מדינת ישראל
משרד החינוך

ראמ"ה
הרשות הארצית
למדידה והערכה בחינוך

המזכירות הפדגוגית
אשכול שפות
הפיקוח על הוראת האנגלית
המנהל הפדגוגי
האגף לחינוך יסודי

Assessment of Basic Literacy in English (ABLE)

Teacher's Guide

National Authority for Measurement and Evaluation in Education (RAMA)

Steering Committee

Chair

Prof. Elinor Saiegh-Haddad, Bar-Ilan University

Members (in alphabetical order)

Dr. Lisa Amdur, National Authority for Measurement and Evaluation in Education (RAMA)

Dr. Elisheva Barkon, Oranim Academic College of Education

Dr. Carole Goldfus, Levinsky College of Education

Dr. Janina Kahn-Horwitz, Oranim Academic College; E.J. Safra Brain Research University of Haifa

Ms. Aharona Korman Gvaryahu, Ministry of Education; Levinsky College of Education

Dr. Judy Steiner, Chief Inspector, Ministry of Education

Development

Dr. Susie Russak, Head Writer, Center of Educational Technology (CET), Beit Berl Academic College

Ms. Dvorah Bohak, Beit Berl Academic College

Ms. Arige Elouti, Oranim Academic College

Ms. Noga Gottesfeld, Research Team

Dr. Ron Bratslavsky, Research Team

Mr. Fadi Kanaan, Ms. Yael Gorodensky, Psychometricians

Ms. Yael Werner-Vardi, Ms. Rabab Smidiyeh, Coordinators

Ms. Tehila Grunwald, Project Manager

Editing and Production

Center for Educational Technology

Ms. Lilach Hazay, Ms. Shani Guetta, Mr. Yirmi Leja

Acknowledgment

We would like to thank all the pupils and teachers who participated in the pilot studies, thereby contributing to the development of this kit.

Contents

Chapter 2:
Description of the ABLE Kit

Chapter 3:
Testing Materials

Appendices

Preface

Acquisition of basic literacy skills is the focus of instruction of English as a foreign language (EFL) in the early elementary school years. These skills include awareness of the sounds of language, awareness of print, knowledge of the relationship between letters and sounds, vocabulary recognition and acquisition, word decoding, and spelling (National Reading Panel, 2000). These basic literacy skills constitute a critical foundation for the pupil to rely on and are used in developing higher-order literacy skills such as reading comprehension. Unfortunately, many pupils find it difficult to acquire such basic literacy skills, and this has a far-reaching impact on their general language and reading development. While a sensitive teacher is usually aware of any pupils who are struggling, he/she may not be able to identify the specific areas of difficulty or the sources of the difficulties. Furthermore, he/she may not possess the appropriate tools to help the pupils deal with their difficulties.

On the following pages, we describe the rationale and the development of a testing kit that has been developed with the aim of helping teachers in this area. This kit, which is entitled "Assessment of Basic Literacy in English" (hereafter, ABLE), comprises two tests: a whole-class administered Screening Test and an individually administered Diagnostic Test. The aim of the Screening Test is to identify the pupils who might have trouble acquiring literacy in English as a foreign language. The aim of the Diagnostic Test is to identify the specific literacy skills with which these pupils are having difficulty. The ABLE kit includes the actual tests to be used for test administration as well as a teacher's copy of the test with the corresponding scoring sheets. The tests have been prepared in two versions: one for Arabic-speaking pupils and another for Hebrew-speaking pupils. It is worth noting that while the instructions are presented in two different languages, the two versions are otherwise identical.

Chapter 1: Background

I. Introduction

Life success in the 21st century is reliant on literacy skills. Academic achievement, job attainment, and many forms of social interaction are all dependent on the ability to read and write. One of the most important tasks of early education is to teach children these skills. Today, approximately one-quarter of the world's population is already competent in English. English is the most widely taught foreign language in the world today (Crystal, 2003). In Israel, English is one of the compulsory subjects for the matriculation examinations (Spolsky & Shohami, 1999) in order to obtain a high school diploma. Therefore, it is extremely important that all pupils in Israel acquire English literacy.

In this teacher's guide, the underlying oral language skills that support literacy acquisition will be discussed first. Then the range of skills that comprise literacy will be examined, and finally, the impact of the L1 on the acquisition of literacy in English as a foreign language (EFL) will be considered. An exploration of these topics will help the user to better understand the theoretical underpinnings of the ABLE kit.

Please note that a glossary of terms used in this guide has been included (see Apendix I). In addition to the glossary, a list of Frequently Asked Questions (see Appendix II) has also been included in the ABLE Kit.

II. Oral Language Processing

Although children are exposed to and acquire their L1 orally from birth, reading and writing skills are acquired at much later stages of early childhood. From birth, children hear language all around them. At first, their perception of words is holistic, but as their vocabularies increase, their awareness of the individual sounds that make up each word also develops (Metsala & Walley, 1998). A child's ability to perceive, produce, and manipulate the sounds of the language that he/she hears has been found to impact his/her ability to learn to read (see Adams, 1990 and the National Reading Panel, 2000 for a discussion of this issue). If the quality of the lexical information stored in the memory is clear and precise, this information will be more easily accessed and retrieved (Perfetti & Hart, 2001). High-quality lexical information in turn facilitates reading acquisition processes that are reliant on the establishment of connections between sounds and letters (Elbro, 1996; Goswami, 2000).

A. What are Phonological Representations?

Phonological representations are like identity cards for each individual sound and for each lexical item (word) in a language. Each speech sound or phoneme consists of distinct linguistic **features** that make it unique and different from all other sounds. The distinction might be based on only one feature such as **voicing** (as in the difference between the sound /t/ and the sound /d/), or it might be based on several **features** (as in the difference between the sounds /m/ and /z/, which are distinguished by place and manner of **articulation**). The best way for our brains to learn to distinguish between **phonemes** is by coming into contact with words that sound similar to the words we know but are in fact different. This contact forces the brain to focus on the distinct differences, and, in response, to create new **linguistic categories**, which in this case contain phonological information, in order to accommodate the newly gained information (Elbro, 1996). Correct pronunciation and recognition of each **phoneme** is reliant on a clear and accurate **phonological representation** of each sound in the **mental lexicon**. While the quality of the **phonological representation** for known sounds from the L1 phonological inventory should be well-established by the time a child reaches elementary school, the establishment of quality **phonological representations** for the novel sounds from a foreign or second language that are not familiar to the pupil might be more challenging. The creation of high-quality phonological representations for the novel sounds depends on the intensity of exposure to those sounds together with the quality of the sounds to which the pupil is exposed. If the pupil is exposed to accurate representations of the **phoneme**, the chances of developing high-quality representations are greater (Saiegh-Haddad, 2003, 2007; Saiegh-Haddad, Levin, Hende, & Ziv, 2011).

