

# DEVELOPMENT OF AN INSTRUCTIONAL GUIDE FOR CHINESE PRE-SERVICE EFL TEACHERS TO TEACH PHONICS

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DEVELOPMENT OF AN INSTRUCTIONAL GUIDE FOR CHINESE EFL  
PRESERVICE TEACHERS TO TEACH PHONICS

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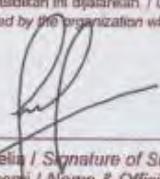
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## ABSTRACT

The purpose of this study is to develop a phonics instructional guide for pre-service EFL teachers in China. The study employs a multi-phase mixed-method experimental design that incorporates a survey, an experimental design, a delayed retention test, a focus group discussion, and the trainer's teaching reflection. The study is organized into three phases in accordance with the ADDIE instructional design guideline: needs assessment phase, design and development phase, and implement and evaluation phase. This survey was distributed to 254 pre-service EFL teachers. For quantitative studies, stratified random sampling is used to select representative samples from the population, but the purposive selection is used for qualitative studies. The data from multiple sources indicated that instructional design effectively equips pre-service EFL instructors with subject matter content knowledge to teach phonics. Additionally, the results indicated that pre-service EFL teachers require an instructional guide to learn how to teach phonics and that current phonology classes in teacher preparation programs should be reformed to place a greater emphasis on preparing pre-service EFL teachers' knowledge base for implementing phonics instruction in an explicit, direct, and systematic manner. This study also yields pedagogical and theoretical implications that pre-service EFL teachers' professional development should be complemented. Needs assessment should first be conducted before at the initial stage of instructional design to ensure the quality of the instructional design product and professional training. And, pre-service EFL teachers' knowledge base, especially subject matter content knowledge can be modified via environmental input of professional training which was conducted based on the needs assessment.





## DEVELOPMENT OF AN INSTRUCTIONAL GUIDE FOR CHINESE EFL PRESERVICE TEACHERS TO TEACH PHONICS

### ABSTRAK

Tujuan kajian ini adalah untuk membangunkan panduan pengajaran fonik untuk guru EFL pra perkhidmatan di China. Kajian ini menggunakan reka bentuk eksperimen kaedah campuran berbilang fasa yang menggabungkan tinjauan, reka bentuk eksperimen, ujian pengekal tertunda, perbincangan kumpulan fokus, dan refleksi pengajaran jurulatih. Kajian ini disusun dalam tiga fasa mengikut garis panduan reka bentuk pengajaran ADDIE: fasa penilaian keperluan, fasa reka bentuk dan pembangunan, dan fasa pelaksanaan dan penilaian. Tinjauan ini telah diedarkan kepada 254 guru EFL pra perkhidmatan. Bagi kajian kuantitatif, persampelan rawak berstrata digunakan untuk memilih sampel yang mewakili populasi, tetapi pemilihan bertujuan digunakan untuk kajian kualitatif. Data daripada pelbagai sumber menunjukkan bahawa reka bentuk pengajaran secara berkesan melengkapkan pengajar EFL praperkhidmatan dengan pengetahuan kandungan perkara untuk mengajar fonik. Di samping itu, keputusan menunjukkan bahawa guru EFL praperkhidmatan memerlukan panduan pengajaran untuk mempelajari cara mengajar fonik dan kelas fonologi semasa dalam program penyediaan guru perlu diubah suai untuk memberi penekanan yang lebih besar pada penyediaan asas pengetahuan guru EFL praperkhidmatan untuk melaksanakan pengajaran fonik secara eksplisit, langsung dan sistematik. Kajian ini juga menghasilkan implikasi pedagogi dan teori bahawa pembangunan profesional guru EFL pra perkhidmatan harus dilengkapkan. Penilaian keperluan hendaklah terlebih dahulu dijalankan sebelum di peringkat awal reka bentuk pengajaran bagi memastikan kualiti produk reka bentuk pengajaran dan latihan profesional. Dan, asas pengetahuan guru EFL pra-perkhidmatan, terutamanya pengetahuan kandungan subjek boleh diubah suai melalui input persekitaran latihan profesional yang dijalankan berdasarkan penilaian keperluan.



