

Evaluation of Phonics Content in Academic Degrees, Pre- and In-Service Teacher Training Programs, and Primary Grade Teacher Instructional Materials in Pakistan

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Abstract

Teacher training and teacher instructional materials play integral roles in developing the knowledge and skills among the teachers and the learners and implementing any change in pedagogic policy. This research aims to probe the preparation of government primary grade teachers to teach phonics since its inclusion in the government school syllabus from 2015-2016 to identify the areas of teacher preparation that need improvement. The data was collected through a survey of 230 (Male=115, Female=115) government primary school teachers' academic and professional qualifications alongside the pre-and in-service teacher training programs they had attended. Based on their responses, the contents of the academic & professional degrees, pre-and in-service teacher training programs, and teacher instructional materials were evaluated through the researcher-made checklists. The analysis and the findings realize that although the pronunciation component is part of these teacher preparation programs, no phonics-related content is included in all these teacher preparation programs. Teacher instructional materials are a good resource to teach phonics as they provide all the linguistic information related to phonics instruction but ironically only a few teachers consult it as a teaching resource. It can be concluded that primary-grade teachers are not fully equipped to teach phonics. On these grounds, it is recommended that phonics should be incorporated alongside the pronunciation component in the academic and professional degree programs and pre-and in-service teacher training to bring a positive change in primary grade classrooms and make the pedagogic policy change effective.

Keywords: Phonics instruction, evaluation, pre-service teacher training, in-service teacher training, instructional materials,

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1. Introduction

Content and skill-based teacher training program and the provision of instructional materials for the teachers (Wildová, 2014; Hermans, Sloep & Kreijns, 2017; Low, 2021) are the critical areas for teaching pronunciation as they improve the competence of teachers and make them skillful in assessing the learners at primary, secondary, high secondary and higher educational levels to improve pitfalls in its pedagogic situations. Pronunciation teaching at the primary level termed phonics is the establishment of sound-letter correspondence (Buckingham, 2018; Moats, 2020) as a prerequisite not only to learning the phonological system of a language but also to help in reading (National Reading Panel, 2000; Rose, 2006; Nation, 2017; Lervag, Hulme, & Melby-Lervag, 2018). Teachers' competence must be ensured to develop the sound foundations of phonological competence and reading skills among primary-grade learners. Training plays a pivotal role in inculcating all the skills among the teachers, may it be what they learn during their academic career, before induction, or during service. In the opinion of Morley (1991), teachers are not responsible for teaching but rather facilitating learners' process of learning pronunciation. As a pronunciation coach, the teacher plays a vital role in examining and supervising variations and deviations in spoken English at two levels (a) speech production, and (b) speech performance. Morley (1991) further considers this the responsibility of teachers to carry out pronunciation diagnostic analyses to choose those features that can affect and modify the language of learners towards amplified comprehension, support students in determining both long-term and short-range goals, decide on appropriate instructional styles and materials, plan in-class oral communication activities and encourage students to be aware of their speech and genuine self-monitoring. Celce-Murcia et al. (2010) suggest several aspects (knowledge of segmental and suprasegmental features of the language, principles, methods, and techniques of pronunciation/phonics teaching, imitative and communicative practice through concrete demonstration and training the students to become autonomous learners by identifying and self-correcting their errors) in which Non-Native instructors need to be trained to teach target language pronunciation, especially through phonics at the primary level effectively.

In this respect, King (2014) divides formal teacher training into three basic types i.e., pre-service, in-service, and distance learning/self-study training.

Pre-service training aims at developing the understanding of the teacher's role, essential skills, and competencies in the student-teacher through inclusive education or by addressing the specific pedagogic needs of the classroom. At this stage, the student teachers have no prior experience to build on their knowledge, which is why, they may show less resistance to accepting and trying out new teaching ideas, contents, methodologies, and strategies (Ashby et al., 2008). The monitoring of these trainees after the completion of the course is a challenge whether they put their learned knowledge into practice or not. The in-service teacher training program can be conducted for different durations using a whole-school approach where all the teachers receive the training or teachers from different schools can be chosen as a group and trained with the expectation that they would pass on their knowledge to the other colleagues in their institutions. The training can be tailored to meet the schools' specific needs and tackle current challenges, refresh their knowledge and skills or convey and implement changing educational policies. Although these experienced teachers can immediately put their newly learned knowledge into practice, the real challenge is their resistance if they are accustomed to their traditional methods and not ready to change their attitude towards updating their classroom practices (Borg, 2011). Distance learning/self-study teacher training programs are flexible in time, less expensive to support, and not constrained by location but access to electronic media and digital resources are prerequisites.

It is significantly important to conduct a training session for pre-service and in-service teachers on the regular basis to ensure the implementation of any methodology or technique (Freeman et al., 2015). The quality of training sessions also needs to be measured alongside the regular monitoring of trained teachers' competency and grasp of the particular skill (Tsui, 2011). Similarly, the competence of teacher educators should also be a major concern in teacher training colleges as intercultural, collaborative, supervising, and pedagogical competencies are required for teacher educators (European Commission, 2012). Teacher training should be conducted before implementing any language policy, curriculum, or syllabus change.

1.1 Statement of the Purpose & Research Questions

In the Primary grade textbooks of Punjab, phonics content was first introduced in 2016. Before this implementation, teachers need to be equipped to deliver phonics content to the primary grade students effectively, In this context, the basic purpose of this research is to probe whether Pakistani primary grade teachers are well trained for teaching phonics or not during their academic career, pre-service, and in-service teaching training programs by formulating the following research questions:

1. How far do academic and professional degree programs and pre-and in-service teacher training equip the primary level teachers to teach learners phonics?
2. How far do teacher instructional materials help the primary level teachers to teach and assess learners' phonics competence?

2. Literature Review

From multiple aspects of teacher training programs, the primary focus areas in this research are content-based training, knowledge of instructional materials, and classroom assessment literacy training concerning pronunciation and phonics skills. The quality of teacher training programs and the competence of teacher educators/trainers should also be regularly evaluated to make the training effective. In this context, the Council of Chief State School Officers (CCSSO) InTASC Standards (CCSSO, 2011) set four basic standards—further divided into ten sub-standards— as guiding principles for teacher training programs accepted widely by teacher education organizations across the United States. These standards include (a) The Learner and Learning, (b) Content Knowledge, (c) Instructional Practice, and (d) Professional Responsibility. A few major aspects are discussed below:

2.1. Content-based teacher training and its assessment

Sagliano, Stewart & Sagliano (1998) and Cammarata & Ó Ceallaigh (2018) state that lack of training in content-based instruction is the major reason for problems in the educational system. Shulman (1986) distinguished three kinds of content knowledge: subject matter content knowledge, pedagogical content knowledge, and curricular knowledge that teachers should possess. He & Lin (2018) also state that to effectively pass on the academic content to the learners, the knowledge of the teacher should go beyond just adding it

to the teacher training process; rather, the incorporation of content should be based on collaborative, dynamic and dialogic process, where both teachers and teacher educators are co-developing their knowledge and expertise in the target area of knowledge. Morton (2016) explains that non-native teachers are teaching their learners in English that is neither theirs nor their learners' L1; thus, developing, explaining, and assessing the competence of language teachers to carry out teaching tasks effectively is a dire need. Freeman et al., (2015) also demand to rethink the teacher proficiency in the ELT classroom and incorporate a similar construct in teacher training. Moton (2018) explains in the perspective of pronunciation and phonics-related content-based training that the integration of all the segmental and suprasegmental aspects of the English language, grapheme-phoneme correspondence, blending, segmenting, phoneme manipulation and interrelation of these aspects with reading and oral skills in the teacher training curriculum at academic, professional degree, pre-service, and in-service teacher training should be evaluated to bring a positive change in the proficiency level of learners. The assessment of teachers' current knowledge prior to pre-service and in-service teacher training can be very helpful in needs analysis and determining the focus areas of teacher training. European Commission (2012) proposed a system of feedback that should be established by monitoring instructors' and students' development during the year; the aim of this feedback should be to guide and support the teachers to build on their fortes and control any weaknesses. Feedback should be set within an evaluation system that establishes a framework of standards defining what knowledge, skills, behavior, attitudes, and results are required of a competent teacher.

2.2. Knowledge of instructional materials

Another important aspect of teacher training is to make the teachers conscious of the significant role of available instructional materials and their incorporation in the pedagogic process for the maximum development and motivation of learners. Tomlinson (2013) defines materials as 'anything that can be used to facilitate the learning of language'; that can include linguistic, visual, auditory/kinaesthetic resources in print, digital, or live performance/display modes. Richards (2001) and Farr (2015) divide instructional materials into a) print/published materials e.g., coursebooks, b) non-print materials e.g., audio-video, online, computer-based materials,

and c) authentic materials e.g., TV, newspaper, magazine, brochures, songs, literature, etc. All these kinds of materials have certain advantages and disadvantages but their selection, organization, utility, and evaluation must be governed by the principles of a) learners' needs, goals, and educational requirements, b) teachers' skills, competence, theories, beliefs, and c) thinking underlying the materials, the content presenters' approach to the pedagogic process (Rubdy, 2003). Further, Mishan and Timmis (2015) encapsulate the five basic purposes of materials i.e., they (i) meet a psychological need, (ii) provide exposure to the language, (iii) are vehicles of information, (iv) provide a stimulus for other activities, and (v) can act as teacher education. In short, Richards (2001, p. 251) states "Teaching materials are a key component in most language programs. Whether the teacher uses a textbook, institutionally prepared or self-created materials, instructional materials generally serve as the basis for much of the language input learners receive and the language practice that occurs in the classroom. In the case of inexperienced teachers, materials may also serve as a form of teacher training."

Although listening and reading are usually 'teamed up' as receptive skills but that is a misnomer as it implies passivity according to Mishan & Timmis (2015). They claim that hearing impacts the learning of L1 the most like a natural skill to develop language, but at the same time, it is the most challenging as well. One of the significant dimensions of listening skills is the learning of pronunciation and its different segmental and suprasegmental aspects that are also interrelated with reading skills. Modern-day classrooms provide access to audio-visual materials where listening input can be presented naturally. Digital materials can be adapted and exploited for the teaching of pronunciation, listening, and reading to younger learners due to the great acceptability of these digital tools. In this background, Prensky (2001) coined the term 'digital native' for the younger generation born after the 2000s due to their level of comfort with digital technology i.e., computers, video games, and the internet; for them, 'digital technology' is just a set of tools to be used in their routine lives (Oblinger, 2003). Based on these grounds, Pennington and Rogerson-Revello (2019) consider the input for listening and reading skills through pronunciation technologies as the most effective resource material for the future dimension of the pedagogic context.

In the context of Pakistan, several issues related to administrative and faculty aspects in the teacher training programs are highlighted by Siddiqui et al. (2021). Their findings expose the challenges related to policy and planning, dual training systems and infrequent training, poor induction of teachers, demotivation among teachers, lack of resources in teacher training institutions, and unequal distribution of skilled and productive teachers. Therefore, teacher training programs need evaluation in terms of developing knowledge of different skills and methodologies, assessment literacy, availability, and awareness related to the use of different written and digital resources by motivating the student teachers to bring a change through the collective capacity building process (Mincu, 2015).

2.3. Evaluation of teacher training programs

After being part of a teacher training program, the competence, performance, and classroom practices of teachers determine the effectiveness of the teacher training program. The evaluation of these programs through the performance of teachers can realize whether this training should be provided by universities or individual institutes; what should be the length of the study and final graduation; and, which areas, skills, and strategies need more focus (Wildova, 2014). Hermans, Sloep, and Kreijns (2017) opine that it is significant to explore how certain impacts of Teacher Professional Development interventions are embedded in a teacher's day-to-day classroom practice or school organization. APA Task Force report (2014) suggests the three most commonly used methods for evaluating and assessing the teacher preparation programs i.e., teacher observations, learners' growth on standardized tests, and Satisfaction surveys from graduates, employers, and K-12 pupils in the graduates' classrooms. Deller (2019) also mentions three basic approaches for evaluating the teaching training programs namely, the Kirkpatrick Taxonomy (Reaction, Learning, Behavior, Results), the Phillips ROI Model (Reaction, Learning, Application, and Implementation, Impact and Return to Environment), the CIPP Evaluation Model (Context, Input, Process, and Product); all these approaches with variation focus on synthesizing the relationship between teacher training programs and their impact in pedagogic situations.

For evaluating the micro-teaching practice during teacher pre-service teacher training programs, Syamsudarni and Sahraini (2018) generated a guiding book that explicitly outlined the procedures and guidelines for evaluating reliable and valid grounds to inculcate accurate teaching practices among student teachers and provide feedback before placing them as professional teachers. From a different angle, Piryani et al. (2018) evaluated the self-reported perceived confidence level of the teacher on teaching-learning methodologies, assessment tools, and approaches before and after receiving the training program through a retrospective post-then-pre design questionnaire. Their results realized a significant 29.63 % change in the confidence level of teachers after receiving basic training which was two times more than the teachers who received no pre-service training. To reflect on teacher training programs in the USA, Kesici and Çavuş (2018) observed the classroom practices of teachers whether they adopted the student-centred approach or not. After observing the three teachers for a complete academic year, the researchers found that direct instruction was the most popular method followed by the question-answer technique. In contrast, engaging students in scientific research and assigning presentations were less employed techniques in the classroom. They reflected that, although, a learner-centred approach is proposed in teacher training programs, yet, the practices of teachers realize the reverse situation.

Ashraf, Banerjee & Nourani (2020) reported the results of two years intervention for teacher training in Uganda using the approach 'learning how to learn' with the curriculum 'Preparation for Social Action' that trained 86 teachers of different subjects to instruct the learners to learn like scientists in lower and upper primary sections of state and private schools. After two years, when this approach was adopted in the classroom, the pass rate of learners surged from 51 % to 75% in national exams from elementary to secondary school. The intervention had a positive impact on learner involvement, the number of learners eliciting in class, teaching techniques that promote critical thinking and practical exploration, and teaching techniques to facilitate understanding of concepts and deeper learning. The authors prove that when teachers' assumption of knowledge - be it any subject - changes through systematic and practical training, it is reflected not only in their attitudes and in their practice, but also through the performance

and behaviors of learners. The highlight of t-s intervention is the extensive training of the teachers before implementing the curriculum change.

