
The Effects of Pedagogical Phonetics: Synthetic Phonics in Remedial English Classes for First-Year University Students

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Abstract

In recent years, Japan's English education policy has accelerated early English language learning and heightened content complexity, resulting in a 1.5-fold expansion in the vocabulary students must acquire by high school graduation. Prior research has highlighted vocabulary acquisition difficulties as a primary cause of setbacks and burdens for learners. This study addresses this issue at the word level by focusing on decoding skills involving linking sounds and letters. The potential of synthetic phonics is emphasized. However, its application beyond critical periods remains poorly understood. This study aimed to ascertain whether synthetic phonics (used in early education) enhances decoding skills for university students beyond the critical period. Post-test dictation scores revealed significant differences between the experimental and control groups, confirming the effectiveness of synthetic phonics. Furthermore, an attitude survey conducted with the experimental group revealed that synthetic phonics enhanced students' listening comprehension skills and English spelling abilities. Students also believed synthetic phonics should be taught in the initial stages of English language learning. These findings advocate using synthetic phonics to motivate first-year university students to enhance their decoding skills and vocabulary and recommence their English language learning.

Keywords: Synthetic Phonics, Phonological Awareness, Decoding Skill,
Remedial English Classes

1. Introduction

1.1 Current State of English Education Policy

In 2002, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) introduced the "Strategic Concept and Action Plan for the Development of Japanese with English Proficiency." This plan established specific numerical targets for the entire nation to achieve a level of English proficiency suitable for regular communication upon completion of secondary education. Since then, English education in Japan has rapidly accelerated, and its complexity has increased. Starting in 2020, the new Courses of Study guidance from the Ministry of Education was fully implemented, emphasizing English as the first foreign language of instruction. The content of English education was to be applied from high school to junior high school and then to elementary school.

What calls particular attention is the significant rise in the number of vocabulary items that must be mastered, which increases the burden on learners. Elementary school students are expected to acquire 600–700 words and junior high school students must learn 1,600–1,800 words. In high school, the target has been expanded to 1,800–2,500 words. This is a cumulative vocabulary total of 4,000–5,000 words, a notable increase from the previous benchmark of 3,000 words (MEXT, 2017a, 2017b, 2018).

1.2 Issues in Remedial English Language Instruction

With the rapid acceleration of early and advanced English language learning, it is imperative to recognize that many students experience a decline in motivation during the introductory phase as they cannot fully grasp the English language learning content. Several universities are facing the urgent issue of how to accept and guide students who have failed to learn English in primary and secondary education and how to address this issue from various perspectives, including first-year education, remedial education, and high school–university collaboration.

An ongoing survey was conducted at private universities in Tokyo to gauge the awareness of English learning among new students. The results indicate that over 70% of first-year university students who perceive difficulties in English start experiencing feelings of frustration in the initial stages of their learning paths, that is, within two years of having commenced their studies. The primary factor for this frustration has been identified as “vocabulary learning difficulty” (Sato, 2013). Similarly, in a survey conducted by the Benesse Education Research and Development Institute (2009), 75.4% of junior high school students with limited English proficiency ($n = 1711$) and 68.8% of junior high school teachers ($n = 3643$) identified “difficulty in learning vocabulary” as a hurdle in English language learning. Thus, “difficulty in vocabulary learning” has been frequently highlighted as a primary contributor to losing motivation to learn English (Maeda et al., 2007; Tsumura, 2010).

Many first-year university students who struggle with English encounter obstacles in grasping fundamental vocabulary. It can be inferred that these students faced setbacks early on before engaging in the manipulation of words and grammar during the foundational stages, causing these challenges to persist from secondary education to university. Vocabulary learning poses a significant barrier to further progress. Despite its apparent simplicity, addressing this issue is vital to Japanese English education.