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## LIST OF ABBREVIATIONS

CNKI China National Knowledge Infrastructure

EFL English as a Foreign Language

IPA International Phonetic Alphabet

L1 First Language

MMU Manchester Metropolitan University

NCEE National College Entrance Examination

R+P Reading with Phonology

SSP Systematic Synthetic Phonics





## CHAPTER 1

### INTRODUCTION



Chapter one is a general introduction to the present study. In this chapter, the background of the study, problem statement and rationale of the study are presented. Then, research purpose, research objectives, and research questions as well as research hypothesis are stated accordingly. The theoretical framework which serves as the underpinning of the study is presented and this is followed by significance of the study as well as operational definitions.





## 1.1 Background of the Study

In this era of growing globalization, EFL students in China should begin learning English in elementary school, according to the Chinese Ministry of Education. In China, education is obligatory from Grade 1 through Grade 9, with the intended goal of eradicating illiteracy. In relation to this, phonics was included in the National English Curriculum in 2011 (Long, 2019; Ministry of Education, 2011; Zhao, 2019). Following this new language education policy, phonics is practically included in almost all elementary school textbooks. However, phonics instruction in primary schools, and even throughout the obligatory education period, is far from satisfactory (Long, 2019; Yan, 2018; Zhao, 2019; Zhao et al., 2015; Zhong & Kang, 2021; Zhong, 2020).



Long (2019) noticed that many EFL beginners receive insufficient or ad hoc

instruction in phonics decoding rules. As a result, EFL beginners might lack the ability to self-learn vocabulary if they are not taught the decoding rules. This view, however, has long been ignored as many teachers in China are still holding the belief that, in English language learning, the more vocabulary one possesses, the better one's command of the language (Clarken, 2017). Due to this reason, many teachers in schools frequently attribute a lack of English proficiency to a lack of vocabulary (Xiao & Bao, 2014).

Indeed, vocabulary development is critical for both reading and writing. As Bear et al. (2020) explained, becoming completely literate requires rapid, precise recognition of words, words' meanings in the text and rapid, accurate generation of words in writing, so that readers and writers may concentrate on meaning-making. This,





however, is contingent upon a comprehension of phonics and spelling patterns, as well as word components and meanings rather than on word memorization (Bear et al., 2020). This notion is consistent with Bottom-Up Theory of Reading Process which states that the reading process consists of multiple isolated sub-skills that begin with decoding and progress through blending, chunking, and meaning (Aldhanhani & Abu-Ayyash, 2020). In other words, as Friedman (2019) noted, teaching word recognition is a critical part of early reading education, implying that word recognition automaticity is difficult to acquire without basic decoding skills. Amadi (2019) holds a similar view, stating that lacking basic decoding skills before developing advanced reading skills is like building a home on an unreliable foundation, which risks collapsing at any time. Unaware of this, both teachers and EFL beginners resort to tedious mechanical word memorization to recognize and identify more English words (Yan, 2018; Zhang, 2013).



Furthermore, Clarken (2017) highlighted that the mechanical method of word memorizing is still widely used in China. Teachers frequently require EFL beginners to focus more on word memorization (Shen, 2016; Xiao & Bao, 2014) to expand vocabularies or enhance the ability to recognize words (Clarken, 2017). Clarken (2017) summarized that word memorizing had become a fundamental element of English learning in China and Chinese students, not only the EFL beginners, believe that word memorization will aid them in learning the language more effectively. Zhao et al. (2015) similarly discussed this phenomenon in their work. They found that several mainland Chinese teachers recalled using internal word structures to learn English terms, and memory was the most often cited approach for teaching and learning vocabulary. Besides, they also noticed that EFL teachers in mainland China placed a





premium on teaching vocabulary usage through collocations and sentences. Without a doubt, vocabulary serves communication in the same way that bricks serve a house.

