



Thesis for the Degree of Master of Education

Phonics and Student Success

in English Studies



by

Eun-young Choi Graduate School of Educaiton Pukyong National University February 2012

Phonics and Student Success

in English Studies

(초등학생 6학년의 파닉스 학습 정도와 영어 학업 성취도 간의 상관관계 조사)

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by

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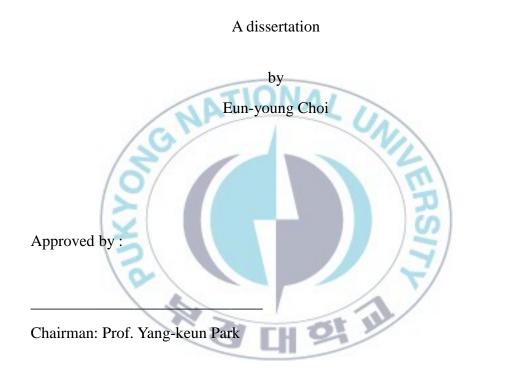
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초등학생 6학년의 파닉스 학습 정도와

영어 학업 성취도 간의 상관관계 조사

최은영

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요약 이 연구의 목적은 파닉스 학습정도가 초등학생의 영어 학습 성취도에 끼치는 영 향과 이런 효과를 가져오는 또 다른 변인들에 대해서 알아보는데 있다. 이 연구는 한국 부산 해운대구에 있는 한 학교의 6 학년 다섯 반을 대상으로 실시하였다. 지역교육청에서 배급하는 2 번의 시험과 연구자가 개발한 파닉스 시험을 기준으로 연구를 설계하였다. 학습자의 파닉스 지식의 영향력을 분석하기

위해서 파닉스 시험 점수에 따라 크게 세 그룹으로 나누어 실시하였다. 이 연구의 결과는 다음과 같이 요약할 수 있다.

(1) 파닉스 지식을 가지고 있는 학생들이 영어 시험에서 더 좋은 성적을 받는다.
(2) 시험에서 높은 점수를 기록한 학생들은 85%이상이 이전에 파닉스 학습을 했고, 70%이상이 사교육을 통해 6 개월 이내 배웠다.

한 가지 흥미로운 결과는 파닉스 점수가 높은 레벨의 학생들과 중간 레벨의 학생들이 영어 시험 성적에서는 많은 차이를 보이지 않았다는 것이다.이 결과로부터 알 수 있는 것은 파닉스의 필수적인 개념을 습득하게 된다면 이 최소한의 학습이 영어 학습 성취도(영어 시험 점수)를 높일 수 있다는 것이다. Phonics and Student Success in English Studies

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Abstract

The purpose of this study was to discover if phonics knowledge can affect the English test scores of elementary school students, and the variables that may contribute to these effects. The study was conducted on five 6th grade classes in a school located in the Haeundae district of Busan, Korea. In addition to two standard English tests provided by the Regional Department of Education, a phonics test was administered to the students by the researcher. To analyze the effects of the learners' phonics knowledge, the students were divided into three groups: high, intermediate, and low according to their phonics scores. The results of this study indicate that: (1) students who have some phonics knowledge get better marks on their English tests; and (2) among the high-scoring students, 85% of them have studied some phonics, and more than 70% of the students had studied phonics through private education for less than six months.

An interesting result of the data analysis showed little difference between high level and intermediate level students in their English test scores. This might suggest that, if a learner has grasped the essential concepts of phonics, this minimal learning can significantly affect English test scores allowing students to achieve more English learning.

Key words: Phonics, English test, National Curriculum, English private lessons

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I Introduction

The current Elementary English curriculum has focused on listening and speaking, spoken language. It is accepted that reading, based on the written language, should be introduced from the fourth grade, and writing, from the fifth grade. The government's policy toward English teaching in public schools focuses on keeping students motivated while they are learning. Previous education policies had focused too much on the written language, and this had the unfortunate result of lessening student interest and the will to continue with their English studies (Lee, 2005).

In many studies, however, problems with the current curriculum have been identified. Positive effects have been noticed when spoken language and written language are taught at the same time from the third grade in elementary schools (Kang, 1999; Lee, 1998). One study has reported that, before official English education begins, a number of students have already had experience in learning the written language (Lee, 1998). Because of the close relationship between the written and spoken language, it has been recommended that learning be carried out in an approach that considers the entire language (Boo, 1999; Shin, 1999). Overall, most researchers have agreed; yet, due to the current policies of the Seventh National Curriculum (which focuses more on the spoken rather than on the written language), sixth graders have difficulties reading even easy and simple sentences in English (Han & Cha, 2007).

Those who can read neither simple words nor sentences are unable to achieve a great deal in their efforts to learn English; they cannot progress. Taking this into consideration, this researcher has raised some questions about the relationship between phonics knowledge and English test scores; and this study has examined what advantages a knowledge of phonics might have on these English test scores. The English tests examined in this study were based on three different skills, mostly reading and listening, and to some extent on writing. This test will be more deeply examined in Section **3.2.2 Tests and the Survey of the Participants.** The specific goals of the present study are to discover:

- 1. Is there a significant relationship between a learner's phonics knowledge and English test scores?
- 2. Where and for how long do high-scoring students learn Phonics before their English studies in public school?
- 3. What other factors affect the English test scores of someone who has studied phonics or not?

To solve the specific research questions presented above, the researcher set up the following hypotheses:

Hypothesis 1 - Learners who have better knowledge of phonics will get better marks on their English tests.

Hypothesis 2 - Learners have studied their phonics through private

education.

Hypothesis 3 - There could be other environmental factors that can affect English test scores.

These questions will be helpful in investigating the relationship between students' phonics knowledge and English success.



II Literature Review

Phonics refers to a method of teaching speakers of English to read and write in that language. Phonics involves teaching how to connect the sounds of spoken English with letters or groups of letters (e.g., that the sound /k/can berepresented by $\langle c, k, ck, ch, or q \rangle^1$ spellings) and teaching them to blend the sounds of letters together to produce the approximate pronunciations of unknown words. Phonics instruction requires the teacher to provide students with a core body of information about the rules and patterns of phonics². In recent years, there has been much research focusing on the importance of accurate pronunciation in second languages (Asher & Garcia, 1969; Moley, 1991). This is, of course, because, if a non-native, English-speaking learner has pronunciation of under a certain threshold, then no matter how excellent his or her grammar and vocabulary may be, communication through the spoken language is problematical (Celce-Muricia & Goodwin, 1991). Accurate pronunciation can thus be very important. There are those who suggest that phonics teaching is crucially important (Lingard, 1997) because it can help students to have intelligible pronunciation.

¹ In this paper, <> refers to spelling, // means phonetic symbols.