To address this situation, this study sought clues for rekindling English learning by using phonological decoding skills. By revisiting the initial steps of English learning, involving “alphabet and sound,” and connecting these steps to vocabulary acquisition in a bottom-up way, the synthetic phonics approach commonly used in early English education has been restructured as an introductory theme for first-year university English education. This approach was integrated into a module format, and its effectiveness in facilitating vocabulary acquisition was examined.

2. Literature Review

2.1 Research on Phonological Awareness

Phonological awareness is pivotal in addressing the issues of “stumbling at the word level,” a primary cause of English language learning difficulties. Phonological awareness involves com-

prehending sound components (e.g., rhymes, syllables, onsets, and phonemes) within the phonetic structure of spoken language. It also encompasses identifying and intentionally manipulating the phonological elements within linguistic units (Gombert, 1992).

Since the 1980s, numerous studies on infants' native language acquisition processes have reported a correlation between phonological and print awareness. Explicitly teaching these skills in the preliminary stages of learning and fostering decoding skills to transform letters into phonograms may significantly contribute to vocabulary development (Rieben & Perfetti, 1991; Sawyer & Fox, 1991). Several studies have indicated that phonological awareness enhances vocabulary recognition and fosters reading proficiency (Wagner & Torgesen, 1987).

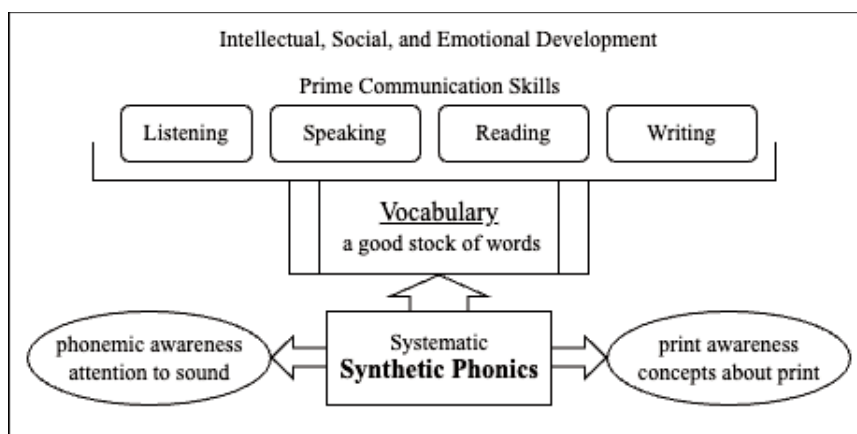
2.2 Significance and Importance of Synthetic Phonics

Phonological awareness involves recognizing a word's sound structure, with phonemic awareness as one of its subcategories. Phonemic awareness entails conscious recognition of phonemes, the minor sound units in spoken language, and is a fundamental skill essential for reading and writing English (Bowers, 2020). This is because the alphabetic spelling system connects written symbols to speech sounds at the phonemic level. Phonics is the practice of reading aloud letter symbols based on their letter-sound relationship (i.e., letter-phoneme correspondence) (Snider, 1995), which was developed as a system for teaching reading skills according to the alphabetic principle (Adams et al., 1990). In essence, phonics teaches the correspondence between letters and their pronunciation in word articulation.

Synthetic phonics has been proven to be effective by many studies (Logan, 2008) and has been integrated into the official curriculum in the UK as a skill that children should acquire in their initial stages of schooling (Johnston & Watson, 2014). For example, in the final report to the UK Department for Education and Skills (commonly referred to as the Rose White Paper), Rose (2006) emphasized that the four skills of speaking, listening, writing, and reading, derived from and promoted by high-quality systematic phonics instruction, are crucial for intellectual, social, and emotional development of young children. He asserted that phonics is the most direct

Figure 1

The Significance of Synthetic Phonics



Note. Developed conceptual diagram based on Rose (2006).

way for most young children to become proficient readers and writers (Figure 1). In response, the UK Department for Education and Skills published “Letters and Sounds: Principles and Practice of High Quality” as a specific program for teaching synthetic phonics in 2007 (UK Department for Education and Skills, 2007). This underscores that synthetic phonics is the foundational step in learning to read. Consequently, “In England, the national curriculum requires maintained schools to teach reading using systematic phonics,” affirming the promotion of synthetic phonics within school education and its explicit inclusion in the public curriculum (UK Department for Education and Skills, 2023).