While vocabulary is undoubtedly crucial for the comprehension of English as a foreign language (Clarcken, 2017), the critical question is not whether vocabulary is necessary or not. Instead, the critical point is how to attain automaticity in early reading process. As previously stated, Bottom-Up Theory of Reading Process promotes early reading by developing basic decoding skills. To attain essential word recognition at the word-reading level, a beginner should first master letter-sound relationships to read accurately, followed by automaticity and fluency (Aldhanhani & Abu-Ayyash, 2020). In the present study, word recognition is prioritized over word identification in phonics instruction. The phrase word recognition refers to the cognitive act of recognizing a previously encountered word, whereas word identification focuses on retrieving the meaning of the words via phonetic sounds stored in long term memory (Johnson, 2016). In this regard, phonics instruction is critical for liberating EFL beginners from mechanical word memorizing and enabling them to learn words explicitly, systematically, and efficiently.

Furthermore, Friedman (2019) emphasised on the teaching of word recognition in phonics instruction, which is a vital component of early reading process. Thus, phonics instruction is critical for preventing EFL beginners from mechanical word memorization and facilitating the acquisition of new words. Additionally, multiple studies conducted in China since 2011 have discovered that basic phonics instruction can significantly increase word recognition ability, reading comprehension, and general language skills (Chen, 2019; He, 2018; Huang, 2019; Li, 2019; Li, 2015; Liu, 2019; Pu,





2018; Ren, 2019; Wen, 2013; Zeng, 2016; Zhang, 2019; Zheng, 2016).

Multiple studies have examined the issue of integrating phonics instruction and discovered that the majority of EFL teachers lack a phonics knowledge foundation (Long, 2019; Yan, 2018; Zhang, 2013; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020). In these studies, many EFL teachers stated that they had neither learnt phonics nor been prepared to teach phonics during their teacher training program (Long 2019; Zhao, 2019). Additionally, they stated that in their phonology lesson, they studied International Phonetic Symbols (IPA) mainly in order to fix their own pronunciations (Long, 2019; Zhao, 2019). IPA is fundamentally distinct from phonics, which utilizes a set of phonetic symbols to assist EFL learners in remembering the sounds of English letters when perceiving the symbols rather than alphabet letters. It is not as straightforward as phonics, which essentially stands for the relationship between letter sounds (Zhao, 2019). As a result, even when phonics is included in English textbooks, teachers may not identify its elements, let alone explain or instruct their students explicitly or systematically. Also, though some EFL teachers may recognize that phonics contents are related to letter sounds, they prefer to teach letter sounds using IPA rather than the direct letter-sound relationship (phonics), as they were previously taught IPA rather than phonics decoding rules (Zhao, 2019; Zhang, 2013).

According to these findings, there is a need for professional development for EFL teachers in China, including a systematic and explicit instructional guide for phonics instruction (Long 2019; Yan, 2018; Zhang, 2013; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020). Essentially, such professional development should begin with pre-service EFL teachers in the teachers' training program, and the phonics





instructional guide should be developed specifically for pre-service EFL teachers.

## 1.2 Problem Statement

As mentioned previously, phonics was included in the 2011 National English Curriculum for Compulsory Education in Mainland China (Long, 2019; Ministry of Education, 2011; Zhao, 2019). Consequently, a growing number of studies have been published in the last decade on the benefits of integrating phonics education in primary schools to improve EFL beginners' word recognition ability, spelling ability, phonemic awareness, and motivation to study English (Cai 2020; Chen, 2020; Hu, 2020; Huangpu, 2017; Liu, 2019; Sun, 2019; Wang, 2018; Zhou, 2021).



Nonetheless, these studies unanimously revealed a phenomenon that only a minority of EFL beginners in Chinese junior middle schools could apply the knowledge of letter-sound relationship to read and spell unfamiliar words encountered during reading; while the majority are still unable to read unfamiliar words and must memorize letter by letter or even write them down in Chinese Pinyin or characters with similar sounds (Xiong, 2019). For instance, Xiao (2001) discovered that 52.7 to 53.5 percent of Chinese EFL beginners' spelling errors are caused by a lack of knowledge about the letter-sound relationship in the English language. Moreover, Xiong (2019) noted that, while phonics is made a requirement in the National English Curriculum for Compulsory Education, there are no phonics instructional guidelines prescribed for teachers to use. Additionally, though teachers are provided with additional instructors' books, the section on phonics instruction is not made explicit or systematic (Xiong,





2019; Zhang, 2013; Zhong & Kang, 2021; Zhong, 2020).