² This is from <u>http://en.wikipedia.org/wiki/Phonics</u> (2011, October, 22).

From their point of view, phonics teaching provides a great number of benefits to students. One study claims that "... phonics can cover both regular and irregular words. Phonics-first children also tend to be phonics-fast children, rapidly outstripping eclectically-taught children in their ability to read both regular and irregular words" (Chew, 1997).

There are many ways of approaching phonics teaching, but in this study the author presents Synthetic Phonics and Analytic Phonics. Synthetic Phonics is a method employed to teach phonics to children when they are learning to read. This method involves examining every letter within a word as an individual sound and in the order in which they appear; and then blending those sounds to make the complete word. 'Shrouds', for example, would be read by pronouncing the sounds for each letter or digraph (such as <sh, th>) '/ \int , r, ao, d, z/' and then blending those sounds orally to produce a spoken word, ' \int fraodz/'. (Of course, the student is shown the correct spelling of the word and taught how the letter(s) represent specific sounds in that word.) The goal of synthetic phonics instruction is to help students identify the sound-symbol correspondences and blend their phonemes automatically.

Analytic phonics has children analyse sound-symbol correspondences, such as the $\langle ou \rangle$ spelling of $\langle au \rangle$ in 'shrouds', but students do not blend those elements as they do in synthetic phonics lessons. Furthermore, consonant blends (separate, adjacent, consonant phonemes) are taught as units (e.g., in shrouds the $\langle shr \rangle$ would be taught as a unit). A *phonogram*, known in linguistics as a *rhyme*, is composed of the vowel and all the sounds that follow it in the syllable. Teachers use the analogy method to assist students in memorising a bank of phonograms such as <-at> or <-am>. Teachers may use the learning of 'word families'³ when teaching about phonograms. Students then use these phonograms to analogise to unknown words.

In the study 'Long-term Effects of Synthetic versus Analytic Phonics Teaching on the Reading and Spelling Ability of 10 Year Old Boys and Girls', a comparison was made of ten-year-old boys and girls who had learnt to read by analytic or synthetic phonics methods as part of their early literacy programmes. The boys taught by the synthetic phonics methods had better word reading skills than the girls in their classes, and their spelling and reading comprehension was as good as well. In contrast, with analytic phonics teaching, although the boys performed as well as the girls in word reading, they had inferior spelling and reading comprehension. Overall, the group taught by synthetic phonics had better word reading, spelling, and reading comprehension. From this study, what we can conclude is that, for different students, there are different methodologies that can enhance students' interest and abilities. From this study, too, it would seem that a combination of the two differing phonics methods could be suitable for most learners.

³ A word family is a group of words having the same rhyme (or ending), but different onsets (or beginnings); for example, *cat*, *bat*, and *mat*.

There are several studies concerning the benefits of phonics teaching in English classes.

Lee (2007) studied the "Teaching of English Phonics through Creative Drama in a Korean Primary School". This study presents the results of an investigation into how creative drama affects young language learners' English learning in a Korean primary school. An English drama class in Seoul, in an after-school program combined with creative drama, was observed once a week for a complete semester. Seven first graders in the class were presented with stories that contained certain selected phonemes; the students were to dramatise the stories in a creative way. In this study, participants made progress in linguistic aspects including phonics and vocabulary skills; and their affective factors, including language anxiety level, showed a positive development throughout the semester. Moreover, each participant showed improved characteristics in terms of linguistic and affective perspectives.

In Lee & Lee's study (2001a), "The Effects of Phonics on the Improvement of Reading Skills for Elementary School Students", the subjects (in one elementary school) were one class, an experimental group which received phonics lessons focusing on vowels; and another class, a control group, which received standard lessons with an English native speaker. The results showed a statistically significant increase in reading comprehension and the ability to distinguish between words and sentences in the experimental group compared with the control group. Moreover, it showed that phonics is especially useful for beginners. Another study done by the same researchers, Lee & Lee (2001b), examined the effects of phonics and story-telling on the reading skills of elementary school learners of English. "The subjects are two classes of sixth graders. One group, an experimental group, receives phonics-based lessons as their form of instruction. The other group, a comparison group, receives lessons based on story-telling. The results show some increases in the improvement of reading skill for the experimental group compared with the comparison group. Moreover, it is found that there is a difference in the improvement of reading skills in the proficiency levels" (Lee & Lee, 2001b).

Another study attempted to investigate the relative effectiveness of the phonics approach on elementary school students' reading competence and effective factors (Han & Cha, 2007). Sixty-one third graders, whose levels were diagnosed as 'basic', based on their pre-test scores on the Proficiency of English Language Test (PELT), were selected and divided into two groups. The experimental group was mainly taught using a variety of activities based on the phonics approach. The results indicated that (1) the experimental group performed significantly better on the reading test; (2) the experimental group expressed a high degree of interest when the phonics approach was used to help students undertake self-directed instruction; (3) both groups showed positive effects on their attitudes toward English learning; there was, especially, an increase in their interest levels, their degree of satisfaction, and in their self-confidence when taught using a variety of activities by the same teacher. The study's findings call for more attention to teaching literacy skills

through phonics instruction; and thus suggest a rethinking of our current elementary school curriculum based on the 7th National Curriculum which focuses more on the spoken rather than on the written language.

In general, studies on phonics teaching at the elementary level have focused on learners' reading abilities rather than other skills; studies dealing with other skills such as listening and writing are sadly lacking.

The present research, therefore, deals with how phonics learning can affect English abilities in general, including reading, listening, and some writing.



III Research Design

To examine the following hypotheses, the researcher employed two methods of investigation. For Hypotheses 1 and 2, a quantitative approach was used; and for Hypothesis 3, a qualitative approach was chosen.

Hypothesis 1 - Learners who have better knowledge of phonics will get

better marks on their English tests.

Hypothesis 2 - Learners have studied their phonics through private

education.

Hypothesis 3 - There could be other environmental factors that can affect English test scores.

The background of the best subjects and the nature and format of the best materials will be discussed in the following sections.

3.1. Participants/subjects

One hundred and twenty Korean 6th grade primary school students learning English as a foreign language in Korea participated in this study; there were some changes because of student transfers, but the final number of students who were involved in this study was 120. Students from five primary classes in an elementary school in the Hae-un-dae district of Busan, South Korea, were selected by the researcher. This school was newly opened in 2009, and all of the students were from different schools ranging from the Hae-un-dae District to Kyoung-nam Province. Choosing this school allowed the researcher to be able to sample a wide spectrum of students from many differing backgrounds, both social and geographical.

Table 1 shows, in brief, the demographic data of a sampling of the participants who were in the qualitative study. These demographic data help us to more easily understand the participants and their educational background.