With this background, this study conducted empirical verification to address the following two research questions:

(1) Research Question 1

Can synthetic phonics instruction, a pedagogical approach traditionally employed in early English education, effectively enhance the decoding proficiency of university students who exceed the critical period?

(2) Research Question 2

To what extent do learners appraise synthetic phonics as a viable strategy for surmounting “word learning difficulties,” a contributory factor diminishing their English learning motivation?

3. Method

3.1 Participants

The participants were first-year students at a private university in the Tokyo metropolitan area who were not majoring in English. All were classified in the lower group on the English placement test when the university accepted them. They perceived themselves as less skilled in English and had no experience learning synthetic phonics. The participants were divided into experimental and control groups. The experimental group was taught synthetic phonics. A dictation test was administered as a post-test. The mean TOEIC Bridge scores of the experimental and control groups were 76.5 and 80.5, respectively (the standard error for the TOEIC Bridge is Listening + Reading = 8 points). The students were informed that this study would be conducted to improve the teaching methods for them. Consent for the research was obtained from all the students.

3.2 Research Procedure

3.2.1 Teaching Method and Schedules

In the experimental group, synthetic phonics instruction was provided once a week during the initial warm-up period of a 90-minute mandatory first-year English class, spanning 10 sessions in a modular format. By contrast, the control group received regular Listen & Repeat instructions for new vocabulary.

3.2.2 Teaching Approach and Policy

Synthetic phonics teaches 42 major sounds of English by linking the letters of the alphabet to their representative sounds. In contrast to analytic phonics, which teaches sounds in alphabet-

ical order, synthetic phonics teaches the most frequently occurring phonemes in English words. This leads to efficient learning, in which learners understand the words they use as far as possible at an early stage, which is also reflected in the policy of the National Curriculum in the UK. In this study, while following the traditional approach to synthetic phonics, the following two original policies and procedures were used to guide instruction:

1. The students will engage in listening and repetition and enhance their expressive skills by considering the crucial points and manner of articulation.
2. The aim was to enhance the students' ability to overcome obstacles in vocabulary acquisition, a fundamental aspect of learning English. This can be achieved by equipping them with the skills to read, listen, write, and pronounce unfamiliar words.

3.2.3 Contents of the Class

As outlined in the previously mentioned original policy 1, another focus was on acquiring fundamental pronunciation skills. The key concepts of the minimum essential articulation point and manner were explained and practiced using an oral cavity model. To enhance the program's effectiveness, the sequence of learning phonemes in synthetic phonics was reorganized, and the groups of sounds were expanded from the original seven to eight, comparing their similarities with Japanese sounds. The number of characters covered, including the digraphs composed of two characters, totaled 34. This accounted for 81.0% of the total English phonemes (42).

Within the text, the letters are preceded and followed by slashes, indicating the representative sounds of the letters, as addressed in synthetic phonics. For example, /a/ = [æ] and /u/ = [ʌ].

As the targeted students were in remedial classes that required a fresh start in learning English, the chosen vocabulary for each lesson was set at the junior high school level. Essential foundational English words frequently used in first- and second-year junior high school English textbooks were selected as instructional materials. Printouts containing the essential synthetic phonics rules required for hearing and writing the said words were prepared. Articulation points were taught explicitly using an oral model.

The targeted words were designated for each lesson, with students practicing the dictation of words formed by combining the phonemes they had learned through listening and writing. This practice aimed to confirm the enhancement of the decoding skills. Herewith is a summary of all 10 synthetic phonics lessons, along with a table illustrating the keywords, groups of words to be studied, and target words for each lesson (Table 1).