In addition, multiple studies (Long, 2019; Yan, 2018; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020) have observed the absence of published guidelines for EFL teachers to follow and the absence of professional development for in-service EFL teachers. Therefore, it is not surprising that many EFL teachers are unfamiliar with or unsure of how to teach phonics. The same scenario is also observed in the college in China. In the context of EFL teacher education, the phonology course that is usually offered to pre-service EFL teachers in teachers' training college is designed mainly to improve their pronunciation using IPA rather than to prepare them for future phonics instruction. To be specific, the objectives of the phonology course are to (i) increase the ability to distinguish between British, American, and Chinese accents; ii) imitate the intonation and grasp the presentation skills; iii) assess and correct both one's own and others' pronunciation; and iv) develop the habit of self-correction and pronunciation practice. In short, the contents of the course are highly related to IPA. Thus, as Zhao et al. (2015) commented, the phonology course lacks phonics and phonics instruction content. These are the primary reasons behind pre-service EFL teachers' lack of phonics understanding.

Therefore, there is a strong need to address the issue of the lack of an instructional guide that could provide Chinese pre-service EFL teachers with the necessary knowledge on phonics and most importantly, the pedagogical knowledge on phonics instruction. This study sets out to address this need by developing a phonics instructional guide.



### 1.3 Rationale of the Study

As mentioned in the previous section, previous studies have empirically demonstrated that phonics instruction has positive effects on EFL beginners in China (Chen, 2019; Huang, 2019; He, 2018). However, some studies indicated that the implementation of phonics instruction is still far from optimal, primarily owing to inadequate preparation and knowledge base for teaching phonics among EFL teacher' (Long, 2019; Yan, 2018; Zhang, 2019; Zhao, 2019; Zhong, 2020). These studies also discovered that most EFL teachers in China are unaware of phonics, its' importance, and how to teach it (Long, 2019; Yan, 2018; Zhang, 2019; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020).

More precisely, past research findings indicated that most Chinese EFL teachers could not discern IPA from phonics. Therefore, they could not identify phonics content in textbooks, leading them to either avoid phonics education entirely or instruct EFL beginners using IPA instead. Also, as many EFL teachers lack a clear understanding of phonics and the inter-relationship between phonics and reading, phonics content is wholly overlooked. In addition, many EFL teachers have not acquired phonics decoding rules, thus, they cannot explain most of the decoding rules explicitly or systematically to EFL beginners. Due to this reason, they are forced to teach only the easiest and most evident ones that they understand. In that situation, they may periodically inform EFL beginners of decoding rules, but this is not systematic. Besides, as reported in some studies, many Chinese EFL teachers, particularly the novice teachers, expressed their frustration with their inability to explain irregularities to EFL beginners when generalizing decoding rules (Long, 2019;



Yan, 2018; Zhang, 2019; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020).

Based on the research findings, educators are advocated for the development of a phonics instructional guide that would assist pre-service EFL teachers in learning to teach phonics explicitly and systematically with an appropriate scope and sequence (Long, 2019; Yan, 2018; Zhang, 2019; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020). This is pertinent as CNKI (China National Knowledge Infrastructure), the most popular database in China for researchers, and Zhao's (2019) and Zhong's (2020) research reports unanimously indicated that no such instructional guide for Chinese EFL contexts has been developed thus far, which indicates a research need to be accomplished.



To address this gap, the present study attempts to develop an instructional

guide with explicit and systematic phonics instruction approach that focuses on resolving the aforementioned challenges encountered by Chinese pre-service EFL teachers. Considering the problems addressed in the previous section, the proposed phonics instructional guide should focus on: (i) phonics-related general knowledge, which provide basic terms related to phonics and knowledge on the relationship between phonics and reading; (ii) explicit and systematic phonics decoding rules which range from simplest ones to the more complex ones; and (iii) phonics instruction approaches, with an emphasis on systematic synthetic phonics instruction approach. Apart from these focuses, the proposed instructional guide should also be aligned with the 2011 Chinese National English Curriculum.