No.			Phonics	Starting	phonics	
	Age	Sex		Ū.	learning	Interest(d)
(a)			level(b)	Age	experience (c)	
18	12	F	high	7	2 months	3
27	12	М	high	9	3 months	4
92	12	F	low	8	none	4
110	12	М	low	0%	1 month	3
111	12	F	low	9	2 years	3
119	12	М	low	9	none	1
	5					

Table 1: Brief Demographic Data of the participants

- (a) The individuals' names will not be revealed in this research, so the number was taken from the researcher's data,
- (b) Students who took the phonics test were assigned to the appropriate level.
- (c) Phonics learning experience was dealt on the questionnaires.
- (d) '5' indicates the most interested, '1' indicates the least interested.

3.2. Materials

3. 2. 1 Background Information Questionnaire

For the present study, a background information questionnaire was adapted from Lee, Hye-won's study, Teaching English Phonics through Creative Drama in a Korean Primary School (2007); adapted from Kim's Questionnaire for Individual Learner Factors (2005). The questions included information about the starting age of English learning, the English learning styles of the students, and their attitudes toward English learning. They were very basic questions that sought the individual student's general beliefs with respect to English learning. In addition, the researcher added questions specific to the needs of this study, such as phonics learning experience in private education and phonics contributions to English test scores. Some questions adapted from Lee's research were not appropriate or sufficient to this researcher's study, so suitable additional questions related to this study's purpose were developed.

Before giving the students the phonics test, the researcher needed answers to some of the affective aspects of their English learning. Table 2 shows the questions; all of which were multiple-choice based. The researcher had decided to include affective questions because those could enrich the research and provide more information for follow-up studies.

Table 2: Background Information Questionnaires Question 1. Do you have fun learning English? ① I never have fun. 2 I do not have much fun. Answers ③ Just so-so. ④ I have some fun. ⑤ I do have much fun. 2. How long have you been learning English including outside school Question experience? ① Less than six months ② Over six months and up to a year ③ Over one year to two years Answers ④ Over two months to three years (5) Over three years Question 3. Had you heard of Phonics when you were learning English?

① I have heard of it, and I learnt it.

Answers ② I am not sure whether I have heard about it or not.

3 I have never heard of it.

Question	4. If you chose $\textcircled{1}$ from the question No. 3, where did you learn
Quiotion	phonics? (You can answer more than one)
	① In class at school
	② After-school class at school
	③ Private institute
Answers	④ Tutor
	5 Book
	6 Etc. (Taught by parents, EBS-e programmes, both routes at the
	same time, and so on)
- ·	5. If you chose ① from the question No. 3, how long have you
Question	studied phonics?
	D Lorg them site months
	① Less than six months ② Over six months up to a year
Answers	2 Over six months up to a year3 Over one year to two years
1 115 11 015	 Over two months to three years
	5 Over three years
Question	6. How much do you think that phonics can be helpful to English
	Learning?
	① It is never helpful.
	② It is not very helpful.
Answers	③ Just so-so.
	④ It is a little bit helpful.
	5 It is very much helpful.

3.2.2 Tests and the Survey of the Participants

In this section, more detailed information will be provided on the characteristics of the test and questionnaire used in this research.

Phonics Test

The phonics test measured the students' ability to read based on the sounds that letters represent. There were six sections with five questions in each, and each section had five similar types of questions, therefore, 30 questions in total. Students had twenty minutes for this test, and it was enough time for every student to finish.

In sections one and two, the students were asked to distinguish the first beginning sound and the ending sound; then, in the next section, they were asked to read words and find the one that they heard. In the next section, they wrote the words that they heard. The fifth section focused on short and long vowel distinction. In the last part, the students were asked to write how English words are pronounced in Korean using Hangeul. These questions were created by the researcher through an examination of the literature, the first being Lee's Effective Teaching [of] Phonics for EFL Learners (2000). In his research, Lee discusses constructing factors of phonics: single vowels, vowel teams, single consonants, consonant digraphs, consonant blends, and more. With these factors in mind, a phonics pre-test was designed to help answer the hypotheses, taking into account the students' levels and knowledge. Another source was Han & Cha (2007), The Effects of the Phonics Approach on Elementary School Students' Reading Competence and Affective Factors; the test materials were developed from the questions presented therein.

Section A is from numbers 21-25, Section C is from numbers 26-33, and section F is from questions 40-49 in the reading post test.

The phonics test used in the present study was taken by the students before they were given two general English tests. Throughout the six sections, the students were asked to read the words that appeared on the test sheet. Table 3 shows how the test was constructed.

Some nonce words were included (words which frequently arise through the combination of an existing word with a familiar prefix or suffix), such as 'complish' and 'tain', in order to meet needs of the test. They were employed here to discover if students were able to read words that they had never seen before. In this way, one can determine whether or not a student can read by applying phonics rules.

	1	2	3	4	5	
Section A	В	S	J	PR	CL	
Section B	Т	G	R	MP	NT	
Section C	dive	tain	hobe	puke	reef	
Section D	lib	zest	scope	biter	complish	
Section E	foe	maid	folk	sack	bulk	
Section F	scab	trump	feast	droughty	baptism	
Section Details						
Section A	2	Disting	uish the begin	ning sound)	
Section B	2	Distinguish the ending sound				
Section C	Listen and choose the correct word					
Section D	Listen and write					
Section E	Read and match					
Section F	Read and write how it sounds using Hangeul					

Table 3: Phonics Test Construction

Two English Tests by the Regional Education Department

In Korean elementary schools, there are tests for Korean, Math, Social Studies, Science, and English twice per semester. Each school has the option of choosing a test made by the regional education department or its own test. The school in this study chooses the test provided by the regional education department every year. In this study, two test results will be used as materials: one from the first semester, final-term exam and the other from the second semester, mid-term exam.

Since the public cannot be allowed access to the specifics of these tests, the researcher presents only a very general description of these tests' characteristics. 'No.' in the table is the question's number as presented on the real test, and assessment keys are the content of each question. Skills have three different fields, which are listening, reading, and writing. In this English test, there were 14 listening questions, 9 reading questions, and 2 writing questions combined with listening and reading. In Table 4and Table 5, L represents listening questions; R represents reading questions, and W represents writing questions. It should be noted, however, that writing questions are always combined with listening or reading.