Lesson 1: Focus on understanding the differences in syllable production between Japanese and English, emphasizing vowels and consonants.

Lesson 2: Learn that each alphabet letter has a "name" and a corresponding "sound." Additionally, the sounds of the letters /l/n/t/d/ were recorded while considering the alveolar.

Lesson 3: Compare the basic vowels of five letters (/u/a/i/ea/e/) with the Japanese equivalents “う” “あ” “い” and “え” to facilitate learning.

Lesson 4: Acquire familiarity with the seven consonants (/p/b/m/c/q/k/g/) while understanding aspirations and bilabial aspects.

- Lesson 5: Learn three letters (/s/z/th [θ] [ð] /x/) involving fricative sounds by drawing comparisons with the Japanese “ス”.
- Lesson 6: Master the two-character semi-vowels (/w/oo/) and long vowels by relating them to the Japanese “フ”.
- Lesson 7: Proficiently grasp the r sound of (/r/er/ir/ur/), which poses difficulty for Japanese speakers, by relating it to the Japanese “フー” sound.
- Lesson 8: Master five fricative and affricative sounds (/h/f/v/sh/ch/) by comparing the labiodental and post-alveolar sounds with the Japanese “フ” “フ” and “フ”.
- Lesson 9: Acquire the sounds of three additional letters (/j/y/o/) that have not been covered previously. The /o/ presents a particular challenge for learners. Students will practice by contrasting the three phonemes [æ] [ʌ] [ɑ] with their Japanese counterparts.
- Lesson 10: Review all the sounds learned thus far and apply that knowledge to continuously read a list of 50 words with the correct pronunciation. Additionally, read short sentences aloud.

Table 1
Key Points Covered in the 10 Sessions of Synthetic Phonics Instruction

	Keyword	Group	Target word
1	consonant vowel segment		
2	alveolar	l / n / t / d	
3	vowel	u / a / i / ea / e	land / nut / tan/ eat / tea
4	aspiration bilabial	p / b / m / c / q / k / g	pea / ban / beck / mam / met
5	fricative	s / z / th ([θ] [ð]) / x	then / sun / tax / zeal
6	rounded	w / oo	cool / zoo / wet / wind
7	rhotic	r / er / ir / ur	red / circus / speaker
8	labiodental, post-alveolar	h / f / v / sh / ch	hand / food / shut / church
9	glide, [æ] [ʌ] [ɑ]	j / y / o	yes / yet / chopstick / mother / hat-hut-hot
10	a / b / c / d / e / f / g / h / i / j / k / l / m / n / o / p / q / r / s / t / u / v / w / x / y / z / er/ ir /ur / ea / oo /ch/ sh/ th		Read 50 words quickly with no interruptions Read short sentences aloud

3.2.4 Dictation Test

- After completing the 10 lessons, a dictation test was administered to both the experimental and the control groups as a post-test (Figure 2). The procedure was as follows:
- Step 1) Four English words, each consisting of four phonemes, were audibly repeated five times at a slow pace. The words were as follows: bunch (Q1), slug (Q2), twig (Q3), and fist (Q4). After the test, it was confirmed that the participants were unfamiliar with the words.
- Step 2) The spelling was completed by writing the phoneme heard in the four blank spaces on the answer sheet using the alphabet selected from the provided options.
- Step 3) One point was assigned for each correct answer, and a maximum of four points was attainable for correct answers. Additionally, a cumulative total of 16 phonemes was scored individually for the phoneme-level analysis.

