effectively used as part of a normal English class, a scientifically controlled teaching experiment was conducted for a period of fifteen days. Sixty-two students, representing two divisions of the second secondary class at International College,

were used in this experiment. One division was selected as the experimental group, and was given the pronunciation exercises as part of their regular English class work. The second division was held as a control group, and was not exposed to the pronunciation exercises during the fifteen day period.

A tape recorded test was developed to provide a basis by which to rate the effectiveness of the pronunciation exercises on the students who were taught. This test was given to all of the students in the experimental and the control groups both before and after the teaching experiment.

The step-by-step procedure which was followed in the (1) development, (2) teaching, and (3) testing of the pronunciation exercises is presented in the pages that follow. The linguistic principles guiding each process are described briefly. Special reference is made to the application of these principles to the age and ability levels of the students of the first or second secondary grade level.

A. DEVELOPMENT OF THE EXERCISES

The contrastive analysis of the phonemic systems of Beirut Colloquial Arabic and General American English presented in Chapter II was made in order to discover the sounds that would present problems for the Arabic-speaking student learning English. Although the descriptions and the systematic comparisons do not represent the material to be taught, they are

important to the second objective of this thesis work: the selection and preparation of teaching materials.

1. Selection of Materials: The material to be taught in pronunciation includes, as Yorkey points out,

. . . precisely those components that make up the phonological system of the foreign language. The teacher must present to the students in some orderly and systematic way those aspects of the sound system that the native speaker has learned and uses unconsciously.¹

Although these include the segmental phonemes (consonants, vowels, and semi-vowels) and the supra-segmental phonemes (the prosodic patterns such as pitch, stress and juncture), this work is limited to the study of segmental phonemes only.

The contrastive analysis of the phonemic systems of both languages points out the sounds that are likely to be distinct learning problems for the Arabic-speaking student learning English. A swift glance at the vast difference in length and content between the descriptive statements and the phonemic charts of Beirut Colloquial Arabic, however, shows that the material presented in the phonemic charts alone does

1. Richard Yorkey, "A Study of the Practical Application of Structural Linguistics to the Teaching of English in Lebanese Elementary Schools" (unpublished Ed. D. dissertation, Dept. of English, University of Michigan, 1959), p. 131.

not supply all of the information necessary for the preparation of teaching materials.

The phonemic charts serve as a convenient summary of the phonemic findings, but they do not reveal all of the material gathered as a result of the analysis. From the phonemic charts it is possible to anticipate that certain sounds will or will not be used. In order to determine the kind of trouble that might be expected, however, a careful study must be made of the allophones of each Arabic phoneme. A study of the descriptive statements given in Chapter II, for example, reveals /p/ as an allophone of /b/ in initial position before certain Arabic consonants. This information does not appear on the phonemic chart showing the consonants of Beirut Colloquial Arabic, because /p/ was not found to be phonemic in Arabic. For the purposes of classroom teaching, however, the occurrence of /p/ as an allophone of /b/ in certain Arabic words may be of decided aid in helping the students to hear and to produce the sound. For the selection of teaching material, therefore, "the particular points of the pattern are not necessarily as important as the resulting contrasts in the pattern."²

It was found that the phonemic analysis and the phonemic charts are important in the selection of materials for teaching pronunciation. It was also found, however, that the material

2. Ibid., p. 133.

supplied by the phonemic charts alone is not enough.³ For teaching purposes there are distinctive sound features of a language other than those that have been identified as phonemes. If the phonemic charts are to be used wisely and with understanding, therefore, they must be considered with the following important points in mind:

- a) "The phonological system of a language is not so much a 'set of sounds' as it is a network of difference between sounds."⁴
- b) The number, kind and distribution of allophones help to determine the substitution that will be made.⁵
- c) A student cannot hear sound features which are not "points on the pattern" of his native language.⁶

2. The Teaching Approach: Recognition and Production:

The oral approach in teaching is basic to the linguistic belief in contrastive analysis. Linguists suggest that "speech is the

3. Yao Shen, "Phonemic Charts Alone Are Not Enough." Language Learning, V. 3 & 4 (1955), pp. 122-129.

4. Charles F. Hockett, "Learning Pronunciation," Modern Language Journal, XXXIV. 4 (1950), p. 220.

5. Yorkey, op.cit., p. 135.

6. Charles C. Fries, Teaching And Learning English As A Foreign Language, (Ann Arbor: University of Michigan Press, 1945), p. 16.

language,"⁷ and that the mastery of the fundamentals of the language should be through speech. Fries defines the oral approach as it applies to teaching:

Oral approach is a name primarily for the end to be attained in the first stage of language learning rather than a descriptive limitation of the permissible devices to attain that end. The end is the building up of a set of habits for the oral production of a language and for the receptive understanding of the language when it is spoken.⁸

In order to attain the end desired of the oral approach as defined by Fries, the teaching of pronunciation becomes a process of teaching both recognition and production. The student must be helped to hear the problem sounds before he is expected to produce them. As Lado points out, however, recognition is not as simple as it might seem. "We assume that the student who comes in contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to his native language will be simple for him, and those elements that are different will be difficult."⁹

Lado's statement may be amplified by an example from this experiment. According to the findings of the contrastive analysis, the English vowel /^o/ will present one of the most

7. Ibid.

8. Ibid., p. 8.

9. Robert Lado, Linguistics Across Cultures: Applied Linguistics For Language Teachers (Ann Arbor: University of Michigan Press, 1957), p. 2.

difficult pronunciation problems for the Arabic-speaking student learning English because the /ɔ̃/ sound does not occur in his native language. The analysis further suggests that the Arabic phoneme /o/ will tend to be substituted for the English phoneme /ɔ̃/, because the /o/ is the closest vowel phoneme in Arabic. Since the Arabic-speaking student will tend at first to hear with his own phonemic system, he will not be able to make a distinction between the English vowel contrast of /o/ and /ɔ̃/ as in the English words, bowl and ball. The Arabic-speaking student will hear /o/ in both words; he will be phonemically deaf to the English /ɔ̃/ sound.

The above example is verified in fact by the teaching experiment. When the /o-ɔ̃/ lesson was introduced, the students were shown large pictures of a bowl and a ball. The students were given two sentences by the teacher: "This is a bowl" and "This is a ball". They were asked to point to the picture which illustrated each sentence. Not one student, out of thirty-three, was able to hear and thereby identify the sentence with the /ɔ̃/ sound. Thirty-three students actually heard bowl even when the word ball was pronounced. On the second day, when a student was congratulated for being able to both hear and produce the /ɔ̃/ sound, he responded, "It's not so difficult. I just never heard that sound before."

3. Methods For Teaching Pronunciation: With the objectives of recognition and production set up as ends for

the oral approach in teaching, linguists have developed methods for the teaching of pronunciation that take advantage of the systematic nature of the sound system. These linguistic techniques are designed (1) to force recognition of the sound to be learned, (2) to aid production of these sounds, and (3) to provide intensive drill, organized and practiced in the most efficient possible way for effective learning and retention.

Although linguists have techniques for the teaching of pronunciation, no specific references were found listing a step by step procedure which could be followed when developing material for actual classroom work. A study of two types of teaching material¹⁰, however, made it possible to use and to expand the techniques for the development of the pronunciation exercises of this study.

The steps followed in the preparation of the pronunciation exercises developed for this experiment are explained in detail. Specific reference is made to the reason behind each choice of subject matter.

10. Betty Wallace, The Pronunciation of American English For Teachers of English As A Second Language, (Ann Arbor: George Wahr Publishing Co., 1957) pp. 1-87.

Structural Notes and Corpus: A Basis for the Preparation of Materials to Teach English as a Foreign Language (Washington: American Council of Learned Societies, 1952), pp. 1-109.

Step 1. Recognition of the sounds by identifying them in contrast: The teaching materials reviewed suggest that an effective method for helping students to hear phonemic distinctions is to put the problem sound in contrast with a similar, and--if possible--familiar sound. The English phoneme /p/, for example, is listed as an expected problem for the Arabic speaker because it is not a phoneme in his native language. The specific problem that he will have will be one of substitution. He will tend to substitute his familiar Arabic /b/ for the English /p/. This establishes a contrast, a pair of sounds that must be recognized separately. Therefore, for the lesson plan, the study of problem /p/ actually became the study of the contrast between /b/ and /p/. A similar process was carried out for each of the English phonemes considered for this study that had been identified as problems for the Arabic speaker.

For each pair of sounds thus developed, a list of minimal pairs¹¹ was made (big-pig, nibble-nipple, cob-cop). Whenever possible, these lists of words were limited to the vocabulary of the students. In the case of some sounds, however, it was necessary to use rather obscure words merely to provide a contrast example.

11. Kenneth L. Pike defines a minimal pair as follows: "Minimal pair: A set of two words differing the least amount possible phonetically and yet contrasting in meaning." Phonemics: A Technique for Reducing Languages to Writing (Ann Arbor: University of Michigan Press, 1947), p. 242.

From each list of minimal pairs, a pair of words was selected that could be shown in picture form, thus providing a visual image of the confusion caused when sounds are substituted. For example: Two large pictures were drawn, one of a pear and the other of a bear. The pictures were accompanied by two identical sentences. The difference between, "I ate a pear" and "I ate a bear" becomes much more vivid when seen in picture form.

Each lesson, with the exceptions of /k-g/, /ð-z/ and /z-j/, is begun with a set of pictures. The attempt is merely to provide a visual picture of the confusion that can result from faulty pronunciation.

Teaching Procedure: For teaching purposes, the recognition of sounds by identifying them in contrast was presented in the following way:

- a) Teacher shows two pictures. (bear - pear)
- b) Teacher reads two sentences. (This is a bear. This is a pear.)
- c) Students point to the picture that illustrates each sentence.
- d) Minimal pairs are shown in two columns. The sound that begins each of the words in column 1 contrasts with the sound that begins each of the words in column 2. (bear - pear)

- e) Teacher reads all of the words in column 1. (All begin with b)
- f) Teacher reads all of the words in column 2. (All begin with p)
- g) Teacher reads the words in pairs. (bear - pear)
- h) Teacher chooses words at random from either list. Students are asked to show which column the word is from by holding up one or two fingers.
- i) Any step, from a to g, may be repeated until the majority of the class is able to hear the contrast of sounds.

Step 2. Explanation or illustration of the proper

articulation: In the teaching materials reviewed for this study, sounds are presented in phonemic script, and are accompanied by technical explanations and diagrams. These techniques suggest that the students have had training in phonetics. Because the basic aim of this work was to present simple exercises in pronunciation that could be easily integrated into a normal English class for young students, an attempt was made to eliminate all technical terms and explanations. This necessitated a very careful consideration of each sound to determine exactly which features of its articulation were of specific importance, and which could be illustrated in some simple way.

In the section devoted to articulation (Production) in each lesson plan, the familiar Arabic sound is always presented first. English words or phrases are listed for the students to translate into Arabic. The method of translation is aimed at making the students aware of sounds not always considered as being "Arabic". It was also an attempt to divert any confusion that might arise as a result of the teacher's pronunciation being different from that of the students'. The teacher never speaks Arabic; she simply provides English words and phrases which will, by translation, force the students to produce the sounds in Arabic words.

Once the sound is identified in an Arabic word, it is suggested that the entire class whisper the sound, and think about its formation. It was felt that if the students made the sound themselves, the teacher would be free to call attention to important features of the articulation.¹² These descriptions are very simple. They are confined to brief statements as illustrated in the following examples: "I can see your tongue between your teeth." "Your teeth are together and your tongue is behind them."

The difficult or problem sound is always presented second. In the majority of the lesson plans, the problem sound is also introduced in an Arabic word, following the method

12. It must be emphasized that, as pointed out in Chapter I, although sounds may be similar in two given languages, they are never identical. English sounds are introduced in Arabic words, therefore, not because the sounds are the same in both languages, but because this method provides a basis for recognition and help in articulation.

outlined above. It is intended that the English words or phrases provided to produce the problem sound be given to several students in various parts of the room. It was expected that some boys would use the problem sound in their Arabic translations, and that others would not. If a sufficient number of students are given the opportunity to translate, however, the sound will be produced an adequate number of times to provide the recognition required.

The only lesson plans which do not include translation for the production of the problem sound are those for /o-ɔ/ and /n-ŋ/. The preparation of descriptions for the vowel sound /ɔ/ and the nasal /ŋ/ presented a problem in that an important part of their articulation, the tongue, could not be seen by watching the teacher, or by looking in a mirror. It was felt that a description such as, "This sound is formed by lowering the velum, raising the back of the tongue until it comes into firm contact with the velum, and expelling the voiced breath through the nose",¹³ would have very little meaning. The sounds for which the tongue position was of vital importance for production were shown visually by the aid of a large face chart, which is shown in Appendix B.

13. Charles K. Thomas, An Introduction To The Phonetics Of American English, (1st ed.; New York: World Press Co., 1947), p. 62.

Teaching Procedure: The teaching procedure for the articulation of sounds followed the exact outline given above. For the teaching of specific sounds, the lesson plans given in the Appendix B should be consulted.

Step 3. Production of the sound in an attempt to make it unconscious and automatic: It was, of course, not sufficient to list minimal pairs, and to explain the articulation of each sound. Some type of exercise was needed to provide constant practice to help establish the new habits of pronunciation. Sentences, based on contrast of sounds, were developed to meet this need. Using the original lists of minimal pairs, sentences of three types were developed. The first set of sentences introduced in each lesson contains the familiar sound in various positions. The second set of sentences emphasizes the new and difficult sound. The third set of sentences combines the two sounds, thus providing a more difficult type of contrast practice.

Teaching Procedure: The teaching procedure for the sentence exercises was presented in the following manner:

- a) Teacher pronounces a sentence (from first group).
- b) Students repeat the sentence after the teacher.
- c) Individual students pronounce one or more of the sentences.

the exercises, for the purpose described, could only be tested by teaching the exercises to students in an authentic academic atmosphere. A teaching experiment was conducted in an actual English class for a period of fifteen days. The details of the teaching experiment are presented in order to report the information pertinent to the third objective of this thesis work: How can the pronunciation exercises be presented in an actual classroom situation?

1. Selection of Students: Sixty-two students representing two divisions of the second secondary class at International College were selected for this experiment. The school and the students were selected for the following reasons:

- a) The writer had taught at International College for two years and was, therefore, familiar with the students and the subject content of the English classes.
- b) The administration of International College kindly agreed to cooperate with the experiment.
- c) The two divisions were taught by the same teacher. Aside from the pronunciation work, all other progress in English remained relatively stable.
- d) The further division of these two classes into experimental and control groups was the result of the time at which both classes met. The experimental

group met directly after a ten minute recess, thus providing an opportunity to set up teaching materials in advance.

2. Control of Students: Three methods of control were used to ensure an adequate basis for statistical testing:

- a) Division B was used as the experimental group. The students were given instruction with the pronunciation exercises at the beginning of their regular English class for a period of fifteen days.
- b) Division A was held as the control group. This class was not visited by the investigator during the fifteen day experiment, and did not see the pronunciation exercises. They received only the normal amount of help in pronunciation that their teacher deemed necessary during the course of any recitation.
- c) Although all of the boys in both sections were given the tape recorded tests, and all of the boys in the experimental group were given the pronunciation instruction, only native-Arabic speakers were considered in the final evaluation. For statistical purposes, therefore, the total number of students used in the judging was fifty-nine.

- d) The students in the experimental group were given no printed exercises to study, and were assigned no homework. It was impossible for the control group to see the teaching material.

3. Limitation of Time and Sounds: A strict limit was put on the amount of time that could be devoted to the pronunciation work. The exercises were presented to the experimental group for ten minutes a day, five days per week, for a period of three weeks. The total experiment consisted of approximately one hundred and fifty minutes, distributed over fifteen class sessions.

The necessity of limiting the time of the experiment also made it necessary to limit the number of sounds that could be presented. The sounds were restricted to one vowel and eight consonant contrasts. (/o/-/ɔ/, /p/-/b/, /θ/-/s/, /f/-/v/, /g/-/k/, /ð/-/z/, /n/-/ŋ/, /ʃ/-/ʒ/, /j/-/ʒ/)

4. Materials: In order to provide an adequate supply of material in some form, various teaching materials were especially developed for use in this work.

- a) Flip Chart: A large flip chart was designed to present the written exercise material to the students. The chart was made of two ply-wood sections, each measuring seventy centimeters in both height and width.

The two sections were hinged by material so that they could be folded for easy handling. Because ply-wood is flexible, a grooved dowel stick, the length of the opened chart was made to serve as a support. The flip chart, braced in its support, was set in the chalk tray at the front of the classroom. The word lists and sentences for each lesson were printed in India ink on large sheets of heavy white construction paper. A printed lesson chart with its descriptive pictures, was screwed to the top of the chart prior to each class session.

For the purposes of this experiment, the flip chart proved to be very helpful. The size of the chart and the printed material made the lessons visible to all members of the class, regardless of the size of the classroom. The chart as opposed to mimeographed papers, for example, definitely helped to direct and to hold the students' attention toward the front of the room. Almost no comparison can be made between the use of the chart as opposed to writing on the blackboard from the standpoint of time. With the chart, it was possible to begin each lesson as soon as the bell rang, and to proceed at any rate of speed; the material was always ready and available.