Furthermore, as the National English Curriculum for Compulsory Education (2011) requires Chinese EFL teachers to stay current and expand their subject matter content knowledge, the development an instructional guide is highly required for pre-service EFL teachers to acquire phonics and phonics instructions-related knowledge. Additionally, in order to ensure its effectiveness, the proposed instructional guide has to be developed based on the targeted learners' needs, and this can be done via a needs assessment which aligns with the principles in Andragogy Theory of Adult Learning (Knowles et al., 2015; Kurt, 2020).

A search for previous studies in CNKI revealed that not only there is no phonics instructional guide available to assist Chinese pre-service EFL teachers in learning phonics instruction, there were also no studies undertaken to identify their needs for a phonics instructional guide. This latter is deemed critical as needs assessment is the root to the development of the instructional guide.

Thus, to ameliorate the predicament mentioned earlier, an instructional guide developed based on the needs of pre-service EFL teachers is required to prepare them with the necessary knowledge base to teach phonics. This is also the main purpose of the present study.

#### **1.4 Purpose of the Study**

The main purpose of this multi-phase developmental study (Richey & Klein, 2005) is to develop a phonics instructional guide based on the ADDIE instructional design



model. The phonics instructional guide is meant to help Chinese pre-service EFL teachers for implementing explicit and systematic synthetic phonics instruction.

Following the ADDIE instructional design guideline and in light of Andragogy Theory of Adult Learning, the needs of pre-service EFL teachers should be identified first before designing and developing the proposed guide. Thus, as part of the guide development, the present study is also undertaken to identify Chinese pre-service EFL teachers' objective needs (present knowledge) and subjective needs (desired changes) for a phonics instructional guide (Branch, 2018; Hutchinson & Waters, 1987; Macalilster & Nation, 2020).

Following the development of the instructional guide based on the outcome of the needs assessment, the guide is tried out and evaluated. To be specific, through implementation and a norm-referenced pre-test and post-test, the effectiveness of the newly designed instructional guide is evaluated on the learning level (Johnson & Bendolph, 2018) using a one-group pretest-posttest design experiment (Creswell & Creswell, 2018; Johnson & Bendolph, 2018). Based on this design and for the purpose of analysis, the instructional guide is regarded as the independent variable and the learning outcome (trainees' performance) as the dependent variable. As such, another purpose of the present study is to determine the effectiveness of the newly developed instructional guide. As suggested by Branch (2018), a delayed retention test is added for the evaluation of the learning level (Johnson & Bendolph, 2018). Lastly, an evaluation questionnaire, a focus group discussion as well as trainer's teaching reflection are conducted to evaluate the trainees' perception level in order to help ascertain the effectiveness of the guide. (Johnson & Bendolph, 2018)

In summary, this multi-phase developmental study (Richey & Klein, 2005) is conducted for three purposes. The main purpose is to develop an explicit and systematic phonics instructional guide for Chinese pre-service EFL teachers. This main purpose is guided by two sub-purposes: to identify pre-service EFL teachers' needs and to evaluate the effectiveness of the newly developed instructional guide. In line with this, three research objectives have been established based on the research purposes.

### 1.5 Research Objectives

**Objective 1:** To identify Chinese pre-service EFL teachers' objective needs (present knowledge), subjective needs (desired changes) as well as environment constraints for a phonics instructional guide.

**Objective 2:** To determine appropriate contents for the phonics instructional guide.

**Objective 3:** To evaluate the effectiveness of the phonics instructional guide.

### 1.6 Research Questions

This study aims at answering the following research questions:

**Research Question 1:** What are the Chinese pre-service EFL teachers' needs for a phonics instructional guide?



**Research Question 1.1:** What are the Chinese pre-service EFL teachers' objective needs (present knowledge) for a phonics instructional guide?

**Research Question 1.2:** What are the Chinese pre-service EFL teachers' subjective needs (desired changes) and environment constraints for a phonics instructional guide?