Dictation Test

Listen carefully to the English words you hear and complete the spelling by selecting the letters that apply from the choices. There are four questions, Q1 through Q4. Each word is repeated 5 times.

choices

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
q	r	s	t	u	v	w	x	y	z	er	ea	oo	ch	sh	th

Ex.

t	ea	ch	er
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Q1

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Q2

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Q3

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Q4

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The experimental group was asked three questions about their perceptions of the effectiveness of synthetic phonics. Q1 was “I believe that phonics has improved my English reading ability.” Q2 was “I believe that phonics has helped me in learning English spelling,” which required the respondents to select an option (strongly agree, agree, disagree, or strongly disagree). Q3 was “At which point of the schooling path do you think it is best to learn phonics?” For Q3, the respondents were given four options: elementary school, junior high school, high school, and university. This post-survey was conducted after the completion of the 10 synthetic phonics lessons and included responses from those students who did not attend all the classes. As a result, the total number of responses was $n = 37$.

The survey results are categorized into three sections: word-level analysis (total score out of four points, percentage of correct answers for each word, and analysis of incorrect responses); phoneme-level analysis (number of correct answers, percentage of correct answers for each phoneme, and analysis of incorrect responses); and awareness survey results (effectiveness of synthetic phonics for reading, spelling, and optimal learning timing). These results are discussed below.

4.1.1 Comparison of Total Scores

Synthetic Phonics in Remedial English Classes for First-Year University Students

The analysis results revealed significant differences between the two groups. The median scores [25th and 75th percentiles] for the continuous scale were 2 [1–3] and 0 [0–1] for the experimental and control groups, respectively. A statistically significant difference was observed, with the experimental group outperforming the control group ($p < 0.0001$). The average percentage of correct answers for the experimental group was 55.2% compared with 10.2% for the control group. This significant difference across all the questions underscores the substantial disparity in performance between the two groups (Table 3).

The observed data revealed a significant difference between the experimental and control groups in their proficiency in utilizing heard sounds as cues to spell words accurately. These findings suggest that synthetic phonics could serve as a valuable tool for first-year university students who are unable to read or write words at the junior high school level upon entering university, thereby facilitating their English relearning processes.

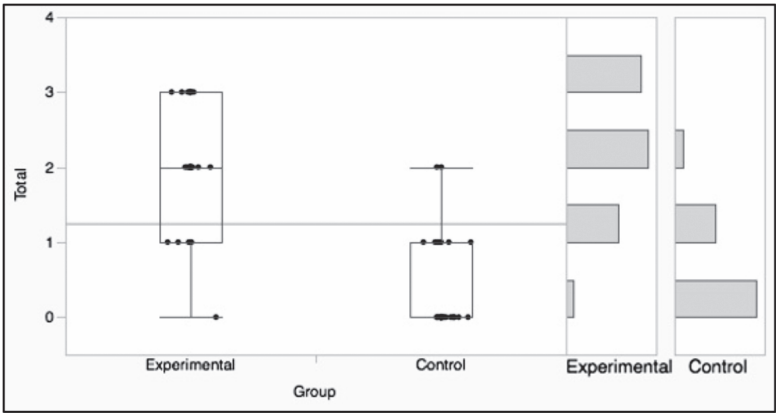
Table 2
Total Scores out of Four Points

Words	Total score						Interquartile range	<i>p</i>
	0	1	2	3	4			
Experimental	<i>n</i>	1	7	11	10	0	2[1–3]	<.0001
	%	3.5	24.1	37.9	34.5	0.0		
Control	<i>n</i>	18	9	2	0	0	0[0–1]	<.0001
	%	62.1	31.0	6.9	0.0	0.0		

Table 3
Accuracy Rates for Each Word

		Q1	Q2	Q3	Q4
		bunch	slug	twig	fist
Experimental	<i>n</i>	5	9	20	25
	%	17.2	31.0	69.0	86.2
Control	<i>n</i>	2	1	2	8
	%	6.9	3.4	6.9	27.6