Delay caused by writing and erasing on the black-board was completely avoided.

- b) Face Chart: Because all of the descriptions of speech production were developed with simplicity in mind, there was a need to show--rather than to explain--important articulations of the tongue. Although standard charts of the cross-sectional view of the speech mechanism are available, it was felt that these perhaps presented unnecessary detail. In order to illustrate tongue positions which could not be observed by watching the teacher or by looking in mirrors, therefore, a simple drawing of a profile outline of a boy's head was used. The chart displayed the tongue in relaxed position. The tongue section was slit and backed by a "pocket". When sounds were introduced that demanded a specific position of the tongue, "tongues" cut from bright colored paper were inserted into the slit section of the chart, and were held stationary by the "pocket" at the back.

An attempt was also made to show lip positions by the same method, simply attaching the correct positions to the chart. This, however, did not seem to be as effective as merely asking the students to observe

the exaggerated lip positions of the teacher or of another student.

For the purposes of this experiment, the simple face chart saved time and confusing explanation. The student could see, by the aid of the colored tongues, where his tongue should (or should not) be for a particular sound. By looking at the chart, he could practice until he was able to copy the position himself.

- c) Mirrors: Five small purse-size mirrors were taken to each class session. These were handed to individual students when their pronunciation problem was connected with a fault that could be seen. The students were allowed to practice silently with the mirrors while other boys were reciting. As the boy returned the mirror, he was expected to try to pronounce the problem sound for the teacher.

5. Method of Teaching: The flip chart, face chart and small mirrors were always put in place before the bell rang for class. As soon as the boys entered the classroom, the pronunciation work began. A single class session followed this pattern:

- a) Listening: The first procedure was always a very short listening period, lasting not more than sixty seconds. "Listening" was directed to the many noises

and sounds heard inside and outside of the classroom; it was not directed to the identification of speech sounds. The topics for the listening periods varied as the class progressed in its ability to listen. Students were first asked to report as many sounds as they could within the given time limit. Later, distinctions were made between sounds that came from outside and those that came from inside the room. On occasions, familiar but not necessarily common sounds were planned by the teacher, and the students were requested to identify the sounds.

Listening is of vital importance to the study of pronunciation. These listening exercises served a three-fold purpose in the teaching experiment. They (1) drew attention to the skill of listening, (2) gave practice in selective listening, and (3) calmed the class after a rather noisy and exciting recess.

- b) Review: The listening exercise was followed directly by a short review of the work covered on the previous day. This review revolved about the words or sentences last studied. Very simple questions were often inserted throughout the recitation concerning important points for production of a sound. The

questions anticipated a simple, one-word answer as illustrated by these samples: "The first sound of pear is like the first sound in what Arabic word? For the first sound of think your tongue is _____?" These questions were not intended as academic testing. They were asked in order to ensure that simple, but important distinctions were remembered.

The reviews were planned as general practice, and as an opportunity to check those students who had had some type of trouble the day before. A list was kept of the students who had problems, or who were shy about reciting. These boys were encouraged to recite during the review time, in the hope that they might gain a little more confidence, as well as receive needed help.

- c) Exercise Material: It is true that the experiment provided a specific amount of time in which to present a specific number of sounds. It is also true that, within limits, the schedule for teaching, by days, fit into a prearranged plan. It must be pointed out, however, that the amount of material covered within the limits of a single session depended entirely upon the progress of the class. Although a desired amount of material was prepared for a given day, the actual pace of that particular lesson was set by the amount of material that could be effectively digested

by the students. Therefore, although each lesson is roughly described below as requiring one and one-half sessions, it was necessary to lengthen this period for some sounds, and it was possible to shorten it for others. The pre-planned division of each lesson plan was as follows:

- (1) Five minutes--second half of session: Recognition of new sound pair by the use of pictures and minimal pairs. Proceed immediately to articulation of two sounds, and provide practice by using two lists of minimal pairs.
- (2) Ten minutes--entire session. After listening exercise, review material covered day before. Proceed immediately to sentences. Provide practice time for each student in the class. If, time permits, introduce a new sound pair. If the class moves slowly, progress slowly, leaving some material to be used as review in next session.

Because it may not be obvious from the above outline, it is important to emphasize that a complete lesson plan was never presented during a single session. Each session started with listening and review as mentioned above. The review not only served as

practice; it also provided a transition from the familiar to the new work.

The specific length of time devoted to each contrast pair in the teaching experiment is listed below. The reader's attention is called to the time involved in the definition of session or class. A class session equalled ten minutes. A half session, therefore, roughly equals five minutes.

<u>Contrast Pair</u>	<u>10 Minute Sessions</u>
/p/-/b/	1
/f/-/v/	1
/θ/-/ð/	2
/ʃ/-/z/	1 1/2
/o/-/o/	2 1/2
/g/-/k/	1
/n/-/ŋ/	2 1/2
/ʒ/-/ʒ/	1 1/2
/j/-/z/	1
	<hr/>
	14
Review	1
	<hr/>
Total Number of Sessions	15

d) Review Sessions: Review sessions were made available to the students of the experimental group during their free hours. It was hoped that the entire class would attend these sessions in order to provide the necessary practice and drill that were impossible during the regular ten minute class lessons. The review sessions were not compulsory, however, and the attendance varied considerably. Therefore, although the actual teaching experiment totaled one-hundred and fifty minutes, an additional forty minutes for review and practice were available to those students who wished to take advantage of them. The total number of students who attended these sessions, and total number of minutes to which they were exposed to the pronunciation exercises are listed below:

Number of Ten Minute Review Sessions	Number of Boys Who Attended	Total Number of Minutes: Class And Review
4	11	190
3	4	180
2	5	170
1	8	160
0	3	150

As far as can be determined, this teaching experiment represents one of the first attempts to subject carefully designed pronunciation exercises--based on a contrastive analysis of Arabic and English--to a test by means of a scientifically controlled teaching experiment. It is hoped, therefore, that the details pertinent to this teaching experiment may be of help in future work with these or similar pronunciation materials.

C. TESTING OF THE EXERCISES

The purpose of teaching the pronunciation exercises in an actual classroom situation was to provide some basis by which to rate their effectiveness. A tape recorded test was given to all of the students in the experimental and the control groups both before and after the teaching experiment. The tape recordings provided a permanent record, which could be used by several judges in order to determine the kind and degree of improvement in the pronunciation of the experimental group. The details concerning the selection of (1) the test material, (2) the type of test, and (3) the method of recording are as follows:

1. Selection of Test Material: The selection of the material and the method for testing the pronunciation of the students were also supplied by linguistics as a result of the

great progress that has been made in the area of testing pronunciation. As Lado points out,

We can now test the entire sound system of a language in a test of reasonable size, and we can score it objectively. We can test the student's perception of the significant sound contrasts of the language through his comprehension of carefully chosen sentences. We can test that perception by asking him if two sentences he hears are the same or different. We can test his production of the significant sounds by forcing him to utter carefully chosen sentences. And we can test his pronunciation indirectly by asking him to say whether certain sounds whose symbols are omitted in a printed test are the same or different to him. . . . These techniques for testing could not have been devised if we did not know quite specifically what problems we were trying to test.¹⁴

The problem of selecting the material to be tested, therefore, was solved. For, just as the contrastive analysis supplied the material from which to develop the pronunciation exercises, so did it provide for the material to be tested; we test precisely those sounds that are shown to be significant problems.

2. Selection and Preparation of the Test: Once the material to be tested was isolated, two types of test were considered. Both types of test were developed, and both were pre-tested on second year students not to be used in the experiment.

14. Lado, loc.cit., p. 5.

Three aims were set for these tests:

- a) The test must force the students to produce the sounds under study.
- b) The test must be long enough to judge adequately, but short enough to be practical.
- c) The recording of the test must be clear, and patterned to provide easy listening.

The two tests considered for use in this experiment are described in detail, with the reasons for the rejection of one and the acceptance of the other:

- a) Picture Test: The first test that was tried was composed of pictures. It was felt that by giving the names of objects shown in pictures, the students would be forced to produce the sounds under study without being overly conscious of their pronunciation or confused or distracted by spelling. The results of the pre-test proved that the use of pictures would be an unsatisfactory means of testing pronunciation for the following reasons:
 - (1) Certain sounds do not occur in words that can be shown in picture form.
 - (2) Object pictures, within the vocabulary range of the students, were limited.

(3) Of the objects selected to test the sounds, five needed to be replaced. (This presented a difficulty as a result of number 1, above.) Thus, the students did not produce the sounds that were to be tested.

(4) It required twenty-five minutes to administer this test to eight boys individually.

b) Sentence Test: The second test, which was finally selected for use in the experiment, was composed of carefully worded, simple sentences.¹⁵ As the students read the sentences, they were forced to produce the problem sounds in the various positions in which they occur in English words. (please, apple, lamp) This test was accepted as being satisfactory for the following reasons:

(1) The students did produce the sounds under study. They read exactly what was on the test paper.

(2) It required only eight minutes for eight boys to complete the test individually.

From the results of the two pre-tests, it was possible to set up the following criteria for the mechanical workings of the actual recording sessions,

15. See the sample Evaluation Sheet given in Appendix C for the specific words and sentences used on this test.

thus fulfilling the third aim of the test:

- (1) The room selected must be quiet and away from school sounds. It must be reserved for recording and labeled as such by a printed sign.
- (2) Two people are needed to handle the boys in order to save time and to prevent extra noise on the tape. One person should run the recording machine and give the test. One person should remain with the boys and give them the necessary instructions.
- (3) The recording machine must be in good working order, and must be equipped with a pause control and counter.
- (4) The test material must be presented in a clear form for the students. If pages are to be turned, the material must be written on heavy paper to prevent noise. The pre-test method was satisfactory: Each sentence was written on an individual piece of paper. Each paper was inserted into plastic pages of a photo album. The person recording spaced the recitation by turning the pages for the students.
- (5) Each boy and each sentence should be identified by some method of code in the event that the

tapes are to be spliced. There are more boys than there are sentences. Boys may be numbered (1, 2, 3). Sentences may be lettered (A, B, C).

- (6) Boys must be instructed to speak in loud voices and at a normal rate of speed. The person recording will pace the shift from sentence to sentence by turning the pages which contain the test material.

3. Method of Testing: It was desired that several judges be used to evaluate the effects of the pronunciation exercises. In order to provide a permanent record, necessary for this type of multiple judging, all test material was recorded on tape. The material recorded was divided into two recording sessions. One test was given to all the students, from both the experimental and the control groups, on the day before the exercises were started. The same test was repeated, using all of the students from the two groups, on the day after the teaching experiment was ended. Each recording session was conducted in the following manner:

- a) The students were asked to report to the principal's home at specific five minute intervals during their free hours.
- b) The students were met outside by A.U.B. students who acted as ushers. Each student was given a

piece of paper with a number and a place to write his name. The numbered papers were accompanied by the following instructions:

- (1) Each boy has a number (1, 2, 3)
 - (2) Each sentence has a letter (A, B, C)
 - (3) Read your number and the sentence letter before you read each sentence. Example: 10 A Today is Monday.
 - (4) Give the paper, with your name and number to the man who works the recording machine.
- c) The students were recorded individually according to the code method described above. The test material was presented to the students by the person recording.
- d) Because the recording method was worked out in advance, and because the students reported on time, it was possible to complete each recording session in fifty-five minutes. None of the students was ever late for a scheduled class.

4. Control of Test Material: The sentences used on the pronunciation test were shown to the students of the two groups only during the recording sessions. The words used in the test sentences were eliminated from the exercise material given to

the experimental group during the teaching experiment. Therefore, no practice or drill was given on the specific words in the test, to either group, during the fifteen day period between the two recording sessions.

Summary: The material supplied by the descriptive statements and the phonemic charts of Beirut Colloquial Arabic provided the basis for the selection of the material to be used in the pronunciation exercises. Linguistic techniques for the teaching of pronunciation were the guides used in the development of the exercise material. The age and ability levels of the students of the first or second secondary level directed the selection of the specific methods and materials to be used in teaching. The exercises were taught as part of a regular English class for a period of fifteen days. The conditions of this teaching experiment were scientifically controlled. A specially prepared pronunciation test was given to all of the students of the two groups both before and after the fifteen-day teaching experiment. The words used on the pronunciation test were eliminated from the pronunciation materials given to the experimental group. This tape recorded test provided the basis by which to rate the effectiveness of the pronunciation exercises on the students who were taught.

It has been the purpose of this chapter to acquaint

the reader with the step-by-step procedure which was followed in the (1) development, (2) teaching, and (3) testing of the pronunciation exercises designed for this study.

CHAPTER IV

THE EVALUATION OF THE DEVELOPMENT, TEACHING AND TESTING OF THE PRONUNCIATION EXERCISES

The development, teaching and testing of the pronunciation exercises was undertaken with the final objective of this thesis in mind: Will the exercises, based on a contrastive analysis of the two languages, produce improvement?

The before and after tape recorded tests, outlined in Chapter III, provided the basis by which to evaluate the effectiveness of the pronunciation exercises on the students who were taught. These tests made possible the objective evaluation of the results of the experiment. These same tests, however, provided no insight as to how the exercises were actually received, day by day, by the students who were taught.

Because no record was found concerning a similar scientifically controlled teaching experiment, it was felt that a second type of evaluation would also be of value. This second evaluation is concerned with the subjective evaluation of how the students reacted (1) to the lessons in general, and (2) to the methods and materials in particular. The subjective evaluation is the result of answers given by the regular classroom teacher, and the students who were taught at the end of the fifteen day experiment, combined with detailed

notes taken by the writer after each class session. The subjective evaluation attempts to give some insight as to how the pronunciation exercises were integrated with the normal English class routine.

The two evaluations, objective and subjective, are presented in the pages that follow. Because the objective evaluation is based on statistical information, it is presented last.

A. SUBJECTIVE EVALUATION

In order to report what actually happened in the classroom during the teaching experiment, detailed notes were recorded after each class session, and questionnaires were given to both the regular classroom teacher and to the students who were taught. These combined sources provide a subjective evaluation of the reaction of the students (1) to the lessons in general, and (2) to specific materials and methods in particular.

Student Evaluation: A questionnaire was given to fourteen of the students in the experimental group at the end of the teaching experiment. Only fourteen students were questioned because the evaluation was made outside of class hours. These particular students had been interested in the extra review sessions, and were willing to give up a recess period in order to fill in the questionnaire. The answers supplied by the students provide insight (1) to their reactions to the lessons, and (2) to the degree of academic material which they retained. A master questionnaire containing the fourteen student answers appears in the appendix. Although the answers vary for each question asked, the student evaluation may be summarized as follows:

1. Student reaction to lessons: The majority of the students questioned felt that -

- a) The time taken by the pronunciation exercises each day did not put them behind in their regular class work.
- b) Pronunciation work is important, and they would like to have more of it.
- c) The exercise material provided help in spelling and vocabulary as well as in the production of sounds.
- d) The face chart, with the colored tongues, helped in acquiring correct pronunciation of the difficult sounds.
- e) The exercises should be written out (mimeographed) so that the students could practice them at home.

2. Degree of material retained: The fourteen students questioned retained a surprising amount of "academic" information concerning pronunciation. The majority of these students understood -

- a) Why correct pronunciation is necessary and important.
- b) Why Arabic words were used to introduce problem sounds.
- c) That the confusion of English sounds is sometimes due to the free substitutions of Classical and Colloquial dialects of Arabic without confusion in meaning.
- d) That important differences in the production of

sounds may be found by observing the lips, tongue and teeth of another speaker.

- e) That the important difference between some sounds is only a matter of "breath" (voiceless) or "hum" (voiced), which can be tested by little tricks given in the exercises.

Regular Teacher's Evaluation: A detailed questionnaire was also given to the regular classroom teacher on the day that the experiment was completed. The information supplied by the regular teacher deals specifically with (1) the lessons in general, and (2) the reactions of the students both during and after the pronunciation sessions. Because the regular teacher was very enthusiastic about the teaching experiment, and was kind enough to elaborate on the points she felt strongly about, her evaluation (which is given in Appendix C) should be consulted. One important point supplied by the regular teacher, was unobtainable from any other source: The students of the experimental group definitely became conscious of their pronunciation, and retained and practiced the correct production of sounds after the investigator left the room. The various other opinions expressed by the regular classroom teacher are very similar to those of the investigator, and may be summarized in the evaluation which follows.

Evaluation of Investigator: Detailed notes were taken immediately following each class session. These notes were intended (1) to evaluate each lesson, (2) to summarize the strong and weak points, and (3) to describe teaching techniques that were effective, and those that needed improvement. On the basis of these daily notes, the following evaluation can be made:

1. Student Reaction To Lessons:
 - a) The majority was interested and attentive.
 - b) The students were concerned with their problems and tried to correct them.
 - c) Many students showed their interest by asking to be "checked" for correct pronunciation of a specific sound before the pronunciation session began each day.
 - d) No one said, "I can't", or acted completely disinterested.
 - e) The majority became aware of their mistakes, and usually corrected themselves.
 - f) In general, the students retained a great deal of the academic content of the articulation descriptions, although this was not really expected of them.
 - g) The idea of "sounds" was accepted immediately.