**Research Question 2:** What specific contents should be included in the phonics instructional guide?

**Research Question 3:** How effective is the guide in assisting pre-service EFL teachers in acquiring subject matter content knowledge for phonics instruction?

**Research Question 3.1:** Does the guide yield similar impact on pre-service EFL teachers from different academic years?

**Research Question 3.2:** Is the acquired knowledge well retained across time?

## 1.7 Research Hypothesis

The research hypotheses come along with research question 3 for hypothesis testing in quantitative study.

Null hypothesis: There is no causality between the independent variable (the guide) and the dependent variable (trainees' learning outcome).





Alternative hypothesis: There is causality between the independent variable (the guide) and the dependent variable (trainees' learning outcome).

## 1.8 Theoretical Framework

This section provides an outline of the theoretical framework. Guided by the purpose of the study and the research questions, this study is conceptualised in three theories: Bottom-Up Theory of Reading Process (Amadi, 2019; Gough, 1972), Stimuli-Response (S-R) Theory with Reinforcement (Schunk, 2020) and Andragogy Theory of Adult Learning (Knowles et al., 2015).



1972) provides implications for EFL beginners to start reading with phonics. This theory also supports the application of explicit and systematic synthetic phonics instruction in EFL settings such as China. Therefore, such a theory decides explicit and systematic phonics instruction approach is a core section in the instructional guide.

Second, Stimuli-Response (S-R) Theory with Reinforcement which includes both Skinner's Instrumental Conditioning Theory and Thorndike's Trial and Error Learning Theory (Schunk, 2020) provides pedagogical implications to phonics instruction and instructional design. Especially, Instrumental Conditioning theory implies that a group of trainees' complex learning behavior can be shaped via the implementation of the guide. In addition, the law of effect and the law of exercise





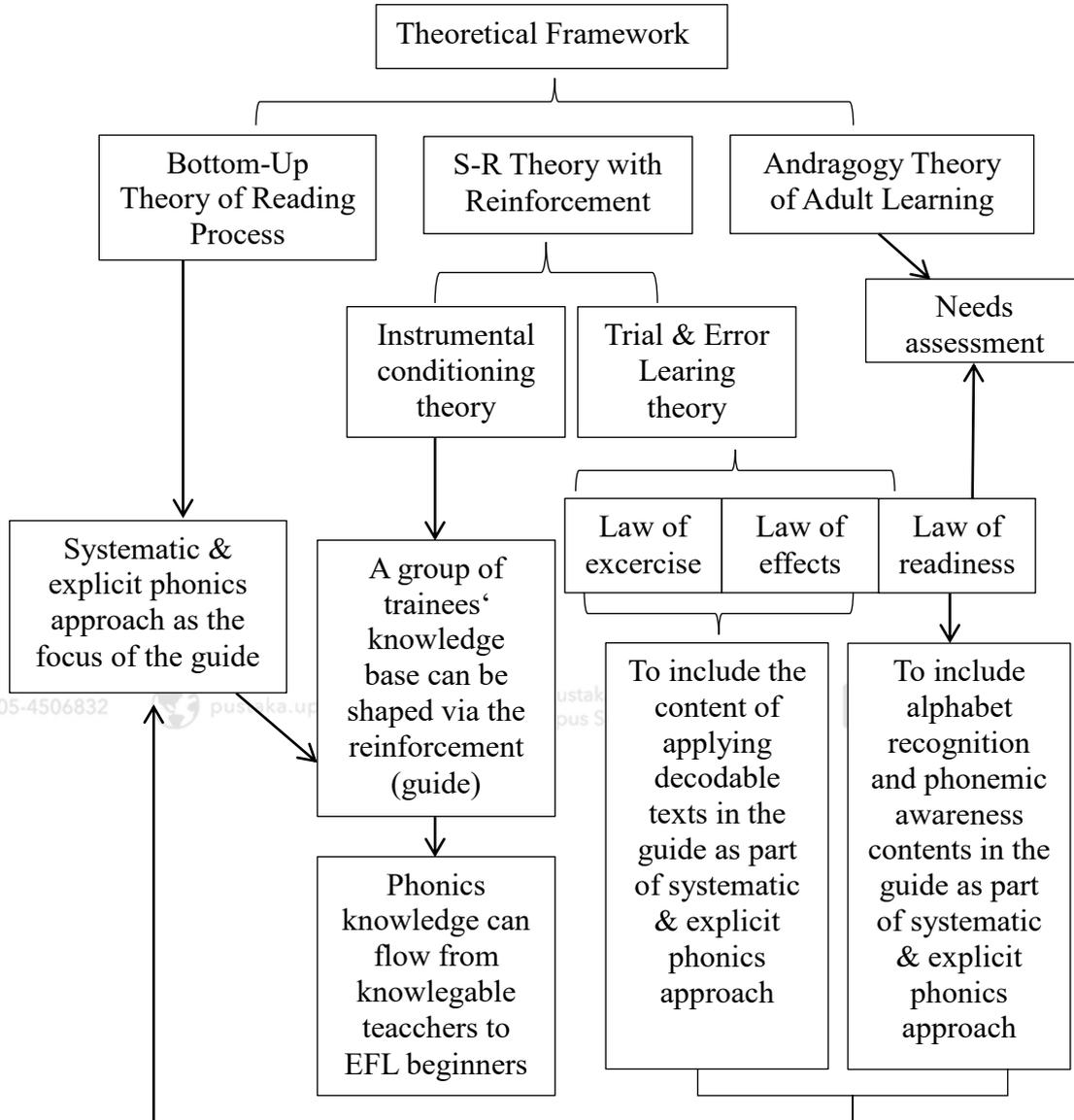
decide to integrate applying decodable text as a means of decoding rules reinforcing approach into explicit and systematic phonics instruction approach continuum.

