"It's difficult since there is no rhyme or reason": Spelling relevance in an EFL context

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Abstract

This study examines the knowledge of language components in 44 teachers of English as a foreign language (EFL). These components include phonology, orthography, and morphology, for reading and spelling instruction. The study also examines teacher attitudes towards and perceptions of these language components in the context of their self-reported practice. Mixed methods analyses showed that teacher knowledge was not at ceiling level but was greater than reported comparative studies in the Israeli EFL context. Similar to previous studies, this study found that teacher knowledge of phonological awareness was weak. The teachers in this study were keen to learn more; however, their self-reported practice demonstrated a discrepancy between their perceptions of the importance of language components such as orthography and their implementation in the field, with the least number of teachers reporting teaching the orthographic conventions. The teachers' responses provide some insights into their thinking about the relevance of language components to their teaching in an EFL context where they are often the only guiding source in the path towards literacy. For EFL teachers to impact their students' progress in literacy, there is a need for them to acquire a more in-depth understanding of language components such as phonology, orthography, and morphology to become professionally adept.

Keywords Spelling · Orthography · Phonemic awareness · EFL teacher knowledge · Attitudes · Perceptions · Self-reported practice

Introduction

Teachers need linguistic knowledge of both the phonemic system and its orthographic representations to teach students to read and spell words in English (Moats, 2014, 2020). This knowledge is crucial because teachers are the primary

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agents facilitating the acquisition of literacy. In an English as a foreign language (EFL) setting, teacher knowledge of English phonology, orthography, and morphology and their attitudes towards teaching these language components may be considered at least as critical as they are in a first language (L1) learning environment (Birch, 2011, Russak & Kahn-Horwitz, 2015). EFL teachers are the guides in the process of leading EFL students towards an adequate level of literacy because they are often the main or only source providing knowledge to their students (Vaisman & Kahn-Horwitz, 2020). Considering that English has become the lingua franca in the twenty-first century (Crystal, 2003), it is even more critical for EFL teachers to adequately guide their students towards English literacy.

Considering the above, it is essential to examine EFL teacher knowledge, attitudes, and perceptions as well as self-reported practices regarding spelling and reading. In this study, spelling is understood as the written form of a word that is decoded or encoded to read and spell. English spelling is complex for numerous reasons. English spelling is morphophonemic in that spellings of words that are connected through their common morpheme have a shared meaning that takes precedent over pronunciation represented by the grapheme-phoneme correspondence (Venezky, 1999). For example, the spellings of the words < heal > and < health > and < nation > and < national > illustrate their morphological connection yet are pronounced differently. This complex grapheme-phoneme correspondence as a result of the morphophonemic structure of English and the complex syllable structure—for example, closed syllables that contain short vowel sounds, e.g., < cat >; open syllables that contain long vowel sounds, e.g., < go >; vowel-r syllables with their specific phonemes, e.g., < girl > , < arm > , and < for > ; split digraph syllables, e.g., < name > ; consonant < le > syllables, e.g., < middle > ; and vowel team syllables, e.g., < meet >— are elements that might be acquired to guide the reader or speller with regards to pronunciation and spelling (Joshi et al., 2008). These factors characterize English orthography as opaque (Frost, 2005). This study examines what EFL teachers know about each of these aspects of language as represented in English spelling.

In the Israeli context in which this study takes place, where Hebrew or Arabic are typically the first spoken languages, EFL teachers may expect students to learn whole word spellings without delving into component graphemes, orthographic conventions, morphemes, or their corresponding phonemes (Russak & Kahn-Horwitz, 2015). Thus, this study examined EFL teacher phonemic, orthographic, and morphemic knowledge; teacher attitudes and perceptions; and self-reported practices used to teach spelling and reading in the classroom, which influences how students acquire English orthography for reading and spelling (Kahn-Horwitz, 2015).

The orthography-literacy link

Knowledge of grapheme-phoneme and phoneme-grapheme correspondence, orthographic patterns, and rules is one of the foundations of literacy, as these must be known to the point of automaticity for proficient reading to occur. The

positive correlation between spelling and reading in English has been well documented in the L1 (Moats, 2005; Treiman, 1998) and EFL literature (Kahn-Horwitz et al., 2012) and cross-linguistically (Kahn-Horwitz et al., 2005; Kahn-Horwitz & Saba, 2017). Learning how English spelling represents language at the phonemic, syllabic, and morphemic levels also has cognitive benefits because it forces the learner to delve deeper into the makeup of a word and thus relate to the word's phonemic (Treiman, 1998) and semantic content (Perfetti & Hart, 2002). Spelling thus activates deep processing mechanisms in the brain, which leaves substantial memory traces of the word in the mind (Ehri & Rosenthal, 2007; Joshi et al., 2008).

Deciphering the alphabetic code is essential for learning to read and spell in L1 (McCutchen et al., 2002) and EFL (Kahn-Horwitz, 2020; Russak & Kahn-Horwitz, 2015), and phonological awareness is the underlying skill upon which becoming literate is built (Adams, 1990). To read and spell, children need to recognize the different graphemes with their specific shapes and directionality. They learn to decode and encode using the orthographic conventions of the language and associate the written form with a lexical meaning, thus establishing stable and reliable lexical representations as described in the *lexical quality hypothesis* by Perfetti and Hart (2002). Perfetti and Hart argued that the more accurate the imprint of the word in memory, the more efficiently it can be retrieved from memory and be used to decipher a text. Furthermore, an inability to decode efficiently slows down the speed of reading and distracts the reader from gauging the overall meaning of a text (Graham & Santangelo, 2014).

Recognizing and processing morphology is a further development in the reading and spelling process (Bowers & Bowers, 2017; Murphy & Diehm, 2020). Reading requires the blending of phonemes, and spelling requires breaking words into phonemes, understanding the relationship between graphemes and phonemes, using morphemes appropriately, and learning about the origins of words (Kahn-Horwitz et al., 2012; Moats, 2014). Henry (2005) added that explicit teaching of the morphology and etymology of words can improve spelling because morphological suffixes or affixes are stable and reliable, despite how their sound may change depending on how they are attached to the root. An example of a stable and reliable affix is the suffix <ed> indicating the past tense. The spelling of the <ed> suffix in the following examples remains the same despite the phonemic change following a root word ending in <d> or <t>, as in <rested>, as opposed to a root word ending in a voiced consonant resulting in <ed> pronounced as the /d/ phoneme in <drowned>. An example where the writer may identify the correct spelling of the suffix by considering the etymology of the root word is the suffix <able>, meaning able or can do, used with Anglo-Saxon roots such as <drink> or <buy>, versus the variant suffix <ible> with the same meaning used with Latin roots such as <reduce> or <access> (Henry, 2003).