Not one student ever referred to spelling or to a "letter".

- h) Students who had problems one day usually came prepared to recite on the next.
- i) When very difficult sounds were introduced (/o/, /u/) there was a general feeling of challenge and "esprit de corps".

2. Use of Translation:

- a) The students accepted the use of translation without comment, or challenge.
- b) Most were eager to give the Arabic words, and to try to find the English sound or sounds in them.
- c) The brighter students enjoyed trying to discover why two sounds were introduced together. These students were particularly helpful in bringing out the difference in pronunciation between the Classical and the Colloquial dialects of Arabic.
- d) Toward the end of the experiment, students were able to supply Arabic words containing the new or problem sounds before words were given for translation. (This could present a problem, if the teacher was not alert. If these students associated sounds in English and in Arabic which they "thought" were similar, but which were not, the translation would be of no help whatsoever.)

3. Articulation Descriptions:

- a) The students picked up the idea of "breath" (voiceless) and "hum" (voiced) sounds immediately.
- b) They enjoyed trying the little tests to check their pronunciation. ("Try to move the paper when you make the /p/ sound")
- c) They liked the special references to articulations which could be seen or felt. ("I can see your tongue between your teeth for the /θ/ sound. Close your teeth so that you can feel your tongue between them.")
- d) Many boys studied the face chart, with the colored tongues, carefully and tried to imitate the position shown.

4. Visual Aids:

- a) The chart with exercise material became an accepted fact after the first session.
- b) The height of the chart was a problem in very long rooms. Boys at the far back tended to stand up, until the chart was raised.
- c) The mirrors were accepted without comment.
- d) Students wanted to use the mirrors, and asked to do so both before and after class for additional practice.

5. Time Allowed For Experiment: The time limitation represented the main problem in the teaching experiment. Ten minutes per day would have been long enough if the over-all time expanse had been longer, or if the number of boys in the class had been smaller. Lack of time was considered an actual handicap to the experiment for the following reasons:

- a) Because of the over-all limit of fifteen days in which to work, each lesson was more rushed than was desirable.
- b) It was difficult, if not impossible, to give each of the thirty-one students the individual attention that he needed.
- c) Attention on many days would reach its highest peak just as it was time to finish the session.
- d) Weaker students sometimes needed more time to understand the new points that were introduced. Just as they seemed on the point of grasping the idea under study, the investigator had to leave.

It must be pointed out that although the size of the class and the time devoted to the pronunciation exercises were handicaps to this teaching experiment, neither time nor size of the class should present a problem if the exercises are given by a regular teacher as part of the regular English study. Under regular teaching conditions, the teacher would be free

to space the introduction of each new sound over the course of a semester or of a year. The regular teacher would have the opportunity to draw on problem sounds as they occur, in the normal routine of work, rather than to force a great deal of material all at one time. Daily recitations on any material of the English class would provide practice in pronunciation for the students, and an opportunity for the teacher to give constant help.

6. Necessities For Teaching Pronunciation: Five points concerning the effective teaching of pronunciation are made repeatedly throughout the notes taken after each class session. Because these points were important to the teaching of this experiment, they appear to be worth mentioning. Quite possibly these points may be of aid in any further teaching that is done with this or similar pronunciation material:

- a) Students must be given some form of drill routine. Students like to know what is expected of them. If instructions are consistent, it is possible to set up routine procedures that encourage class participation, and discourage class confusion.

The instruction, "Whisper each word (or sentence) after your teacher", is given constantly throughout the lesson plans. For the first few days of the experiment, however, this type of unison recitation

was new to the students. With continued emphasis upon the words "whisper" and "repeat together", the students were able to understand why the two requests were made. At the end of approximately five days, the boys were able to whisper the material in almost perfect unison. At the end of approximately seven days, they were able to carry on the activity without instructions from the teacher.

- b) Establish a quiet atmosphere, but encourage all to participate: Boys of the first and second secondary grade level are normally very enthusiastic. They find some difficulty in raising their hands without pulling some other part of their body out of the desk. They want to recite, and will speak out loud, simply because they have something to say. This obviously is a bad situation for any type of teaching, but it is particularly disastrous to pronunciation work. Twaddell's method¹ of "Raise your left hand if you hear a mistake", was introduced to solve this problem. The students were instructed to listen to all recitations. If a student heard a mistake, he was to raise his left hand. (Right

1. W.F. Twaddell, "Oral Practice in Elementary English Instruction" (Cairo: mimeographed, 1955), pp. 16-18.

hands were reserved for questions.) The class quickly realized that this method saved time and gave them more opportunities to express their various opinions.

In this experiment the "raise left hand" technique served three important purposes: It served (1) to focus attention of the class on individual speakers, (2) to focus attention of speaker on himself (Boys of this age don't like to be caught making mistakes.) and, (3) to minimize the confusion caused by hand raising and impulsive speaking.

- c) Every boy must be given a chance to practice orally, regardless of the size of the class: In pronunciation work it is not difficult to become very interested in those who progress quickly, or in those who have interesting problems. Regardless of personal interest, however, the teacher must provide an opportunity for each boy to recite each point under study. Although most teachers are able to keep a mental note of those who have recited, it proved helpful to ask, "Is there anyone in the class who has not tried?", before moving to the next point. Students will raise their hands either because they feel neglected, or because they are aware that their seat neighbors know very well whether or not they really have recited.

d) Pacing of material is important to class attention:

A pronunciation class must move fast enough to keep all busy and all challenged, but it must move slow enough to provide adequate help and practice for all. If interest is to be held, the teacher must know precisely when she has given enough (or not enough) time to the study of a particular point.

e) Teacher must be very familiar with the subject, and adequately prepared for each individual lesson:

Because of the pace and interest mentioned above, the teacher doesn't have time to stop and think of what to do next. All information must be at her finger tips, preferably in lesson plan form. The teacher must be prepared in advance with the Arabic words to be used for translation, and she must be aware of the types of substitutions that may occur in these translations. Although the lesson plans contain descriptions of articulation, the teacher must always consider before the class, "What shall I do if this method doesn't work for these students?" In short, it is of the utmost importance that the teacher understands the subject content and the problems involved in pronunciation. She must know exactly what information is necessary and important to the study, and which is unnecessary for the level of the class.

Summary: In an attempt to report what actually took place in the classroom during the fifteen day teaching experiment, evaluations were made by the regular classroom teacher, the students who were taught, and the investigator. On the basis of these three types of subjective evaluation it is possible to comment broadly on the integration of the pronunciation exercises with the normal English class routine. The exercises were received by the majority of the students with interest and enthusiasm. The students became aware of their pronunciation problems, and were interested in correcting them. The materials and methods used in the teaching experiment seemed to be appropriate to the age and level of the class. Although the limited time and the large size of the class presented handicaps for the purposes of this experiment, neither time nor size of the class should present a problem for a regular classroom teacher. With the advantage of daily classes, spread over the length of a semester or a year, a regular teacher should be able to work the proposed exercises into the normal class routine with little or no difficulty.

B. OBJECTIVE EVALUATION

The purpose of developing a special pronunciation test, and of tape-recording each student's voice in the experimental and the control groups, both before and after the teaching experiment, was to provide an objective basis by which to evaluate the effectiveness of the pronunciation exercises. Three judges were selected to evaluate the "before" and "after" tape-recorded tests of the two groups. The data supplied by the judges were tabulated by the investigator, and analyzed by means of the chi square technique. The details pertinent to the (1) evaluation, (2) tabulation, and (3) statistical analysis of the material supplied by the three judges are presented with the fifth objective of this thesis in mind: Will the exercises, based on a contrastive analysis of the two languages, produce improvement in pronunciation?

Selection of Judges: Three members of this thesis committee were selected to listen to the "before" and "after" tape-recorded tests in order to evaluate the effect of the pronunciation exercises on the students. The judges were selected for the following reasons: (1) All of the judges have had training in linguistics, and are familiar with the type of listening and rating required of the tests. (2) All of the judges have had considerable experience in teaching

English to Arabic-speaking students.

Reliability of Judges: Because only three judges were used to evaluate the recorded tests, the extent of agreement among their judgements was measured. W , the Kendall Coefficient of Concordance,¹ was computed for the number of sounds judged to be correct in the control group, "before" series (twenty-eight boys). W equals .615, which shows a substantial and significant (.01 level)² degree of agreement among the judges concerning the number of sounds judged to be correct for each boy.

Method of Judging: The Evaluation session was held in the Language Laboratory of the American University of Beirut. The listening booth and ear-phone facilities of the Laboratory made it possible for the judges to evaluate the recordings at the same time, without distraction from outside noise. The judges were given pre-numbered evaluation sheets³ for each boy, and the following instructions:

1. Identification:

- a) Each boy is identified by number (1,2,3). Listen to the boy say his number to be sure that you are using the correct evaluation sheet.

1. The steps in the computation of W may be found in S. Siegel, Nonparametric Statistics, (New York: McGraw-Hill, 1956), pp. 229-238.

2. For the meaning of .01 level see the definition given on page 109 in connection with Table I.

3. A sample of the evaluation sheet is given in Appendix C.

- b) Each sentence is identified by letter (A,B,C). Listen to each boy say the letter, to be sure that you are evaluating the correct sentence.

2. Sounds:

- a) Each sentence contains three sounds which are to be tested. These sounds are underlined in the words in which they occur (church).
- b) Try to listen only for the sounds that are underlined. Do not be concerned with sounds in other words of the sentence.

3. Evaluation: The small check boxes drawn under the words which contain the test sounds are to be used for evaluation.

Example: church

č	-
---	---

- a) If the student pronounces the sound correctly, put a check mark in the square containing the phonetic symbol. /č/
- b) If the student does not pronounce the sound correctly, put a check mark in the square containing the minus sign. /-/

This method of evaluation required that the judges rate the pronunciation of single sounds as correct or incorrect.

The judges were unable to know whether their judgements represented gains or losses in the quality of pronunciation of the two groups.

The original random selection of numbers assigned to the boys made it impossible for the judges to determine whether they were hearing (1) a student from the experimental or the control group, or (2) the first or second recorded test. Thus, the three judges evaluated the pronunciation of each student, from both the experimental and the control groups, twice: once on the "before" test, and once on the "after" test. Six judgements, therefore, were used in the final tabulation of the pronunciation for each boy.

Method of Tabulation: Using the numbers assigned for the test recordings, the three evaluations of the "before" test and the three evaluations of the "after" test were compared for each boy in both groups. The results of the comparison of the six evaluations were charted on a single master evaluation sheet for each boy. The evaluations of each judge were differentiated by color.

1. Individual Ratings: The individual rating of a judge on the "before" recording established his opinion of the correctness or incorrectness of a specific boy's pronunciation of each sound. The rating of the same judge for the same boy on the "after" recording, therefore, told what

happened to the pronunciation of each sound during the fifteen-day period between recordings. The pronunciation of a specific sound could do one of three things: (1) improve, (2) remain the same, or (3) retrogress.

From the master evaluation sheet compiled for each boy it was possible to determine the movement (improved, remained the same, retrogressed) of the pronunciation of each sound according to the opinion of each judge. The individual rating of each judge for each boy was tabulated in the following manner:

Example:	B Test	church	A Test	church				
	#25	✓	#3	✓				
		<table border="1"><tr><td>č</td><td>-</td></tr></table>	č	-		<table border="1"><tr><td>č</td><td>-</td></tr></table>	č	-
č	-							
č	-							

The sound under consideration was the final /č/ in the word church. A single student was evaluated; he was coded as number 25 on the before test, and as number 3 on the after test. The two ratings were made by a single judge.

- a) Judge A marked the sound as incorrect on the "before" test. The same judge marked the sound as correct on the "after" test. The shift from incorrect to correct indicates improvement.
- b) If the shift had been reversed, a move from

correct to incorrect pronunciation, the sound would have retrogressed.

- c) If the judge had placed his mark in the same square for both tests, the sound would have been tabulated as, remained the same.

Using this method of tabulation, it was possible to determine whether each judge felt that the pronunciation of a given sound for a given boy (1) improved, (2) remained the same, or (3) retrogressed as a result of the pronunciation exercises. These data were analyzed by means of the chi square technique.

The first tabulation considered was that of the individual ratings of each judge for both the experimental and the control groups. By combining the totals of these three individual judgements, the data shown in Figure 1 were obtained.

TABLE I

TOTAL NUMBERS OF SOUNDS JUDGED BY THREE JUDGES TO HAVE IMPROVED, TO HAVE REMAINED THE SAME, AND TO HAVE RETROGRESSED

	Experimental	Control	
Improved	275	124	Chi square equals 50.5 (significant at .001 level)
Remained the same	2381	2233	
Retrogressed	134	163	

Examination of Table I shows clearly that the proportion of improved sounds in the experimental group is greater than that in the control group. This disproportion is significant at the .001 level.⁴ Thus, the experimental group was genuinely superior to the control group in improvement of sound production according to the combined individual ratings of three judges.

2. Agreement of Three Judges: From the master evaluation sheet developed for each boy, which contained the results of six separate judgements, it was possible to determine (1) the number of times the judges were in complete agreement, (2) the number of times the judges were in disagreement, and (3) the specific points on which they agreed or disagreed.

Because the number of sounds judged to have remained the same was very large in both groups, the study of agreement of the judges was confined to the total number of boys and sounds that either improved or retrogressed during the fifteen-day period. When the total number of agreements of the judges were considered for each boy, three possible patterns of movement in pronunciation were detected:

- a) Improvement only: This boy's pronunciation moved in a forward direction only (\rightarrow); the boy improved. He did not retrogress in the pronunciation of a single sound.
- b) Retrogression only: This boy's pronunciation moved in a backward direction only (\leftarrow); the boy

4. Significance of a disproportion at the .001 level indicates that chance sampling factors could produce the observed disproportion only one time in one thousand such experiments if there is no disproportion in the population represented by the sample.

retrogressed. He added errors in pronunciation without improving a single sound.

- c) Mixed: Improvement and Retrogression: The pronunciation of this boy moved in two directions, both forward and backward (\longleftrightarrow). He improved on the pronunciation of one or two sounds, but at the same time he retrogressed in the pronunciation of one or two other sounds.

The judges unanimously agreed that in the experimental group the movement of pronunciation of sounds was confined to two categories: (1) improved only, and (2) retrogressed only. In the control group, however, the judges unanimously agreed that the mixed movement of pronunciation was also evident. Tabulations were made of the unanimous agreement of the three judges concerning (1) the number of sounds, and (2) the number of boys represented in the improved only, mixed, and retrogressed only categories described above. On the basis of this agreement, the data in Tables II and III were obtained.

TABLE II

TOTAL NUMBERS OF SOUNDS JUDGED BY THREE JUDGES TO HAVE IMPROVED ONLY, TO HAVE BOTH IMPROVED AND RETROGRESSED, AND TO HAVE RETROGRESSED ONLY.

Total Number of Sounds Which:	Experimental	Control	
1) Improved only	20	4	Chi square equals 19,0 (Significant at .001 level)
2) Mixed: Improved and Retrogressed	0	7	
3) Retrogressed only	2	5	

Table II shows clearly that the proportion of sounds which were improved in the experimental group is greater than that in the control group. This disproportion is significant at the .001 level. Thus, according to the unanimous agreement of the judges, the experimental group was genuinely superior to the control group in the proportion of sounds judged to have improved.

The information in Table III was obtained by tabulating the unanimous agreement of the judges concerning the number of boys represented in the improvement only, mixed, and retrogressed only categories.

TABLE III

TOTAL NUMBERS OF BOYS JUDGED BY THREE JUDGES TO HAVE IMPROVED ONLY, TO HAVE BOTH IMPROVED AND RETROGRESSED, AND TO HAVE RETROGRESSED ONLY.

Total Number Of Boys That:	Experimental	Control	
1) Improved only	15	4	Chi square equals 9.1 (Significant at .05 level)
2) Mixed: Improved and retrogressed	0	3	
3) Retrogressed only	2	5	

Table III shows clearly that the proportion of boys who improved in the experimental group is greater than that in the

control group. This disproportion is significant at the .05 level.⁵ Thus, according to the unanimous agreement of three judges, the experimental group was genuinely superior to the control group in the proportion of boys judged to have improved.

3. Mean Improvement: In order to determine the average improvement in number of sounds for both groups, the evaluations of the judges were totalled for each boy. The total number of sounds judged to be correct on the first test of a given boy was subtracted from the total number of sounds judged to be correct on his second test. If the given boy had a larger number of correct sounds on the second test than on the first, his score was positive. If a boy had a smaller number of correct sounds on his second test than on his first, his score was negative. From the score of each boy the data in Table IV on page 114 were obtained.

The difference between the means of the experimental and the control groups (Table IV) yields a critical ratio of 4.57 which is significant at better than the .001 level. Thus, chance sampling factors cannot account for the clear superiority of the experimental group in the average number of improved sounds for each boy.

5. Significance of a disproportion at the .05 level indicates that chance sampling factors could produce the observed disproportion only five times in one-hundred such experiments if there is no disproportion in the population represented by the sample.