Table 4: Table of Specification

(First English Test)

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No.	Assessment Keys	Skills			
1.01		L	R	W	
1	Listen to a dialogue and find the thing the speaker chooses	0			
2	Listen to a dialogue and find the dish the speaker wants	0			
3	Listen to a dialogue and find the birthday	2			
4	Listen to a dialogue and match dates and days	0			
5	Choose the possible place where the conversation takes place	0			
6	Listen to a dialogue and choose the correct picture	0			
7	Listen to a dialogue and match birthday and presents	0			
8	Listen to a dialogue and choose the correct price	0			
9	Listen to a dialogue and choose the appropriate answer	0			
10	Listen to a dialogue and choose the appropriate conversation	0			
11	Listen to a dialogue about shopping and get the gist of it	0			

12	Listen to a dialogue and guess the birthday date	0		
13	Listen to a dialogue and guess the price of an item	0		
14	Listen to a dialogue about shopping and get the gist of it	0		
15	Listen to a dialogue and write the birthday date	0		0
16	Match picture and food		0	
17	Choose the correct word for an item		0	
18	Arrange month		0	
19	Choose the correct sentence describing date		0	
20	Choose a sentence which is asking price	-	0	
21	Choose a sentence which is wanting food	R	0	
22	Rearrange shopping dialogues	115	0	
23	Choose appropriate dialogues	7	0	
24	Read about shopping and get the gist of it	/	0	
25	Fill in the blank with food words		0	0

Table 5: Table of Specification

(Second English Test)

No.	Assessment Keys	Skills		
		L	R	W
1	Listen to a dialogue and choose what she wants to be in a picture	0		
2	Listen to a comparative expression and choose the correct answer	0		
3	Listen to a dialogue and find what he did in the past	0		
4	Listen to a dialogue and find what the speaker wants to do	0		
5	Listen to a dialogue and choose what the speaker did in the past	0		
6	Listen to a dialogue and choose the correct picture	0		
7	Listen to a dialogue and choose the correct response	0		
8	Listen to a dialogue and choose the correct answer	0		
9	Listen to a dialogue and choose the most appropriate conversation	0		
10	Listen to a dialogue and choose the appropriate conversation	0		
11	Listen to a dialogue about comparative expressions and get the gist of it	0		

12	Listen to a dialogue and fill in the blank with appropriate the past tense word	0		0
13	Listen to a dialogue and write what the speaker wants to do and why	0		
14	Listen to a dialogue about past tense situation and get the gist of it	0		
15	Listen to a dialogue and find the comparable object	0		
16	Fill in the blank with a comparative word		0	
17	Choose the correct expression about what a speaker wants to do	SE	0	
18	Arrange the sentences about past	R	0	
19	Choose the correct response	215	0	
20	Read and choose what the speaker did in the past	5/	0	
21	Read and find the comparable object		0	
22	Get the gist of a dialogue		0	
23	Choose appropriate word for the dialogue		0	0
24	Write the comparable object using the table		0	
25	Complete a sentence using a comparative word		0	0

3.2.3 List of Interview Questions in the Qualitative Research

Table 6: Interview Questions for Qualitative Research

Category	Questions
	1. When did you start learning English?
Starting	2. What made you start learning English?
English	3. Where did you learn English?
	4. For how long have you learnt English?
	1. Have you heard of Phonics?
Related	2. For how long did you learn Phonics?
to Phonics	3. Do you think that phonics knowledge can contribute to English
/	learning in general?
	1. What is your strong point in English?
	2. What is your weak point in English?
English	3. For how long do you study English a day?
Learning	4. When you meet new words, how do you deal with them?
	5. How do you memorise new words?
	6. Are you actively involved in English reading activities?
Attitudes	1. Do you have fun learning English?
toward	2. Do you want to continue to learn English?
	3. What is your aim in learning English?
English	4. Do you have any suggestions for English class at school?
	1. How is your family?
Environment	2. Are all of your family members interested in learning?
	3. How do your parents educate you?

Table 6 provides the questions that were used in the qualitative research. Two subjects were chosen from the high group, and four from the low group. Each was interviewed with the questions presented below for about twenty minutes to half an hour.

3.3. Procedures

The children were divided into three groups (low, intermediate, and high) using their phonics pre-test scores. The phonics scores of each group would be compared with the two English tests. This study spanned a six-month period. The statistical analyses were carried out using the SPSS statistics program.

3.3.1 Tests taken

Phonics Pre-Test

The phonics pre-test was taken by five different classes over the course of two days in the third week of June. Of the 149 students, those who transferred to other schools or did not take the phonics test during the week of the phonics pre-test were excluded from this study. In the end, 120 students were involved in this study. They were divided into three groups: Number 1 (highest level) represents students who got more than 20 questions correct out of 30. Number 2 represents students who got more than 15 but fewer than 20. Students in the third group, Number 3, scored less than 15. Each group was of a similar size, approximately 40 students.

First English Test

This test was taken on Jun 30, 2011. One hundred twenty students took this test. The results will be discussed in Section **4.1.1 Phonics level and English test score**.

Second English Test

This test was taken on 27 October, 2011. The same number, 120 students, took this test. The results will be discussed in Section **4.1.1 Phonics level and English test score** as well.

3.3.2 Results Analysis

There are two ways to study this research; one is by quantitative study and the other is by qualitative study. For Hypothesis 1 and 2, the quantitative approach will be used, and for Hypothesis 3, a qualitative approach will be used.

Hypothesis 1

Learners who have better knowledge of phonics will get better marks on their English tests.

A One-way Anova analysis (one-way analysis of variance) in the SPSS programme was used in order to calculate the significance between phonics knowledge and English test scores. Phonics knowledge is a factor, and English test scores are the dependent variables. The results will be shown with a line graph and will indicate the correlation between phonics knowledge and English test scores.

To understand more deeply the relationship between phonics knowledge and test scores, the researcher divided the test into three different skills according to the table of specification. Each skill will be discussed in its relationship with phonics knowledge. These will be shown as well in line graphs.

Hypothesis 2

Learners have studied their phonics through private education.

To obtain more detailed information, the researcher questioned all of the participants with survey questionnaires. There were four differing aspects of examination of the student's attitudes toward English learning including phonics studying. The four different aspects were interest, phonics learning route, phonics learning duration, and phonics contribution to English learning. First, the result will be shown with all the participants' answers, and then by level. In this way, the researcher can find the common properties of different groups and what the groups do not have in common.

Hypothesis 3

There could be other environmental factors that can affect English test scores.

To obtain more detailed information from individual participants, the researcher took the qualitative approach to this hypothesis. Two students from the high level were selected, and four students from the low level. They were interviewed with the series of questions presented in section **3.2.3 List of Interview Questions in the Qualitative Research**. About twenty minutes were allotted to each student. The detailed information from the students was synthesised, and this will be dealt with in Chapter 5, Case Studies.