Undoubtedly, literacy involves top-down skills such as understanding the expository structure of a text and clues regarding key connectors. However, without the bottom-up skills of learning how to decode and encode the language, fluent reading and writing will remain impaired. If readers cannot decode words, they cannot develop fluency in their reading skills and as a result cannot reach the point of

implementing top-down skills (Moats, 2014). The more that students internalize the orthographic conventions, the more fluent they will be as readers and spellers and can be cognitively free to devote their energies to top-down skills.

The challenges of English orthography

Unlike speaking, which comes naturally (for L1 speakers), writing is a skill that has to be acquired (Treiman & Kessler, 2014). English writing has a particularly challenging orthography because of its opaque quality (Seymour et al., 2003). As mentioned above, those studying to read and spell English learn that there is no consistent one-to-one correspondence between phonemes and graphemes. Learners need to contend with numerous orthographic conventions. Some of these include understanding how spelling is affected by the stress in a word, determining syllabic division, recognizing where and whether letters need to be doubled, and noticing how phonemes change their grapheme representation depending on their position in the word. English contains orthographic conventions that even L1 English adult students find difficult to spell (Burt, 2006; Kemp, 2009). Kemp (2009) reported adult L1 English-speaking students showing some difficulty using the morphemically appropriate ending < s > for pseudowords presented as plurals ended in the phoneme /z/, words with apostrophes. Burt (2006) found that adults had problems doubling the consonant before an uncommon suffix for example, "regrun" becoming "regrunnable" (p. 457).

EFL students necessarily find the complexity of English orthography even more of a challenge because, by definition, they are less exposed to the phonology of the language that underlies the orthographic conventions (Kahn-Horwitz, 2020). Also, EFL learners are expected to simultaneously acquire vocabulary together with complex English orthography, making the task doubly challenging (Kahn-Horwitz et al., 2012). Opaque English orthography is also a challenge for EFL teachers (Kahn-Horwitz, 2015), whether they are experienced or novices (Fuchs, 2017), because many of these teachers are not native English speakers themselves. Even native English teachers whose spelling has become automatic find themselves needing to learn or relearn some of the conventions (Moats, 2014). Taking the above into account, teacher education programs should provide adequate knowledge about the complexities of the English writing system if teachers are to be responsible for imparting this knowledge to their students.

Why teachers need orthographic knowledge

Because teachers are the key agents of literacy for their students, they need to integrate orthographic conventions and word-specific knowledge when answering their students' questions. Teachers should not conclude that as a result of its complexity, they should discard the teaching of spelling because English orthography is not as irregular as it seems (Henry, 2005; Moats, 2005). Shankweiler and Fowler (2004) reinforced this by demonstrating the predictability of English orthography. They pointed out, for instance, that because "closed syllables make up almost half of all

written syllables; their spellings correctly predict the vowel pronunciation in 95% of words" (p. 494). Furthermore, Henry (2005) demonstrated how teaching morphemes can significantly assist students in decoding and encoding words.

Teacher orthographic knowledge directly impacts student literacy outcomes (McCutchen et al., 2002; Piasta et al., 2009, 2019). In these studies, students showed significant gains not only in spelling but also in reading and writing. In McCutchen et al. (2002) research, teachers were taught the recommended sequencing for teaching phonological awareness, starting with blending and segmenting compound words, then syllables followed by onset and rime, and finally individual phonemes beginning with word-initial phonemes. Teachers were also made aware of the more complex orthographic conventions such as where one grapheme represents multiple phonemes, as in the word < ox >, or how the opposite may happen with multiple letters representing one phoneme, as in a trigraph, for example, < igh >. Students benefited depending on how well the teachers knew the content.

It is relevant here that skilled adult readers may demonstrate poor phonemic awareness. Scarborough et al. (1998) attributed this to adults no longer needing this skill. Alternatively, phonemic awareness skills are depleted as competing processing is required by orthographic and morphological knowledge. Nevertheless, Scarborough et al. (1998) emphasized the need for teachers to acquire phonemic knowledge to facilitate initial reading and spelling skills in their students. This is particularly critical in a foreign language context (Kahn-Horwitz, 2015, 2016).

McCutchen et al. (2002) reported how teachers learned to diagnose students' difficulties via their spelling errors. The study outcomes suggested that teacher knowledge influenced students in all parameters of the language, from phonological awareness to orthographic fluency, vocabulary, reading comprehension, and writing. The authors ended on a positive note, saying that by bequeathing teachers with adequate knowledge for dealing with literacy challenges, they are at least on their way to winning the battle to prevent reading and writing impairment (McCutchen et al., 2002, p. 86). This is reinforced by Graham and Santangelo's (2014) meta-analysis of 53 studies indicating that explicit spelling instruction had a positive effect on all literacy skills.

Moats (2014) reinforced the continuing need to increase awareness among those responsible for teaching literacy that teacher mastery of orthographic knowledge is essential, and should be acknowledged for the science that it is (Moats, 1999, 2020). Binks-Cantrell et al. (2012) referred to the Peter Effect, which means that one cannot give to others what one does not have oneself. This was later referred to as the Peter Principle by Moats (2014). According to the Peter Effect, teachers need to learn the skills of their trade, namely, phonology, orthography, and morphology, to be able to teach their students in a professional manner (Binks-Cantrell et al., 2012; Moats, 2014). Treiman (1998) also noted that when teachers themselves are knowledgeable about the orthographic-reading link, they can use orthographic errors to guide and correct their students by pointing out phonemic aspects of the word or teaching a convention.

The ramifications of a lack of teacher knowledge are enormous. Moats (1999) maintained that there was an inevitable negative cause and effect relationship between teachers' lack of phonological, orthographic, and morphological knowledge

and their students' inabilities to decode and read. Teachers' lack of content knowledge has negative consequences for much more than just reading. Students who cannot read feel a lack of confidence that subsequently snowballs, creating a negative attitude towards learning and academic achievement (Moats, 1999).

EFL teacher knowledge in a Hebrew L1 context

The positive outcome of teacher knowledge input is reflected in research done in both L1 and EFL contexts. Studies performed in Israel (Kahn-Horwitz, 2015, 2016) with pre-service and in-service teachers who studied orthographic conventions mirror the results of similar studies performed in an L1 context (Bos et al., 2001). It seems that language teachers' lack of language content knowledge, including phonology, orthography, and morphology, is an international predicament that requires addressing (Fuchs et al., 2019; Joshi et al., 2016; Vaisman & Kahn-Horwitz, 2020). Fuchs et al. (2019) and Vaisman & Kahn-Horwitz (2020) questioned whether EFL teachers are adequately teaching foundation-level orthography and its corresponding phonology in the Israeli context. The axiom that teachers cannot teach what they do not know, or the Peter Effect (Applegate & Applegate, 2004; Binks-Cantrell et al., 2012), should not be ignored. Until recently, Israeli EFL teacher education did not include a course on English orthography and related language components. Awareness is growing concerning the importance of this knowledge for effective teaching, and some in-service professional development programs have included teaching this subject matter. The importance of teacher knowledge is relevant to all disciplines (Mamluk-Naaman et al., 2018) and is even more pertinent regarding teaching reading and spelling in an EFL setting where teachers are the agents of literacy.