Sounds	Number of Boys	
	Experimental	Control
+ 14	2	
+ 13	0	
+ 12	1	
+ 11	1	
+ 10	1	
+ 9	1	
+ 8	0	
+ 7	4	1
+ 6	5	0
+ 5	2	1
+ 4	3	0
+ 3	2	4
+ 2	1	5
+ 1	1	3
0	1	2
- 1	4	2
- 2	0	1
- 3	0	2
- 4	1	2
- 5	1	2
- 6		1
- 7		0
- 8		0
- 9		1
- 10		1

TABLE IV
 NUMBERS OF PLUS AND
 MINUS RATINGS FOR
 EACH BOY IN BOTH
 EXPERIMENTAL AND
 CONTROL GROUPS

Mean Improvement	+ 4.71	- .57
Standard Deviation	4.72	4.00

*Although the pronunciation exercises were based on an analysis of Beirut Colloquial Arabic, one of the boys who made improvement on fourteen sounds is from Saudi Arabia.

It must be emphasized that the mean improvement shown in Table IV equals the average improvement of each boy. Therefore, each boy in the experimental group made an average improvement in the pronunciation of approximately five sounds in the fifteen-day period devoted to the teaching experiment. The pronunciation of each boy in the control group, which was untouched by the teaching experiment, appears to have retrogressed to the extent of approximately one-half sound. This small amount of apparent retrogression possibly reflects errors of measurement rather than real losses in ability.

To investigate whether the review sessions appreciably influenced the extent of improvement in the experimental group, the average improvement for boys attending four, three, two, one and none of the extra sessions was computed, and the information shown in Table V was obtained.

TABLE V
AVERAGE IMPROVEMENT FOR BOYS ATTENDING FOUR, THREE,
TWO, ONE OR NONE OF THE EXTRA REVIEW
SESSIONS.

Number of 10 Minute Review Sessions	Average Improvement	Number of Boys
4	+ 5.53	11
3	+ 2.25	4
2	+ 4.40	5
1	+ 4.50	8
0	+ 5.67	3

Table V. shows clearly that the number of review sessions attended is not a significant factor in the average improvement of the experimental group.

Summary: The recorded tests of the experimental and the control groups made both before and after the teaching experiment were evaluated by three judges. The extent of agreement among these judges was measured and found to be substantial and significant. Tables I through V present the data obtained from the chi-square technique of analyzing the responses of the judges. All of the data clearly indicate that the effects of the pronunciation exercises on the experimental group represent considerable improvement. None of the analyses indicate improvement in the control group. During the fifteen-day period between the two recorded tests, each boy in the experimental group made an average gain in the pronunciation of approximately five sounds. During the same fifteen-day period, without any more than the normal amount of help in pronunciation given by the regular classroom teacher during the course of the regular English class, the boys in the control group gave no evidence of improvement.

CONCLUSIONS

This thesis has been devoted to the preparation of simple pronunciation exercises in General American English, which can be integrated easily with the normal English lessons to improve the English pronunciation of Arabic-speaking students of the first or second secondary grade level.

Following the current linguistic approach to the preparation of teaching materials, the writer attempted (1) to develop pronunciation exercises based on a contrastive analysis of the native language of the students (Arabic), and of the language to be learned (English), (2) to teach the exercises in an authentic classroom situation, and (3) to evaluate their effectiveness by statistical means. From the results of this work, described in Chapters I through IV, the following conclusions may be drawn concerning the five specific questions underlying the thesis problem:

1. How can problem sounds be determined accurately?

Sounds which will tend to present problems may be found by making (a) a descriptive analysis of the language to be learned, (b) a similar descriptive analysis of the language of the learner, and (c) a systematic comparison of these two descriptive analyses in order to bring out the similarities and differences of the structural patterns of the two languages.

2. How can these problem sounds best be put into lesson form? Teaching materials should be based on the problems found as a result of the contrastive analysis; they should concentrate on weaknesses. Problem sounds should be introduced with similar and, if possible, familiar sounds. Production of these sounds should be aided by simple, meaningful explanation. The teaching material should provide intensive drill, organized in the most efficient possible way for effective learning and retention.

3. How can these pronunciation lessons be presented in class, as an integral part of the study of English? The pronunciation exercises were integrated with the work of a regular English class for a period of fifteen-days with the aid of carefully designed teaching materials. The exercises were designed with the age and the ability of the students in mind; they progressed from the simple to the complex. In an attempt to eliminate technical explanations, pictures were used to illustrate sound contrasts, Arabic words were used to introduce problem sounds, and a face chart was used to help with important articulations of the tongue that could not be seen by looking at the teacher. The regular classroom teacher, the students who were taught, and the investigator reported that the materials used were accepted with enthusiasm.

4. How can the results of the pronunciation exercises

be tested? Those sounds identified as significant problems by the contrastive analysis are the sounds to be tested. For the purposes of this experiment, the production of significant sounds was tested by forcing the students to utter carefully chosen sentences, both before and after the teaching experiment; all test material was recorded on tape. The evaluations made by three judges determined the effectiveness of the exercises. The results of a pre-test proved that production could not be tested by naming objects shown in pictures due to the limited vocabulary of the students.

5. Will the exercises, based on a contrastive analysis of the two languages, produce improvement? The exercises designed for this experiment definitely did produce improvement. According to the evaluations of the judges, the pronunciation of the experimental group was shown to be genuinely superior to that of the control group at the end of the fifteen-day teaching experiment. Chance sampling factors cannot account for the improvement of the experimental group.

DELIMITATIONS

The conclusions presented above must be considered with the delimitations of this thesis clearly in mind. The scope of this study was strictly confined to the following:

1. The material designed was based on a contrastive analysis of Beirut Colloquial Arabic and General American English.

2. The pronunciation lessons were geared to the age and level of ability common to students of the first or second year secondary school.

3. The exercises concentrated on the correct pronunciation of only segmental phonemes (consonants, vowels and semi-vowels) as they occur in words. The exercises were not concerned with the supra-segmental phonemes such as pitch, stress and juncture.

4. The improvement desired of English pronunciation was limited to the correct or acceptable recognition and production of segmental phonemes as they occur in words rather than word groups or larger discourse.

It is hoped that this thesis will provide a better understanding of the theoretical basis on which effective materials for teaching pronunciation can be developed. It is also hoped that the results obtained by the step-by-step procedures outlined for the development and teaching of the exercises of this experiment will encourage teachers of English to use similar exercises in their classrooms. If such exercises are more widely used the achievement level of Arabic-speaking students, in English pronunciation, may eventually be raised.

APPENDIX A
VOWEL RESIDUE

The vowels of Beirut Colloquial Arabic presented far more difficulty in analysis than the consonants, and resulted in a more simplified list of expected problems than one might anticipate. Several very important questions which were completely unanswered by the analysis, however, remain as important points for further consideration. The items listed as Vowel Residue have been placed in the Appendix, rather than in Chapter II, because they are the result of personal observation and questioning.

1. Are the vowel sounds of Beirut Colloquial Arabic important and essential for comprehension? The vowel sounds of Beirut Colloquial Arabic do not always appear to be important. It is possible that the native Arabic speaker listens for consonants, and that he is able to guess meaning (regardless of the vowels used) from sentence context. Two illustrations may help to clarify this view:

- a) Importance of Consonants: The investigator was interested in identifying the vowel sounds in the Arabic words, /xét/ 'handwriting' and the masculine command, /hét/ 'put'. After repeated attempts by the investigator to pronounce the two words, the informant advised, "I don't care what sound you put in the middle. It's the first sound that's important."

- b) Meaning from Context: The words /xé^l/ 'vinegar', and /xæ^l/ 'uncle', were found in this analysis to be minimal pairs, thus establishing two separate phonemes /e/ and /æ/. When seated at the table for lunch, however, the informant said, /bí^d.dí^l.xæ^l/. No question of meaning arose for the Arabic-speaking person to whom this request was made. The informant was brought vinegar.

2. Is there a standard system of vowel phonemes in Beirut Colloquial Arabic, or are these the result of individual interpretation of a multitude of dialects? The informant used for this analysis was born, raised and schooled in Ras Beirut. Not all of his teachers, class-mates and friends, however, were Beirutis. Some of them, at least, came from other parts of Lebanon and from other Arab countries; they, no doubt, brought their various dialects with them. At home, the informant spoke Arabic with his parents, one of whom was raised in the mountains of Lebanon and the other in Aleppo. The latter has a speaking knowledge of five languages. If the opinion is correct that the consonants and not the vowels of Beirut Colloquial Arabic are important, it would seem that all of the various dialects used by friends, teachers and parents would have had an influence on the final selection of the vowels now used by the informant. It would also seem that a similar set of influences would be at work on others

born, raised and schooled in Ras Beirut. Is it possible, therefore, that there is a truly standard Beirut system of vowels? Quite possibly the specific vowel dialect of an individual living in Ras Beirut may be more accurately defined as his individual interpretation of the combined pronunciations of those with whom he is in close contact, rather than a standard vowel dialect spoken by all within the confines of a specified area.

3. How much influence does Classical Arabic have on Colloquial Arabic pronunciation? References were made in the analysis to the single Arabic word /ʂa^ʔwt/ or /ʂo^ʔwt/ 'voice', in which the phonemes /o/ and /a^w/ were in free variation. When the informant was asked to give the Classical Arabic word for voice, he supplied /ʂa^ʔwt/. This Classical pronunciation is commonly heard to announce the radio broadcast, Voice of the Arabs /ʂa^ʔwt.l.ʔrab/. It is impossible to state, in this work, how much the radio and other contacts with spoken Classical Arabic influence the pronunciation of Beirut Colloquial Arabic.

4. Does the speaking knowledge of one (or more) foreign languages have any influence on the Beirut's pronunciation of Arabic vowels? The informant used for this analysis also speaks English fluently, and is able to understand and to communicate in French. It is felt, moreover,

that a similar ability in at least one of these languages (particularly English) is common to those living in Ras Beirut. The vowel sounds in both of these foreign languages are very important. The limits of this study, however, do not provide for any interpretation of the influence of these languages upon the informant's pronunciation of the Arabic vowels.

The four points listed above represent personal observation and questioning. Answers to these questions were not provided by this limited study. It is felt that the above points may be of importance, however, in working with pronunciation materials.

APPENDIX B
TEACHING MATERIALS

Appendix B contains the teaching materials (described in Chapter III) that were especially designed for this teaching experiment. The materials are presented in the following order:

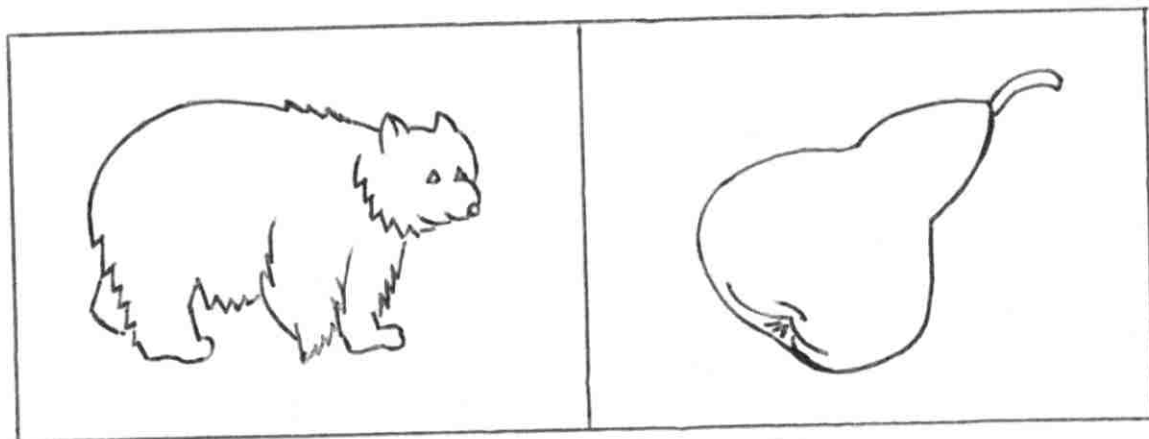
1. Face Chart: The Face Chart was designed to show important articulations of the tongue that could not be seen by watching the teacher or another student. The Face Chart is presented first so that references made to it in the exercises may be fully understood.

2. Pronunciation Lesson Plans: The nine pronunciation lesson plans used in the teaching experiment are given in the order in which they were taught to the students. The reader will note that the language of the exercises is very simple; the teacher speaks directly to the students. As an aid to the understanding of the material presented, directions to the teacher have been written in capital letters and enclosed in parentheses.



LESSON PLAN

TEACHING PRONUNCIATION OF /b/ AND /p/



A. RECOGNITION:

1. Listen while I pronounce the following sentences. Point to the picture which explains the sentence.

This is a pear.
This is a bear.

2. There is only one sound difference between the words pear and bear. Where does that difference occur?
3. The following lists of words are also very much alike. Listen carefully while I pronounce the words. Pay close attention to the first sound in every word.

1.	2.
bear	pear
bit	pit
bet	pet
bark	park
bill	pill
bat	pat
bomb	palm

4. This time I will give you a word from either list. I will not read the words in order. Listen very carefully. When I point to you, tell which list the word is from by holding up one or two fingers.

B. PRODUCTION:

1. /b/: The words in column 1 are easy for you because they all begin with a sound you have in Arabic. What is the Arabic word for house? [béyt^h] What is the Arabic word for window? [šib.beyk^h] Whisper the Arabic word for house, and think how you make the first sound.
- Close your lips so that no breath or sound can come out.
 - Push your lips open so that your breath comes out suddenly.
 - As you let your breath out, you can hear a hum sound. You can feel the sound you are making by putting your thumb and first finger on your throat (vocal cords) like this - (ILLUSTRATE)
2. /p/: Did you know that you also have some words in Arabic that begin with almost the same sound as the words in column 2? I will give you some words in English. I want you to translate them into Arabic. Remember, you are speaking. Try not to think of spelling. Think only of the way you say the first sound of each word. What is the Arabic word for she eats? [ptéy.kul] What is the name of the village after Alley on the road to Damascus? [phám.dun] How do you say good-bye to a girl in Arabic? (There are two correct answers for this question. Be sure that [pxát'fíyk^h] is given by someone.) Whisper the Arabic word for good-bye and think how you make the sound that begins the word.
- Close your lips so that no breath or sound can come out.
 - Pretend that you are holding your breath to swim under water.
 - Push your lips open so that your breath comes out suddenly, just as if you were coming to the top of the water after a long swim.
 - A little "puff" of breath will come out, but no sound.
 - If you are making the sound correctly, you should not be able to feel this sound in your throat.
 - Let's try to make the sound again. Remember, think about swimming under water. (REPEAT INSTRUCTIONS ABOVE, BRIEFLY.)

3. /b/ /p/ These two sounds are like "sisters" in English. The only difference between the two sounds is that the /p/ or "puff" sound takes more breath and makes no sound.
4. Try this little test on yourself to see if you are making the "puff" sound correctly.
 - a. Pick up the small piece of paper I have given you with your thumb and first finger.
(ILLUSTRATE)
 - b. Hold the paper about two inches from your mouth, and make the sound.
 - c. Push the breath from your mouth strongly.
 - d. Did your paper move?
 - e. Now say the words bear and pear in a whisper. Did the paper move for the word bear? It shouldn't.
 - f. Move the paper farther from your mouth and try the test again.

C. PRACTICE IN PRODUCTION:

1. The following lists of words have /b/ and the "puff" sounds at the end. Listen while I pronounce the words. Whisper the words after me. Test yourself with a paper in front of your mouth to be sure that you are making the "puff" sound for the words in column 2.

1.	2.
cub	cup
cob	cop
tab	tap
robe	rope
rib	rip
Abe	ape
2. These words have the "puff" sound in the middle. They are difficult to say correctly. Let's see who can move the paper with the first try.

1.	2.
nibble	nipple
ribbing	ripping
stable	staple
3. When I call your name, pronounce the words in pairs. (cob-cop) The rest of the class will listen very carefully. If you hear a mistake, don't speak. Show me that you hear a mistake by raising your left hand.