IV Results

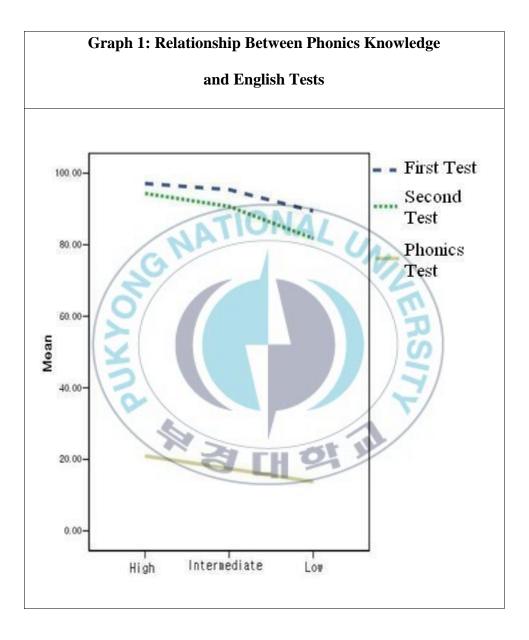
To solve the questions of this study, the researcher used a ONE-way Anova analysis in the SPSS program. By using this program, it is possible to judge whether there is a significant difference between two different dependent variables' averages. In this case, the results will be presented and ordered by 'All of the students' and then 'By level'. In the results for 'All of the students', the data will be presented with a pie chart, while the 'by level' data will be shown with a bar graph. By presenting this data separately with different styles of graph, it may be easier to recognise the significance of the results.

4.1. Hypothesis 1

The first hypothesis to the question 'Is there a significant relationship between a learner's phonics knowledge and his or her English test scores?' is that 'Learners who have better knowledge of phonics will get better marks on their English tests. The results will be shown in the section below: 'Phonics Level and English test score'.

4.1.1 Phonics Level and English Test Score

According to the line graph below, there is a very significant difference between a student's level and first test score. There was a similar tendency as indicated in Graph 1 on the following page. In both tests, the results were similar according to the student's knowledge of phonics.



- Level 1 high level students according to phonics test
- Level 2 intermediate level according to phonics test
- Level 3 low level according to phonics test

Using a one-way Anova program, the results are similar but are more accurate: the independent factor was the student level, of which there were three levels: high, intermediate, and low; and the dependent factor was the first English test. The significance is .001 indicating a significant connection between phonics level and the English test score. These results indicate that the more phonics knowledge a learner has, the more likely he or she is to have better marks on an English test. From this, we can conclude that students should learn phonics while they are learning English.



Table 7: Relation of Phonics Knowledge

		10(1)	mean		C ' ()
	squares(a)	df(b)	Square(c)	F(d)	Sig.(e)
Between Groups	1306.139	2	653.069	7.679	0.001
Within	0965 550	116	95 049		
Groups	9865.559	116	85.048		
Total	11171.697	118	AL	IN	

and First Test Score

- (a) Sum of squares: refers to an interim quantity used on the calculation of an estimate of the population variance
- (b) df: degree of freedom
- (c) Mean Square: refers to an estimate of the population variance based on the variability among a given set of measures.
- (d) F: F ratio. This can affect significance.
- (e) Significance: The mean difference is significant at the .001 level.

	sum of	16	mean	Б	C :-
	squares	df	Square	F	Sig.
Between	2249 117	2	1674.059	16.881	000
Groups	3348.117	2 1674.058	10.001	.000	
Within Groups	11602.475	117	99.166		
Total	14950.592	119			

Table 8: Relation of Phonics Knowledge and Second Test Score

4.1.2 Multiple Comparisons Between Groups

Tables 9 and 10 show an interesting result. In Tables 9 and 10, the sign* indicates the relationship between the two groups: there is a mean significance. While there is no significant difference between the Level 1 group and the Level 2 group, there is a significant difference between Level 1 and Level 3, and between Level 2 and Level 3. From this, what we can conclude that once a student has a basic knowledge of phonics, there will be no significant difference in English test scores; but it is essential for learners to have some phonics knowledge in order to get good marks in English.

Dependent Variable: First English Test		Mean Difference	Std. Error	Sig	
	Level Level		(I-3)		
Tukey	1	2	1.72821	2.07531	.684
HSD		3	7.72821*	2.07531	.001
	2	1	-1.72821	2.07531	.684
		3	6.00000*	2.06213	.012
	3		-7.72821*	2.07531	.001
	X	2	-6.00000*	2.06213	.012

Table 9: Multiple Comparisons Between Groups

by Level (First Test)

The results in Tables 7, 8, and 9, 10 indicate that we can accept that "Hypothesis 1 - Learners who have better knowledge of phonics will get better marks on their English tests" is valid.

In Tables 7 and 8, learner's having knowledge of phonics is crucial to obtaining good marks on English tests. In Tables 9 and 10, it is difficult to find a great distinction between high and intermediate level students in the English tests. Low level students, however, did not get good marks on their English tests. This suggests that learning phonics affects English ability in general.

Furthermore, phonics teaching should be included in English teaching if this is an essential key to English success for students.

Dependent Variable: First English Test		Mean Difference	Std. Error	Sig	
	Level	Level	(I-3)		
Tukey	1	2	3.65000	2.22673	.233
HSD		3	12.57500*	2.22673	.000
	2	1	-3.65000	2.22673	.233
		3	8.92500*	2.22673	.000
	3	1D	-8.92500*	2.22673	.000
	/	C ²	-6.00000*	2.06213	.012

Table 10: Multiple Comparisons Between Groups

by Level (Second Test)

4.1.3 Results according to each English Skill

In many studies, researchers have discovered that there is a connection between phonics knowledge and a student's reading skills; for example, in Lee & Lee's study (2001a), researchers concluded that a group who received lessons through phonics with emphasis on short and long vowels had a significant increase in reading comprehension and the ability to distinguish between words and sentences compared with the control group who just received lessons by an English Native speaker.

Another study which was conducted with secondary students showed a similar result. In Edwards' (2008) study, phonics intervention was provided to high school students, and the researcher focused on the effects of the phonics

intervention on the reading fluency of the students. The results indicated that all students benefited significantly from the phonics intervention.

The results in Tables 11 and 12 indicate that there is a relevance not only in the reading part but also in the listening and writing parts of the tests. Students' phonics knowledge can affect reading skills and listening skills at the same time.