Figure 3
Distribution Graph of Total Scores



4.1.2 Word-Level Error Analysis

Furthermore, a qualitative difference was observed between the two groups' answers when analyzing incorrect answers. The control group's answers showed that most of them deviated from the rules for letter placement in English words, such as bunch → bnce, slug → seank, twig → toolk, and fist → ficht, indicating that they constructed the letters without confidence. Conversely, analyzing the wrong answers of the experimental group revealed that they were caused by mishearing errors such as /r/ and /l/, /a/ and /u/, etc., and concentrated on sounds that Japanese are generally

not good at, such as bunch → banch; slug → srug; twig → tweg; and fist → fisth. The number of significant deviations from the basic rules of English spelling was limited, indicating a tendency to match phonemes and letters according to the rules of synthetic phonics (Table 4).

Table 4

Examples of Incorrect Answer

Experimental				Control			
Q1 bunch	Q2 slug	Q3 twig	Q4 fist	Q1 bunch	Q2 slug	Q3 twig	Q4 fist
banch	srug	tuig	fisth	vath	srak	thore	hafe
vumch	srag	tooig		bage	srak	toolk	feat
dunch	clug	tweg		bnce	thark	tuic	pest
bunck	slag			bact	shrak	tooeach	fesch
				banth	seank	trig	ficht

4.2. Phoneme-Level Analysis

4.2.1 Comparison of the Phoneme-Level Correct Answer Rate

I now consider the outcomes of the phoneme-level analysis. All the words in Q1–Q4 comprised four phonemes, and the accuracy of phoneme identification was assessed for each word. The Mann–Whitney U test was used to ascertain whether a significant difference existed in the number of accurately identified phonemes per word between the two groups. The findings indicated that the experimental group outperformed the control group, with a notably higher number of correctly identified phonemes. Upon examining the interquartile range of the correct phoneme counts, the respective results for the experimental group vs. control group, were as follows: Q1 bunch: 3[3–3] vs. 3[1–3]; Q2 slug: 3[3–4] vs. 2[1–3]; Q3 twig: 4[3–4] vs. 1[1–3]; and Q4 fist: 4[4–4] vs. 3[1.5–3]. Distinct differences were observed between Q3 and Q4 (Table 5).

Table 5

Number of Correct Phonemes per Word

Segments		Score					Interquartile range	<i>p</i>
		0	1	2	3	4		
Q1 bunch								
Experimental	<i>n</i>	1	0	1	22	5	3[3–3]	<.0024
	%	3.5	0	3.5	75.9	17.2		
Control	<i>n</i>	1	7	5	14	2	3[1–3]	
	%	3.5	24.1	17.2	48.3	6.9		
Q2 slug								
Experimental	<i>n</i>	0	0	0	20	9	3[3–4]	<.0001
	%	0	0	0	69.0	31.0		
Control	<i>n</i>	3	8	10	7	1	2[1–3]	
	%	10.3	27.6	34.5	24.1	3.5		
Q3 twig								
Experimental	<i>n</i>	0	0	0	9	20	4[3–4]	<.0001
	%	0	0	0	31.0	69.0		
Control	<i>n</i>	4	11	6	6	2	1[1–3]	
	%	13.8	37.9	20.7	20.7	6.9		
Q4 fist								
Experimental	<i>n</i>	0	0	0	4	25	4[4–4]	<.0001
	%	0	0	0	13.8	86.2		
Control	<i>n</i>	4	3	4	10	8	3[1.5–3]	
	%	13.8	10.3	13.8	34.5	27.6		

To provide further insights into the nature of the responses, I scrutinized the accuracy percentages for each of the 16 phonemes across the four questions answered by the participants. Notably, the experimental group displayed an average accuracy of 87.5%, in stark contrast to the control group (53.3%). This discrepancy underscores the superior overall performance of the experimental group in terms of correct answers. A breakdown of the percentage of correct responses for each phoneme is presented in Table 6. Employing the Mann–Whitney U test, I investigated significant variations in the accuracy percentages for each phoneme. The results indicated that, excluding the initial /b/ and /s/ sounds, all 14 phonemes had a significant difference. It is worth highlighting that the accuracy rates of the control group for consonants /l/, vowels /u/, and semi-vowels /w/ were 27.6%, 6.9%, and 13.8%, respectively, notably lower than those of the experimental group.