The participating EFL teachers in this study teach in an L1 Hebrew context. Teachers in this context need to understand the specific challenges that Hebrew learners may have with the English language, specifically English phonology, orthography, and morphology. Kahn-Horwitz et al., (1998) cite numerous reasons why English language components, including phonology, orthography, and morphology, are particularly difficult for L1 Hebrew learners. First, the English alphabet is novel for Hebrew speakers. The shapes of the letters are completely different from those of Hebrew letters. Also, English is written in the opposite direction as Hebrew. Moreover, Hebrew readers are not used to dealing with vowels as graphemes because, in Hebrew, most of the vowels are diacritical markings above or below the consonants. Most consonant graphemes in Hebrew represent the same phoneme regardless of where they appear in the word. In English, some consonant graphemes have varied phonemic representations depending on their position in the word. Phonological differences between Hebrew and English include novel phonemes for L1 Hebrew speakers, such as /ʤ/, /w/, /ð/, /θ/, /ʧ/, /aʊ/, and the short vowels /ɛ/ and /æ/, which many L1 Hebrew speakers find confusing as a result of the novelty of the latter. Hebrew speakers utilize morphology in reading by focusing on the root outwards. English decoding is a linear process. The phonemes /f/ and /p/ are represented by different graphemes in English, whereas in Hebrew, their corresponding graphemes are almost identical (Kahn-Horwitz et al., 1998).

It is clear that teacher knowledge, attitudes towards, and perceptions of English language components, including phonology, orthography, and morphology, are critical factors in ensuring that students attain adequate literacy skills (Fuchs et al., 2019; McCutchen et al., 2002; Piasta et al., 2009; Piasta et al., 2019; Vaisman & Kahn-Horwitz, 2020). EFL teachers may be even more important key players in this challenge because their students are faced with the double burden of learning an objectively complex orthography in a foreign language.

Does experience matter?

It is not the number of years a teacher has been practicing, but rather the knowledge that a teacher has that appears to determine the extent to which teachers feel well prepared to teach literacy (Bos et al., 2001). Teachers' lack of knowledge about literacy instructional tools has been documented in L1 as well as EFL contexts (Fuchs, 2017). In both of these contexts, experienced teachers were not necessarily found to be more knowledgeable than novice teachers (Bos et al., 2001; Fuchs, 2017).

The current study

This study examines the following questions concerning EFL teacher knowledge, attitudes, perceptions, and self-reported practice regarding teaching literacy-related language components such as phonology, orthography, and morphology for reading and spelling:

(1) To what extent are EFL teachers in the Israeli context knowledgeable about English language components, including phonology, orthography, and morphology? Furthermore, is there a difference between experienced and novice teachers?
     Based on prior L1 and EFL studies (Fuchs et al., 2019; Goldfus, 2012; Kahn-Horwitz, 2015; Moats, 2014; Roffman, 2012; Vaisman & Kahn-Horwitz, 2020), the first hypothesis is that teacher knowledge of orthography is somewhat limited and uncomprehensive, resulting in EFL teachers teaching language components such as phonology, orthography, and morphology in a sporadic manner if at all and teaching spelling as whole words (Russak & Kahn-Horwitz, 2015). Furthermore, it can be hypothesized that teachers' instruction on orthographic rules mainly focuses on grammar because spelling rules are usually presented in coursebooks within the context of grammar topics. For example, the < ing > suffix marks the progressive tenses. Despite the expectation that experience may have resulted in a deeper appreciation of orthographic knowledge, based on Fuchs (2017), we may find no difference between experienced and novice EFL teachers in their English language component knowledge.
(2) What are these EFL teachers' attitudes towards and perceptions of teaching EFL language components (phonology, orthography, and morphology) for reading and spelling? Do they consider orthographic instruction to be an important EFL component?

Teacher attitudes towards and perceptions of the subject of orthography may range from enthusiasm to antagonism depending on their knowledge of language components (phonology, orthography, and morphology), feelings of competency, and professional experience in the EFL field. Also, their perceptions of how long it takes for EFL learners to acquire reading and spelling may reflect their understanding of the impact of opaque English orthography on the acquisition process.

(3) How are teacher knowledge, perceptions, and attitudes towards orthography and spelling reflected in their self-reported practices?

Regarding self-reported practice, EFL teachers who perceive language components (phonology, orthography, and morphology) as important may tend to give these components priority in their lessons and devise a systematic and knowledge-based approach to reading and spelling. As a corollary, EFL teachers who perceive language components as being marginal in their teaching of EFL may not teach them at all or may expect students to learn spelling with a whole-word approach.

Method

This research used a mixed-method paradigm. Literacy-related language (phonology, syllables, orthography, morphology) component knowledge in an EFL setting was analyzed quantitatively. Open questions examining attitudes and perceptions were analyzed qualitatively using Braun and Clarke's (2006) specific recommendations. Teachers filled out their answers to the open questions in a written format in the Google form providing the transcription information recommended by Braun and Clarke (2006) as the first stage in the qualitative analysis process. In the coding process, each data item was given equal attention with each response being matched to the themes that the authors found. Every response was matched with a theme and color-coded. Some responses fit more than one theme. The data was analyzed in light of the open questions. The overall process was extensive and thorough to make sure that no data would be overlooked. The authors were active in the written report which comprised a cohesive analysis of what the teachers reported and how these findings accumulated to build a comprehensive map of teachers' perceptions, attitudes, and practices of spelling relevance in an EFL context. The report and analysis of the qualitative data can be seen in Table 3 which includes the themes and examples of the teachers' responses. The resulting themes were used to verify and complement the quantitative results (Calfee & Sperling, 2010).

The answers provided a more in-depth perspective of the participants' attitudes towards, perceptions about, and self-reported practice regarding different English language components. Additionally, a closed question examined teachers' self-reported practice regarding teaching EFL spelling. Closed and open questions were analyzed quantitatively and qualitatively, respectively.

Participants

A questionnaire was sent to a convenience sample of 52 EFL teachers with novice to experienced status. Their teaching experience ranged from one to 42 years, and they had at least an undergraduate degree, together with an English teaching certificate. Of the 52 teachers, 26 teachers were teaching in a private school in northern Israel. The other 26 questionnaires were sent to EFL teachers in public schools in the same geographic location. Out of the 52 questionnaires distributed, 44 teachers responded. Nine of the teachers who responded were teaching EFL in elementary school, grades 1–6; 11 were teaching EFL in middle school, grades 7–9; and 24 were teaching EFL in high school, grades 10–12. Forty of the participants were female. Eleven of the respondents were L1 English speakers.