Table 11: Relation of Phonics Knowledge and Specific Skill Score

Between s	um of	df(b)	mean Square(c)	F(d)	Sig.(e)		
Groups s	quares(a)						
Listening	242.067	2	121.033	9.797	.000		
Reading	132.200	2	66.100	16.129	.000		
Writing	256.267	2	128.133	11.864	.000		
AL TOT IN							

(First English Test)

Table 12: Relation of Phonics Knowledge and Specific Skill Score

(Second English Test)

Between	sum of	df(b)	mean Square(c)	F(d)	Sig.(e)
Groups	squares(a)	ui(<i>b</i>)	incan Square(c)	1'(u)	Sig.(c)
Listening	1084.867	2	542.433	12.608	.000
Reading	132.867	2	66.433	5.947	.003
Writing	179.467	2	89.733	13.290	.000

4.2. Hypothesis 2

The second Hypothesis, for the question 'Where and for how long do highscoring students learn phonics before there English studies in public school?' is that 'Learners have studied their phonics through private education.' The results will be shown in the section below: 'Phonics Interest and other affective aspects'.

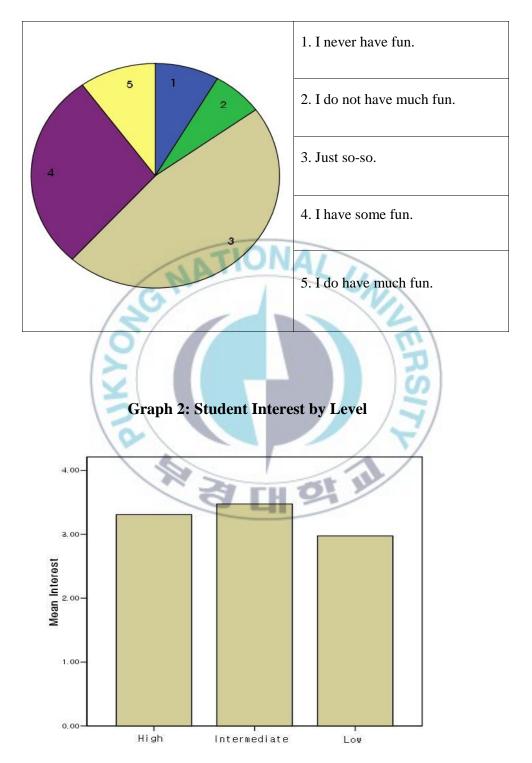
Before investigating high-scoring students' traits, it will be necessary to collect more information about students' affective attitudes toward English learning. Data on the students' interest in learning English will be discussed in this section as well.

4.2.1 Interest

All Students

The first question of the survey was "Do you have fun learning English?" and Chart 1 shows the participants' responses. The number in the pie chart matches the same choice given in Table 2 presented in section **3. 2. 1 Background Information Questionnaire.** Less than one quarter of the students responded that learning English is not very interesting. Around one third of the students indicated that they are fond of learning English. Almost half of the students do not feel strongly interested in learning English, but just less than half of the students are very interested in learning English. Our schools need to provide more interesting and motivational activities so that students who are wavering can feel better about studying English.

Chart 1: Students' Interest



By level

In Graph 2, the researcher has divided the results by the students' phonics knowledge level. High level students have an average of more than 3. Using a One-way Anova in the SPSS program, the significance is .082 (in statistics; and, in this case, .001 means that there is a significant difference between groups); therefore, there is not a significant difference between the groups.

4.2.2 Phonics Learning Route

All Students

Those students, who answered that they had studied phonics before, answered question number five: where they had studied phonics. In this pie chart, Choice 3 was the most popular answer. Seventy-five percent of the students had studied phonics through private institutes.

By level

The bar chart on the left indicates that there was not much difference between high-scoring phonics learners and those with lower scores. With respect to the table below, the significance is .366 which means the 'route' does not affect the phonics level.

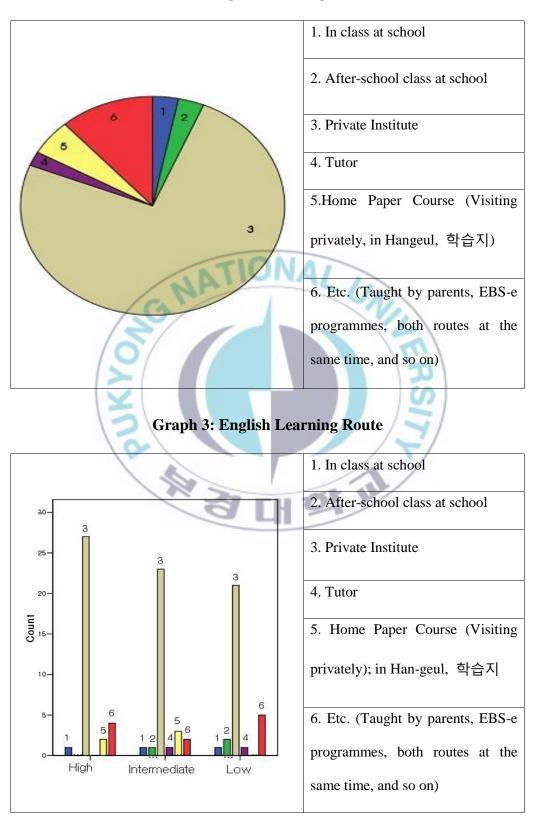


Chart 2: English Learning Route

4.2.3 Phonics Learning Duration

All Students

Half of the students had studied phonics for less than six months. This indicates that students need not be exposed to phonics learning for a great deal of time: being exposed to the concepts alone seems to contribute significantly to higher English test scores.

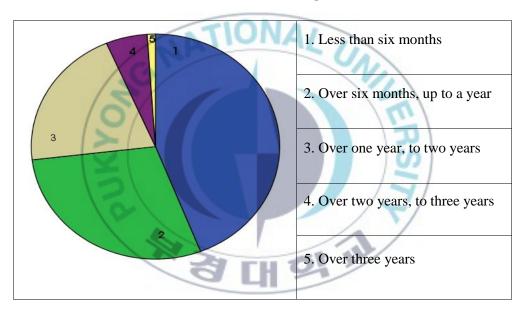
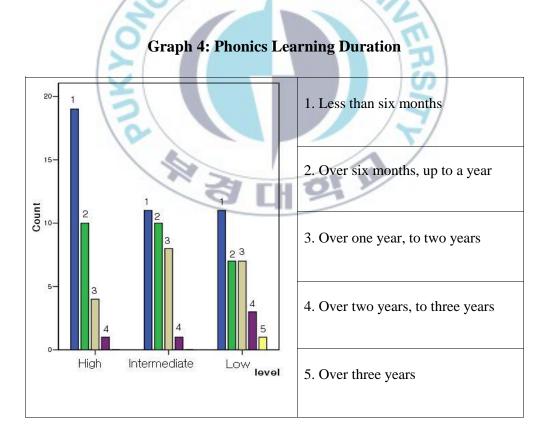


Chart 3: Phonics Learning Duration

By level

More than half of the students in the advanced group studied phonics for less than six months. Although the advanced students had better marks on their English tests, they had less exposure to phonics than the intermediate and low level students. Low level students had significantly more time learning phonics than high and intermediate level students. From this, we must consider and discover what are the most important factors in phonics learning and teaching.