Third, Andragogy Theory of Adult Learning (Knowles et al., 2015) as well as the law of readiness under Thorndike's Trial & Learning Theory provides theoretical support for needs assessment at the initial stage of instructional design process to prepare the trainees to be ready to learn and to maximize the quality of the guide (Branch, 2018; Brown & Green, 2016; Morrison et al., 2019). The framework is shown as in Figure 1.1



**Figure 1.1**

*Theoretical Framework*





## 1.9 Significance of the Study

First, the present study seeks to contribute to the field of EFL teacher education by developing an integrated phonics instructional guide to prepare Chinese pre-service EFL teachers to teach phonics in China. The instructional guide aims to broaden their subject-matter content knowledge in implementing explicit and systematic synthetic phonics instruction, which is critical for future professional development. On overall, this study contributes to the field theoretically and pedagogically. Theoretically, the present study provides additional evidence with respects to S-R Theory with reinforcement and Andragogy Theory of Adult Learning that a learning group's (adult pre-service EFL teachers') complex behavior which consists of sequential sub-skills can be conditioned via the reinforcement, especially in the condition that the training is to their needs (Knowles et al., 2015; Schunk, 2020). Pedagogically, this study implies that pre-service EFL teachers' subject matter content knowledge can be significantly improved in large group instruction mode with Gagné et al.'s (2005) nine instructional strategies regardless of their academic years.

Also, the present study contributes to the understanding of objective needs (present knowledge) and subjective needs (desired change) (Hutchinson & Waters, 1987; Macalilster & Nation, 2020) in the context of EFL teacher education, and particularly in the development of a phonics instructional guide for Chinese EFL teachers. The objective needs, in the context of this study, refer to the present knowledge necessary to implement phonics instruction, whereas the subjective needs refer to the desired change or expectations (Hutchinson & Waters, 1987; Johnson & Bendolph, 2018; Macalilster & Nation, 2020). As noted previously, a search in the





CNKI reveals that no studies have been conducted in the Chinese EFL setting to examine teachers' knowledge base and desired change for teaching phonics (Huangpu, 2017; Zhao, 2019; Zhong & Kang, 2021; Zhong, 2020).

Thirdly, this study may assist university educators and course designers to have an in-depth understanding towards Chinese pre-service EFL teachers' learning needs and subsequently support course improvement for teacher preparation program. Lastly, in terms of theoretical contribution, the present study hopes to enrich the literature in the areas of reading from phonics, implementation of phonics instruction and instructional guide development in the EFL setting.