Measures

The teacher knowledge questionnaire examined English language component knowledge and included questions concerning phonemic awareness, linguistic terminology, grammatical/morphology-related conventions, syllabic awareness, and orthographic conventions. See the appendix with the specific language component being tested in bold next to each question. The questions were taken from past research (Kahn-Horwitz, 2016; Moats, 1994; Roffman, 2012) to ensure validity and reliability Cronbach's alpha was 0.66.

The questionnaire included the following:

(1) Background questions to investigate the number of years of experience in the EFL field and grades that the teacher taught.
(2) Eighteen questions to investigate knowledge of phonemes, syllables, grammatical/morphemic-related items, orthographic conventions, and general linguistic terminology relevant to the subject of orthography. Of these, 15 were multiple-choice questions, one included 10 words requiring phonemic analysis, and two open questions required that participants provide examples of consonant doubling conventions.
(3) Perceptions and attitudes regarding orthography and spelling and self-reported practice were examined with the following:

    (a) Six questions dealing with perceptions regarding the time required to acquire L1 and EFL literacy.
    (b) One open question to investigate attitudes towards teaching English spelling.
    (c) Four open questions to investigate perceptions of the value of teaching orthography in EFL acquisition and self-reported orthographic teaching practice, including challenges and successes.
    (d) One multiple-choice question to examine the frequency with which the respondents teach spelling.

Procedure

The questionnaire was presented on a Google Docs form, and participants were asked to respond online. This took fifteen to twenty-five minutes to complete. Some teachers responded immediately, while others took up to a week to respond. After a week, one-third of the teachers who had not responded were contacted, and they were reminded to fill out the questionnaire. The eight teachers who did not return the questionnaire either ignored the reminder or stated that they did not have time to complete it.

Results

The following reports teachers' knowledge of, attitudes towards, and perceptions of self-reported teaching of orthography in an EFL setting. Both quantitative and qualitative data are presented in answer to each research question.

Experienced versus novice EFL teachers' knowledge of literacy-related components

The results first highlight teachers' knowledge regarding orthographic conventions, phonemic awareness, grammatical/morphemic conventions, syllabic types, and professional language-related terminology. Means and standard deviations were calculated (see Table 1).

EFL teachers experienced ceiling results with grammatical (morphemic) conventions that required orthographic changes following the correct use of the suffixes < s > and < ing > (e.g., Question: "Which word is an example of the spelling rule *drop the letter < y > and replace it with the letters < ie > when adding the letter < s >*?". Answer: "Cry-cries." Question: "Which word is an example of the spelling rule *double the last letter after cvc in a stressed syllable when adding the suffix < ing >*?". Answer: "Begin-beginning".

In contrast, identifying phonemes proved to be the most challenging of the various components. Here, participants were required to count the phonemes in words. The participants' mean score was 55%. Their poor phonemic analysis was expressed as follows. Aside from the word < shook >, which was correctly analyzed by 93% of the participants, the rest of the words were analyzed correctly in decreasing order: < says > 75%; < shrimp > 61%; < know >61%; < sawed > 61%; < drill > 59%; < eight > 55%; < sing > 48%; < quack > 23%; and < mix > 16%. The second component of phonological awareness required dividing four words into syllables. Here, teachers were asked to count the number of syllables. In decreasing order, teachers identified the syllables as follows: < banana > 100%; < lighten > 95%; < international > 80%; and < talked > 50%.

The teachers showed relative strength in their knowledge of orthographic conventions (for example, recognizing the soft < c > from four options: < cone >, < cape >, < chide > and < centre >) and knowledge of the

Table 1 Teachers' knowledge of literacy related language components

	Orthographic conventions (range 0–6)	Phonemic awareness (range 0–10)	Grammatical (morphemic) conventions (range 0–2)	Syllabic awareness (range 0–4)	Language-related terminology (range 0–8)	Total score (range 0–30)
Literacy component knowledge	87.12 (15.19)	55.23 (18.49)	100.00 (.00)	81.25 (17.98)	67.05 (23.05)	71.21 (12.20)

Means and Standard Deviations (in brackets) Converted to Percentages

pronunciation of a vowel phoneme in a closed syllable (for example, which word contains a short vowel sound from the words < great >, < cart >, < clip >, and < saw >). In addition, when asked which letter cannot be doubled, all participants gave at least two examples of letters that cannot be doubled in English. When asked to say which letters fit the orthographic convention of letters that are doubled at the end of a stressed syllable with a short vowel (< f >, < l >, < s >, and < z >), only 14% of the teachers provided at least two letters that fit this orthographic convention, while 11% gave only one correct letter. Teachers' knowledge of professional language-related terminology barely reached a score of 70% (see Table 1).

The first question also examined whether experienced teachers demonstrated greater orthographic-related knowledge than novice teachers. To answer this question, we calculated correlations between the various components and years of teaching experience (see Table 2). No significant correlations were found between the total EFL teacher knowledge score and years of teaching experience. In other words, experienced teachers did not demonstrate more orthographic-related knowledge than novice teachers.

Attitudes and perceptions regarding the importance of spelling for EFL

The qualitative aspect of this research answered the second question regarding teachers' attitudes and perceptions towards teaching orthography and whether they consider spelling instruction to be an important EFL component. The following are the analyses of the open questions (see Table 3).

Spelling contributing to learning English

In response to the question about how English spelling contributes to learning English, the authors noted four themes in decreasing order: spelling contributing to literacy, spelling cementing the meaning of vocabulary, spelling assisting in the speaking and pronunciation of English, and no contribution whatsoever. To see teacher responses, refer to Table 3. In one case there were contrasting perspectives whereby one teacher expressed frustration about not being able to correlate spelling with pronunciation due to the opaque English orthography. In contrast, the response "it

Table 2 Correlations between literacy related language components and teacher experience ($n = 44$)

Variables	1	2	3	4	5	6	7
1. Orthographic conventions	–						
2. Phonemic awareness	.27	–					
3. Grammatical conventions	.0	.0	–				
4. Orthographic syllabic	.02	.18	.0	–			
5. Professional terminology	.06	.41[**]	.0	.30	–		
6. Total knowledge	.42[**]	.82[**]	.0	.44[**]	.78[**]	–	
7. Teacher experience	.16	-.22	.0	− .06	− .30	− .24	–

Table 3 Thematic categories of open-response teachers' perceptions, attitudes, and practice

Thematic category (number of responses)	Key terms	Response examples
Q1. In what way do you think English spelling contributes to learning English?		
Literacy (20)	Literacy, reading accurately, word recognition, reading fluently, reading comprehension, writing	"You can speak fluently without knowing how to spell, but you appear to be illiterate" "…It contributes reading accurately and therefore correct comprehension" "…It helps the connection between sounds and letters and mainly it helps with writing" "To read correctly, fluently and accurately" "Once you learn how to spell correctly it makes your reading easier and faster"
Vocabulary and meaning (14)	Memorize words, understanding, enriches vocabulary, meaning	"It helps memorize words to a great extent" "Deciphering the words is the first step in understanding them. Without being able to spell a word correctly, it becomes harder … to understand the word" "Helps understand and enriches vocabulary" "…Small spelling differences that give different meaning to similarly written or similarly pronounced words…"
Pronunciation and speaking (8)	Pronunciation, express yourself, communicative ability	"[Spelling is] one of the [greatest] obstacles to good pronunciation" "It provides a better understanding of the language and helps pronunciation" "It's important … in terms of basic communicative ability"
None (6)	I'm not sure, in no way, not that important, very little	"I'm not sure, since English is not spelt like it sounds" "In no way. It's difficult since there is no rhyme or reason"
Q2. What is personally challenging for you regarding EFL spelling?		