2.4. Level-specific Teacher training in Pakistan

Khan (2014) states that teacher training is level-specific because pre-primary, primary, secondary, higher education, and vocational education have different needs and employ varying methods and strategies in a real pedagogic context; teacher education programs should be designed accordingly. Before joining and serving as a teacher, the instructor has all the academic knowledge learned during their academic career, which can also benefit the newly inducted teachers if they are selected as subject specialists. But if they are not selected as subject specialists, they are expected to teach more than one subject in state-run Pakistani schools, the primary teachers having M.A/BS qualifications in English teach Urdu, Science, Social Studies, etc. as well. In another case, the teachers having no academic expertise in the English Language as a subject teach English at the primary level alongside other subjects considering it to be easy but the lack of basic knowledge about skills and their teaching methodologies can have a very negative impact on the classroom practice. Before applying for the job, the teachers are also required to achieve some professional degree as a mandatory requirement that may introduce them to the profession of teaching and its different aspects in terms of specialized knowledge of any subject, skills, methods of teaching, administrative aspects and integration of technology, etc. After achieving these academic and professional degrees, formal teacher training is usually offered, once a teacher is selected (Tahira et al., 2020). If there is some lack at both these levels; formal training can help improve the situations.

3. Methodology

Following a qualitative research paradigm, for the analysis of phonics-related knowledge and training in the government schools context, a survey was carried out among 230 male (N=115) and female (N=115) government school primary-level instructors from the Multan District, Punjab. To give a holistic picture of all the primary grade teachers' competence, all the age groups of teachers were included. This survey focussed on their exposure to phonics and pronunciation content during their academic & professional

degrees and pre- & in-service training programs as represented in Table 1 below. Based on their responses, the syllabus of academic programs (BS & M.A. English approved by HEC for all the universities), professional degree programs i.e., C.T./P.T.C, B.Ed, and M.Ed., overall contents of Induction Teacher training carried from 2016-2019, in-service teacher training manuals and teacher guide (grades 1-V for primary teachers) as supporting instructional materials were evaluated. To evaluate the documents is to decide the appropriateness of any content/document involving both subjective and objective material analysis according to the needs of learners and teachers (Hutchison & Waters, 1987). In this wake, the focus of this research was just to check the availability of phonics contents in teacher instructional materials, its presentation, and teacher training courses through document analysis (Corbin and Strauss, 2008; Bowen, 2009; Wood et al., 2020) and checklists (Stufflebeam, 2000; McGrath, 2002; Elyakine, 2019). In the backdrop of student learning outcomes (SLOs) stated in the curriculum for the development of pronunciation and phonics skills, teacher guides and the teacher training material were evaluated through simple researcher-made checklists on three points Likert scale validated by three experts of the relevant field and the emergent perspectives were interpreted with relevance to the objectives and research question of the study (O'Leary, 2021). The aim was to measure the availability of pronunciation and phonics content, their appropriateness, and the relevance in these documents to relate their impact on the knowledge, classroom activities, and training of teachers that in consequence influence the learners.

Table 1. Frequency and percentage of government school teachers' demographic survey

Demographics	Group	Frequency	Percent	Cumulative Percent
Gender	Male	115	50.0	50.0
	Female	115	50.0	100.0
Age group	21-30 years	94	40.9	40.9
	31-40 years	59	25.7	66.5
	41-50 years	42	18.3	84.8
	51-60 years	35	15.2	100.0
Highest Educational level	Matric	25	10.9	10.9
	F.A/F.Sc	24	10.4	21.3
	B.A/B.Sc	41	17.8	39.1

Demographics	Group	Frequency	Percent	Cumulative Percent
	M.A/M.Sc	138	60.0	99.1
	M.Phil	2	.9	100.0
Have you done M.A. English?	Yes	70	30.4	30.4
	No	160	69.6	100.0
Professional qualification	CT/PTC	53	23.0	23.0
	B.Ed.	107	46.5	69.6
	M.Ed.	68	29.6	99.1
	No professional qualification	2	.9	100.0
For how long, studied pronunciation during your academic career?	Never taught less than a month	77	33.5	33.5
	1-3 months	74	32.2	65.7
	4- 6 months	53	23.0	88.7
	7-9 months	12	5.2	93.9
	9-12 months	5	2.2	96.1
		9	3.9	100.0
Received pronunciation-related training during the in-service training period?	Never received any training	65	28.3	28.3
	1-15 days of training	108	47.0	75.2
	1-month training	46	20.0	95.2
	more than 1-month training	11	4.8	100.0
Received phonics-related training during pre-service (induction training program)?	Yes	0	0.00	0.00
	No	230	100.0	100.0
	Yes	0	0.00	0.00

Demographics	Group	Frequency	Percent	Cumulative Percent
Received phonics-related training during the in-service training program?	No	230	100.0	100.0
Do you use teacher guides as supporting material for phonics instruction?	Yes	23	10.0	10.0
	No	207	90.0	100.0

Based on responses from the teacher participants, for the evaluation of academic & professional degrees, pre-and in-service teacher training, and teacher guides, the following schemes of studies and related books, documents and chapters are consulted and analyzed as given in Table 2 below.

Table 2: Sources of Data for the analysis of academic & professional degrees, pre-and in-service teacher training, and teacher guides

Source	Courses/Program	Scheme of Studies	Books/Documents/Chapters
Academic Degree	<ul style="list-style-type: none"> BS/M.A. English 	Phonetics and Phonology	<ul style="list-style-type: none"> 3 credit hours compulsory course (HEC Approved)
Professional Degree	<ul style="list-style-type: none"> C.T/PTC B.Ed. Elementary (1.5 years program) B.Ed. Secondary (4 years) 	<ul style="list-style-type: none"> Obsolete course (No contents available) Allama Iqbal Open University course (AIOU) for B.Ed. & M.Ed. 	<ul style="list-style-type: none"> Teaching of English (2015, Course Code: 1655, Unit-3, pp. 47-74) English -V (2017, major content, course code: 6472, pp.99-112)

	program)	<ul style="list-style-type: none"> • M.Ed. • Diploma in TEFL by AIOU • HEC Approved Scheme of studies for Pakistani Universities for B.Ed. 	<ul style="list-style-type: none"> • (Course code: 552, 2nd Edition: 2005; English Phonology content, Unit 11-18 pp.393-555) • Teaching of English, EDU/542 by HEC • HEC course guide of English for Semester-II, (Unit 3: Sound Patterns, Tone, and Purpose)
Induction/Pre-service Training	Training manual August 2021	<ul style="list-style-type: none"> • 4-week training of 111 sessions 	<ul style="list-style-type: none"> • Teaching English Trainer book (British Council, 2015) • Teaching English Participant book (British Council, 2017)
In-service Training	Punjab English Language Initiative (PELI) in collaboration with British Council (2018)	<ul style="list-style-type: none"> • Teaching and learning of Mathematics, General Science, Social Studies, and English through 10 workshops 	<ul style="list-style-type: none"> • Teaching English for the Subject Classroom (lite) • Trainer book (TB) and its Participant manual (PM)

Teacher guides	<ul style="list-style-type: none"> • Grade-I • Grade-II • Grade III • Grade-IV • Grade-V 	<ul style="list-style-type: none"> • Lessons 7-9 (pp. 31-47) • Lessons 3, 4, 6, and 7 (pp. 9-16 and 25-31 respectively) • Lessons 16-25 (pp. 41-67) • Lessons 7-10 (pp. 19-30) • Lessons 6-19 (pp. 14-50)
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4. Analysis and Findings

The findings are reported after analyzing the related content lists of academic and professional degree programs, pre-and in-service teacher training programs' manuals, and teacher instructional materials.