By the time a native Arabic- or Hebrew-speaking pupil is introduced to the spoken form of English, he/she has already established distinct and clear phonological representations for the sounds of his/her native language in his/her **mental lexicon**. Therefore, sounds that are familiar from the native language will not be difficult to perceive and use. The sounds that usually present difficulties for EFL pupils are those that are new and different from their native language and not within its **phoneme inventory** (Russak & Saiegh-Haddad, 2011). For example, for native Arabic speakers, this category of new, unfamiliar sounds in English would include the **consonant** sounds /p/, /g/, /v/, and for native Hebrew speakers, this category would include the **consonant** sounds /th/, /w/. In order for the EFL pupil to create high-quality phonological representations for

the new sounds in his/her **mental lexicon**, direct and explicit instruction is sometimes required, with attention to correct auditory discrimination and **articulation** of each of the sounds, as well as lots of practice at using the new sounds when pronouncing words and sentences. Note that most vowel sounds in English are novel to both Hebrew and arabic native speakers.

B. What is Phonological Awareness?

Phonological awareness is the understanding that spoken words in a language are made up of small sound units (called phonemes) and the ability to access and manipulate these sound units in different ways. Phonological awareness is an umbrella term that includes various aspects of phonological processing: accessing syllables within words, identifying shared rhyme patterns between words, accessing phonemes within words and isolating, deleting, or blending them, and finally, hearing distinctive features of individual speech sounds as they are articulated during speech production. (For a full discussion of phonological awareness and its importance for reading, see Shankweiler & Fowler, 2004).

1) What are Phonemes?

A phoneme is the smallest speech sound in a language that alters the meaning. Consider the word fat. If the first sound /f/ is replaced with the sound /p/, we get pat. Fat and pat carry different meanings and are different words in English. The sound /f/ and /p/ are therefore two different phonemes in English.

2) Why are Phonemes So Difficult to Recognize?

Phonemes are abstract linguistic units. This means that they exist only as mental sound-units. In other words, individual phonemes cannot be heard as such within the context of natural speech. This is because when we speak, the individual sounds are blended together. As we pronounce the first sound of a given word, the **articulators** of our mouth (especially the tongue and the lips) are already prepared to say the next sound by moving to the next position. As the **articulators** move from one position to another, the demarcation between one sound and the next is blurred and the sounds become blended. This blending is called **co-articulation**. As mentioned above, the effect of **co-articulation** is that phonemes cannot be heard separately in natural speech. This makes it difficult for speakers to become aware of the individual phonemes within words. Added

to this is the fact that phonemes are meaningless linguistic units and are very small. All this makes it hard for speakers, especially children, to become aware of phonemes.

Our brains learn about phonemes by comparing words. Words that differ in only one phoneme (**minimal pairs**) such as *fat* and *pat* are especially suited to helping us develop our awareness of specific **features** of individual phonemes. As we learn new words, particularly words that sound similar, there is a growing need to listen more carefully to the **features** that distinguish among words and compare these in order to keep the words distinct and not confuse them. As we listen for the precise differences between words, our ability to analyze the speech sounds in a word develops (Fowler, 1991). In this manner, we gradually develop more accurate phonological representations for the lexical items we know as a result of the increase in our vocabulary size. This process is called **lexical restructuring** (Metsala & Walley, 1998).

3) Can Phonological Awareness Be Taught?

Incorporating phonological awareness activities into early literacy instruction has been shown to contribute positively to the literacy acquisition process (Bianco, Pellenq, Lambert, Bressoux, Lima, & Doyen, 2012; Wagner & Torgesen, 1987). Using oral blending, segmentation exercises, and a variety of discrimination activities helps pupils listen for specific sounds in words (Russak, 2013). These activities can therefore help in the establishment of phonological representations for new sounds and lexical items in EFL. It is advisable to start with larger phonological units (e.g., syllables, or morphemes – words within compounds, such as class-room), followed by blending onsets and rimes (f-at), and finally articulating whole words by phonemes (f-a-t).

4) Five Basic Types of Phonological Awareness Tasks

Below is a table of five basic types of phonological awareness tasks as proposed by Adams (1990). The order of the activities within each task reflects an increasing level of complexity. (For suggestions regarding activities that can promote phonological awareness in EFL, see Russak, 2013).

Task 1 — The ability to hear rhymes and alliteration

a. rhyme
Example: I once saw a cat, sitting next to a dog. I once saw a bat, sitting next to a frog.

b. alliteration
Example: Six snakes sell sodas and snacks.

c. assonance
Example: The leaf, the bean, the peach—all were within reach.

Task 2 — The ability to do oddity tasks

a. rhyme
Example: Which word does not rhyme: *cat, sat, pig*? (pig)

b. beginning consonants
Example: Which two words begin with the same sound: *man, sat, sick*? (sat, sick)

c. ending consonants
Example: Which two words end with the same sound: *man, sat, ten*? (man, ten)

d. medial sounds (long vowels)
Example: Which word does not have the same middle sound: *take, late, feet*? (feet)

e. medial sounds (short vowels)
Example: Which two words have the same middle sound: *top, cat, pan*? (cat, pan)

f. medial sounds (consonants)
Example: Which two words have the same middle sound: *kitten, missing, lesson*? (missing, lesson)

Task 3 — The ability to blend words orally

a. syllables

Example: Listen to these word parts. Say the word as a whole.
ta . . . ble—What's the word? (table)

b. onset/rime

Example: Listen to these word parts. Say the word as a whole.
/p/ . . . an—What's the word? (pan)

c. phoneme by phoneme

Example: Listen to these word parts. Say the word as a whole.
/s/ /a/ /t/—What's the word? (sat)

Task 4 — The ability to segment words orally (including counting sounds)

a. syllables

Example: Listen to this word: *table*. Say it syllable by syllable. (ta . . . ble)

b. onset/rime

Example: Listen to this word: *pan*. Say the first sound in the word (the onset) and then the rest of the word (the rime). (/p/ . . . an)

c. phoneme by phoneme (counting sounds)

Example: Listen to this word: *sat*. Say the word sound by sound. (/s/ /a/ /t/)
How many sounds do you hear? (3)

Task 5 — The ability to do phonemic manipulation tasks

a. syllable deletion
Example: Say *baker* without the *ba*. (ker)

b. initial sound deletion
Example: Say *sun* without the /s/. (un)

c. final sound deletion
Example: Say *hit* without the /t/. (hi)

d. initial phoneme in a blend deletion
Example: Say *step* without the /s/. (tep)

e. final phoneme in a blend deletion
Example: Say *best* without the /t/. (bes)

f. second phoneme in a blend deletion
Example: Say *frog* without the /r/. (fog)

g. initial sound substitution
Example: Replace the first sound in *mat* with /s/. (sat)

h. final sound substitution
Example: Replace the last sound in *mat* with /p/. (map)

i. vowel substitution
Example: Replace the middle sound in *map* with /o/. (mop)

III. Written Language Processing

A. Introduction

It has been argued that reading is the product of two skills: decoding and listening comprehension (or language comprehension skills) (Gough & Tunmer, 1986). Written language processing includes the ability to decode words accurately and rapidly (automatically) in order to access meaning (word recognition). Decoding is the knowledge of the sounds that each letter or group of letters (graphemes) represents, in addition to any rules that assist in matching written letters (spelling) to their phonological representation (sound), and **phonological assembly** using the **alphabetic mechanism** of reading. The ability to recognize orthographic patterns and words quickly and accurately further facilitates the decoding process (Joshi & Aaron, 2000). The ability to extract meaning from what we hear (listening comprehension) is reliant on a large store of vocabulary. In order for this vocabulary store to be effectively used in reading, readers have to identify the word they know orally (oral vocabulary) in its written form (print vocabulary). Only this will guarantee successful word recognition. Thus, decoding ability together with the ability to make sense of language (oral and written) are two proximal prerequisites for reading comprehension.