Table 3 (continued)

Thematic category (number of responses)	Key terms	Response examples
The complexity resulting from opaque orthography (26)	Exceptions, rules	"The challenge is to … remember and follow the rules" "That there are no general rules and too many exceptions" "It has no logic and there are too many rules"
Didactic challenges (9)	Time, spelling allowances (accommodations), teach, Hebrew and English, challenges	"The high proportion of students with spelling allowances make spelling tests and the importance of learning to spell not politically correct" "Students have the tendency to translate back and forth from both languages, which many times leads to confusion" "Teaching words that are spelled completely different[ly] than how they sound" "Lack of available time to work on spelling" "The high proportion of students with spelling allowances" "Confusion [between] these two languages… " "When you know the rules, there's no challenge"
Individual differences (8)	Spelling, dyslexic, non-native, own errors	"Being a dyslexic student myself, I check myself very often. So when I am teaching, I have to be even more aware of the spelling" "My own spelling errors. I tell the children to look for them, and then we fix them together". "I am dyslexic. Spelling is an issue in any language for me" "As a non-native speaker, I sometimes get confused especially if I am tired" "My own spelling errors…"
None (2)	Nothing, none	"I have a good visual memory, thus learning spelling has never been a true obstacle to me" "Nothing"

Table 3 (continued)

Thematic category (number of responses)	Key terms	Response examples
Q3. How do you overcome the challenges you face regarding teaching EFL spelling?		
Repetition and testing (15)	Quiz, repetition, exercise, test, practice	"Repeat over and over again…" "Quiz the students. This forces them to learn accurate spelling" "I believe in training, practicing and dictations"
Extrinsic motivating activities (10)	Games, play, group, activities, fun	"I try to teach spelling in a playful and interesting way, such as giving riddles to memorize or memory games"
Independent learning of whole words (9)	Dictionary, by heart	"Usually I tell them that I know It's not simple, but with a lot of practice and reading, it will fall into place" "I tell them to try and spell words by heart"
None (6)	I don't, lowered expectations	"I have lowered my expectations and demands of kids in light of spelling allowances and the general feeling that bad spelling is not so bad. Kids lose very few points on bagrut [matriculation exam] for bad spelling" "I don't take it too seriously; even native speakers have problems with it. That's what I tell my students
Teaching orthographic conventions (4)	Rules	"I try to help my students 'hear' and 'see' the rules as much as possible, so it'll help them remember" "The students may roll their eyes in the beginning, but as they realize that the rules really help them they overall enjoy getting acquainted with the rules"
Q4. What successful experiences have you had regarding teaching EFL spelling?		

Table 3 (continued)

Thematic category (number of responses)	Key terms	Response examples
Success motivating tests including competitions (12)	Motivated, success, test	"When a struggling student all of a sudden succeeds in a dictation because s/he practiced a lot at home and showed dedication and motivation despite the difficulty" "Every time my students are requested to write something or they are tested on spelling and they succeed, it is a success"
Game related activities (9)	Chants, games, puzzles	"Studentsremember the chants after a long time and write correctly without even noticing" "Using crossword puzzles" "inventing games or associations to remind of correct spelling e.g. committee: three doubles" "C/V/C like a sandwich with something inside it. It works"
None (8)	Don't, can't remember, none	"I don't. My highs school students are all exempt from spelling" "I don't teach spelling" "None that I know of" "I can't remember"
Practice (7)	Practice	"…would say practice makes perfect" "After working on certain vocabulary items in many different ways, the students succeeded in the test"
Explicit teaching of orthographic conventions (5)	Rules, syllables, generalization	"Especially weaker students enjoy knowing the rules as they can see an instant improvement" "Dyslexic kids who overcome spelling mistakes because they understand the rules" "breaking words into syllables by clapping hands"
Independent learning of whole words (2)	Fixing own errors, learned	"When a student is fixing his own errors" "It just has to be learned"

contributes to the students' ability to pronounce the words correctly" reflects a perception and attitude that spelling knowledge empowers students. The response of spelling not contributing to learning English whatsoever is highlighted in the following response: "In no way. It's difficult since there is no rhyme or reason".

Personal challenges with EFL spelling

In response to the question about what teachers perceived as being personally challenging regarding EFL spelling, three themes were noted in decreasing order, namely, the complexity of English spelling, didactic challenges, and individual differences. The dominant theme to emerge in answering this question was the issue of the complexity of English spelling, with 14 of the 26 teachers expressing their difficulty as a result of their perception of English as being irregular with too many exceptions (see Table 3 for teacher responses).

Teacher knowledge, perceptions, and attitudes towards orthography and spelling were reflected in their self-reported practices and can be categorized as didactic challenges or individual differences.

Personal difficulties regarding didactic challenges related to spelling included finding efficient ways to help students internalize accurate spelling. Also, teachers expressed concern regarding challenges in finding ways to assist weak learners who have problems with spelling in their L1. They also mentioned that little weight is given to spelling in the national matriculation examination. Finally, they wrote about the orthographic distance between Hebrew and English spelling, which adds to the existing difficulty of learning a new foreign language.

Teacher individual differences as being personally challenging regarding EFL spelling included being nonnative English speakers or being dyslexic. Two teachers reported that nothing was challenging for them (see Table 3 for teachers' responses).

Teacher knowledge, perceptions and attitudes towards literacy-related language components reflected in teachers' self-reported practices

In response to the third research question about self-reported practice, the quantitative results regarding how often teachers taught spelling are first reported, after which the qualitative results are reported. The quantitative results about how often teachers teach spelling in their lessons are arranged from the greatest to the least: 36% reported teaching spelling only when they notice a common error; 25% teach spelling every lesson; 18% teach spelling only when they teach grammar; 9% teach spelling when they teach new vocabulary; 5% do not teach spelling at all; 2% teach spelling when they teach words with a "special" spelling; 2% teach spelling once a month, and the other 2% teach spelling once every couple of weeks.