Table 6
Accuracy Rates for Each Phoneme

	Q1				Q2				
	b	u	n	ch	s	l	u	g	
Experimental%	82.8	48.3	93.1	79.3	96.7	69	75.9	100	
Control%	89.7	13.8	79.3	66.5	93.1	27.6	6.9	55.2	
<i>p</i>	0.458	0.002	0.134	0.248	0.57	0.002	<.001	<.001	

	Q3				Q4				Av.
	t	w	i	g	f	i	s	t	
Experimental%	100	75.9	93.1	100	100	100	100	86.2	87.5
Control%	86.2	13.8	34.5	34.5	82.8	51.7	62.1	58.6	53.5
<i>p</i>	0.042	<.001	<.001	<.001	0.021	<.001	<.001	0.02	

4.2.2 Analysis of Errors at the Phoneme Level

Error analysis was performed to examine the phonemic responses of both groups. Specifically, the control group showed notably lower accuracy (Q2 /l/, Q2 /u/, and Q3 /w/), and variations in the error responses were extracted and examined (Table 7). After removing the non-answers (represented by blank spaces), the control group displayed seven distinct error variations

Table 7
Variation of Incorrect Phonemes

/l/		correct	blank	a	e	ea	o	r	t	u
Experimental	<i>n</i>	20					1	7		1
	%	69.0					3.5	24.1		3.5
Control	<i>n</i>	8	2	2	1	1	0	11	2	2
	%	27.6	6.9	6.9	3.5	3.5	0.0	37.9	6.9	6.9

/u/		correct	blank	a	e	l	n	r		
Experimental	<i>n</i>	22		6	1					
	%	75.9		20.7	3.5					
Control	<i>n</i>	2	2	17	1	1	1	5		
	%	6.9	6.9	58.6	3.5	3.5	3.5	17.2		

/w/		correct	blank	e	i	o	oo	r	u	wi
Experimental	<i>n</i>	22		2		1	2		2	
	%	75.9		6.9		3.5	6.9		6.9	
Control	<i>n</i>	4	5	1	1	12	2	1	2	1
	%	13.8	17.2	3.5	3.5	41.4	6.9	3.5	6.9	3.5

for Q2 /l/. Their attempts to convey sounds resembling the Japanese /l/ led to instances of spelling such as a, e, ea, o, t, u, and more. By contrast, the experimental group exhibited three error variations. Regarding Q2 /u/, the control group exhibited seven variations in erroneous responses, trying to capture sounds akin to the Japanese /l/, using spellings such as a, e, r, n, and others. Contrarily, the experimental group had fewer error variations. For Q3 /w/, the control group showed seven distinct error variations, aiming to represent sounds similar to the Japanese /ʍ/, with spellings such as e, i, o, oo, r, u, wi, and more. Conversely, the experimental group demonstrated four error variations. The control group demonstrated a diverse range of error variations across all the questions. This suggests that the establishment of a correlation between phonemic and print awareness may be lacking within the control group.

4.3 Analysis of Emotional Aspects

The survey results are presented in Table 8. For Q1 “Phonics is helpful for reading English,” 45.9% responded “Agree,” and 54.1% responded “Strongly Agree,” indicating that all the participants provided positive responses, and none expressed a negative opinion. Similarly, for Q2 “Phonics is helpful for learning English spelling,” 56.8% answered “Agree,” 40.5% responded “Strongly Agree,” and only 2.7% indicated “Disagree.” This suggests a positive perception (97.3%) of improving spelling skills through synthetic phonics. Hence, convincing evidence supports the idea that synthetic phonics decoding skills are beneficial for vocabulary acquisition among students. Regarding Q3 “When do you believe is the optimal time to learn phonics?” the responses were as follows: primary school, 27.0%; junior high school, 35.2%; high school, 21.6%; and university, 16.2%. A significant majority (62.2%) believed early English learning in elementary and junior high school was ideal. The fact that 37.8% of the high school and university students chose this option suggests that including phonetic terminology and articulation guidance, unlike traditional early childhood synthetic phonics instruction, may have led to a perception of greater difficulty for some participants.