Automatic reading is characterized by fast and accurate identification of whole words. Automatic word reading develops as a result of repeated and accurate word decoding (Share, 1995). The advantage of automatic word processing is that it does not take up attentional resources, which are thus freed up for meaning construction. Since automatic readers have built strong orthographic representations through repeated exposure and practice with word decoding, they pay little conscious attention to the mechanical aspects of reading. The development of strong orthographic representations will not take place without automatic letter (or grapheme) recognition. In order for an orthographic pattern to be perceived, the graphemes within it (the individual letters and letter combinations or digraphs such as *sh*, *ch*, *th*, *ng*, and *wh* must be recognized at the same time. If visual recognition of the letters is not automatic and takes time and effort, activation of the first letter will have dissipated by the time the next letter is recognized, and therefore the pattern (joint occurrence of the letters) will not be perceived. As a result, slow letter recognition will hinder word decoding and prevent learning about the orthographic pattern of a word as a whole. Thus, automatic word recognition is based

on a subset of skills that includes letter shape recognition, knowledge of the sounds that each letter and group of letters makes (syllable types, rimes, spelling patterns), word decoding, and whole word representations (sight words) that do not adhere to any pattern or rule. In the following sections, each of these skills will be discussed.

B. Letter Recognition

In order to be able to read, one must first be able to recognize the letters that comprise a word. In order for a pupil to decode a word, he/she must first recognize each letter and then match a sound to that letter or group of letters. Letter recognition is the ability to visually recognize letters (their shape) and match them with the appropriate sound (letter-sound knowledge) – something that might seem quite simple to an experienced reader. However, at initial stages of learning letter symbols in EFL, pupils might confuse similar looking letters that are distinguished by placement within the space and/or direction of the letter (as in the letters b, d, p, q), or line length (h, n). These pupils need direct instruction in the distinct visual features that distinguish one letter from another.

How Does Our Brain Achieve Letter Recognition?

According to the *feature-detection theory* (Rayner & Pollatsek, 1989) letter recognition is perceived as an analytical process. According to this theory, our brain analyzes the component elements of letters. In other words, letters are analyzed in terms of the horizontal, vertical, oblique, and curved lines that make up their shape. Letters in the Latin or Roman alphabet tend to fall into three separate groups, even though these have a great deal of similarity and featural overlap (see the table below). For recognition to take place, one only needs to remember the distinguishing feature(s) between similar letters.

Curved	Vertical		Slanted
c	I	l	V
o	R	b	W
a	N	h	X
d	M	k	Y
g		p	
q		t	
	(u)	(f, j)	
the letters e, s, z			

C. Grapheme-Phoneme Correspondence Knowledge

Grapheme-Phoneme Correspondence (GPC) knowledge involves matching sounds (also called phonemes) to letter symbols (also called graphemes). For a pupil, this means learning that the letter m represents the sound /m/, for example, or that the letter combination (or digraph) th represents the sound /ð/ or /θ/ (voiced and voiceless /th/, as at the beginning of the words then and thin, respectively). This knowledge forms the basis of decoding in all alphabetic languages. In English, GPC knowledge is usually easier to acquire for consonants than for vowels. This is because consonant graphemes (letter and letter combinations) usually represent one sound each, whereas individual vowel graphemes may represent more than one phoneme, depending on the context in which they occur. Consider the different sounds of the grapheme a in the following words: sat, same, saw, star, soar. The vowel sound that the same letter represents in each of the examples above is determined by the context in which it occurs. Teaching vowels within word families, or phonograms, creates stability and predictability for the vowel pattern (Goswami, 1993). Knowledge of all the possible grapheme–phoneme patterns is an essential precursor to achieving accurate word decoding skills. While some pupils can gain this insight implicitly through repeated exposures and practice, many pupils require explicit multi-sensory instruction in order to be able to achieve those skills.

D. Knowledge of Orthographic Patterns

Due to the fact that English **orthography** is highly irregular (**a deep orthography**), knowledge of grapheme-phoneme correspondence rules is not sufficient to ensure that a pupil will decode words accurately in EFL. Additional knowledge about the **orthography** is required. This includes knowledge about the two categories into which orthographic patterns can be divided: regular and irregular. Regular patterns further consist of words that can be read based on grapheme-phoneme correspondence knowledge, knowledge of **rime/spelling** patterns, and knowledge of the six orthographic syllable types. In the following sections, regular patterns and irregular patterns will be described.

1) Regular Patterns:

These are orthographic patterns that can be read based on applying GPC knowledge, knowledge of word families, and knowledge of the orthographic syllables. In English, decoding does not proceed linearly; in other words, reading is more than simply adding

and blending the sounds of the letters one by one in the order in which they appear in the word. In English, the sound of the letter, particularly vowels, can only be established after the pattern of the **rime** (**nucleus** vowel and following **coda consonant**) has been processed. Segmenting words at the **onset**-**rime** level (**Consonant**/Vowel **Consonant**) appears to be the most effective word-attack strategy in English owing to the regularity of **rime** patterns (Goswami, 1993).

a) The structure of the English syllable

Onset: An English syllable can start with a vowel (i.e., **NO onset**), or with **up to three consonants**. Compare the following one-syllable words: *is* (no initial **consonant** sound), ***t****ap,* ***st****ep,* ***str****ap*.

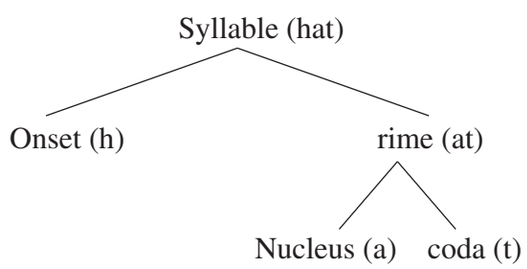
Coda: An English syllable can end in a vowel (i.e., **NO coda**), or with **up to four consonants**. Compare the following one-syllable words: *so* (no final **consonant** sound), *so****ft***, *cra****fts***, pro***mpts***.