Above all, the proposed phonics instructional guide not only could benefit the pre-service teachers, it could also be employed to train Chinese in-service EFL teachers as part of professional development programme. Additionally, any institution or training centre may customize the instructional guide for a short-term intensive training session. Thus, the findings of the present study may assist educators in developing a more concise but equally effective training activity or course for phonics instruction.

## **1.10 Operational Definitions**

### **1.10.1 Phonics**

It refers to the relationship between sounds and the written symbol. In other words it is letter-sound relationship in the English language (Bear et al., 2020). Therefore, in the





present study, phonics is considered as letter-sound relationship.

### **1.10.2 Phonics Instruction**

This term refers to the activities to instruct or teach letter-sound relationship (phonics) which involves both instructors and students (ILA, 2019). In the present study this definition is adopted.

### **1.10.3 Synthetic Phonics**

Given that synthetic phonics refers to the approach that instruction begins with individual sounds and the blending of sounds to form words which is already an explicit phonics instruction (Bear, et al, 2020), synthetic phonics in the present study is also considered as explicit and systematic phonics instruction approach.

### **1.10.4 Systematic Synthetic Phonics (SSP)**

It refers to systematic, explicit phonics instruction which is based on synthetic phonics which begins with simple letter-sound relationship, then proceeded to more complex ones. In this thesis, explicit and systematic synthetic phonics equals explicit and systematic phonics instruction. Sometimes, the two terms are used interchangeably.





### **1.10.5 Objective Needs**

As Hutchinson and Waters (1987) classified the required knowledge base and the potential trainees' present knowledge as objective needs and in this study, required knowledge has been generalized from previous literatures as suggested by Macalister and Nation (2020), the term objective needs specifically, in this study, refers to Chinese pre-service EFL teachers' present knowledge base to teach phonics.

### **1.10.6 Subjective Needs**

As Hutchinson and Waters (1987) classified, potential trainees' desired changes belong to subjective needs, the desired changes or so called wants in Macalister and Nation's (2020) needs assessment framework which is adopted in the present study is operationalized as the pre-service EFL teachers' subjective needs.

### **1.10.7 Environment Constraints**

Informed by Branch (2018), this term in the present study refers to the time, location, and material constraints.



### **1.10.8 Necessities**

As Macalister and Nation (2020) defined, in the needs assessment framework, this term is also known as required knowledge base for the learners. It can also be understood as the knowledge which the trainer wants the learners to learn. In this study, this term refers to the knowledge base which includes seven dimensions that were mainly generalized from previous literatures and SSP framework by MMU (2015) and R+P framework from Hatcher (2006).

### **1.10.9 Pre-service EFL Teachers**

This term refers to the college students who are in English Major in Teachers' colleges in China. And in this study, in Chapter Three, the population is the pre-service EFL teachers in a teachers' college and samples are also drawn from them. They are not referred to as "student" in this study. In this study, occasionally, they are addressed as trainees or pre-service EFL teachers, according to the context. More precisely, trainees are the pre-service EFL teachers who are receiving training via the guide.

### **1.10.10 EFL Beginners**

EFL beginners in the present study mainly refer to the EFL students who are enrolled in compulsory education phase from Grade 1 to Grade 9. In China, students in Grade 1-Grade 6 are called pupils and students in Grade 7-9 are called junior middle school



students. The National English Curriculum for Compulsory Education covers students from Grade 1-9. English is required to learn from Grade 1 onwards. For remote areas or less developed areas, English is required from Grade 3 onwards.

### 1.10.11 Word Recognition

In this study, as Johson (2016) defined, word recognition refers to the cognitive act of recognizing a familiar word that has been seen before which is different from the notion of word identification which, on the other hand, refers to the process of decoding the meaning of the word through its phonetic sounds.



This chapter describes the research background information, problem statement, research rationale, research purpose, objectives, research questions, theoretical framework, operational definitions, as well as the significance of this study. The information, mainly the purpose, the research questions and the theoretical framework, are critical in keeping the study on track and aiding in the conceptualization of the instructional guide for this study.