4.1. Exposure to pronunciation/phonics content during the academic career

Out of 230 teachers, 157 teachers reported that they had studied pronunciation during their academic career including their professional degrees. Many participant teachers (N=160) didn't hold an M.A. English degree or were less qualified like B.A./B.Sc., F.A./F.Sc., or even matriculate older teachers implying they did not have command of English as a specialized subject as realized through the demographic analysis of participants. Although these teachers had studied the compulsory English courses focusing more on comprehension and grammatical aspects of the English Language, they had no exposure to English pronunciation/phonics during their academic career. They might have studied the pronunciation component during their professional degree i.e., B.Ed. or M.Ed.

All the teachers having BS/M.A. English degrees might have studied the pronunciation component for a semester as Phonetics and Phonology is a 3 credit hours compulsory course in BS English and M.A. in English Language/Linguistics across the country. In this course, segmental and suprasegmental aspects are taught in detail to teach sound-symbol

correspondence but spelling-sound correspondence from the perspective of phonics has never been focused on. Many experienced teachers might have studied phonetics/phonology many years back during their academic career before 2016, therefore, need thorough revisions before teaching in the classroom. The participants having an M.A. English Literature degree would be less likely to study phonetics and phonology in detail. This discussion insinuates that many teachers might have either no or weak command of pronunciation and phonics skills; in that case, their actual knowledge in this area needs to be figured out before going into the classroom for teaching that content.

4.2. Exposure to pronunciation and phonics at the professional degree level

Different types of professional degree programs are prerequisites for primary grade teachers i.e., CT/PTC, B.Ed., and M.Ed. Certificate of Teaching (CT/PTC) is an old course held by older teachers and there was no content related to pronunciation/phonics. In B.Ed. and M.Ed. courses, to-be teachers are trained from multiple perspectives i.e., knowledge of the specialized subject, lesson planning, assessment schemes, teaching methods, classroom management, use of Information technology (IT) in education, etc. Two types of B.Ed. degrees are offered i.e., B.Ed. Elementary (1.5 years program) required for the 14-scale government school teacher job for the teaching of grades I-VIII and B.Ed. Secondary (4 years program) required for 15-17 scale subject specialist teachers to teach from grades 9-12. Different universities and institutes offer B.Ed. and M.Ed. courses; some of which are analyzed below to see whether these professional degrees prepare teachers to cope with pronunciation and phonics skills.

Allama Iqbal Open University (AIOU) offers B.Ed., M.Ed. and Diploma in TEFL degrees through distance learning and AIOU degrees are widely recognized so many people take admissions into these courses. The books are available on the website and can be easily downloaded. Different textbooks related to the Teaching of English in B.Ed. (1.5 years, 2.5 years & 4 years program) were explored to find out pronunciation/phonics-related content; it was found in the textbook Teaching of English (Course Code: 1655, Unit-3, pp. 47-74) printed in 2015. This unit is divided into 8 chapters which discuss in detail factors affecting pronunciation teaching, methods of

pronunciation teaching, introduction to phonetic symbols, teaching vowels, consonants, word stress, sound linking, the role of the teacher, and singing songs in pronunciation teaching and teaching English spelling. The following image illustrates the consonant and vowel phonetic symbols represented through keywords in Figure 1 below. Many other activities are also given in the relevant chapters to clarify the basic concept of English phonology in written form but no audio resource is indicated in this textbook implying teachers are supposed to listen and practice sounds on their own.

PHONETIC SYMBOLS			
CONSONANTS		VOWELS	
Symbol	Key Word	Symbol	Key Word
p	pin	i	need
b	bat	ɪ	sit
t	tea	e	bed
d	day	æ	cat
k	key	ɑ	cart
g	get	ʌ	bud
tʃ	chain	ɔ	board
dʒ	jam	ɒ	lot
f	fast	v	good
v	van	u	boot
θ	three	ɜ	bird
ð	this	ə	against
s	sing	aɪ	time
z	zero	əv	now
ʃ	shine	eɪ	late
ʒ	pleasure	əv	road
h	hat	ɔɪ	boy
m	money	ɪə	feared
n	name	eə	there
ŋ	bring	və	poor
l	light		
r	reader		
j	yes		
w	wet		

Figure 1: Pronunciation-related content in AIOU B.Ed. textbook (Teaching of English, p. 59)

Chapter 8 in the same unit focuses on the inter-relation of certain spelling rules affecting sounds of words i.e., soft and hard sounds of 'c', two sounds of 'ch' /k/ and /tʃ/, counting the number of sounds in words, silent -e rule as in hop/hope, identifying single vowel letters having long sound in polysyllabic words e.g., re-la-tion and steps of improving spelling. Although this content is somewhat closer to phonics teaching, this is insufficient and unsystematic as it does not cover all the concepts of spelling-sound correspondence systematically. The contents of this chapter are presented below in Figure: 2

8.	Teaching English Spellings.....	68
8.1	The Values of 'e'	68
8.2	The two 'ch' Values	68
8.3	One Value Composite Consonants	69
8.4	Position Constraints on One Value Composite Constant	69
8.5	The Silent e Rule	69
8.6	Single Vowel Letters in Polysyllabic Words.....	69
8.7	Steps of Improving Spellings	70
	Activity-7	70
	Activity-8	71
	Activity-9	71
	Activity-10	73

Figure 2: Contents of Chapter 8 in Unit 3 of AIOU B.Ed. textbook (Teaching of English, p. 49)

Another textbook English -V (2017, major content, course code: 6472, pp.99-112) for B.Ed. 2.5/4 years program for subject specialists also has Unit-5 titled Teaching of Phonology which in general defines and explains phonology, its types, the importance of phonemic awareness, the problem of teaching phonetics and phonology, and the role of the teacher; this unit theoretically introduces the concepts and does not present the sound-symbol relationship.

Diploma in TEFL (course code: 552, 2nd Edition: 2005) intended for higher academic levels like college and university teaching included the English Phonology content (Unit 11-18 pp.393-555) focusing on all the segmental and suprasegmental aspects with audio material provided to the learner-teacher for listening input. This content is related to practical aspects of all English vowels and consonant sounds-symbol relationships and all the suprasegmental features in detail with activities and exercises. Although it explains all the concepts in a very concrete manner, it does not introduce phonics aspect/spelling-sound correspondence as the contents are represented in Figure 3.