Nucleus: Each syllable has its one and only nucleus or vowel sound. Vowel sounds do not cluster in a syllable. In the word *lion*, for instance, there are two vowel sounds and therefore two syllables. Note that there is a single vowel in a word like *may*, and this vowel is identical to the vowel in the word *make*. In English, long vowels such as the one illustrated above is a complex single vowel (a **diphthong**) that sounds like a double vowel but it is not.

Example:

The word *hat* can be analyzed into an **onset** /h/ and a **rime** /-at/. The rime can be analyzed into a **nucleus** /a/ and a **coda** /t/.

- **Diagram of the relevant components of the syllable for accurate word reading in English**



b) The six orthographic syllable types in English

A closer look at the onset-rime patterns for the regular category of written words enables them to be organized in a more manageable and comprehensive way under one of the six orthographic syllable types: the open syllable, the closed syllable, the double-vowel (or paired-vowel) syllable, the silent-e syllable, the r-controlled syllable, and the consonant-le syllable (Carreker, 1999; Moats, 2005).

1. *Open syllables (CV):* end in a vowel and the vowel says its name. Long vowels are marked with a macron above the vowel *(ā, ē, ī, ō, ū).*

Examples:

Simple CV pattern: *me, hi, go*

Complex CV pattern with initial blend: I

2. *Closed syllables (CVC):* End in a consonant, have one pronounced, short vowel. *Examples:*

Simple CVC pattern: *fat, bed, sit, hop, mud*

Complex CVC patterns with initial and/or final blends: *hand, help, milk, soft, jump, grand, step, slip, stop, plum*.

3. *The double- or paired-vowel syllable (CVVC):* The first vowel letter says its name and the second vowel letter is silent. Common vowel pairs: *ai, ea, ee, oa, ui, ue.*

Examples:

Simple CVVC pattern: *rain, meal, feel, goat, suit*

Complex CVVC pattern with initial or final blends: *paint, sleep, clean, toast, fruit*

4. *The silent-e syllable (CVCe):* The vowel letter is followed by a consonant + silent e and it says its name.

Examples:

Simple CVCe pattern: *cake, five, cone, cute*

Complex CVCe pattern: *skate, smile, close, flute*

5. *The r-controlled syllable (CVr syllable):* the presence of the r changes the sound of the preceding vowel and in this sense controls the vowel.

Examples:

Simple CVr pattern: car, her, or

Complex CVr pattern: farm, girl, born, hurt

6. *Regular final syllable (C-le):* the /l/ functions as a syllabic consonant. In order to get information about the preceding syllable, count back three letters from the end of the word (one consonant and –le). Never divide between the consonant and the ending –le.

Examples:

little: lit-tle with a closed first syllable and short i

cradle: cra-dle with an open first syllable and long a

2) Rime/Spelling Patterns:

Rime/spelling patterns are orthographic patterns whose decoding depends on the recognition of specific letter combinations. They are also known as word families, and include letter combinations representing the vowel and the following consonants (rime patterns) as well as common letter combinations (spelling patterns). Familiarity with these patterns has a positive impact on literacy acquisition (Johnston, 1999). Following are some examples (for a more thorough list of word families, see Wylie & Durrell, 1970):

-ck is most common at the end of one-syllable words of the CVC pattern as in *duck, snack, black*;

-ff, -ll, -ss, -zz occur at the end of one-syllable words of the CVC pattern as in *sniff, tell, class, jazz*;

-al/-all as in *pal, small*;

-igh(t) represents the long /ī/ sound as in *high, night*;

kn- occurs at the beginning of words with silent 'k' as in *knee, know*;

-ge (occurs after a long vowel) or **-dge** (occurs after a short vowel) as in *age, dodge*;

-ew for /ū/ as in *new*.

Vowel diphthongs:

-ay for long /ā/ as in *play, say*;

-oy/oi as in *boy, toy, join*;

-ow for /ō/ as in *snow, grow, slow*;

-ow/-ou as in *cow, house*.

Long vowels /ī/ or /ō/ in closed syllable:

The vowels 'o' or 'i' followed by two consonants (especially -ld, -nd after 'i', and -st after 'o') say their name as in *child, find, most*;

wo- as in *word, work*.

Doubled consonants after a short vowel (orthographic rule) as in *little, running*.

3) Irregular patterns:

These are also referred to as sight words, and include some high- frequency words whose reading requires lexical strategies and familiarity with the orthographic representation of the word as a whole (**logographic reading mechanism**), since the alphabetic mechanism will not produce accurate decoding.

List of sample sight words (for a more complete list see Adams, 1990):

you, your, their, they, where, there, does, do, some, one, said, friend, who, whose, whole, through, eight, weight, height, young, guess, guard, guide, away, two, are, four, have, again, could, were, buy, laugh, bear, bread, chair, eye, bye, school, shoe, money, walk, talk.

IV. The Impact of L1 on L2 Reading Acquisition

Our native language (L1) skills and knowledge influence the acquisition of additional languages (Koda, 2008; Ziegler & Goswami, 2005). While having a strong language and literacy background in L1 will always have a positive effect on the acquisition of an additional language, the relative linguistic distance between L1 and FL will have a differential effect on the acquisition of various aspects of the FL. For instance, the phonological distance between English on the one hand and Hebrew and Arabic on the other has a negative impact on EFL acquisition. This is because it negatively impacts native Hebrew and Arabic speakers' accurate perception and production of some phonemes that do not exist in their L1 phonemic inventories. In this case, the pupils rely on L1 phonemic categories that are phonetically close to the unfamiliar sounds. This

reliance on familiar L1 phonemes interferes with the creation of a precise representation for the new sound (Flege, 1992).

Various linguistic components of L1 can impact L2 acquisition processes. These include phonological, orthographic, morphological, and syntactic processes. Research studies indicate that when a learner has strong linguistic skills in L1, these skills will usually transfer to L2; similarly, if a learner has a specific difficulty with any of those linguistic domains in L1, this difficulty will surface in L2 as well, and will impede acquisition processes in L2. This idea was put forth as the Linguistic Coding Differences Hypothesis by Sparks, Ganschow, and Pohlman (1989), who suggested that difficulties with L1 linguistic codes (specifically phonological/orthographic, syntactic, and semantic) will be transferred to the foreign language learning experience of similar skills. With regard to learning EFL, Kahn-Horwitz, Shimron, and Sparks (2005) found that Hebrew L1 skills, more specifically phonological awareness, orthographic ability, and word-reading speed and accuracy predicted word reading and reading comprehension in EFL among native Hebrew-speaking fourth-graders. They also found that language components measured in Hebrew (L1) differentiated between weak and strong readers in EFL (Kahn-Horwitz, Shimron, & Sparks, 2005). Similarly, Saiegh-Haddad and Geva (2008) tested phonological awareness skills in the two languages of third- to sixth-grade English L1-Arabic FL pupils in Canada and found that the children's phonological awareness in the two languages was correlated and explained reading cross-linguistically. In other words, phonological awareness in English predicted reading in Arabic and phonological awareness in Arabic predicted reading in English. Therefore, when reading difficulty is encountered, it is important for teachers to consider the possible role of similar linguistic processing difficulties in L1. Consideration of these factors can significantly enhance the EFL teaching and learning process.