Five themes were noted regarding how teachers report overcoming challenges regarding EFL spelling instruction. The themes in decreasing order of the responses were requiring repetition and testing, extrinsic motivational methods such as games and songs, independent learning of whole words, no method, and teaching orthographic conventions (see Table 3 for teachers' responses).

Successful experiences teaching EFL spelling

Six themes emerged regarding successful experiences teaching EFL spelling. In decreasing order, the themes that emerged were tests that motivate learning, including competitions or other means of language output; the use of games, chants, and mnemonic strategies; no method; practice; drawing attention to linguistic conventions; and independent learning of whole words (see Table 3 for teachers' responses).

Perceptions about the time needed to become literate

The following figure (see Fig. 1) illustrates teacher perceptions regarding the length of time (in years) needed to acquire L1 versus EFL reading. Some teachers responded qualitatively to this question. They cited motivation, adequate exposure, language ability, and practice as contributing to the speed of acquiring reading.

Perceptions of how long it takes for English L1 learners to learn to read texts for comprehension purposes as opposed to EFL learners also show that teachers considered it a lengthier process for EFL students to learn this skill. Once again, teachers who chose to write answers to this question cited practice as a key contributing factor for both L1 and EFL students being able to read for comprehension purposes. Additional responses from teachers cited factors such as the text level and cognitive development of the students as contributing factors to facilitating student reading for comprehension purposes.

Figure 2 shows that the teachers perceived that it took less time for L1 learners to acquire accurate spelling than for EFL learners. One teacher who responded qualitatively regarding how long it takes for EFL learners to learn to spell surmised that it takes a lifetime. The longest number of years given by a teacher for an L1 learner to learn how to spell was twenty years.
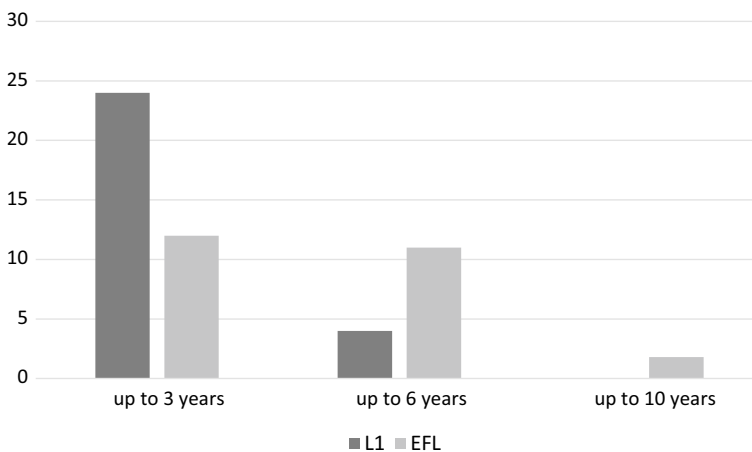

Fig. 1 Teachers' estimation regarding the number of years L1 and EFL learners acquire decoding
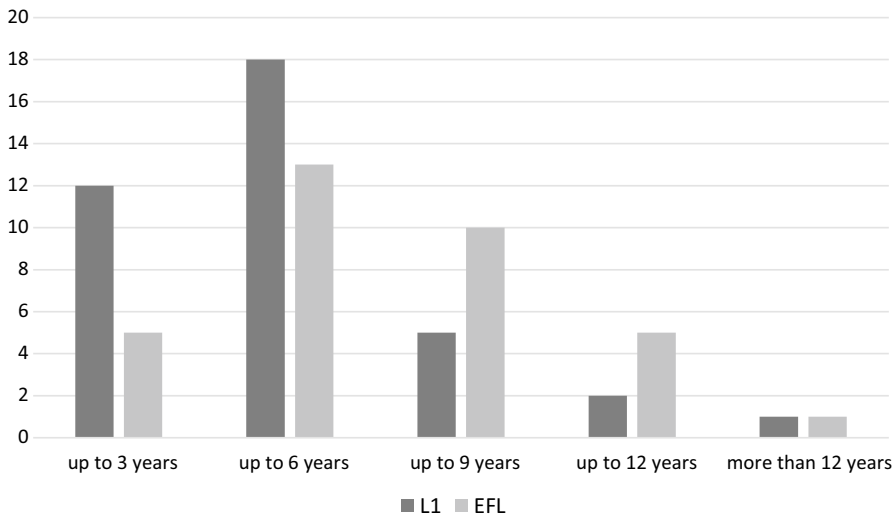
Fig. 2 Teachers' estimation regarding the number of years L1 and EFL learners acquire spelling

Discussion

This section discusses answers to the three questions presented in this study. First, the discussion focuses on EFL teachers' knowledge of literacy-related concepts as a prerequisite for teaching. Then, we will discuss teachers' attitudes and perceptions of literacy-related components, including phonology, orthography, and morphology. Their attitudes and perceptions may be based on their knowledge and the ease with which they gained this knowledge. Included in this discussion are teachers' percep-tions of the time they estimate that it takes to acquire EFL reading and spelling. This reflects their understanding of the opaque English orthography. Attitudes and practice will be linked to teachers' self-reported practice. Self-reported practice is the fruit of teacher knowledge, attitudes, and perceptions. This discussion will aim to consolidate EFL teachers' roles in the literacy link.

EFL novice versus experienced teacher knowledge of literacy-related components

Compared to participants in other studies (Fuchs et al., 2019; Goldfus, 2012; Kahn-Horwitz, 2015; Vaisman & Kahn-Horwitz, 2020), the participants in the current study received a higher overall survey-grade for teacher knowledge. This may reflect a substantial subgroup of the current participants who teach in a private setting where there is the freedom to select professional staff. Nevertheless, it is clear that gaps of knowledge in the realm of spelling and orthography still exist and need to be addressed. According to the results, where spelling has already been integrated into the official curriculum (as demonstrated in the perfect score for grammar), teachers have successfully incorporated spelling into their knowledge.

It is noteworthy that similar to teachers in other studies (Goldfus, 2012; Kahn-Horwitz, 2015; Vaisman & Kahn-Horwitz, 2020), teachers in the current study demonstrated the most difficulty when counting phonemes in words. Several explanations may account for this result. It may reflect that English is indeed a foreign language for most speakers in Israel, and there are challenges involved in identifying EFL novel phonemes. This may be due to a lack of adequate exposure to spoken English that typifies a foreign language setting. An additional explanation may be that teachers who are fluent adult readers themselves are not necessarily aware of the connections between phonemic awareness, reading, and spelling. They may not have received phonemic instruction when they were learning to read English; also, they may not have learned how to break words into phonemes during their pre-service or in-service teacher education (Scarborough et al., 1998). As a result, they are likely unable to facilitate word analysis for their students in their teaching practice. The fact that the number of letters in a word can be more or less than the number of phonemes could lead to a lack of clarity and requires the attention of teachers to explain to students the phoneme-grapheme connection in reading and spelling.