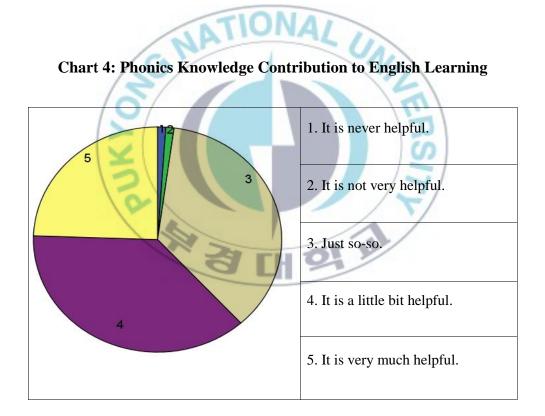
The key to having better marks on one's English tests does not seem to depend on how long one is exposed to phonics. The conjecture is that better test scores seem to depend on the essential concepts that would be taught early in a phonics program. If this is true, then low level students who have had the opportunities to learn the basic phonics, can score higher grades on their English tests.



4.2.4 Phonics Study's Contribution to English Learning

All Students

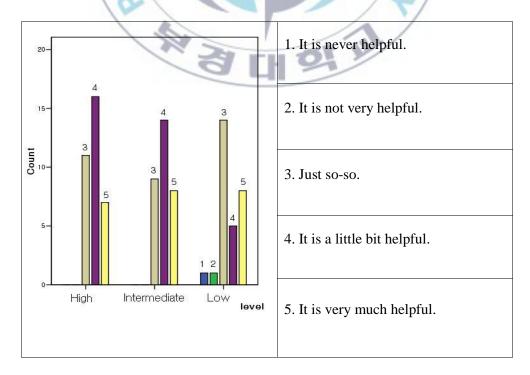
In this pie chart, only a small number of students responded that phonics learning is not necessary. More than 67% of the students seem to be very much aware of the importance of phonics study. This would indicate that most of those students who were exposed to phonics study know the importance of phonics learning when learning English.



By level

The pie chart 4 indicates that more than two thirds of the students agree that phonics learning is important in English learning.

The results from Graph 5, however, indicate an interesting point. Sixty-six percent of the high level students responded that phonics is quite helpful, but there were two students who responded that phonics is not useful. Among high level and intermediate students, there were none who answered that phonics is unnecessary. From this, it might be possible to suggest that students who do not have much phonics can be cynical about learning phonics. In addition, only 44% of the low-level students responded that phonics can help English learning.



Graph 5: Phonics Knowledge's Contribution to English Learning

In conclusion, students who have high phonics knowledge can get good marks in English tests. There was an interesting point that should be examined.

There was not a huge significance in English test scores between the high level students and the intermediate level students. There was, however, a noticeable significance between low level students and two other groups. Most of the students had phonics instruction through private institute and they have learnt phonics less than six months. Especially, high level students thought that phonics learning contributes to English learning.



V Case Studies

In this section, the qualitative approach was used. Among the one hundred and twenty students, six students were selected for this study. These six selected students had different starting ages for English learning, and differing attitudes. The purpose, here, was to collect data on what other factors can affect the English test scores of someone who has or has not studied phonics; and, in so doing, reveal some of the common properties of successful English learners and those of poor English learners.

5.1. High Level Students

These two selected students had been assigned to the high level, and had obtained good marks in the two English tests, but they have differing attitudes toward English learning. For their future success, both of them want to keep learning English.

5.1.1 No. 18⁴

No.18 was assigned to the high level. On her two English tests, her marks were 100 and 96, respectively. She started her English at the age of seven, and it was an early start because her mother is an English teacher at a private

⁴ For the participants' privacy, the researcher has decided to use numbers instead of names from the data sheet.

institute. She had studied phonics through a phonics book with a native English speaker for two to three months. She thinks that clear pronunciation is affected by phonics learning; her strong point in English learning is listening and reading. She studies English for two hours each day.

If she meets a new word, she tries to decide on how to pronounce it; then, she starts memorising by writing. She reads six to seven books a month, but she does not enjoy reading books. Her father works for a company and her mother runs a private institute.

Since she is an only child, her parents have great hopes for her, and they support her in many ways. She thinks that learning is fun and having a class with a native English teacher is fine, but grammar is not her strong point. She wants to learn; that is, if English does not become too difficult for her to continue to learn. In her school classes, she wants more exciting activities.

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5.1.2 No. 27

No. 27 was also assigned to the high level. This participant had been studying English since the third grade. Since English is introduced in the third grade of the Elementary School Curriculum in Korea, his parents decided to send him to a private institute. He studied there for about three years. He experienced phonics learning there for three months. How that institute approached phonics was through teaching students phonetic transcriptions. After that, he could read most basic words. He responded that phonics is quite helpful to his English studies because, through phonics, he could understand the essential, simple things that are basic to English. He also mentioned that his strong point in English is reading, and his weak point is writing. When he meets a new word, he recalls the phonetic transcriptions and divides the word into smaller parts as he tries to read it. When he wants to memorize words, he repeats them aloud many times. He is, however, not yet actively involved in English reading activities.

He has parents, and a younger brother who goes to the same school. His parents are very interested in cultural education. His father works for a company, and his mother is taking a course to be a child care worker. He thinks learning English is fun and he wants to continue to work on it. His objective in learning English is that he wants the preparation necessary to be a global leader in the future. He believes that he needs more reading activities in English class at school.

5.2. Low Level Students

Four selected students were assigned to the low level. Half of them did not have a chance to study phonics through any media. Three out of four have very low interest in learning English, and they do not seem to be goal-oriented toward learning English.

5.2.1 No. 92

No. 92 had her first exposure to learning English when she was in the second grade of elementary school. Her parents had sent her to an after-school English class. She has been learning English since then, and she studies English for about twenty to thirty minutes each day with a textbook, a workbook, and a CD. She stated that she does not know whether phonics is helpful in learning English.

She is good at listening and speaking but not good at writing. When she meets new words, she tries to read and mimics the sound. When she tries to memorise words, she reads and writes them at the same time. She does not like reading books in English, so she does not read them often.

She studies with one of her parents. She does not go to a private institute, but her mother stays at home and teaches her with the textbook and some workbooks. Her parents are very interested in her studying and are very attentive. She does not want to keep studying English, but she said that it is necessary to get a good job and to meet foreigners. She would like to participate more in the class, but only if the English lessons at school provide more interesting activities.