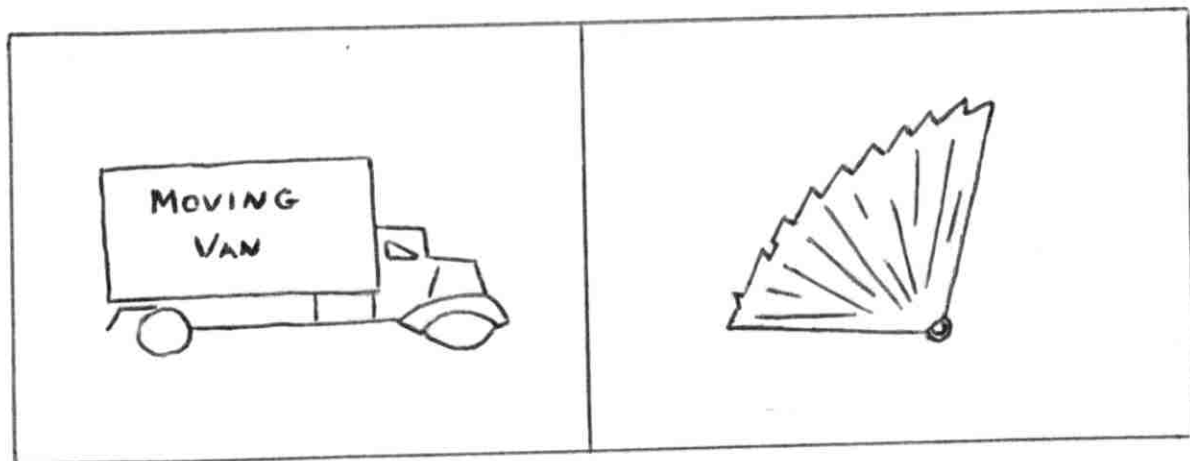
4. Pronounce any word from the two columns when I call your name. Let another student tell which column the word is from by holding up one or two fingers.
5. Sentences: Pronounce these sentences after me. Many of the words contain the /b/ sound as in the Arabic word, house.
- Betty bought a new bath robe.
 - The blue book is in the bedroom.
 - Ben nibbled on a corn cob.
 - Bob beat the robber.
 - The dog bit both boys.
 - Boys buy books, boats, birds, bells and bicycles.
6. Sentences: Pronounce these sentences after me. Many of the words contain the "puff" /p/ sound that begins the Arabic word, she eats.
- Please staple these papers.
 - Put the rope on top of the map.
 - The puppy played with the pretty pink lamp.
 - Peter's pencil is sharp.
 - People peel pears and apples.
 - Polly is happy with her new cap.
7. Sentences: These sentences are more difficult. Each sentence contains both the /b/ and the /p/ sounds. Be sure to push your breath out for the "puff" sounds. It is this little puff of breath that helps us to know the difference between words like bear and pear.
- The baby dropped his cup.
 - Put the puppy in the stable.
 - The poor boy has a pack on his back.
 - Bill has a pretty blue pen and pencil.
 - How many pieces of paper did Pete buy?
 - Did you practice the poems?
8. Conversation: I will ask you some simple questions. Answer each question in a complete sentence. Be careful! Your answers will **have both the /b/ and the /p/ sound** in them.
- | | |
|---------------------------------------|--------------------------------|
| a. What is this? | a. It's a pen. |
| b. What is that? | b. It's a piece of paper. |
| c. Where do people keep their money? | c. In their pockets or purses. |
| d. Where do you write your exercises? | d. In my copybook. |

- e. Why do we go to a mosque or a church?
- f. Who catches thieves?
- g. What does a poet write.

- e. We go there to pray.
- f. The police catch thieves.
- g. He writes poetry.

LESSON PLAN

TEACHING PRONUNCIATION OF /f/ AND /v/



A. RECOGNITION:

1. Listen while I pronounce the following sentences. Point to the picture which describes each sentence.

This is a van.

This is a fan.

2. There is only one sound difference between the words fan and van. Where does that difference occur in the words?
3. The following lists of words are also very much alike. Listen carefully while I pronounce the words for you. Pay close attention to the first sound of every word.

1.

fast
few
fine
fairy
feel

2.

vast
view
vine
very
veal

4. This time I will give you a word from either list. I will not read the words in order. Listen very carefully. When I point to you, tell which list the word is from by holding up one or two fingers. (USE SAME DRILL AFTER No. 5 ALSO)
5. These two lists of words contain the /f/ and /v/ sounds at the end. Listen while I pronounce the words.

1.	2.
half	have
proof	prove
safe	save
thief	thieve
belief	believe
fife	five
surf	serve

B. PRODUCTION:

1. /f/ The sound that begins and ends the words in column 1 of the two word lists should be very easy for you. You have a sound very much like it in Arabic. What is the Arabic word for cup? [fīn.žān] What is the Arabic word for copybook? [dāf.tēf] What is the Arabic word for lamb? [xā.fuf] Say the Arabic word for cup in a whisper and think about the sound. I will help you to understand what you are doing to make the sound.
 - a. Put your lower lip lightly against your upper front teeth. (LIKE THIS)
 - b. Push your breath between the front teeth and the lips.
 - c. Listen for the "hiss" sound as your breath pushes through your lips.
2. /v/ I could not find an example of the sound that begins and ends the words in column 2 of the word lists in an Arabic word, but the sound should not be very difficult for you to make.
 - a. Put your lower lip lightly against your upper front teeth as for the /f/ sound.
 - b. Push your breath against your lower front teeth and lower lip and make a hum sound. (DO NOT PUSH THE BREATH BETWEEN YOUR TEETH AS FOR /f/.)
 - c. You can feel your lips move as your breath hits your lower teeth, if you put one finger on your lips like this - (ILLUSTRATE).

3. /f/ /v/ These two sounds are also like "sisters" in English. The only difference between the two sounds is the same difference we found between /b/ and /p/. Do you remember what that difference is? That's right! /f/ is a breath sound like /p/. /v/ is a voice or hum sound like /b/.
4. Try these two little tests to see if you are making the /v/ sound correctly.
 - a. Make the /v/ sound and put your fingers lightly against your lips. Your lips will move a little.
 - b. Make the /v/ sound and put your thumb and first finger on your throat like this. You will feel a movement in your throat just as you did for /b/.

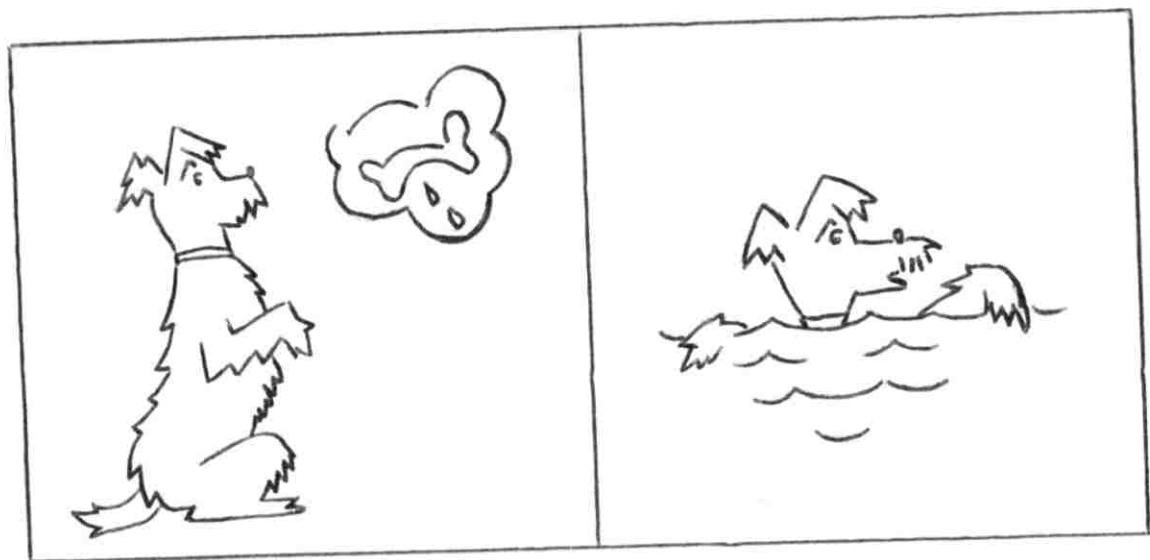
C. PRACTICE IN PRODUCTION:

1. Let's look at the two word lists again. When your name is called, read all of the words in the list that I point to. All of us will listen carefully. If we hear a mistake, we will raise our left hands.
2. Pronounce all of the words in column 2. Be very sure that you are making a hum sound for the first sound of each word.
3. When I point to you, read a word from either list. The class will tell which list your word is from by holding up one or two fingers.
4. Read the words in pairs (fan-van) as quickly and as correctly as you can, when your name is called. Remember! Left hands for mistakes!
5. Sentences: Listen while I pronounce these sentences. Whisper each sentence after me. Many of the words contain the /f/ sound that begins the Arabic word for cup.
 - a. The thief robbed the safe.
 - b. Half of the film was funny.
 - c. Father often plays his fife.
 - d. Farid feels fine.
 - e. Four fat farmers found fifty figs in a field.

6. Sentences: Pronounce these sentences after me. Most of the words contain the /v/ sound. Be sure to make a hum when you pronounce this sound. Check your pronunciation by touching your lips or your throat.
- I have twelve lovely vases.
 - The servant put the veal in the oven.
 - Several boys leave school at seven every evening.
 - Thieves believe their lives are bad.
7. Sentences: These sentences are much more difficult. They have both the /f/ and the /v/ sounds mixed in them. Pronounce each sentence very carefully after me. Remember! The sound that begins the Arabic word cup is a _____ sound. (STUDENTS SHOULD BE ABLE TO SUPPLY THE WORD "BREATH") The /v/ sound that begins the English word van is a voice or hum sound.
- I have solved half of the problems.
 - Few people have a view of the sea from their flats.
 - Paul's father read a very funny fairy story.
 - We have fifty-seven live fish in a big pond.
 - Fred often telephones several friends in the evening.
8. Conversation: I will ask you some very simple questions. Answer each question in a complete sentence. Your answers will have both the /f/ and the /v/ sounds in them.
- | | |
|--------------------------------------|---------------------------------------|
| a. What do we put flowers in? | a. We put them in a vase. |
| b. What should we do with our money? | b. We should save it. |
| c. Do grapes grow on trees or vines? | c. They grow on vines. |
| d. What do we call men who steal? | d. We call them thieves. |
| e. How many books are on the table? | e. There are five books on the table. |

LESSON PLAN

TEACHING PRONUNCIATION OF /θ/ AND /s/



A. RECOGNITION:

1. Listen while I pronounce these sentences. Point to the picture which shows the meaning of each sentence.

The dog is sinking.
The dog is thinking.

2. Listen to these two words again: sinking - thinking. Only the first sound of each word is different. Does this one sound make much difference in the meaning of the sentences? What will happen if we mix these two sounds when we are speaking?
3. These words are very much like sink and think. Listen carefully while I pronounce the words for you. Try to hear the sound difference.

1.	2.
sink	think
sank	thank
sin	thin
sought	thought
some	thumb
pass	path
miss	myth

4. You must listen very carefully this time. I will choose a word from either column and ask you which column the word is from. Show the number of the column by holding up one or two fingers.

B. PRODUCTION:

1. /s/ The words in column 1 are easy for you because the /s/ sound is very much like a sound you have in Arabic. What is the Arabic word for rug? [siž.žéy.diy] What is the Arabic word for sugar? [sík.kàř] Whisper the Arabic word for rug, and think how you make the sound that begins the word.
 - a. You put your upper and lower front teeth together.
 - b. Your tongue tip is just behind your teeth.
 - c. You push your breath out through your teeth and make a hissing sound.
2. /θ/ The words in column 2 should not be difficult for you because you also have this sound, but in "high" Arabic. How do you say secondary school in Arabic? (ASK SEVERAL BOYS TO GIVE THE WORD. LISTEN FOR THE COLLOQUIAL SUBSTITUTE OF /s/ for /θ/. IF IT OCCURS, USE THIS LATER TO POINT OUT REASON FOR CONFUSION OF SOUNDS IN ENGLISH.) Say the Arabic word for secondary to yourselves and think about the way you make the first sound.
 - a. You put your tongue between your teeth.
 - b. You push your breath over the top of your tongue and out your lips.
 - c. Your lips are rounded a little so that your breath does not go out the sides of your mouth.

C. PRACTICE IN PRODUCTION:

1. Look at the two lists of words again. Listen while I pronounce the words. Whisper the words after me.
2. When I call your name, pronounce the words in pairs. (sink-think) Use left hands, if you hear mistakes.
3. Pronounce any word from the two columns when your name is called. The class will tell which column the word is from by holding up one or two fingers.

4. I have given you some words with the /θ/ sound. Can you think of any other English words that have this sound?
5. Words that end with the sounds /θs/ are very difficult to pronounce. Many people drop one sound to make a word easier to say.
 - a. Look at this word --- months. (USE CHART)
 - b. Listen to this word as I pronounce it. /mons/
 - c. What sound was dropped out?
 - d. What sound ended the word?

Practice saying this word without the /θ/ sound. Pretend that it is spelled mon -- s. Be sure to end the word with the /s/ sound.

6. Sentences: Pronounce these sentences after me. Many of the words contain the /s/ sound as in the Arabic word for sugar. Are your teeth close together or apart when you make this sound? Where is your tongue?
 - a. Students study at home and at school.
 - b. Salim saw lots of nice white snow in Sweden.
 - c. A nurse doesn't always work in a hospital.
 - d. My sister was absent yesterday.
 - e. Some secretaries do not keep secrets.
 - f. Don't spill the sugar or the salt on yourselves.
7. Sentences: Pronounce these sentences after me. Many of the words contain the /θ/ sound as in the Arabic word for secondary. Remember! When you make this sound, your tongue is between your teeth.
 - a. His teeth were pulled out last month.
 - b. Don't throw anything through the window.
 - c. Thirty-three boys had toothaches on Thursday.
 - d. The pretty baby put her thumb in her mouth.
 - e. I thought I heard thunder while I was in the theater.
 - f. Thank you for the birthday present.
8. Sentences: These sentences are more difficult. The sounds /s/ and /θ/ are mixed in every sentence. Pronounce these sentences carefully.
 - a. Selma has something on her thumb.
 - b. The sea-shore runs north and south.
 - c. We seldom pass a small path.
 - d. The mouse put a piece of cheese in its mouth.
 - e. Thank you for the toothpaste.
 - f. The nurse saw thirty-six sick children.

9. Conversation: I will ask you some simple questions. Answer each question in a complete sentence. Be careful! Your answers will have both the /s/ and the /θ/ sound in them.

- | | |
|---|--|
| a. Where are your teeth? | a. They're in my mouth. |
| b. How many months are there in a year? | b. There are twelve. |
| c. Is your book thick or thin? | c. It's thick. |
| d. What is this? | d. It's your thumb. |
| e. How many boys are in this class? | e. There are thirty-three. |
| f. What is the past tense of think? | f. The past tense is thought. |
| g. What do we call a very small road? | g. We call it a path. |
| h. What do we use to brush our teeth? | h. We use a toothbrush and toothpaste. |

LESSON PLAN

TEACHING PRONUNCIATION OF /z/ AND /ʒ/

A. RECOGNITION:

1. I don't have pictures to help you with the two sounds that we are going to study today. But, I think the sounds will be easy for you because they are "sisters" to the two sounds that we studied yesterday.
2. Look at these two lists of words. Listen carefully while I pronounce the words for you. We are interested in the sounds that end the words in the two columns. (THE WORDS ARE DIFFICULT BECAUSE MINIMAL PAIRS FOR THESE SOUNDS ARE DIFFICULT TO FIND. EXPLAIN MEANINGS VERY SIMPLY.)

1.	2.
breeze	breathe
bays	bathe
close	clothe
lays	lathe
she's	seethe
ties	tithe

3. This time I will read a word from either of the two columns. Show which column the word is from by holding up one or two fingers.

B. PRODUCTION:

1. /z/ The sound that ends the words in column 1 is very much like a sound you have in Arabic. What is the Arabic word for butter? [zib.diy] What is the Arabic word for handbag? (HOLD UP HANDBAG) [ʒiz.deyn] What is the Arabic word for rice? [ʕizz] Whisper the Arabic word for butter. Think about the first sound. I will help you to understand what you are doing to make this sound.
 - a. You put your upper and lower front teeth together. (ILLUSTRATE)
 - b. Your tongue tip is just behind your teeth. (POINT TO FACE CHART)
 - c. You push your breath against your teeth and add the "hum" sound.
2. /ð/ The sound that ends the words in column 2 should not be difficult for you. You also have a sound very much like this one, but in "high" Arabic. What is the Arabic word for if, meaning possible? Say, in Arabic: If I study, I will succeed. (ASK SEVERAL BOYS TO GIVE THE WORD IF, IT IS EXPECTED THAT SOME WILL GIVE THE CLASSICAL [ʔiðə], AND SOME THE COLLOQUIAL [ʔizə]. THE SUBSTITUTION OF /z/ FOR /ð/ IS IMPORTANT. IF IT OCCURS, USE THIS LATER TO POINT OUT THE REASON FOR CONFUSION OF THE TWO SOUNDS IN ENGLISH.) Say the Arabic word for if, as (boy's name) did. (ASK ONE BOY TO REPEAT THE WORD, USING THE CLASSICAL [ʔiðə/]) Think about the middle sound. I will help you to understand what you are doing to make this sound.
 - a. Your mouth is open just a little.
 - b. Your tongue is between your teeth as for the /θ/ sound. (ILLUSTRATE)
 - c. You push your breath against your tongue and your upper front teeth.
 - d. As your breath come out, you add the "hum" sound.
3. Both of these new sounds are "hummed". The important difference between the /z/ and the /ð/ is the position of your tongue. For the /z/ sound your tongue is where?

That's right! It's behind your teeth. Where is your tongue for the /ð/ sound? Try to say these two sounds one after the other: /z-ð, z-ð, z-ð/ (TEACHER MUST ILLUSTRATE USING A GREAT DEAL OF EXAGGERATION.)