PHONOLOGY	
UNIT 11	Introduction to phonemes
UNIT 12	The consonants of English
UNIT 13	The vowels of English
UNIT 14	Syllables and Word Stress
UNIT 15	And
UNIT 16	Sentence Stress and Intonation
UNIT 17	Weak Forms and other features of Connected Speech
UNIT 18	Teaching Pronunciation

Figure 3: Contents of Diploma in TEFL textbook (course code: 552)

Higher Education Commission Pakistan (HEC) provided a scheme of studies as Curriculum of Education (B.Ed.) (Hons.) Elementary, ADE (Associate Degree in Education) (Revised 2012) to be followed by all the universities in Pakistan to ensure uniformity of content. In B.Ed. Elementary (1.5 years program) section of teaching method courses, the teaching of English can be opted in the second semester by Arts group teacher-learner. In some universities like Bahauddin Zakariya University Multan and the University of Peshawar, Teaching of English is a compulsory course paired with any other option from the Arts group but in other universities e.g., the University of Education Lahore, University of Jhang, University of Sargodha, four-five subjects in Arts group are offered i.e., Teaching of English, Urdu, Islamic Studies, Pakistan Studies, and Economics. The learner-teacher is supposed to choose any of two subjects as it is not mentioned in their scheme of studies whether the teaching of English is mandatory. If the learning outcomes and contents of this course are analyzed, it introduces the learner-teachers to all the basic concepts of English Language and Literature teaching with methods and techniques/activities, lesson planning, use of audio-visual aids, and evaluation of students as illustrated in Figure 4 below.

Course Code	Course Title	Credit Hours
EDU/542	Teaching of English	3(3+0)

Learning Outcomes

At the end of the course, the prospective teachers are expected to be:

- familiar with the four language skills - Listening, Speaking reading and writing
- identify and prepare activities for developing four skills
- apply modern methods and approaches in teaching of English
- prepare lesson plans of Prose, Poetry, Composition and Grammar
- Effective use of audio visual aids.
- measure and evaluate the students' progress during teaching of English as a foreign / second language

1.2 **Speaking Skills**

1.2.1. Favorable classroom environment for speaking

1.2.2. Value of pronunciation and intonation in speaking

1.2.3. Conversation and dialogue

1.2.4. Language games for oral expression

1.2.5. Vocabulary building

Figure 4: Learning outcomes and contents of speaking skill in HEC scheme of studies for B.Ed. Elementary (1.5 years program)

The pronunciation content is the part of speaking skill from the perspectives of the value of pronunciation and intonation. In the HEC course guide of English for Semester-II, Unit 3: Sound Patterns, Tone, and Purpose, the guidelines are given that Student Teachers would be given a one-week refresher course to relearn and articulate the basic sounds (consonants and vowels) and intonation patterns of English through practical activities; two web links are also given to practice sounds (pp. 46-47). In these contents and course guides, there is no indication of the inclusion of the phonics/spelling-sound component that is the beginning point of the teaching of English in Grades 1-V since 2016. This overview of Teaching of English in B.Ed. as a professional degree realizes that it might prepare the teachers for teaching pronunciation in general but not from phonic perspectives at the elementary level. The HEC did not revise the course outline and course guide since 2012 implying that teaching phonemes and intonation are the ultimate goals of teacher training for Grades I-VIII whereas the phonics component was

included in 2015-2016, which is related not only to the speaking but also the reading skill.

In the Education Departments of the Islamia University Bahawalpur and Fatima Jinnah Women University Rawalpindi, specialized courses like Montessori teaching, Diploma in Early Childhood Education, and Language Education are also offered; as these are specialized courses and are not a requirement for Government school jobs, the elementary school teachers (for Grade I-VIII) do not opt for it. Government College University, Faisalabad offers a Communication Skills course in the third semester of B.Ed. Elementary that focuses on the theoretical aspects e.g., importance, types of four skills, and strategies to improve four communication skills; there is no inclusion of pronunciation/phonics component in this course.

M.Ed. is a more specialized degree program of one year for teaching at the higher educational levels to equip the teachers with the knowledge, methods, and diversified dimensions of education e.g., Foundations of Education, Leadership and Management, Curriculum and Assessment, Educational Psychology, and Research in Education, etc.

4.3. Exposure to pronunciation/phonics during induction training

After being selected as a government school teacher, induction training of different durations is organized by Quaid-e-Azam Academy for Educational Development (QAED), Punjab for the Teacher-Educators; the latest training manual August 2021 was sought from QAED Lahore through official permission. This training manual is of general type and designed for all the teachers from all the areas of specialization i.e., arts and science groups. In 2021, pre-test post-test based 4-week training of 111 sessions was organized in August; the basic goal of this training was to introduce the newly inducted teachers to the general areas and content-based training e.g., rules & regulations, concepts and techniques, computer technology, latest initiatives like Single National Curriculum (SNC) and model teaching represented through Figure 5.

MAJOR DIVISIONS OF TRAINING CURRICULUM			
MAJOR DIVISIONS	AREAS	NO. OF SESSIONS	
1	DIVISION 1 - GENERAL AREAS; CONCEPTS AND TECHNIQUES & GENERIC SKILLS 02 Weeks (48 Sessions)	Registration & Introduction; Pretest;	02
		Rules & Regulations, Concepts & Techniques, Early Childhood Education, New Initiatives etc.	53
		Computer Technology	06
2	DIVISION 2 - CONTENT-BASED TRAINING & MODEL TEACHING 02 Weeks (145 Sessions)	Real time Needs Assessment (Identification of Content Topics to be focused)	02
		Pedagogy	10
		Content-based Training by Trainers	20
		Computer Technology & Practice	06
		Content-based Model Teaching & Tests by Trainees	10
		Mid-Test; Post Test Closing Ceremony	2
		Total Number of Sessions	111

Figure 5: Induction training curriculum (August 2021)

There were 30 sessions related to content-based training and content-based model teaching. The notes given at the end of this training manual stated:

1. The topics identified during Real-time Needs Assessment should be focused on during content-based model teaching.
2. Topics may also be selected from the list provided or from the curricula/ textbooks.
3. The selected topics should cover all subjects of Educators' teaching specialization.
4. Content-based tests will be developed and marked by Master Trainers. The trainee's marks in these tests will be included in his/her overall training performance.

One of the district-level Master teacher trainers was contacted to cross-check how many sessions were allocated to pronunciation/phonics teaching or focused on Real-time Needs Assessment during induction training. She reported that the choice of topics for content-based model teaching is left to teacher educators/trainees and they usually choose from easy topics in their area of specialization. This kind of training usually integrates English, Science, and Mathematics subjects as at the primary level teachers usually teach more than one subject; hence, teacher trainers are also chosen from any of these three backgrounds. A Master trainer with expertise in Mathematics

and Science might overlook the inclusion of pronunciation and phonics content in Real-Time Needs Assessment. The qualification and subject background of Master trainers at the district level also need to be focussed on because earlier than 2018, candidates just having Masters degrees in the relevant subject were selected as Master trainers and they were provided training either by the British Council or QAED experts for a certain period before allocated to train the teacher educators at the district level. In 2021, the selection criteria for Master trainer selection are revised by adding 3 years of teaching experience alongside the Masters qualification; the mastery of these Master trainers on the pronunciation content, its integration with the other skills, and assessment literacy must be ensured during their training.