V. Pedagogical Insights from the Development of the ABLE Kit

Our knowledge of the factors related to oral language processing and written language processing underpinned the development of the ABLE Kit. The development of the kit included not only the writing of test items (that cover all the aspects of reading acquisition described in the previous sections) but also the piloting of these items. The screening test was piloted among an extensive and representative number of fifth grades classes

and the diagnostic test was piloted among many pupils who were considered as having difficulties with reading acquisitions in English. Both these pilot studies were conducted among Hebrew-speaking and Arabic-speaking pupils in schools across the country. In the following we wish to share important pedagogical insights that emerged from the analysis of the data that was gathered through these pilot studies.

- In preparation for the pilot study of the diagnostic test, and in order to identify pupils with difficulties in reading acquisition, teachers in the participating schools were asked to rank the pupils in their fifth-grade classes as strong, average, or weak readers. Relatively strong correlations were found between the teachers' assessment of their pupils' reading ability and the pupils' actual performance on the various components of the Diagnostic Test among both the Hebrew- and Arabic-speaking pupils (see Apendix III). These correlations indicate that EFL teachers have a reliable sense of the ability levels of their pupils. The benefits of using the ABLE Kit are in enabling teachers to identify the specific skills that may be responsible for the general difficulty they sense in their pupils, and also in providing directions and guidelines for appropriate interventions.

- The results of the pilot revealed no difference between the Hebrew- and the Arabic-speaking samples on any of the skills targeted in the Diagnostic Test. This implies that there is no apparent gap between the two groups in initial literacy acquisition in EFL.

- The results of the pilot showed that pupils scored higher on reading irregular words such as *you, one, have, school* than on regular words such as *ten, day, street*. This implies that in their decoding, pupils rely more on logographic mechanisms (lexical knowledge or sight word knowledge) than on grapheme-phoneme correspondence knowledge or orthographic pattern knowledge, which is a critical foundation in literacy acquisition (Share, 1995). This could be the result of instructional practices that focus on increasing vocabulary knowledge based on relevant content areas rather than on teaching decoding. As a result of this content-based emphasis on literacy instruction, pupils appear to be able to read words that they have encountered

before, but are not capable of generalizing from this to reading unfamiliar words, even when spelled regularly. Beginning English literacy instruction should include a balance of teaching GPC rules, orthographic patterns, and whole-word representation for functional high-frequency words together with content-based vocabulary. This balanced instruction is important because it provides the learner with the basic tools required to read unfamiliar words.

- The pilot manifested a significant correlation between the phonological representation task and the phonological awareness task on the one hand, and the decoding and spelling tasks on the other. This supports the theoretically-motivated classification of these tasks into clusters. The clusters can be used by the teacher for planning individual and small-group interventions.

- The pilot showed that on the GPC Knowledge Task, pupils provided the sound that the letter made, but also added a short vowel before or after the sound of the letter. For example, instead of saying the sound /b/ for the letter b, they said /eb/ or /ba/. Based on an analysis of the general performance of these pupils making these errors as well as their word decoding performance, it was decided to accept these answers as correct. It was reasoned that adding a vowel after the letter sound might reflect difficulty in articulating (not conceptualizing) the sound (or phoneme) that the letter represents, which, in the case of some letters such as b, d, g (stop consonants), is indeed impossible. In the same way, it was reasoned that the tendency to add a vowel before the letter sound, which was more frequent in the Arabic-speaking sample, might reflect the tendency to communicate (again not conceptualize) the letter sound using this pattern in the native language – Arabic.

References

Adams, M. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.

Bianco, M., Pellenq, C., Lambert, E., Bressoux, P., Lima, L., & Doyen, A. (2012). Impact of early code-skill and oral-comprehension training on reading achievement in first grade. *Journal of Research in Reading*, *35*(4), 427-455.

Carreker, S. (1999). Teaching reading: Accurate decoding and fluency. In J. Birsch (Ed.) *Multisensory teaching of basic language skills* (pp. 141-182). Baltimore, MD: Paul Brokkes Publishing.

Crystal, D. (2003). *English as a global language: Second edition,* Cambridge University Press: Cambridge, UK.

Elbro, C. (1996). Early linguistic abilities and reading development: A review and a hypothesis. *Reading and Writing: An Interdisciplinary Journal*, *8*, 453-485.

Flege, J. (1992). Speech learning in a second language. In C. A. Ferguson, L. Menn, & C. Stoel-Gammon (Eds.), *Phonological development models, research implications* (pp. 565-604). Timonium, MD: York Press.

Fowler, A. (1991). How early phonological development might set the stage for phoneme awareness. In S. Brady & D. Shankweiler (Eds.), *Phonological processes in literacy* (pp. 97-117). Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Goswami, U. (1993). Toward an interactive analogy model of reading development – decoding vowel graphemes in beginning reading. *Journal of Experimental Psychology*, 56(3) 443-475.

Goswami, U. (2000). Phonological Representations, Reading Development and Dyslexia: Towards a Cross-Linguistic Theoretical Framework. *Dyslexia, 6*, 133-151.

Gough, P.B., & Tunmer, W.E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, *7*, 6-10.

Johnston, F. R. (1999). The timing and teaching of word families. *The Reading Teacher*, *53*(1), 64-75.

Joshi, R. M. & Aaron, P. G. (2000). The component model of reading: Simple view of reading made a little more complex. *Reading Psychology*, 21, 85-97.

Kahn-Horwitz, J., Shimron, J., & Sparks, R. L. (2005). Predicting foreign language reading achievement in elementary school pupils. *Reading and Writing: An Interdisciplinary Journal*, 18, 527-558.

Koda, K. (2008). Impacts of prior literacy experience on second-language learning to read (pp. 68-96). In K. Koda & A. M. Zehler (Eds.), *Learning to read across languages: Cross-linguistic relationships in first- and second-language literacy development*. New York, NY: Routledge.

Metsala J., & Walley, A. (1998). Spoken vocabulary growth and the segmental restructuring of lexical representations: Precursors to phonemic awareness and early reading ability. In J. Metsala & L. Ehri (Eds.), *Word recognition in beginning literacy.* Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Moats, L. K. (2005). How spelling supports reading and why it is more regular and predictable than you may think. *American Educator*, *29*(4), 12-43.

National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, D.C.: National Institute of Child Health and Human Development.