Identifying the nonsense word < toyn > as incorrect was challenging. This may be explained by the incomplete orthographic knowledge concerning the position of the diphthong < oi > as opposed to < oy >. Incomplete orthographic knowledge was also demonstrated regarding letters that cannot be doubled, with only 14% of the teachers correctly stating which letters are doubled at the end of a stressed syllable containing a short vowel.

For syllabic knowledge, the most challenging item involved counting the number of syllables in the word < talked >. Respondents may have confused syllables and morphemes. This is understandable considering the participants' mean score of 67% for professional terminology. This finding demonstrates incomplete knowledge of phonemes, whereby teachers were unaware of the /t/ phoneme following an unvoiced consonant.

Teacher knowledge regarding general linguistic and orthographic terminology was far from ceiling level, mirroring findings from previous studies (Goldfus, 2012; Kahn-Horwitz, 2015). The most difficult item was defining the diphthong. The low scores concerning other terminology used in teaching orthography might imply that teachers either do not know these terms or have been taught them but have since forgotten them because they do not use them regularly, as some commented after completing the questionnaire. These teachers were high school teachers who claimed that they did not need to use these terms in their teaching. This reflects EFL high school teachers delegating responsibility for teaching literacy-related components such as phonology, orthography, and morphology to elementary school EFL teachers and thereby relegating the relevance of teaching these literacy-related components to the foundation level. This finding is concerning because it cannot be taken for granted that these literacy-related components are taught explicitly at the foundation level (Fuchs et al., 2019; Vaisman & Kahn-Horwitz, 2020). There seems to be a contradiction here, as participants acknowledged that acquiring EFL reading and spelling is a prolonged process, yet they felt that this instruction should be the domain of elementary school EFL teachers.

EFL teacher attitudes towards teaching literacy-related components: Phonology, orthography, and morphology

From the results, it is clear that participants have a positive attitude towards the teaching of literacy-related components for spelling and reading. They cite its value, with the majority stating that it is a key factor in forging the literacy link. Furthermore, they seem keen to know more. They also perceive the value of literacy-related component knowledge (phonology, orthography, and morphology) for their teaching. This interest both contradicts and reinforces the hypotheses. On the one hand, the desire to learn about phonology, orthography, and morphology contradicts the hypothesis that participants would resist learning about incorporating the teaching of orthography into EFL lessons. On the other hand, the results reinforce the hypothesis that teachers indeed do not know enough about the relevance of these literacy-related components for EFL literacy.

Self-reported teacher practices of orthographic intervention instruction in an EFL setting

Although teachers were keen to learn more about orthographic conventions, they demonstrated ambivalence in their self-reported practices. The results show that the majority teach orthographic conventions and spelling only as a reaction to common errors in an ad hoc manner rather than as an essential part of the EFL lesson. They stated that the minimal points allocated for incorrect spelling in the matriculation examinations discouraged them from spending what the teachers defined as precious class time on anything other than the essentials, noting that spelling was certainly not the top priority. Teachers also maintained that they did not have time to teach spelling because they were addressing so many other aspects of the curriculum. These reactions demonstrate a possible lack of understanding regarding the important role of accurate English spelling knowledge acting as a mnemonic, anchoring the lexical representation of the word in memory as expressed in Perfetti and Hart's (2002) lexical quality hypothesis.

The majority of teachers reported that they taught spelling through rules. They might have been referring to grammatical spelling rules, for which they received the highest scores. Also, they used the term "rules" too generally without demonstrating the knowledge or experience to implement the teaching of orthographic rules explicitly. This supports Moats' (2015) apt description of orthography being taught arbitrarily. Furthermore, the teachers who reported teaching orthography through testing seemed to perceive testing as teaching. By not stipulating how they assist their students in learning to spell, they may expect their students to simply learn the way a word is spelled in a rote fashion without any specific focus on word components. Testing as a form of "teaching" orthography perhaps reflects the teachers' attitudes and perceptions of orthography as being something arbitrary, which cannot be taught systematically and thus requires students to learn how to spell whole words by heart. Other teachers who stated that they did not teach orthography felt that their students should acquire spelling independently. These teachers may lack

adequate knowledge about literacy-related components, including phonology and orthography, to impart to their students, thus expecting their students to acquire spelling as an arbitrary conglomeration of letters that make up words. Once again this would fit in with the unfortunate description that Binks-Cantrell et al. (2012) termed the Peter Effect, whereby teachers cannot give to their students what they do not have themselves.

Teachers acknowledged that it takes longer for EFL students to acquire reading, spelling, and comprehension than it does for L1 students. Additionally, teachers commented about how difficult English orthography is and how there are so many exceptions to the rules that make learning how to spell accurately so complicated. This is indicated in the literature illustrating the complexity of the opaque English orthography (Fowler & Shankweiler, 2004; Frost, 2005) and the extended period required by L1-English speaking children to acquire English literacy skills (Seymour et al., 2003). Perhaps teachers should be made aware of the extent to which orthographic acquisition is an ongoing process that should not stop after the foundation level, especially in the EFL context where students are dealing with acquiring word meanings at the same time as learning to read. Teachers seem to give up too easily in trying to teach literacy-related components such as phonemic awareness and orthographic conventions, perhaps as a result of feeling overwhelmed by a lack of knowledge accompanied by a limited teaching time. Spelling exemptions in the matriculation exam and minimal penalties for spelling errors could therefore be seen as excuses not to teach the very subject that is lacking in the teachers' professional repertoire.

Teachers' perceptions of the value of spelling instruction in an EFL setting

Teachers' perceptions of how spelling contributes to learning English demonstrate that the teachers that participated in this research are aware of the significant contribution of spelling to all aspects of learning English (Ehri & Rosenthal, 2007). The fact that the majority of the teachers in this research were aware of how spelling is an essential cog in the wheel of literacy acquisition is encouraging and suggest that teachers would be willing to learn more on the subject of literacy-related components such as phonemic awareness and orthographic convention when it is given its appropriate place in the curriculum. Most of the teachers found the rules and exceptions to the rules challenging, in addition to the fact that English spelling does not necessarily correspond to the way words sound. Some teachers found it difficult themselves to spell in English and would therefore benefit from more input and clarification of orthographic conventions. The difficulties surrounding coping with opaque English orthography are epitomized by the following comment from a teacher: "It is too difficult since there is no rhyme or reason".