For the training of Master trainers, two booklets i.e., Teaching English Trainer book (British Council, 2015) and Teaching English Participant book (British Council, 2017) were used as resource material during training in the last five years. The contents of the trainer book comprised of three basic components i.e., planning lessons and courses, assessing learners, understanding learners, and how primary children learn. More extensive teacher training components are given in the Participant book i.e., understanding and engaging with assessment for learning, engaging with professional development (peer observation & reflective teacher), engaging with learning outcomes, engaging with lesson planning and frameworks, and understanding and engaging with thinking skills in the classroom. Both these books and the components given in them thoroughly introduce the trainers with the background knowledge to equip them with the major theoretical and practical perspectives of the primary level pedagogic situation but lack focus on the content-based training. Teaching different language skills is indirectly integrated into the components of trainer books through different activities and each skill has not been separately focussed to develop its mastery or assess in the teacher trainers; if these master trainers lack mastery in any language skill, it would directly impact their training of teacher educators.

An official from QAED informally told that pronunciation/phonics content is hardly chosen by trainees for model teaching although trainers from British Council focus on this area and provide pronunciation content-related

training. She also told that this training curriculum is grounded on the notion that teacher educators already have command of all the concepts of English Language skills and knowledge; during the training, they are taught how to deliver the content to the students in the classroom context through proper lesson planning and micro-teaching practice. In this context, if teachers had no background in pronunciation and phonics skills or weak command of it during their academic career, just 1-2 induction training sessions by the trainers are not sufficient to get good command or practice this skill; they need extensive content-based training in that case.

4.4. Exposure to pronunciation/phonics during in-service training

In-service teachers also need training on regular basis to update their knowledge, skills, and capacities to perform better with the changing requirement of educational policies and curricula. After the implementation of the Single National Curriculum (SNC) in 2020, all the government school teachers of Punjab were provided a 3-day training through the Learner Management System (LMS) to update them with the new educational policy.

In 2018, a training module titled Teaching English for the Subject Classroom (lite) was organized for each in-service government primary school teacher (PSTs) on a very large scale with the collaboration of the British Council named Punjab English Language Initiative (PELI). Trainer book (TB) and its Participant manual (PM) were accessed to explore what kind of training was provided to the in-service teachers. The aim of this course was 'to teach the participants functional English to be applied in the classroom; develop confidence in using English; develop an understanding of activity-based, child-centred learning; develop strategies for motivating students in low-resource environments; reflect on teaching practice and put together mini action plan' (p. i). The following Figure 6 elucidates the overview of this course, for whom this course is designed, and its structure and delivery. This course focused on the teaching and learning of Mathematics, General Science, Social Studies, and English through 10 workshops; each workshop was designed to be delivered in 2-3 hours.

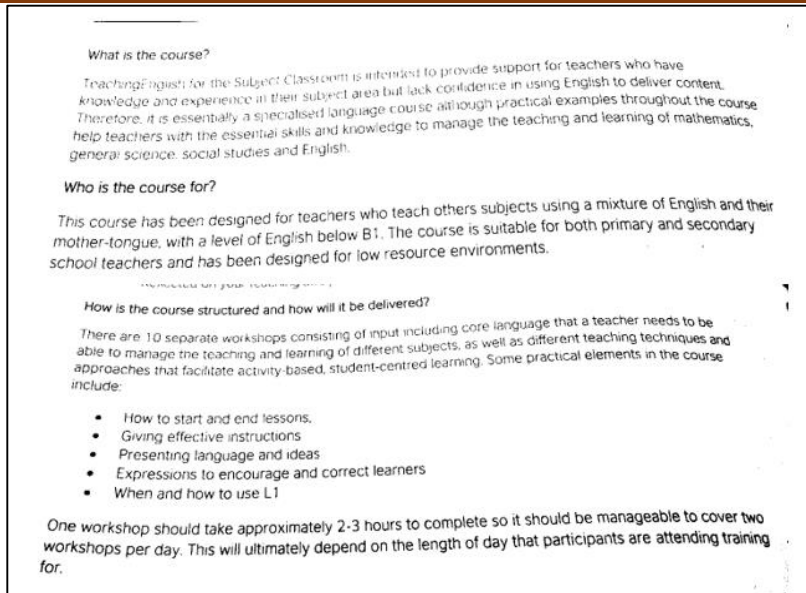


Figure 6: An overview of the in-service teacher training program conducted in collaboration with the British Council (2018, p.i)

Workshop 9 of this course (PM, pp. 63-68; TB, pp. 69-76) was exclusively designed for pronunciation teaching and divided into 9 stages i.e., warmer, session overview and lead-in, sounds, word stress, using dictionaries, sentence stress, intonation, rhythm and lastly reflection and review. The allocated time for practicing sounds was 30 minutes during which sounds and symbols of vowels and consonants were introduced (PM, p. 64) as realized in Figure 7.

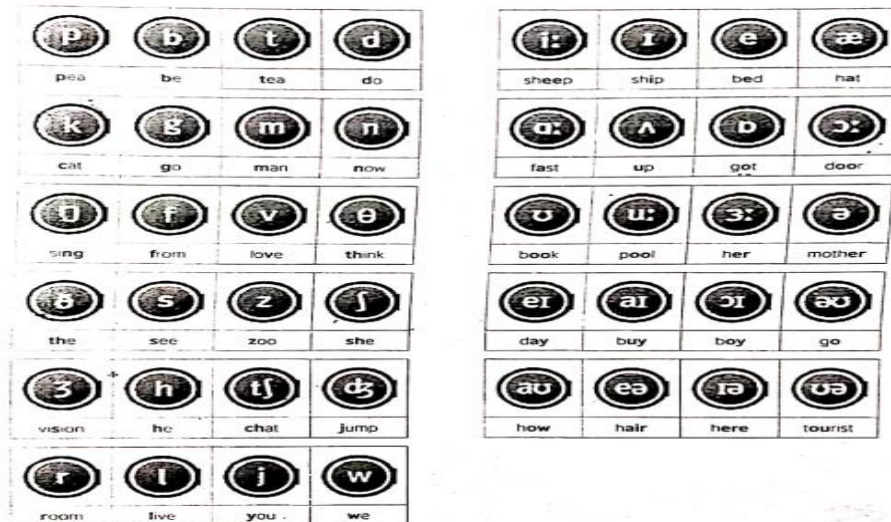


Figure 7: Representation of sound symbol with the keywords in Participant manual of in-service teacher training (p.64)

Two activities were planned for the participants a) to practice minimal pairs (PM, p.64) as realized in Figure 8 below.