Table 8

Results of the Attitude Survey

Q1	n	%	Q2	n	%	Q3	n	%
Strongly disagree	0	0	Strongly disagree	0	0	University	6	16.2
Disagree	0	0	Disagree	1	2.7	High school	8	21.6
Agree	17	45.9	Agree	21	56.8	Primary school	10	27.0
Strongly agree	20	54.1	Strongly agree	15	40.5	Junior high school	13	35.2

5. Discussion

5.1 Results of Research Question 1

This study highlighted the significant difference in scores in a dictation test involving spelling words based on heard sounds between university students who learned synthetic phonics and those who did not. The effectiveness of explicit instruction in bottom-up phonemic and print awareness through synthetic phonics, validated primarily for early childhood, applies to university students beyond the critical period. The results imply that synthetic phonics could be an

essential strategy for enhancing spelling skills by organically connecting word sounds and letters. This potentially addresses the root causes of English learning frustration and becomes an essential tool for reintroducing English learning at the university level. Moreover, although initially challenging, introducing concepts such as the place and manner of articulation using phonetic terms (e.g., aspiration, alveolar) was accepted without resistance and even generated classroom interest, thus contributing to academic engagement among university students.

5.2. Results of Research Question 2

In the consciousness survey, 100% of the participants believed that synthetic phonics improved their English reading ability, and 97.5% felt it helped in memorizing word spellings. This shift in learners' perceptions was also evident to the instructor (author) throughout the 10 synthetic phonics sessions. As decoding skills improved, the delight in acquiring unfamiliar words for reading and writing was manifested in their swift and confident pronunciation of newly introduced words on flashcards. The collaborative continuous reading activity featuring 50 new English words during the final phase of the synthetic phonics lessons further boosted the students' confidence. Some students even expressed a sentiment of wishing they had known about synthetic phonics earlier. The decoding skills honed through synthetic phonics, enabling oral pronunciation and written representations of novel words, may also enhance learners' motivation in English learning.

6. Conclusion

The importance of cultivating individuals with advanced English proficiency, strong communication skills, and exceptional presentation abilities for international engagement is evident in contemporary English education policies. However, learners who encounter difficulties and setbacks have been neglected amidst the rapid transformation of English learning environments toward more complex content, early exposure, and the integration of AI- and ICT-based learning methods. Educators must address such learners at some point, establish appropriate goals considering their prospects, and equip them with concrete strategies to recommence their learning journey. This responsibility is as significant as addressing the needs of high-achieving learners, constituting an essential aspect of our role in education.

Implementing synthetic phonics through a series of 10 modular sessions presents several issues warranting further consideration. First, the initiative predominantly focused on a restricted range of phonics content. To further advance the mastery of complex spelling, it is imperative to delve deeper into the intricate rules of phonics and the numerous exceptions that do not adhere to them. This necessitates the creation of a more detailed syllabus to facilitate appropriate time allocation during classroom implementation. Second, the instruction of synthetic phonics demands that teachers possess a solid understanding of and substantial expertise in phonetics. However, the current teacher training process is not sufficiently equipped to foster this comprehension and skill level. Addressing this gap is vital to the successful implementation of synthetic phonics instruction. Nevertheless, the significance of this endeavor lies in demonstrating that synthetic phonics, known to be primarily effective for early second language acquisition, can also contribute to remedial education for university students. I consider this a noteworthy accom-

plishment of this endeavor and aspire to continue refining and examining the approach to first-year English education.

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