Perfetti, C. A. & Hart, L. (2001). The lexical basis of comprehension skill. In D.S.Gorfien (Ed.), *On the consequences of meaning selection: Perspectives on resolving lexical ambiguity* (pp. 67-86). Washington, D.C.: American Psychological Association.

Rayner, K., & Pollatsek, A. (1989). *The psychology of reading* (pp. 3-27). Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

Russak, S. (2013). The contribution of phonological awareness to literacy acquisition in English as a foreign language: Cross-linguistic implications. *Perspectives on Language and Literacy: The International Dyslexia Association*, Winter, 17-22.

Russak, S., & Saiegh-Haddad, E. (2011). Phonological awareness in Hebrew (L1) and English (L2) in normal and disabled readers. *Reading and Writing: An Interdisciplinary Journal*, *24*, 427-442.

Saiegh-Haddad, E. (2003). Linguistic distance and initial reading acquisition: The case of Arabic diglossia. *Applied Psycholinguistics*, *24*, 431-451.

Saiegh-Haddad, E. (2007). Linguistic constraints on children's ability to isolate phonemes in Arabic. *Applied Psycholinguistics*, 28, 607-625.

Saiegh-Haddad, E., & Geva, E. (2008). Morphological awareness, phonological awareness, and reading in English-Arabic bilingual children. *Reading and Writing: An Interdisciplinary Journal*, *21*, 481-504.

Saiegh-Haddad, E., Levin, I., Hende, N., & Ziv, M. (2011). The linguistic affiliation constraint and phoneme recognition in diglossic Arabic. *Journal of Child Language*, *38* , 297-315.

Shankweiler, D., & Fowler, A. (2004). Questions people ask about the role of phonological processes in learning to read. *Reading and Writing: An Interdisciplinary Journal*, *17*, 483-515.

Share, D. L. (1995). Phonological recoding and self-teaching: Sine qua non of reading acquisition. *Cognition*, *55*, 151-218.

Sparks, R., Ganshow, L., & Pohlman, J. 1989. Linguistic coding deficits in foreign language pupils. *Annals of Dyslexia*, *39*, 179-195.

Spolsky, B., & Shohamy, E. (1999). *The languages of Israel: policy, ideology and practice*. Clevedon: Multilingual Matters. P. 156-187.

Wagner, R. K., & Torgesen, J. K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. *Psychological Bulletin*, *101*, 192-212.

Wylie, R. E., & Durrell, D. D. (1970). Teaching vowels through phonograms. *Elementary English*, *47*, 787-791.

Ziegler, J. C. & Goswami, U. (2005). Reading acquisition, developmental dyslexia and skilled reading across languages: A psycholinguistic grain size theory. *Psychological Bulletin*, 131(1), 3-29.

Chapter 2:
Description of the ABLE Kit

I. Overview

The ABLE kit has been designed to provide classroom teachers with a reliable, evidence-based **assessment** tool that will enable them to **identify readers with reading difficulties** as well as **the specific basic literacy skills** that may be the source of that difficulty. The ABLE kit comprises two tests: a **Screening Test** to be administered to the whole class and a **Diagnostic Test** to be administered individually. The ABLE kit includes the actual tests to be administered as well as a teacher's copy of the test with accompanying scoring sheets. The tests have been prepared in two versions: one for Hebrew-speaking pupils and another for Arabic-speaking pupils. It is important to note that while the instructions are presented in two different languages, the two versions are otherwise identical.

The Screening Test consists of three tasks: Listening Comprehension, Reading Comprehension, and Spelling. A description of each task appears below. This test is administered to the whole class during a 45-minute lesson. Based on performance on this test, the teacher will be able to identify pupils who appear to have difficulty in acquiring reading in EFL. The teacher then administers the Diagnostic Test to those pupils in order to identify the specific basic literacy skills that may be responsible for their reading problems. It is hoped that the results on the Diagnostic Test will also enable the teacher to offer the struggling pupils appropriate intervention programs that are tailored to the specific difficulties that they manifest on the test.

The Diagnostic Test comprises five tasks: Phonological Representation, Phonological Awareness, Grapheme-Phoneme Correspondence Knowledge, Decoding of High-Frequency Words and Decoding of Low-Frequency Words. A description of each task appears below. The Diagnostic Test is administered individually in a quiet place and takes approximately 15 minutes. Performance on the dictation task (in the Screening Test) is also taken into consideration when analyzing pupils' results on the Diagnostic Test.

II. Target Population

Administration of the ABLE kit should take place at the beginning of the fifth grade or at the end of the fourth grade if the same teacher is going to continue teaching the same pupils in the fifth grade. This recommendation is based on the assumption that, according to the Ministry of Education guidelines and the National English Curriculum, pupils begin literacy instruction in EFL in the fourth grade, having had a year of aural/oral EFL instruction in the third grade. In cases where pupils begin literacy instruction earlier than the third grade, it is *still* recommended to use this tool at the end of the fourth grade / beginning of the fifth grade. It is also recommended that the teacher administering the test be the same teacher who will be providing the intervention to the pupils.

III. The Screening Test

The Screening Test consists of three tasks that can be administered in a classroom setting to a large number of pupils simultaneously. The purpose of the Screening Test is to help the teacher identify pupils who are struggling with reading and should therefore undergo the individual Diagnostic Test. The Screening Test contains three tasks: Listening Comprehension, Reading Comprehension, and Spelling. The words and grammatical structures used in these three tasks are high-frequency items to which the pupils are expected to have been exposed. Based on the scores on this screening test, the teacher will proceed to test pupils individually on the Diagnostic Test.

NOTE: The classroom teacher may make his/her own decision to test a pupil individually on the Diagnostic Test if he/she suspects that this pupil may be struggling and would like to identify the specific areas of difficulty. This can be done either without the pupil having failed the Screening Test or even having done it.

The following sections describe the three tasks on the Screening Test.

A. Listening Comprehension

The listening comprehension task taps into receptive knowledge of English at the foundation level. The vocabulary and grammatical structures chosen for the task are based on a corpus of vocabulary and grammatical structures with which the pupils are familiar from their third- and fourth-grade textbooks. The listening comprehension task

comprises five simple and five complex sentences. Sentence complexity was determined by both the length of the sentences and the grammatical structures used. For example, the sentence, "The girl is playing basketball", was considered simple, whereas the sentence, "Mary is writing in her notebook with a pencil" was considered complex. All the sentences used in the listening comprehension task were recorded by a native Hebrew- or Arabic-speaker. Native Hebrew and Arabic speakers were selected to record the sentences so that the pupils would hear English pronounced in a way that closely resembles the way classroom teachers speak English. Upon hearing a sentence, the pupils are asked to choose the picture (out of four) that best matches the sentence heard. Success on this task is dependent on understanding the vocabulary items used in the sentences as well as the ability to integrate information at the word and sentence level.