	1	2	
/i:/	sheep	ship	/ɪ/
/θ/	three	tree	/t/
/æ/	cat	cut	/k/
/e/	bet	bat	/æ/
/s/	Sue	zoo	/z/
/f/	fast	vast	/v/
/p/	poor	bore	/b/
/ɑ:/	dark	duck	/k/
/dʒ/	joke	choke	/tʃ/
/eɪ/	day	die	/aɪ/

Figure 8: Activity to practice minimal pairs in participant manual of teacher training

The second activity was based on group work in which teachers were asked to identify the sounds their learners found difficult. Participants were also asked to create minimal pairs to practice difficult sounds (Teacher training participant manual, p. 65).

Although it was a very extensive training planned and delivered on a very huge scale for each PST; from the perspective of pronunciation teaching, it focused on 5 basic aspects i.e., vowels, consonants, stress, intonation, and rhythm. It reiterated the sound-symbol relationship without any reference to the phonics-based concept of teaching spelling-sound relationships in the whole training that is taught at the primary level.

Some sessions of micro-teaching were also conducted in which teachers were to plan a lesson and design activities related to any topic from the textbook and feedback was to be provided by other instructors and observers. Figure 9 below realized the basic aspects of the observer's evaluation of the activity presented during micro-teaching and it has no clause related to the content of training; how the activity is carried out and its implications in terms of creating interest, for being logically organized, and clear learning outcomes are to be reported.

BRITISH COUNCIL Teaching English-Trainer Development Course
Workshop 6: Micro training Participant Workbook

Appendix 1

Observer feedback form

Criteria	Yes/ No	Comment
Instructions and explanations are clear		
Learning outcomes are clear		
Understanding is checked		
Activity is logically structured		
All participants are engaged		
The training is inclusive		
The activity is motivating		
Support is given where required		
Pace and timing are suitable for the activity and the participants		
Group and/or pairwork is set up effectively		
A good rapport is established with participants		
Interactions are well-organised		
Feedback is given constructively		

Figure 9: Observer Feedback on micro-teaching activity in PST training

The assessment of teachers after this training realizes the focus areas of this training i.e., lesson planning, assessment literacy, and characteristics of young learners and motivation for them as illustrated in Figure 10 below.

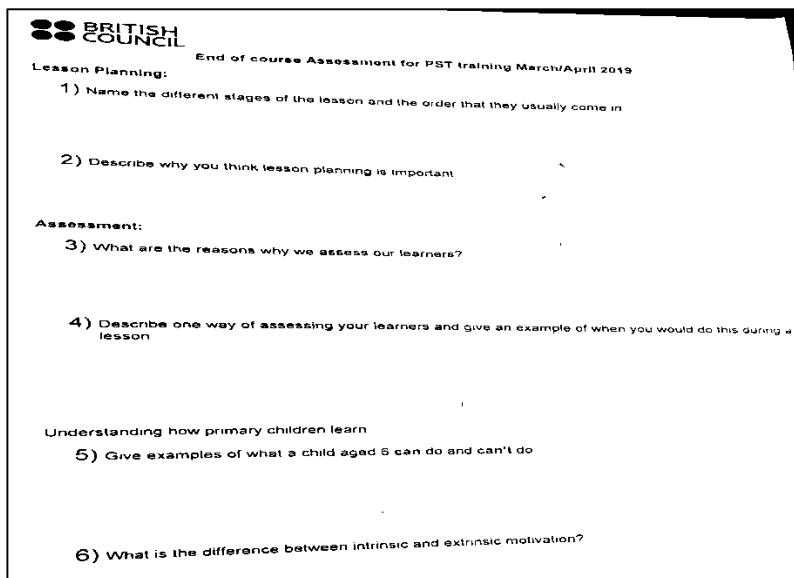


Figure 10: Teacher assessment after in-service Primary school training

Figure 10 realizes that content-based assessments after teacher training are not conducted. Even assessment literacy for different language skills is not properly taught and assessed. The assessment focuses on the theory of education, learning procedures, lesson planning, and different variables affecting learning; so far as, the actual content/oral knowledge of phonics, actual classroom practices, and construction of oral formative and summative assessments are concerned, teachers need the training to actualize the student learning outcomes.

4.5. Instructional Material provided to the teachers

Apart from training the teachers at different levels, teachers are also provided the Teachers' Guide with the textbook for lesson planning at each grade. In each lesson plan guide, Students' learning outcomes, Information about the topic for teachers, Materials/Resources, and allocated time/periods are stated first. Then, an introduction to the lesson plan,

activities, summing up the lesson, assessment and follow-up are given; for the implementation of activities and assessment, some worksheets are also given. For the resources/materials, a board, chart with different activities, flashcards and texts/other print resources are mentioned. For the phonics lesson plan, the teachers are guided to pronounce the sounds, make the learners practice the sounds, make flashcards for this purpose, and encourage the learners to engage in activities of phonics.

In Grade-I Teacher guide Lesson 7-9 (pp. 31-47), teachers are guided about consonants and vowels, rhyming words, and digraphs. Lessons 3, 4, 6, and 7 (pp. 9-16 and 25-31 respectively) in the Grade-II Teacher guide, guidelines about word recognition, classification, spelling, and reading; pronouncing consonants and vowels; digraphs, trigraphs, trigraphs sight words and consonant clusters are given. Lesson 16-25 (pp. 41-67) in the Grade III Teacher guide, demonstrate the lesson plan related to the hard and soft sounds of 'c' and 'g', long and short vowels, diphthongs, three sounds of 'ed', syllables, silent letters (starting with wr & kn), vowel letters and their long and short sounds, digraphs and trigraphs and consonant clusters respectively. In the Grade IV teacher guide, lessons 7-10 (pp. 19-30) present rhythm, stress, and intonation patterns, rising and falling tones respectively. Among the segmental aspects, silent letters with 'mb', long and short vowels in minimal pairs, three common clusters in initial and final positions, syllables, the hard and soft sounds of 'c' and 'g', and weak forms of 'of', 'and', or, and 'but' are exemplified through lesson 13-19 (pp.38-60). Although, all these teacher guides provide grade-wise progression in presenting lesson plans related to phonics skills; the Grade V teacher guide covers all the phonics components very comprehensively including segmental and suprasegmental features i.e., Long & short vowels, vowels & diphthongs, problem consonants, consonant cluster, three sounds of -ed, digraphs, syllables, intonation patterns, rhythm, stress, silent letters (lesson 6-19, pp 14-50). These are quite concrete guidelines for teaching the phonics/pronunciation concepts at the primary level that are designed in line with the textbooks but these require serious efforts and engagement on the part of teachers.