Most teachers reported that teaching the rules through games or activities that encouraged varied practice was a successful method to teach EFL spelling. Giving students the opportunity for repetition in creative ways seems to be beneficial for these teachers to make orthographic rules accessible for their students. From this

feedback, teaching orthography is no different than the didactics of other aspects of EFL teaching or teaching in general, which require innovative and stimulating ways of imparting knowledge (Mamluk-Naaman et al., 2018). Despite the crucial role that knowledge of phonology, orthography, and morphology play in the dual process of teaching and learning to read and spell, at present, EFL teachers are still to some extent left to their own devices to ensure that they acquire these essential building blocks to becoming professionally equipped for EFL teaching.

Implications for practice, future research, and limitations

This study provides an additional layer of evidence to existing EFL teacher knowledge research conducted in Israel. A possible limitation of this study is that the participant sample was small, and that the teachers who participated came from three different levels of schooling. In the context of this study, it is important to note that EFL teaching certification is granted to teachers of multiple levels at many higher education institutions in Israel. Consequently, EFL teachers find themselves teaching different age groups simultaneously or at different points in their careers. Also, many of the results in the current study support the results of prior studies that were conducted with pre-service and in-service EFL teachers teaching elementary, middle, and high school students (Fuchs et al., 2019; Goldfus, 2012; Kahn-Horwitz, 2015, 2016; Roffman, 2012; Vaisman & Kahn-Horwitz, 2020).

For future research it would be recommended to connect EFL teacher knowledge to actual students' outcomes, thereby taking this research one step further in an EFL context. This would result in a study connecting between teacher literacy-related knowledge and students' EFL literacy acquisition. Research of this nature has been conducted in an L1 English context (McCutchen et al., 2002; Piasta et al., 2009, 2019), and this research has provided evidence that teacher knowledge is directly linked to student outcomes.

In the context of the previously mentioned studies of L1 (McCutchen et al., 2002; Piasta et al., 2009, 2019), teacher knowledge of literacy-related components such as phonology, orthography, and morphology is an essential link in ensuring that students gain the foundation of literacy. Consequently, teachers' phonological, orthographic and morphological knowledge are essential pieces in this puzzle. EFL teachers express the desire to acquire more of the literacy-related component knowledge (phonology, orthography, and morphology) required to impart to their students and facilitate their journey into literacy. It is encouraging to note that the Israeli Ministry of Education English Inspectorate has recognized the importance of providing EFL teachers of students of different ages with the knowledge to teach reading and has been running a program called Building Blocks (Israel Ministry of Education) to achieve this pedagogical objective, similar to the value-added programs suggested by Moats (2014).

The urgency of this matter is clear—in the digital age where English is the lingua franca (Crystal, 2003), leaving the issue of teachers acquiring literacy-related component knowledge to chance is not good enough. Official tests such as IELTS and TOEFL validate the importance of spelling by penalizing spelling errors. In our

local context, it is encouraging to note that the recently revised English curriculum, which has aligned itself with the Internationally Common European Framework of Reference for Language (CEFR), has begun to address the need to incorporate phonology, orthography, and morphology, making it an integral part of the building blocks of EFL literacy.

Appendix

Questionnaire

(1) Which word contains a long vowel sound? **orthographic convention**
       a) story b) send c) hall d) cream

(2) Which word contains a short vowel sound? **orthographic convention**
       a) great b) cart c) clip d) saw

(3) Count the number of speech sounds that you perceive in each of the following words. Remember, the speech sounds may not be equivalent to the letters. For example, the word "spoke" has four speech sounds: /s/, /p/, /o-e/, /k/. **phonemic awareness**
       a) drill __ b) sing__ c) says __ d) shook e) shrimp __ f) know __   g) quack h) sawed i) mix __ j) eight __

(4) A *soft* c is in the word: **orthographic convention**
       a) cone b) cape c) chide d) center

(5) Which word is an example of the spelling rule: double the last letter consonant after CVC in a stressed syllable when adding the suffix –ing. **grammatical/ morphemic related convention**
       a) visit b) begin c) reach d) walk

(6) Which word is an example of the spelling rule: drop the letter *y* and replace it with the letters *ie* when adding the letter *s*. **grammatical/morphemic related convention**
       a) play b) buy c) cry d) enjoy e) make

(7) A nonsense word that does not follow the English spelling pattern is: **orthographic convention**
       a) shease b) toyn c) squive d) clow

(8) Which letters are never doubled in English spelling (give 2 examples)? **orthographic convention**

(9) Which letters are always doubled at the end of a stressed syllable with a short vowel (give 2 examples)? **orthographic convention**

(10) How many syllables are in the following words? For example, the word *higher* has two syllables, the word *threat* has 1, and the word *physician* has three syllables: **syllabic awareness**
       a) lighten b) international c) talked d) banana

(11) The smallest unit of sound that changes the meaning of a word is called a: **linguistic terminology**
       a) grapheme b) phoneme c) morpheme d) schwa

(12)   A voiced consonant digraph is in: **linguistic terminology**
       a) these b) ship c) boy d) think
(13)   The name for an unstressed vowel sound is: **linguistic terminology**
       a) morpheme b) phoneme c) schwa d) blend
(14)   The name for two vowel sounds that glide into each other is: **linguistic terminology**
       a) vowel pair b) diphthong c) blend d) apostrophe
(15)   The name for a part of a word that contains at least one vowel and can have a consonant on either side is: **linguistic terminology**
       a) morpheme b) syllable c) affix d) schwa
(16)   The name for sounds created in speech when the vocal tract is open: **linguistic terminology**
       a) consonant b) blend c) vowel d) digraph
(17)   The smallest unit of print for a single speech sound is called a: **linguistic terminology**
       a) grapheme b) phoneme c) morpheme d) syllable
(18)   The name describing a minimal unit of meaning in a word: **linguistic terminology**
       a) consonant b) grapheme c) phoneme d) morpheme
(19)   How many years have you been teaching EFL? ___ **background information**
(20)   What grades do you teach? ___ **background information**
(21)   How many years do you think it takes English L1 learners to read accurately? **perceptions**
(22)   How many years do you think it takes English L1 learners to read texts for comprehension purposes? **perceptions**
(23)   How many years do you think it takes to acquire English L1 learners to acquire accurate spelling? **perceptions**
(24)   How many years do you think it takes EFL learners to read accurately? **perceptions**
(25)   How many years do you think it takes EFL learners to read texts for comprehension purposes? **perceptions**
(26)   How many years do you think it takes EFL learners to acquire spelling? **perceptions**
(27)   How often do you teach spelling? **practice**
       a) every lesson b) once when teaching grammar c) when you notice a common error d) once a month e) other _____
(28)   How do you teach spelling? Please explain in as much detail as possible – pretending that I am not an English teacher! **practice**
(29)   In what way do you think English spelling contributes to learning English? **attitudes**
(30)   What is personally challenging for you regarding EFL spelling? **perceptions**
(31)   What successful experiences have you had regarding teaching EFL spelling? **practice**
(32)   How do you overcome the challenges you face regarding teaching EFL spelling? **practice**

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