B. Reading Comprehension

The reading comprehension task taps into receptive comprehension of written English. Comprehension is assessed at two levels: the sentence level and the text level. The first task appears in a similar format to the one used in the listening comprehension task. In this task, however, instead of hearing a sentence, the pupil reads a sentence and then chooses the matching picture. In the second task, the pupil reads a short passage consisting of four simple sentences and is required to answer two open-ended questions, which necessitate locating information from the text and copying it, and one multiple-choice question requiring an understanding of the main idea of the passage.

C. Spelling

Spelling is one of the most cognitively demanding linguistic skills since it requires both an accurate perception of the way a word sounds and accurate recall of the way a word looks. Due to the fact that English **orthography** is a deep orthography, where one letter can represent different sounds depending on the neighboring letters, and one sound can be spelled in different ways, accurate spelling relies on three sources of linguistic knowledge: GPC (**alphabetic knowledge**), knowledge of regular orthographic patterns (or rime patterns) and spelling rules (**orthographic knowledge**), and finally sight word memory for irregularly spelled words (**logographic knowledge**). Therefore, it is important to teach English GPC rules as well as English spelling patterns and spelling rules explicitly.

Ten high-frequency words were chosen for this task. Seven of the words target knowledge of regular grapheme-phoneme correspondences and word patterns (alphabetic and orthographic knowledge), and three of the words target irregular spelling or sight word knowledge (logographic knowledge). The words are dictated to the pupils from a recording. The words are first enunciated in isolation, then within a simple sentence, and then again in isolation. This allows the pupils to hear the word within the context of a meaningful sentence. Pupils are then required to write the target word on the answer sheet. All words and sentences that the pupils hear in the Spelling Task were recorded by a native Hebrew- or Arabic-speaker. Whereas the Spelling Task is administered within the framework of the whole-class Screening Test, performance on this task is also used for diagnostic purposes later on once the pupil has been identified as having a reading difficulty.

D. Scoring Procedure

The scoring key for the screening test appears on page 163. Please note that the maximum number of points on this test is 30 (maximum of 10 points for listening comprehension, maximum of 10 points for reading comprehension, and maximum of 10 points for spelling). If you wish to transform the pupils' total scores to a percentage please use the following table. For example, a pupil's total score of 26 (out of a possible 30 points) is equivalent to a score of 87%.

Table 1: Transforming raw scores to percentage scores

Raw score	Percentage score
0	0
1	3
2	7
3	10
4	13
5	17
6	20
7	23
8	27
9	30
10	33
11	37
12	40
13	43
14	47
15	50
16	53
17	57
18	60
19	63
20	67
21	70
22	73
23	77
24	80
25	83
26	87
27	90
28	93
29	97
30	100

IV. Deciding Which Pupils Will Participate in the Individual Diagnostic Test

Upon analyzing the results of pupils' performance on the Screening Test, the teacher is in a position to decide who will continue on to the diagnostic phase and do the Diagnostic Test. The pupils who should undergo the Diagnostic Test are 30% of the weakest pupils in the class (based on their scores on the Screening Test). It should be

noted that the teacher is allowed to test a few more than exactly 30% of the pupils in order to be on the safe side, i.e., to ensure that all possible struggling pupils have been included. Furthermore, if the teacher suspects that a certain pupil is having difficulty with EFL, he/she may have the pupil take the Diagnostic Test even without having taken the Screening Test. However, in this case, the teacher must also administer the Spelling Task (a component of the Screening Test).

V. The Diagnostic Test

The Diagnostic Test consists of five tasks that are administered individually: Phonological Representation, Phonological Awareness, GPC Knowledge, Decoding of High-Frequency Words, and Decoding of Low-Frequency Words. The results of these five tasks are then combined with the results of the Spelling Task (from the Screening Test). The main purpose of the Diagnostic Test, as mentioned earlier, is to identify the specific literacy skills with which the pupil who has been screened may have trouble. This information will then be used as a basis for the design of individualized intervention.

The five tasks on the Diagnostic Test together with the Spelling Task that was administered as part of the Screening Test have been grouped into three skill clusters: Phonological skills (Phonological Representations and Phonological Awareness), GPC Knowledge, and Word Decoding and Encoding (Decoding High- and Low-Frequency Words and Spelling). Once the teacher has scored the diagnostic test for a pupil, he/she can build a pupil profile based on the scores in each of the three clusters. Information from this chart can then serve as a guideline in designing individual intervention programs. In order to gain greater insight regarding the specific difficulties of each pupil on the Diagnostic Test, it is recommended that, in addition to the scores for each task within each cluster, the teacher take a closer look at the specific errors of each pupil. In the following sections, each category and each task is described, and then guidelines for administration are provided. This is followed by general recommendations for intervention as well as suggested guiding questions that the teacher can use in addition to the scoring sheet in order to better understand the sources of his/her pupils' difficulties.

A. Cluster 1: Phonological Skills

1) Phonological Representation

The Phonological Representation Task is the first of two tasks that tap into underlying phonological skills serving as the foundation for the development of reading ability. Accurate perception and production of the phonemes of the target language are crucial building blocks for building sound-letter as well as vocabulary knowledge. The ability to repeat a word accurately relies on the precise representation of the sounds of the word in the pupil's **mental lexicon**. Building precise representations is dependent on repeated exposures to and experience with the correct pronunciation of the target sounds and words. In the Diagnostic Test, phonological representation is tested through word repetition that necessitates processing auditory information in the form of phonemes, syllables, and words, and taps into the quality of phonological representations.

The Phonological Representation Task comprises a general list of twenty-four 2-4-syllable words. The list includes words with novel phonemes for Hebrew speakers (th, ch, w) and for Arabic speakers (g, ch, p, v, th). The words chosen for this task are not frequently-occurring words from the corpus of words to which the pupils would have been exposed through the EFL curriculum. Less frequently-appearing words have been chosen intentionally in order to assess the pupils' ability to perceive and accurately produce the sounds of the target language without the memory aid and the automaticity that more frequently-occurring and familiar words might afford. The task requires the pupils to repeat a target word after they have heard their teacher say it in English.

Administration of this task takes approximately two to three minutes. The teacher says the target word and the pupil is required to repeat what he/she has heard as accurately as possible. If the pupil asks for the target word to be repeated, the teacher should comply. If the pupil repeats the word correctly, the teacher should place a tick in the column marked "Correct" on the answer sheet. If the pupil gives an incorrect response, the teacher should place a tick in the column marked "Incorrect" on the answer sheet. Although it is not required that the teacher record the incorrect answer, it is helpful if the teacher pays attention to the characteristics of the pupils' errors.