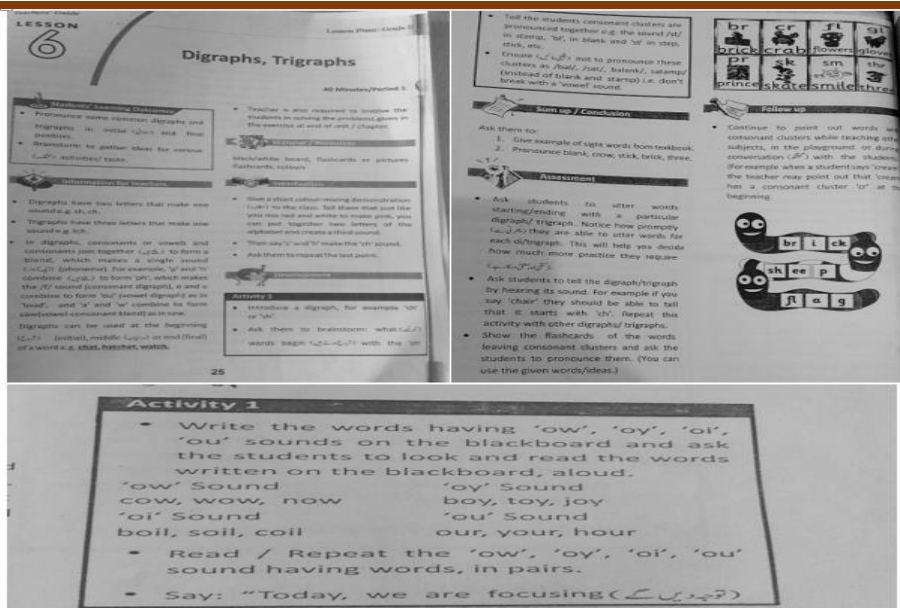


Figure 11: Three excerpts from teacher guides from Grades 2, 3, and 4

If the teachers need any such support as different places of articulation or shape of lips, these guides do not provide any audio-video resource for listening to the sounds, e.g., how to discriminate between /v/ and /w/ while production of sounds. The teacher needs to follow the guidelines properly for targeted learning outcomes and make efforts on their own if they require additional information/clarification regarding any pronunciation/phonics concepts. A separate study can be conducted to investigate how much government school teachers follow the teacher guide to teach language concepts as apparently.

5. Discussion

The evaluation of teacher training at academic and professional levels realizes gaps in terms of equipping the teachers with the appropriate knowledge of phonics to teach and its literacy assessment as realized in the following checklist in Table 2.

Table 3: Evaluation of pronunciation/phonics component in teacher training programs against the checklist

Criteria	Indicator	To a great extent	To some extent	Not at all
Evaluation of teacher training at academic and professional levels	1. At the MA English degree level, segmental and suprasegmental aspects of sounds are taught.		√	
	2. At the non-MA English degree level, segmental and suprasegmental aspects of sounds are taught.			√
	3. At the MA English degree level, phonics as having a letter-sound relationship is taught.			√
	4. At B.Ed. professional degree level, segmental and suprasegmental aspects of sounds are taught.		√	
	5. At B.Ed. professional degree level, phonics as having a letter-sound relationship is taught.			√
	6. During pre-service/induction training, segmental and suprasegmental aspects of sounds are taught.		√	
	7. During pre-service/induction training, phonics is taught.			√
	8. During in-service training, segmental and suprasegmental aspects of sounds are taught.		√	
	9. During pre-service/induction training, phonics is taught.			√

Phonics as content to teach has never been the focus of any academic, professional, pre-service, or in-service teacher training program. As Ashby et al., (2008) opine that it is pertinent to pretest the phonics knowledge of teachers before the pre-service training, then taught phonics component as an integral part of training extensively through digital means, and post-test them (Freeman et al., 2015). The same phonics competence assessment and content-based in-service training are the need of the hour for lesser qualified, older, and more experienced primary grade teachers as non-native instructors (Borg, 2011; Morton, 2016, 2018) who might never have come across any phonological component during their academic and professional career as Wildová (2014), Hermans, Sloep and Kreijns (2017) and Low (2021)

also stress the content-and skill-based teacher training programs and the regular monitoring of teachers (Borg, 2011; Tsui, 2011; European Commission, 2012; He & Lin, 2018; Wiens et al., 2020) to diminish the lack of knowledge on the part of teachers and incorporate their learned knowledge as a dynamic and dialogic process. If the lack of knowledge persists, it is directly reflected in their classroom practices due to which they are not able to handle the phonics component given in the syllabus and either omit it or replace it with the alphabetic method as argued by Millard, Colledge, and Hirano (2020).

The evaluation of teacher guides from Grades 1-5 realizes these to be a very valuable resource in which a lot of effort is put forward to clarify each concept extensively and intensively. Proper guidance related to designing activities, formative assessment sheets, how to use different materials, and what and how to teach the learners is the major aim of these manuals that is fulfilled in a very comprehensive way as evaluated against the checklist in Table 7.4 below. Guidelines related to adapting the materials and activities are also incorporated (Islam and Mares, 2003). The only aspect lacking in these guides is the provision of any audio-visual material for the teachers to listen to the sounds represented by letters/letter combinations as teachers need to develop competence in grapheme-phoneme correspondence through an aural input to develop this skill into their cognitions before teaching the learners.

Table 4: Evaluation of phonics teaching material in teacher in teacher guide against the checklist

Criteria	Indicator	To a great extent	To some extent	Not at all
Teacher guide/manual evaluation	1. Teacher guides provide all the basic linguistic information about the vowel and consonant sounds of English.	√		
	2. These have guidance for designing pronunciation teaching activities in written form.	√		

-
- | | | |
|----|---|---|
| 3. | These have guidance for designing pronunciation formative assessment activities. | √ |
| 4. | These accompany any audio-visual aid for teachers to listen to the sounds. | √ |
| 5. | These books provide all the basic information to the teachers to teach phonics through oral practice. | √ |
| 6. | These teacher guides follow grade-wise progression skills for teaching phonics. | √ |
-

6. Conclusion & Recommendation

The training of teachers is an integral part of any teaching scenario equipping the instructors with the techniques and skills to upgrade their teaching according to the syllabus/curriculum (Tahira et al., 2020). In light of this opinion, teacher training is analyzed from different perspectives i.e., teaching of pronunciation/phonics during an academic career, at the professional degree level, induction training (before joining and starting a job), and during job/in-service teacher training. The results realize a serious gap in the policy of teaching phonics and its implementation through teacher training programs to improve the competence of teachers in this regard. Teachers might be given the knowledge of pronunciation but phonics is not taught to the teachers. Another important aspect that needs consideration is, that just designing a good teacher manual is not enough; its application by the teachers in the pedagogic context can bring a change for both the teacher and the learner that is not being practiced. Manuals are supplied in government schools but no teacher observation takes place as a policy to assess the implementation of these lesson plans in the classroom by the teachers. Resultantly, these manuals are put either into the school library or teacher cupboards without exploitation and the whole effort goes in vain.

Based on the abovementioned findings and discussion, the following recommendations are made: a) Phonics content should be incorporated in academic degree syllabus, and pre-and in-service teacher training programs

alongside pronunciation content; b) teachers should be motivated to use supplementary instructional materials for the teaching of any content that is newly introduced in the syllabus as a result of policy change, and c) the assessment of growth in the competence level of student teachers needs to be conducted not only during and after training but also through the classroom practices as a backwash effect to teacher training programs. One such assessment tool is proposed by Wiens et al. (2020) i.e., Video Assessment of Teacher Knowledge (VATK) to provide information on student-teacher knowledge during and after training programs through easily administered standardized assessment. The implementation of these recommendations would imply an effort to bring change in the current pedagogic practices of government school teachers for the teaching of phonics.

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