5.2.2 No. 110

No. 110 was also assigned to the low level. He had started his English studies in the third grade; but he did not get good marks in English, so he was sent to a private institute. He was taught phonics for a month, and he think that his phonics knowledge is helpful in taking English tests in general.

He also mentioned that listening is rather better for him and writing is his weak point. He studies English for two hours each day. When he meets new words, he uses the Internet or an electronic dictionary to search for the meaning. He memorises words by listening and writing. He is not fond of reading English books, but he says that, from time to time, he likes learning English. He wants to continue to study English for his future so that he can get a good job, or so that he can study abroad some day. He wants to learn more words, and he wants more interesting activities during his classes at school.

5.2.3 No. 111

No. 111 started her English learning in the third grade of elementary school; but her parents became concerned that their daughter could not follow the English lessons at school, so they decided to send her to a private institute. There, she studied phonics for about two years. She responded that phonics does not contribute much to her English learning because it is quite complex, and she does not understand much of it. Her strong point is listening, and she said that she is good at short words like *cat* and *fox*. She is afraid of talking to others in English because she believes that she does not have the ability to speak beyond a few words or phrases; she lacks confidence in her English. She studies English for about an hour a day with her mother at home. If she meets new words, she just ignores them. She does not like reading activities.

She is an only child and her parents are quite interested in her grades and studies. Her mother works for a company and her father is a fire-fighter. Her mother gives her a great deal of attention at home and studies with her. She takes after-school classes to learn dance and Chinese characters. She goes to a private institute to study mathematics. At home, she studies with her mother, reviewing her textbooks and workbooks. She said that she does not like learning English because it is difficult and tiring. She also mentioned that she does not want to keep learning English because, in English class, it is too difficult for her to understand what is being taught. She said that she is the only one who does not understand. If the lessons were easier, she could participate more in the class. Essentially, she does not want to continue studying English because she is afraid that her marks will go down, and she does not want to study something that will make her ashamed.

5.2.4 No. 119

No. 119 received his first English lessons when he entered the third grade of elementary school. He had been learning English only at school, and he had not had any private lessons. He had never heard of phonics, nor had he been exposed to any of the concepts. He responded that his strong point is writing and weak point is listening. He studies only in his school classes. If he meets new words, he asks his older brother or a teacher. It seems that, because he has no phonemic awareness, he just memorises the spelling without understanding the implications. He does not like reading activities, so he is not often involved in reading activities.

He has a tendency to study by himself, and he is eager to learn other subjects. Since he is an independent learner, his parents have great faith in him. He likes studying English and he wants to continue to learn. He responded that he has to study English because it is a regular subject at school and because English is the global language.

He wants to learn more about what he does not know, and he wants more interesting and dynamic activities.

VI Conclusion and Discussion

Before developing any conclusions from the data, it would be more efficient to review the three hypotheses presented in the beginning of this study. The researcher has made the following three hypotheses:

Hypothesis 1 - Learners who have better knowledge of phonics will get

better marks on their English tests.

Hypothesis 2 - Learners have studied their phonics through private education.

Hypothesis 3 - There could be other environmental factors that can affect English test scores.

The first Hypothesis, that phonics-taught students get better marks on their English tests appears to be valid. As in this study, similar results have been borne out by previous studies. There is a study (Connelly, 2001) about comparisons made of two different groups of children, one which had phonics instruction and one which had not. The phonics-taught children demonstrated higher reading comprehension. The present study can be added to such examples of the effect of phonics study on English learning but from a slightly different point of view.

The results of this study indicate that students who have phonics knowledge can achieve high marks in standardised assessments. If educators know that a phonics intervention can benefit struggling students, then it is their responsibility to give these students the tools that they need for success. The most significant finding of this study is that the phonics test did not correlate with significantly different scores on the English test between high-scoring students and intermediate-scoring students, although low-scoring students showed significantly different scores from the two other groups. This result indicates that either the English test was not difficult enough to distinguish between the top levels or more knowledge of phonics does not affect English test scores; but that students who do not have a basic knowledge of phonics cannot do well in English tests.

Hypothesis 2, that 'Learners have studied their phonics through private education' is valid in that almost every student had studied phonics from private institutes including many different types of education: after-school lessons, tutoring, and books. Eighty-five percent of the students support this result. This may be because, in the current curriculum at the elementary level, students are not provided with phonics instruction.

Moreover, most of the students, who **did** study phonics, studied the ideas for less than six months. This indicates that it does not take much time to learn the basic concepts of phonics. If phonics knowledge can be the key to English success, then we should provide our students with phonics teaching at school; it would not take a long time to learn the basic rules.

From the qualitative research, the findings are as follows:

There were few students who did not study phonics amongst the high level students, and among them, most studied phonics when they began their English learning or even before their first English lesson in elementary school. All of these interviewees responded that phonics is very helpful because it helps students to develop clear pronunciation and to read better.

The researcher's suggestions from this study's results are as follows:

- 1. There should be phonics teaching in the beginning level English Classes in elementary schools. The curriculum should involve basic phonics rules and concepts so that students can learn how to read and write beyond the mere memorising of letters; they could learn the relationships between letters.
- The time for phonics teaching should be instituted close to the start of a student's English learning as this study indicates that, in many cases, students started phonics learning when they began to learn English in public schools.

VII Proposals

While this research study was being developed, there were some limitations and difficulties to overcome. The researcher, here, suggests some specific ideas that might encourage further possible studies.

- 1. With English starters for example, third graders a researcher could provide an intervention in the form of phonics teaching for a certain amount of time; then, compare the experimental group with those students who have only the standard English education at school. It would be comparable to a previous study focusing on the effects of phonics intervention for secondary students.
- 1-1. If phonics instruction is crucially essential to those who are struggling at the beginner's level, then the Ministry of Education should provide some practical and useful phonics teaching guides to schools. Researchers could develop phonics teaching materials and discover how they might work in the public school situation. To achieve effective results, phonics teaching methodologies should be studied carefully along with the associated research.
- 2. Students, who achieve low marks in English testing, could be provided with a phonics intervention and the results examined. This can also be linked to a previous study dealing with phonics training for Englishspeaking, poor readers conducted by McArthur et al (2011).

- 2-1. When implementing this kind of research, researchers should consider different ways of presenting a phonics intervention to students. What would be most suitable for most students, would it be synthetic or analytic? Which would provide the greatest significance for a particular group of students?
- 3. There might be some students who achieve low marks on a phonics test yet still get good marks on their English tests. Through qualitative research, more detailed information might be gleaned from those cases, anomalies discovered, and remedial methodologies designed.
- 3-1. On the other hand, there might be some students who achieve high marks on a phonics test yet still obtain low marks on their English tests.What other variables control their marks? Using qualitative research, some interesting points might be discovered through the study.

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