C. PRACTICE IN PRODUCTION:

1. Let's look at the two lists of words again. When I call your name, read all of the words in column 1. The rest of us will listen for mistakes. If we hear a mistake, we will raise our left hands.
2. Read all of the words in column 2.
3. Choose a word from either list, and pronounce it carefully. The class will tell you which list your word is from by holding up one or two fingers.
4. When your name is called, pronounce the words in pairs (breeze-breathe). We will raise our left hands if we hear a mistake.
5. Sentences: These sentences contain both of our new sounds: /z/ and /ð/. Listen very carefully while I pronounce these sentences for you. Whisper each sentence after me.
 - a. This is my father's feather.
 - b. The boy lives with his father, mother and brother.
 - c. Those mothers are buying clothes.
 - d. My cousin came to visit on Thursday.
 - e. There are people who love others more than themselves.
6. Sentences: When the sounds /z/ and /ð/ come together in two small words, they are very difficult to pronounce. Here are the beginning words of six kinds of questions you ask very often in English. Listen carefully while I pronounce these words. Whisper each set after me. Think about your tongue. Be sure that you are making both the /z/ and the /ð/ sound clearly. (THIS EXERCISE SHOULD BE CHALLENGING. VARY THE METHOD OF DRILL IN ANY WAY UNTIL ALL HAVE HAD A CHANCE TO PRACTICE.)
 - a. Has the _____?
 - b. Was the _____?
 - c. Does this _____?

- d. Is that _____?
- e. Has there _____?
- f. Was that _____?

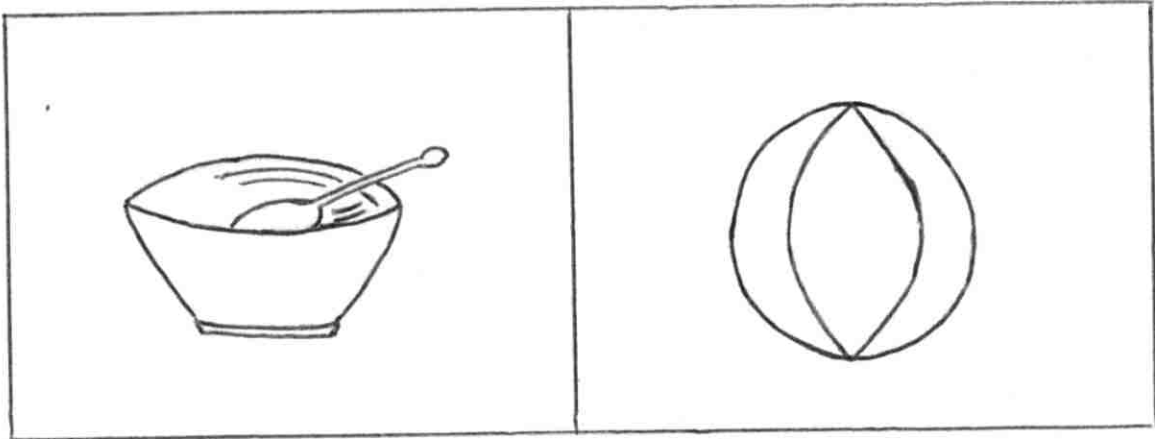
D. PRACTICE IN PRODUCTION OF FOUR SOUNDS:

1. I told you earlier that these two sounds are "sisters" to the sounds that we studied yesterday. Let's see if we can find out in what ways the four sounds are the same or different. (STUDENTS SHOULD BE ABLE TO SUPPLY THE INFORMATION LISTED BELOW. IF THEY SEEM READY, CHANGE THESE EXPLANATIONS TO QUESTIONS. ASK STUDENTS TO SUPPLY THE ANSWERS.)
 - a. Our new sound /ō/ is made in exactly the same way as the sound that begins the word think /θ/. The important difference is that our new sound /ō/ is "hummed". The /θ/ in think is a breath sound.
 - b. Our new sound /z/ is made in exactly the same way as the sound that begins the word sink /s/. The important difference between them is that our new sound /z/ is "hummed". The /s/ is a breath sound.

2. Sentences: Instead of asking you questions today, I have a much more difficult exercise. The four sounds /s-θ/ and /z-ō/ are not at all easy to pronounce when they are mixed together in sentences. Listen carefully while I pronounce these sentences for you. The sentences contain the four sounds we have been studying. Whisper each sentence after me. Later I will ask you to repeat them alone. Be careful! Think about what you are saying. Try not to let me catch you making a mistake.
 - a. Please trace these things.
 - b. They have six-thousand apples in their fields.
 - c. Does this river flow north and south?
 - d. Some things are easier to do than others.
 - e. My thumb is neither thick nor thin.
 - f. They thought the zoo was small.
 - g. Those small boys think that they can swim.

LESSON PLAN

TEACHING PRONUNCIATION OF /O/ AND /ɔ/



A. RECOGNITION:

1. Listen while I pronounce these two sentences. Point to the picture which each sentence describes.

This is a ball.
This is a bowl.

2. Listen to the two words again: ball - bowl. There is only one sound difference in the words ball and bowl. This one sound difference is the most important that we will study. When we mix these two vowel sounds it is very difficult for people to understand what we are saying.
3. The following words are very much like ball and bowl. You must listen very carefully while I pronounce these words. Try hard to hear the sound difference. (THE SOUNDS IN COLUMN 1 ARE UNDERLINED IN BLUE TO MATCH THE BLUE BOWL. THE SOUNDS IN COLUMN 2 ARE UNDERLINED IN RED TO MATCH THE RED BALL.)

1.	2.
<u>bowl</u>	<u>ball</u>
<u>coal</u>	<u>call</u>
<u>pole</u>	<u>Paul</u>

coat	caught
lone	lawn
low	law
Joe	jaw

4. It is not easy to tell these sounds apart, but if you try hard you will be able to hear a difference. Listen to me again. I will pronounce the words in pairs (bowl-ball) to help you hear the difference. (POINT TO PAIRS AS THEY ARE PRONOUNCED.)
5. You must pay very close attention this time. I will pronounce a word from either column. Listen very carefully. If you know which column the word is from, hold up one or two fingers.

B. PRODUCTION:

1. /o/ The words in column 1 are easy for you because the /o/ sound is very much like a sound you have in Arabic. What is the Arabic word for voice? [ʃo^wt^h] What is the Arabic word for he wants? [béd.dó^w] How do you command a boy, in Arabic, to study? Study! [dʃó^ws] (BE SURE TO ASK SEVERAL BOYS THE TRANSLATION FOR EACH WORD OR PHRASE. WHEN THE /o/ SOUND IS FOUND, HAVE IT REPEATED. /u/ WILL PROBABLY ALSO BE GIVEN. TRY TO IGNORE IT, AND EMPHASIZE THE /o/.)

Some of you may not use the /o/ sound in Arabic. You already know how to make the /o/ sound correctly in English, however. This sound is the name of an English letter, and you practice it every time you spell words out loud. Spell the English word only. Now say the word. You see, you know this sound very well.

Whisper the Arabic command Study! and think about the /o/ sound.

- a. You round your lips to look like a circle.
 - b. The tip of your tongue touches the back part of your lower front teeth.
 - c. The rest of your tongue (except the tip) is raised to the center or the middle of your mouth.
2. /o/ The words in column 2 are probably very difficult for you because you do not have this sound in Arabic. The vowel sound in the English word ball is difficult for you to hear, but it is not difficult to make if you practice correctly.

Because you cannot see my tongue, I have brought a "friend" (POINT TO FACE CHART OF A BOY'S HEAD) to help you with this sound. Follow the directions I give you, and try to make this sound. Look carefully at "our friend's" tongue, so that you will know where to put your own. The blue tongue is the position for the /o/ sound. The red tongue shows the position for the new sound /o/. Watch my mouth, and try to follow the instructions I give you.

- a. Make your lips round as for /o/, but don't put them too close together. (LIKE THIS-- GIVE HAND MIRRORS TO STUDENTS WHO HAVE TROUBLE WITH THE POSITION.)
- b. The tip of your tongue is behind your lower front teeth, as for /o/.
- c. The back of your tongue is raised a little more than for /o/.
- d. As you start to make a sound, drop your jaw, but keep your lips round--like this.
- e. Be sure to keep the back of the tongue raised.
- f. (REPEAT THESE INSTRUCTIONS USING FACE CHART AS GUIDE. TRY TO SHOW, RATHER THAN EXPLAIN, IMPORTANT POSITIONS.)

C. PRACTICE IN PRODUCTION:

1. Let's go back to our two lists of words. I will pronounce all of the words in column 1. Whisper each word after me. Remember, you have this sound in Arabic. It is like the /o/ sound in what Arabic word? (Students supply answer, simply to keep attention.)
2. Now let's try the words in column 2. Whisper each word after me. I will walk around the room in order to hear you. Don't be afraid. If you are making a mistake, I want to help you.
3. Listen while I pronounce the words in pairs (bowl-ball). Repeat each pair, quietly, after me.
4. One boy will repeat all of the words in column 2, containing the /o/ sound. Who thinks he is ready to pronounce this list? (POSSIBLY BEST TO CALL ON VOLUNTEERS AT FIRST. LATER, SHY STUDENTS MUST BE ENCOURAGED TO TRY ALSO.) Remember, if you hear a mistake, raise your left hand.

5. Most of you did a very good job pronouncing the words in column 2. Is there anyone who thinks he is ready to try to pronounce these words in pairs? (USE VOLUNTEERS AT FIRST. LATER CHOOSE STUDENTS WHO APPEAR READY, BUT HAVE NOT RAISED THEIR HAND. THIS MUST BE DONE FAST IN AN ATTEMPT TO LET EACH BOY IN THE CLASS RECITE. AS INDIVIDUAL MISTAKES ARE FOUND, THE TEACHER MUST GIVE IMMEDIATE HELP. DRAW ATTENTION TO TONGUE POSITION, OR GIVE A HAND MIRROR TO HELP WITH POSITION OF LIPS AND JAW.)
6. When I call your name, choose any word from the two lists and pronounce it correctly. The class will tell which list the word is from by holding up one or two fingers. This is a good test for each of you. If the class doesn't know which column your word is from, you must practice making each sound to yourself.
7. Sentences: Pronounce these sentences after me. The underlined parts of the words contain the /o/ sound as in the Arabic command, study! All of these words are underlined in blue, to help you remember the sound in bowl. What do our lips look like when we make this sound? Should your tongue be high, low or in the middle of your mouth?
- The bowl is old.
 - I don't know the boy.
 - The piano is low for Moe.
 - My father owns a goat.
 - Don't write notes!
8. Sentences: Pronounce these sentences after me. The underlined parts of the words contain the /o/ sound as in the English word ball. The sounds are underlined in red to help you remember the sound in ball. What shape do you want your lips to be? What do you do with your jaw? Where is your tongue?
- He caught the ball.
 - Paul called the dog.
 - The lawn is always green in August.
 - A tall lawyer is often in the law office.
 - My teacher taught me to spell daughter.
 - All of the small dogs in the hall belong to Paul.

9. Sentences: These sentences are much more difficult. The two sounds /o/ and /o/ are mixed in every sentence. Pronounce each sentence carefully after me. The sounds underlined in red are the /o/ as in ball.
- a. Joe threw a small ball into a bowl.
 - b. You ought to study, but you don't.
 - c. I thought I caught a cold in that awful snow.
 - d. When does a cat close its claws?
 - e. That old dog always goes home with Paul.
 - f. I caught my coat in a hole in the hall wall.
10. Conversation: I will ask you some simple questions. Answer each question in a complete sentence. Your answers will contain both the /o/ and the /o/ sounds.
- | | |
|---|--------------------------------------|
| a. What is the past tense of think? | a. The past tense is thought. |
| b. Is it hot or cold in the winter? | b. It's cold. |
| c. What does a lawyer study? | c. He studies law. |
| d. What do you do in Art class? | d. We draw. |
| e. How many coats are in the hall? | e. There are four coats in the hall. |
| f. Did Paul give you a pole? | f. Yes, Paul gave me a pole. |
| g. How much does a house on the coast cost? | g. A house on the coast costs --- |

LESSON PLAN

TEACHING PRONUNCIATION OF /k/ AND /g/

A. RECOGNITION:

1. I don't have any pictures to help you with the two sounds we are going to study today. Will one of you please pick up your school bag and come to the front of the room? (WHEN THE BOY COMES TO THE FRONT OF THE ROOM, TURN HIM SO THAT HIS BACK IS TO THE CLASS. PLACE HIS SCHOOL BAG ON THE TEACHER'S TABLE OR THE CHALK TRAY.) I will give you two sentences about (boy's name). Point to him or to the table to show me what each sentence describes.

This is Hani's back.

This is Hani's bag.

2. There is only one sound difference between the words back and bag. Where does this difference occur in the words? What will happen if we mix these two sounds when we are speaking?
3. These two lists of words are very much like bag and back. Listen while I pronounce the words for you. (POINT TO CHART AS FOLLOWING INFORMATION IS GIVEN.) The sounds you are listening for begin the first two words. The sounds come in the middle of the next two words, and at the end of the last three words.

1.	2.
class	glass
came	game
racks	rags
locker	logger
back	bag
lock	log
pick	pig

4. This time I will read a word from either of the two columns. Tell me which column each word is from by holding up one or two fingers.

B. PRODUCTION:

1. /k/ The sound that begins the first two sounds in column 1 (POINT TO WORDS) should be very easy for you. You have a sound very much like this one in Arabic. What is the Arabic word for chair? [kiř.siy] What is the Arabic word for bookshop? [mek.tə.biy] What is the Arabic word for window? [řib.beyk^h] Whisper the Arabic word for chair and think about the first sound. I will help you to understand what you are doing to make this sound, with "our friend's" help. (POINT TO FACE CHART, PREPARE COLORED TONGUES)
- Your lips are open just a little.
 - Your tongue tip is just behind your lower front teeth. (POINT TO CHART)
 - When you are ready to make the sound, you raise the back of your tongue, like this (POINT TO POSITION SHOWN ON FACE CHART.)
 - Your breath pushes against your tongue strongly, and your tongue drops in the back. (USE CHART.)
2. /g/ Did you know that you also have the sound that begins the first words in column 2 in Arabic? What is the Arabic word for cigarette? [siy.gāř.ə] How do you say in Arabic, insure your shop? [sā^w.giř] (IT MAY BE NECESSARY TO EXPLAIN INSURE BRIEFLY.) Whisper the Arabic word cigarette and think about the middle sound. "Our friend" and I will help you to understand how you make this sound.
- Your lips are open just a little as for the /k/ sound.
 - Your tongue tip touches your lower bottom teeth, like this (POINT TO CHART).

- c. The back of your tongue is raised and touches the top of your mouth right here. (POINT TO CHART)
 - d. As you push your tongue down to make the sound, you also push right here (POINT TO CHART) to make a hum sound.
 - e. Not much breath comes out of your mouth.
3. /k/ /g/ These two sounds are also like "sisters" in English. The only difference between them is the same difference we found between /b/ and /p/. Do you remember what that difference is? That's right! /k/ is a breath sound, like /p/. /g/ is a hum sound, like /b/.
4. Try these two little tests to see if you are making the two sounds correctly.
- a. Hold the back of your hand about three inches away from your mouth (ILLUSTRATE) and say the word class. Did you feel the breath touch your hand as you made the first sound of the word?
 - b. Put your thumb and first finger on your throat, like this. (ILLUSTRATE) Say the word glass. Did you feel the hum sound as you made the first sound of the word?

C. PRACTICE IN PRODUCTION:

1. Let's look at the two word lists again. When I call your name, read all of the words in the list that I point to.
2. Pronounce all of the words in column 2. Be very sure to make the hum sound /g/. If the rest of us hear a mistake, we will hold up our left hands.
3. When I call your name, read a word from either list. The class will tell you which list the word is from by holding up one or two fingers.
4. Pronounce the words in pairs (class-glass) as quickly and as correctly as you can, when your name is called.
5. Sentences: Listen while I pronounce each sentence. Whisper each sentence after me. All of these sentences contain the /k/ sound. Be sure to push your breath out strongly when you make this sound.
 - a. Kay opened her book.
 - b. A baker bakes cakes and cookies.

- c. Do you think you can come to the skating rink?
- d. Jack picked up his books and put them in his locker.
- e. You can't cut a rock with a fork.

6. Sentences: Listen carefully while I pronounce each sentence. Whisper each sentence after me. All of these sentences contain the /g/ sound as in the Arabic word insure. Remember, this sound makes a hum. Put your thumb and first finger on your throat to be sure that you can feel the hum sound.

- a. A begger begs for money.
- b. Gay gave two pieces of gold to her girl friend.
- c. I saw a big pig near a log.
- d. The girl was glad to get a house with a garden.
- e. Please go to the garden and give the dog a good bath.

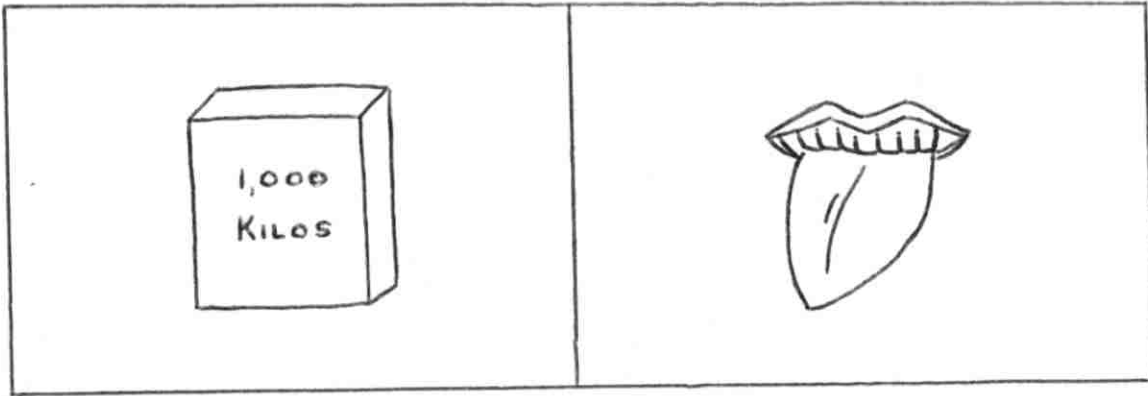
7. Sentences: These sentences contain both the /k/ and the /g/ sound. Listen carefully while I pronounce each sentence. Whisper each sentence after me.

- a. That girl brought a glass to class.
- b. A baker begins to bake bread at six o'clock.
- c. We put the rags on racks in the corner.
- d. Did you ever try to pick up a pig?
- e. The dog carried a big leather bag on its back.

8. Conversation: Listen to these very simple questions. When I call your name, answer your question in a complete sentence. There will be both /k/ and /g/ sounds in your answers.

- | | |
|--|-----------------------------------|
| a. What is the opposite of front? | a. Back is the opposite of front. |
| b. What do you carry your school books in? | b. I carry them in my school bag. |
| c. What do we call people who beg for money? | c. We call them beggers. |
| d. What do chickens lay? | d. Chickens lay eggs. |

LESSON PLAN
TEACHING PRONUNCIATION OF /n/ AND /ŋ/



A. RECOGNITION:

1. Listen while I pronounce these sentences. Point to the picture which shows the meaning of each sentence.

This is a tongue.
This is a ton.

2. There is only one sound that makes these words different. Listen while I say the words again. Can you hear the sound difference? Where does it occur in the words? At the beginning? In the middle? At the end?
3. These words are very much like tongue and ton. There is only one sound that is different. At what part of the word are you going to listen to hear the different sound? That's right! Listen carefully as I pronounce all of the words in column 1, and then all of the words in column 2. Be very sure to think about the last sound of each words.

1.	2.
ton	tongue
thin	thing
din	ding
pan	pang

ran	rang
pin	ping
sin	sing

4. Now listen carefully as I pronounce the words in pairs. Try very hard to hear the sound that ends the words in column 2.
5. Your ears must be very sharp this time. I will pronounce a word from either column. When I point to you, tell which column the word is from by holding up one or two fingers.

B. PRODUCTION:

1. /n/ The sound that ends the words in column 1 should be very easy for you because the /n/ sound is very much like a sound you have in Arabic. What is the name of the Arabic letter n? [nun] What is the Arabic word for sleepy? [nā.sən] What is the Arabic word for cup? [fīn.zən] Whisper the Arabic word for sleepy, and think about how you make the sound that begins the word. (USE FACE CHART)
 - a. Your mouth is open just a little and your lips are pushed forward a little.
 - b. Your tongue is just behind your upper front teeth. (LOOK AT "OUR FRIEND.")
 - c. Your tongue is like a wall, (ILLUSTRATE WITH CHART AND HAND) and your breath is forced through your nose.
 - d. The sound that you make is a hum.

Would you like to test yourself to be sure that you are making this sound correctly?

- a. Take a deep breath and make a long /n/ sound, as in the Arabic word sleepy.
- b. When I raise my hand, hold your nose with your thumb and first finger, like this -- (ILLUSTRATE).
- c. The sound will stop until you drop your tongue and let your breath pass through your lips, or until you let go of your nose.
- d. If the sound did not stop when you held your nose it means that your tongue was not a very strong wall. Look at "our friend" (face chart) to be sure that your tongue is in the right place. Do not move your tongue until you want to stop practicing the sound.

2. /ʔ/ The sound that ends the words in column 2 is much more difficult for you to hear because you do not have the /ʔ/ sound in real Arabic words. You can already make this sound correctly, however, because you use it almost every day in a word that is taken from another language. Say the Arabic word for English very slowly. [ʔiʔ.gliʔ.ziʔ] (WRITE ENGLISH ON THE BLACKBOARD.) Think about the sound that is underlined.

- a. Your mouth is open a little, as for the /n/ sound.
- b. The tip of your tongue is behind and against your lower front teeth. Look at "our friend" to be sure your tongue is in the right place.
- c. The corners of your mouth are drawn back a little as for a smile. Like this--(ILLUSTRATE).
- d. You can feel the back of your tongue push up a little.
- e. Look at the face chart. Your tongue should be raised (POINT TO CHART) so that it touches the top of your mouth near your back top teeth.
- f. You push your breath out through your nose, (POINT TO CHART) without moving your tongue.
- g. The sound must come through your nose.

Would you like to test yourself to be sure that you are making the sound correctly?

- a. Look at the face chart to be sure that your tongue is in the correct position.
- b. Hum the sound, as if you were practicing a song without saying the words, but do not move your tongue.
- c. Hold your nose as we did for the /n/ sound.
- d. The /ʔ/ sound will stop when you hold your nose, if you are making the sound correctly.

(TEACHER MUST LISTEN CAREFULLY. IF TONGUE IS LOWERED WHILE BREATH IS BEING EXPELLED, THE /g/ WILL OCCUR. POSSIBLY BEST NOT TO MENTION THIS, UNLESS IT HAPPENS)

3. The sounds /n/ and /ʔ/ are alike in only one way. For both sounds we push out breath through our nose. The tongue helps us to make these sounds. Look at "our friend" (face chart). His blue tongue shows the position for the /n/ sound as in the Arabic word for sleepy. His red tongue shows the position for the /ʔ/ sound as in the Arabic word for English. Do the tongues slant (SHOW WITH HAND) in the same direction? No,

they slant in opposite directions. For the /n/ sound the tongue is high in the (front) and low in (back). (Students supply answers by looking at face chart.) For the /ŋ/ sound, the tongue is low in the (front) and high in the (back) of the mouth.

C. PRACTICE IN PRODUCTION:

1. Look at the two lists of words again. Listen while I pronounce the words. Whisper the words after me.
2. When I call your name, pronounce all of the words in column 2. The class will tell you if you make a mistake, by raising their left hands.
3. Listen while I pronounce the words in pairs (ton-tongue). Whisper each word pair after me.
4. When your name is called, pronounce the words in pairs. Be very sure that the last sound of each word is very clear. We will raise our left hands if we hear a mistake.
5. Choose any word from the two lists. Pronounce it carefully. The class will tell you which column the word is from by holding up one or two fingers.
6. Sentences: Pronounce these sentences after me. Many of the words contain the /n/ sound as in the Arabic word sleepy. Look at the face chart. Where is the tip of the tongue for this sound?
 - a. The new pan is gone.
 - b. I never run alone at night.
 - c. The sun shines even in November.
 - d. A thin man ran to the new nurse.
 - e. We saw a narrow lane near Lone Avenue.
7. Sentences: Pronounce these sentences after me. The words underlined in red contain the /ŋ/ sound as in the Arabic word English, and the English word tongue. Look at the red tongue on the face chart. Where is the tip of your tongue for this sound? Where is the back of your tongue? Where do you push your breath?
 - a. We are studying new things in English.
 - b. That monkey is hanging by its tail.
 - c. All the children are talking, laughing and playing.
 - d. Bring your books and some ink.
 - e. All the birds are flapping their wings.

8. Sentences: Pronounce these sentences after me. The sounds /n/ and /ŋ/ are mixed in every sentence. The sounds underlined in red are like the last sound in tongue. Look at the face chart, and remember the position of your tongue for the two sounds.

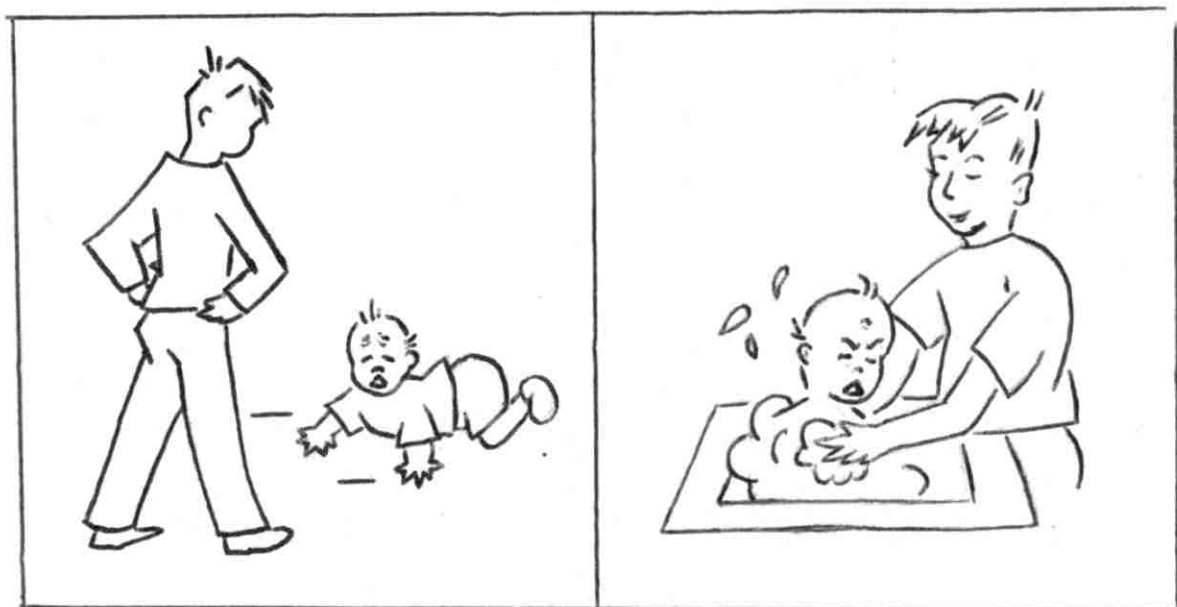
- a. The King is singing new songs now.
- b. Nine boys ran when the bell rang.
- c. It is not a sin to sing songs loudly.
- d. The new boys aren't winning the ping-pong game.
- e. The sun is shining into the living room.
- f. Does a giant's tongue weigh a ton?

9. Conversation: Answer each of these questions in a simple sentence. Watch out! The two sounds, /n/ and /ŋ/ will be mixed in your answers.

- | | |
|--|--|
| a. Who teaches you to sing the school songs? | a. Mr. Bliss teaches us to sing. |
| b. What do I have on my finger? | b. You have a ring on your finger. |
| c. What is this? | c. It's a fountain pen. |
| d. What do we put in a fountain pen? | d. We put ink in a pen. |
| e. What is the past tense of run? | e. The past tense is ran. |
| f. What is the past tense of ring? | f. The past tense is rang. |
| g. Does a giant's tongue weigh a ton? | g. Yes, a giant's tongue weighs a ton. |

LESSON PLAN

TEACHING PRONUNCIATION OF /š/ AND /č/



A. RECOGNITION:

1. Look at the two pictures. Listen while I pronounce two sentences. Point to the picture which explains each sentence.

The boy is washing the baby.
The boy is watching the baby.

2. There is only one sound difference between the words washing and watching. Where does that difference occur? Does this one sound make much difference in the meaning of the two sentences? What will happen if we mix these two sounds when we are speaking?
3. These words are very much like washing and watching. Listen carefully while I pronounce the words for you. Try to hear the sound difference.

1.	2.
sheep	cheap
share	chair
washing	watching
cashing	catching
wish	witch
mash	match

4. You must listen very carefully this time. I will choose a word from either column and ask you which column the word is from. Show the number of the column by holding up one or two fingers.

B. PRODUCTION:

1. /š/ The sound that begins the word sheep should be easy for you. You have a sound very much like it in Arabic. What is the Arabic word for window? [šib.beyk^h] What is the Arabic word for brush? [fēr.šey.yiy] What is the Arabic word for grass? [ħa.šiyš] Whisper the Arabic word for window and think about the first sound. I will help you to understand what you are doing to make the sound.
- Your teeth are together as for the /s/ sound.
 - As you push your breath out between your teeth, your tongue is pushed far back in your mouth.
 - Your lips push forward a little. (LIKE THIS. ILLUSTRATE)
2. /č/ The first sound of the word cheap is also very much like a sound that you have in Arabic. What is the Arabic word for he choked? [čer.čə?] How do you say in Arabic, it is raining? [ʔam.bit.čət.tiy] Whisper the Arabic word for he choked and think about the first sound. I will help you to understand what you are doing to make this sound.
- You put your tongue behind your upper front teeth as if to make the /t/ sound.
 - Then, you say the /š/ sound instead.
 - Let's make the sound again. Start with the /t/ sound, then drop the tip of your tongue just a little and close your teeth together.
 - Let your breath push through your front teeth.
3. There is another way to make this sound.
- Make a long /s/ sound, as I do when I want you to be quiet.
 - When I raise my hand, quickly touch behind your front teeth with your tongue, and then go right on with the /š/ sound.
 - The sound you hear when you raise your tongue behind your upper front teeth is the sound that begins the Arabic word he choked.

4. The /č/ sound is one that we use when we have a cold. We make this sound when we sneeze, "ah-choo". (GIVE AN EXAMPLE OF THE "AH-CHOO" FOR THE STUDENTS.) We also hear this sound when a train starts: choo, choo. (ILLUSTRATE THE "CHOO-CHOO" SOUND)

C. PRACTICE IN PRODUCTION:

1. Look at the two lists of words again. Listen while I pronounce the words. Whisper the words after me.
2. When I call your name, pronounce all of the words in column 2.
3. This time, when I point to you, pronounce the words in pairs (sheep-cheap).
4. Pronounce any word from the two columns when your name is called. The class will tell you which column your word is from by holding up one or two fingers.
5. Sentences: Pronounce each sentence after me. All of these sentences contain the /š/ sound as in the Arabic word window. Are your teeth close together or far apart when you make this sound? Where is your tongue?
 - a. I wish I had shined my shoes.
 - b. Please share your sugar with Sharon.
 - c. She washed and mashed the squash.
 - d. She is at the sea-shore.
 - e. That shepherd has many sheep.
6. Sentences: Pronounce each sentence after me. All of these sentences contain the /č/ sound as in the Arabic word he choked.
 - a. We watched the teacher match the words.
 - b. The rich lady is in the kitchen eating a peach.
 - c. Which picture did you choose?
 - d. Don't buy cheap chairs from the merchant.
 - e. A small child pitched a ball into a ditch.
7. Sentences: These sentences are more difficult. The sounds /š/ and /č/ are mixed in each sentence. Whisper each sentence after me.
 - a. She washed the child's chin.
 - b. The shepherd watched his sheep.
 - c. Charlie shared his chair with Sharon.

- d. Paul's dog always chews on his shoes.
- e. The rich man showed me his new shirt.

8. Conversation: I will ask you some simple questions. Answer each question in a complete sentence. Your answers will have both the /š/ and the /č/ sounds in them. Be careful!

- | | |
|---------------------------------------|---------------------------------------|
| a. What does a shepherd watch? | a. He watches his sheep. |
| b. What is the opposite of expensive? | b. Cheap is the opposite. |
| c. What do you have on your feet? | c. I have shoes and socks on my feet. |
| d. What is this on the wall? | d. It's a picture. |
| e. What am I? | e. You are a teacher. |
| f. What is the opposite of poor? | f. The opposite is rich. |

LESSON PLAN

TEACHING PRONUNCIATION OF /z̥/ AND /j̥/

A. RECOGNITION:

1. Your ears must be very sharp today. I could not find pictures of pairs of words to help you with our two new sounds. If you listen carefully, however, I think you can learn to hear and to make these sounds very quickly. Our two new sounds are "sisters" to the /c̥/ and /s̥/ sounds that we studied yesterday.
2. Look at this list of words. We are interested in the one sound that is underlined in each word. Listen very carefully as I pronounce the words. (THESE WORDS APPEAR ON THE LEFT SIDE OF THE CHART ONLY. THE RIGHT SIDE IS LEFT BLANK UNTIL THE /j̥/ SOUND IS INTRODUCED.)

1.

usually
measure
pleasure
leisure
vision
rouge
garage

3. Now look at this list. We are interested in the one sound that is underlined in each word. Listen carefully as I pronounce the words.

2.

joy
jam
giant
Egypt
soldier
page
carriage

4. Listen while I pronounce the last two words in each list. These words are not pairs, but I want you to hear the difference in the sounds that end the words. (PRONOUNCE THE LAST TWO WORDS OF EACH LIST SLOWLY AND DISTINCTLY. USE EXAGGERATION TO MAKE THE DISTINCTION BETWEEN THE SOUNDS OBVIOUS.)

B. PRODUCTION:

1. /ʒ/ The sound underlined in the words in column 1 should be easy for you. You have a sound very much like it in Arabic. What is the Arabic word for news-paper? [ʒə.ʔi.ji] What is the Arabic word for rug? [siʒ.ʒé.ji] What is the Arabic word for snow? [télʒ] Whisper the Arabic word for newspaper. Think about the first sound. I will help you to understand what you are doing to make this sound.
- Your teeth are together as for the /ʒ/ sound. (ILLUSTRATE)
 - The tip of your tongue touches just behind your upper front teeth.
 - Your tongue acts as a wall as you push your breath out.
 - As your breath hits your tongue, you add the "hum" sound.
 - Your lips are pushed forward a little. (ILLUSTRATE)
2. /ʒ/ The sound underlined in column 2 is more difficult, but you can hear it in some Arabic words. What is the Arabic word for chickens? [ʒéʒ] (ASK SEVERAL STUDENTS FOR THE WORD. IT IS EXPECTED THAT SOME WILL GIVE THE COLLOQUIAL PRONUNCIATION [ʒéʒ] AND THAT SOME WILL GIVE

THE CLASSICAL [žež]. KEEP A MENTAL NOTE OF THE BOYS WHO USE THE COLLOQUIAL SO THAT THEY CAN BE USED LATER TO ILLUSTRATE THE WORD THAT IS WANTED.) How do you say in Arabic, She drives me mad? [bit.jén.in.niy] Pronounce the Arabic word for chickens as (boy's name) does. (ASK STUDENT TO REPEAT [jež]). Think about the first sound. I will help you to understand how you are making this sound.

- a. Your tongue is behind your upper front teeth as if to make the /d/ sound.
- b. As you start to make the sound, you say the /z/ sound instead.
- c. Let's try to make this sound again. Start with the /d/ sound, then drop the tip of your tongue just a little and close your teeth together.
- d. Push your breath against your teeth and add the "hum" sound.
- e. As you finish the sound, your jaw drops down a little. (ILLUSTRATE)

C. PRACTICE IN PRODUCTION:

1. Look at the words in column 1. Listen while I pronounce these words. Whisper the words after me. Think about the "hum" sound. Be sure that your teeth are together.
2. When your name is called, pronounce all of the words in column 1.
3. Look now at the words in column 2. The sound underlined in these words is more difficult. Whisper each word after me. Think about the "hum" sound. Be sure that your teeth open and that your jaw drops a little as you end this sound. (ILLUSTRATE)
4. When your name is called, pronounce all of the words in column 2.
5. I will point to a word from either list. Pronounce the word that I point to when your name is called.
6. Pronounce all of the words in both columns. We will raise our left hands if we hear a mistake.
7. Sentences: All of these sentences contain the /j/ sound. Be careful! Listen carefully while I pronounce each sentence. Pronounce each sentence after me.

- a. John lives in a village in Egypt.
- b. The soldiers went on a journey to Jordan in June.
- c. George just ate a jar of jam and an orange.
- d. A magician does magic tricks.
- e. There are three large jewels on the ledge.
- f. Madge wrote on the edge of the paper.

8. Sentences: These sentences contain both of the new sounds. Listen carefully while I pronounce each sentence. Whisper each sentence after me.

- a. The engineer measured the bridge.
- b. Jane likes to talk to John about their marriage.
- c. Are there any jewels in that large treasure chest?
- d. I usually drink orange juice in the morning.
- e. It is always a pleasure to see Uncle George.

D. PRACTICE IN PRODUCTION OF FOUR SOUNDS:

1. I told you earlier that these two sounds are "sisters" to the sounds that we studied yesterday. Let's see if we can find out in what ways the four sounds are the same or different. (STUDENTS SHOULD BE ABLE TO SUPPLY THE INFORMATION LISTED BELOW. IF THEY SEEM READY, CHANGE THE EXPLANATIONS TO QUESTIONS. ASK STUDENTS TO SUPPLY THE ANSWERS.)

a. Our new sound /z̥/ is made in exactly the same way as the sound that begins the word sheep /ʃ/. The important difference is that our new sound /z̥/ is "hummed". The /ʃ/ in sheep is a breath sound. Try to say the two sounds, one after the other, so that you can hear the difference. /z̥, ʃ, z̥, ʃ, z̥, ʃ/ (ILLUSTRATE) If you put your thumb and first finger on your throat while you make these sounds, you will feel the /z̥/.

b. Our new sound /j̥/ is made in exactly the same way as the sound that begins the word cheap /tʃ/. The important difference is that our new sound /j̥/ is "hummed". The /tʃ/ in cheap is a breath sound. Try to say the two sounds one after the other, so that you can hear the difference. /j̥, tʃ, j̥, tʃ, j̥, tʃ/ (ILLUSTRATE) Put your thumb and first finger on your throat so that you can feel the movement when you make the new sound /j̥/.

2. Instead of asking you questions today, I have a much more difficult exercise. The four sounds /č, š/ and /ž, j/ are not at all easy to pronounce correctly when they are mixed together in sentences. Listen carefully while I pronounce these sentences for you. The sentences contain the four sounds we have just been studying. Whisper each sentence after me. Later I will ask you to repeat them alone. Be careful! Think about what you are saying. Try not to let me catch you making a mistake.

- a. George cho~~o~~ked on a small fish bone.
- b. Jill usually chills the peaches in the refrigerator.
- c. The rich merchant measured the edge of his lawn.
- d. Madge has sweaters that match.
- e. Jane has a large jewel on her gold chain.

APPENDIX C
EVALUATION SHEETS

Appendix C contains samples of the three evaluation sheets used in this experiment. The following information will serve as a guide to the information presented in these evaluations:

1. Regular Teacher's Evaluation: Although the evaluation sheet given to the regular classroom teacher was mostly designed for the simple Yes-No or Multiple Choice type of answers, Mrs. Hanania was kind enough to add personal comments. All words that are underlined in this evaluation represent the words written in by Mrs. Hanania on the original copy.
2. Student Evaluation: The student evaluation sheet reports the answers given by the fourteen students questioned. To show the number of student responses to a particular question, or item in a series, numbers have been inserted in parentheses beside the appropriate question.
3. Evaluation Sheet: The evaluation sheet used by the three judges in rating the two recordings appears as it was used. The method of rating is described in Section B of Chapter IV.

EVALUATION OF REGULAR TEACHER

15 December 1960

Dear Mrs. Hanania,

Now that my experimental teaching is finished, I am trying to draw up some sort of evaluation of what actually happened in the classroom. You are the only adult who observed every lesson. I would, therefore, like your very honest opinion concerning the questions listed below. I, of course, have my own opinions, but I fear that being so closely involved in the work, I may tend to be prejudiced.

Please assume that the theory behind the exercises is correct. Do not be concerned with the sounds that were selected for study. Simply try to combine your observations with the added advantage you have of being the regular classroom teacher.

I have tried to direct my questions to the YES and NO or MULTIPLE CHOICE type of answers simply to save your time. I will be very happy if you will jot down any additional comments you may have concerning the questions--or some problem that I have failed to mention here.

Again, I will urge you to be very frank. Nothing you say will hurt my feelings. My only concern is to evaluate the lessons, and to improve them if I can.

Thank you once again for your kind co-operation and help.

A. Multiple Choice: Please circle the letter that indicates your answer. It is quite possible that you may wish to circle several letters.

1. The second year boys are young and enthusiastic. Do you feel that:

- (a) The majority was seriously interested in the pronunciation work?
- b. The majority was NOT seriously interested in the pronunciation work?
- (c) They were attentive and well behaved considering the newness of the material?

- d. They were restless and noisy the majority of the time?
e. The majority understood what they were doing.
f. The majority DID NOT understand what they were doing?
2. Although the exercises are designed for pronunciation drill, and time made it almost impossible to direct attention to anything else, do you feel that any progress was made in any of these areas?

- a. Vocabulary building secondary
b. Simple sentence building
c. Listening with a purpose to English sounds
d. Challenge for brighter students
e. Encouragement for weaker students secondary

(1) Those whose pronunciation is better than their general ability. (2) Weaker boys who found themselves making quick progress. Your encouraging attitude towards the boys who had pronunciation difficulties was admirable!

- f. Practice in correct sentence patterns
g. Original (problem solving) thinking Oh yes! Why do we say sink for think and bat for pat? I would call it intelligent thinking; recognizing the difference in sound and meaning between thank and sank.

3. It is true that your class schedule was upset by the exercises, but do you feel that taken as a whole, the lessons were:

- a. a complete waste of time
b. of value to the students
c. of value, but ~~seriously~~ affected class work
mainly because: (1) Several of the earlier sessions lasted for over ten minutes. (2) we were nearing examination time, and we had been already somewhat behind in our work.

4. Did any of your weaker students react to the lessons with:

- a. more than usual interest
b. less than usual interest
c. the normal amount of interest
d. complete confusion

5. The lessons were supposed to be 10 minutes long. If they were given again, in a similar situation, do you feel that the lessons should be:

- (a) longer than 10 minutes 15 minutes per lesson would be better. Say 5 minutes for review, 5 minutes for introducing new material, and 5 minutes for practice. Also a longer period of days is required.
- b. less than 10 minutes
- c. the same

I WOULD APPRECIATE AN ADDITIONAL COMMENT ON THE ABOVE QUESTION, AS I AM SURE THAT YOU HAVE IDEAS ON THIS POINT.

6. If the lessons were perfected and given by the regular classroom teacher, do you think:

- (a) They could be integrated into the normal classroom routine as a unit of study.
- b. They should be given as a special class outside regular class periods. Additional help may be given outside to weaker boys in different sounds.

B. YES and NO: Simply write YES or NO to the left of the question in the space provided.

- Yes 1. Did the majority of the boys become conscious of pronunciation?
- Yes 2. Did the class retain and practice the production of sounds after Mrs. Khayat left the room? On the side, the name "George" is a poor measure of this!
- _____ 3. Did there seem to be any connection between the general ability of the students and their progress in pronunciation? Intelligence or ability in English? Difficult to answer. Many factors are involved in good pronunciation.
- Yes 4. Did you, during any lesson, feel that real progress was made on a sound by the majority of the class? (If the answer is yes, please list the sounds by giving the "key" picture word used for the class.)

Most sounds, particularly p and b and ball and bowl. I was not happy about -ing.

Yes 5. In your very honest opinion, do you feel that there is any real need for this type of work in the teaching of English? It is one aspect of English which has not been given special attention so far. However, it is only one aspect.

Yes 6. Do you think that from your current observations you could teach these sounds to another class? But not as well as you did!

C. QUESTIONS: Please answer these questions as briefly as possible. It is not necessary to be elaborate. A simple outline will be fine.

1. What do you feel were the biggest handicaps to the experiment--both from your point of view and of mine?

Mrs. Hanania

Mrs. Khayat

a. Class periods were shortened.

a. 10 minutes were not enough.
b. Not all students came to the review sessions.
c. If we had one classroom, you could have used a higher stand for the charts.

2. What do you feel were the greatest weaknesses of the lessons, or the methods, or Mrs. Khayat? On the whole, the lessons were first class. This applies to the material, the methods, and Mrs. Khayat! Suggestions:

- a. Some of the words were quite foreign to the students. How about replacing Sharon with an Arabic name i.e. Shadiyah?
- b. Why not mention that there is a "t" in "chair" and a "d" sound in "Jack"?
- c. How about emphasizing the humming sound in -ing (m,n,ng) instead of, or along with, explaining the position of the tongue?

- d. You asked the students to forget spelling. When such work is integrated with English teaching, it may be an advantage to link some sounds with spelling. Some students write "thing" for "think" and "glass" for "class".
3. Was there anything that you especially liked about the lessons that has not been mentioned in any of the previous questions?
 - a. I loved the way you introduced English sounds as familiar Arabic sounds.
 - b. The lessons were very well organized. Your manner (particularly with the weaker boys) was excellent, and the speed with which you moved kept the boys on their toes.
 - c. It was very wise to choose this class. -You knew them by name and they felt at ease with you.

N.B. Thank you for the opportunity of sitting back and watching an excellent piece of work.

STUDENT EVALUATION

This is not a test. Mrs. Khayat wants to know what YOU think about the lessons she has given you for the last three weeks. Give the answer that You think is best. You will help her to improve her lessons.

A. YES - NO: Write Yes or No in the blank space beside each question.

Yes No

- | | | | |
|--------|--------|----|--|
| (2) | (12) | 1. | Did you need to study very hard outside of school to make up the 10 minutes Mrs. K was in your class each day? |
| (13) | (1) | 2. | Would you like to do more of this kind of work after vacation? |
| (1) | (13) | 3. | Has any other teacher ever helped you with pronunciation? |
| (11) | (3) | 4. | Did you know that you had trouble making some English sounds before you worked with Mrs. K.? |
| (11) | (3) | 5. | Are you trying to practice what Mrs. K. taught you? |
| (14) | (0) | 6. | Would you like to have the words and sentences that we studied written out so that you could keep them? |
| (14) | (0) | 7. | Did the boy's head, with the colored tongues, help you? |
| (5) | (9) | 8. | Were you afraid or nervous when you recorded the second time? |

B. MULTIPLE CHOICE: Draw a circle around the letter of the answer that you like best. It is possible to circle more than one answer.

1. Mrs. Khayat taught you -

- a. grammar (3) b. spelling (12) c. sounds (13)
d. vocabulary (7) e. nothing (0)

2. It is important to pronounce words correctly because -

- (1) a. We want to sound like Americans.
(6) b. We want to help Mrs. K. with her work at A.U.B.
(9) c. We want people to understand us when we speak.
(0) d. We want to improve our grades.

3. Why did you study with Mrs. K. during your free hours?

- (6) a. I like her.
- (1) b. I had nothing else to do.
- (13) c. I wanted to practice her lessons.

4. The lessons were 10 minutes long. If we did the same thing again, would you like the lessons to be -

- (5) a. longer than 10 minutes.
- (0) b. shorter than 10 minutes.
- (9) c. the same.
- (0) d. no lessons.

5. Do you think you would learn more if the lessons were given - (Boys didn't understand question)

- (3) a. only during free hours.
- (1) b. in your English class, a little every day - as reading and writing.
- (6) c. in a special class, only for pronunciation.
- (4) d. with a smaller number of boys.
- (5) e. the same as they were.

C. QUESTIONS: You will help Mrs. K. very much if you will give the answers that you think are best for these questions. Write what you wish. There are no wrong answers.

1. What did you like best about the lessons with Mrs. Khayat?

- a. I learned something new and useful.
- b. I learned to say sounds so people will understand me.
- (5) c. I learned to pronounce words correctly.
- d. I learned new sounds and new words.

2. What do you think she should do to make the lessons better?

- (2) a. Call us every free hour.
- b. Keep students more quiet.
- (7) c. Give us the sentences on papers so we can practice them at home.
- d. Give us more practice.
- (2) e. Make the lessons longer.
- f. Make the class smaller.
- g. Give us more new sounds.
- (2) h. Nothing. Keep them the same.

3. We studied two sounds together: think - sink. You have the first sounds of each of these words in Arabic. Why did Mrs. K. want you to practice them?
- (3) a. We don't always say "th" in Arabic.
 - (3) b. To show us the difference between the sounds.
 - c. We put the sounds in the wrong words.
 - (3) d. We need to practice the sounds in English words.
 - e. She wanted us to pronounce them better.
 - f. To compare the two sounds.
 - (2) g. We know the sounds better in Arabic. We make mistakes in English.
4. We studied the two sounds that begin pear and bear at the same time. Why do you think Mrs. K. picked these two sounds?
- (2) a. To teach us "p" because we don't have it in Arabic.
 - (3) b. Because we always say "b" in Arabic.
 - c. They are much alike. We must not say, "I ate a bear".
 - (5) d. To teach us the difference. They are alike.
 - e. Because we make them the same way.
5. If you wanted to help another student to learn to pronounce a word correctly, what are some of the things you might tell him to look at -- or you might show him?
- (8) a. Show him my mouth, teeth and tongue (if he can see it).
 - (2) b. Tell him to listen--to push his breath or hum it.
 - (4) c. Show him how my mouth and tongue move for each sound.
 - (4) d. Tell him to feel my throat for hum sounds.
6. We have studied many sounds. Which sounds do you think are the most difficult? Write the "picture word" that contains the sound.
- (11) a. bowl - ball
 - (8) b. sin - sing
 - (3) c. sink - think
 - (2) d. watch - wash
 - (1) e. none

EVALUATION SHEET

No. _____
Student _____

A. My father owns a boat.

ø	-
---	---

o	-
---	---

o	-
---	---

B. We don't talk in church

o	-
---	---

o	-
---	---

č	-
---	---

C. A judge studies law, not geography

j	-
---	---

o	-
---	---

j	-
---	---

D. Is this a lamp or a vase?

ø	-
---	---

p	-
---	---

v	-
---	---

E. The girls are always singing.

g	-
---	---

o	-
---	---

ŋ	-
---	---

F. Do you have the question paper?

v	-
---	---

č	-
---	---

p	-
---	---

G. The soldiers lived in the south.

j	-
---	---

v	-
---	---

θ	-
---	---

H. I made a flag six months ago.

g	-
---	---

θs	-
----	---

o	-
---	---

I. He put a ring on her finger.

p	-
---	---

ŋ	-
---	---

ŋ	-
---	---

J. Thank you for the new toothbrush.

θ	-
---	---

ø	-
---	---

θ	-
---	---

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