Once the teacher has scored this test and has determined that a pupil is struggling with phonological representation, he/she can reexamine the specific errors that the pupil has made on the task. When analyzing these errors, he/she should consider the following

questions (in addition to the information provided on the answer sheet): Do the errors occur more with three- or four-syllable words? Do the errors occur with words that include novel phonemes? If the errors occur with the novel phonemes, this could be an indication that the pupil needs to learn those new sounds in a direct and multi-sensory manner. The teacher should show the pupil which **articulators** are being used when making the sound. The pupil should be given the opportunity to see how the sound is made and to practice making the sound in isolation, and then within the context of target words. If the errors occur with multi-syllabic words, it is possible that the pupil has a problem retaining auditory information in his/her short-term memory. This type of problem might be evident in the L1 as well.

2) Phonological Awareness

The Phonological Awareness Task is the second task that taps into underlying phonological skills serving as the foundation of the development of reading ability in an alphabetic **orthography**. Extensive research over the last three decades has shown that there is a strong connection between phonological awareness and reading, with good readers demonstrating strong phonological awareness skills and poor readers showing poor phonological awareness skills.

Phonological elision (phoneme deletion) is a widely-used phonological awareness task, and it appears in the ABLE kit as well. The task requires the pupil to delete phonemes from orally-presented words. Based on research showing that deleting initial and final phonemes from words is easier than deleting medial phonemes, the items are presented in order of increasing difficulty. Thus, the pupil deletes phonemes first from the beginning of a word, then from the end, and finally from the middle. The words chosen for this task do not appear with great frequency in the EFL curriculum for the foundation level. In the case of all items, once the target phoneme has been deleted, what remains as the correct answer is also a word (for example: deleting 'f' in the word 'fold' results in the word 'old'). The Phonological Awareness Task contains 15 items: three items require the deletion of the initial phoneme from a CVC word, three items require the deletion of the final phoneme from a CVC word, three items require the deletion of the first phoneme from an initial consonantal cluster CCVC word, three items require the deletion of the second phoneme from a final consonantal cluster CVCC word, and three items require the deletion of the first phoneme from a final consonantal cluster CVCC word.

Administration of this task takes approximately three to four minutes. The teacher enunciates the target word and asks the pupil to repeat the word in order to make sure that he/she heard it properly. If the pupil asks for the word to be repeated, the teacher should comply. If the pupil pronounces the word incorrectly, the teacher should repeat the word and ask the pupil to say it again. If he fails to repeat it properly the second time, the teacher ignores this and moves on to the next stage, in which he/she asks the pupil to delete the target phoneme and say the resulting word. Correct and incorrect responses should be scored in the appropriate columns of the scoring sheet.

Pupils who experience difficulties with this task would benefit from Phonological Awareness training. See the table in the section entitled: "Can Phonological Awareness Be Taught?" on page 11.

B. Cluster 2: Bridging

1) GPC Knowledge

The GPC Knowledge Task assesses knowledge of the sounds that graphemes represent. This knowledge and the ability to utilize it automatically are both crucial correlates and predictors of accurate decoding. Being able to match sounds (phonemes) with letter symbols (graphemes) requires the ability to identify each visual symbol as a distinct entity and distinguish it from other letters (e.g., being able to distinguish between n and h, i and l), as well as identify the sound that it represents accurately. The latter skill benefits greatly from accurate **articulation** and auditory discrimination of the sounds of letters. Hence, GPC knowledge requires both auditory skills as well as visual memory for the individual letter shapes and sound (phoneme) representation. Thus, this knowledge serves to bridge between oral phonological skills and decoding.

In this task, the pupil is shown a grapheme and is required to produce the sound that the grapheme represents. The task comprises 24 graphemes printed in lower case using a font with which the pupils are most familiar. The graphemes appear on cards appended to the ABLE kit. These cards should be laminated by the teacher in order to ensure repeated use for testing each pupil. For graphemes that have multiple sounds, such as c, g, y, and the vowel sounds, the teacher's scoring sheet provides keywords to help the teacher identify correct answers. A correct answer on this task is a response that is a single-sound (phoneme) response. However, if a pupil answers with a response

that consists of a consonant and a vowel (such as 'buh' or 'eb' for the sound of the letter 'b'), this response should be considered correct as well. Letter names are not acceptable as correct answers in this task. If a pupil answers with a letter name, he/she should be prompted to give the sound of the letter.

Administration of this task takes approximately two to three minutes. When administering this task, the teacher shows the pupil the letter card and asks the pupil to produce the sound of the letter or letters. If the pupil says the name of the letter as a response, encourage him/her to produce the sound of the letter.

Note: In the case of vowels, there are multiple correct answers. Therefore, if the pupil answers with the letter name of a vowel, this response is actually a correct answer because the name of the vowel letter is one of the sounds that the vowel letter represents, i.e., the long vowel sound. Since the vowel letters represent multiple sounds, it is unlikely that pupils will make too many errors with the vowel letter sounds. In practice, however, we know that producing the correct sound of a vowel letter within a specific word context is one of the most challenging tasks for beginning readers of EFL (see the discussion of this in the section above entitled: "Grapheme-Phoneme Correspondence Knowledge" on page 17). During the administration of this task, the teacher should mark correct and incorrect answers on the scoring sheet.

Upon completion of the test, the teacher should return to the scoring sheet for this task and tabulate the number of vowel, consonant, and consonant/digraph errors. If a pupil does not know the sound that a specific letter represents, the teacher should directly teach the GPC for that letter. In the case of vowels, if a pupil gave a long vowel (letter name) response in the task, the teacher should check whether the pupil knows the additional sounds that this vowel letter represents in other orthographic contexts (words), and if necessary, teach these additional vowel sounds as well.

C. Cluster 3: Word Decoding and Encoding Skills

1) Decoding High-Frequency Words

The ability to read words in English requires a knowledge of GPC rules (**alphabetic knowledge**), the ability to recognize recurring orthographic patterns in the form of rime-based word families, knowledge of orthographic syllable types (**orthographic knowledge**), and word-specific memory for irregularly spelled words (sight words)

that do not adhere to any pattern or rule explanations (**logographic knowledge**). As readers become more familiar with words in their written form through multiple exposures and repeated practice, the reading mechanisms (strategies) they use to decode words shift from reliance on GPC knowledge to reliance on orthographic and logographic mechanisms. Thus, high-frequency words might be recognized as whole-word patterns as a result of the reader having encountered them repeatedly and internalizing the way they look as whole pictures. This means that if a pupil reads a high-frequency word accurately, it may not necessarily reflect knowledge of grapheme-phoneme correspondences, but rather the use of logographic skills, or in other words, remembering the way the word looks. The task of decoding high-frequency words tests the reader's ability to read both regularly- and irregularly-spelled high-frequency words. The words used in this task all appear in EFL foundation level textbooks used in Israel. The task consists of 17 regularly-spelled monosyllabic words that adhere to regular GPC rules and the orthographic syllable types, five regularly-spelled bi-syllabic words (such as *basket, sister*), and seven irregular monosyllabic words (such as *come, you*).

Administration of this task takes approximately four minutes. The teacher's guide includes cards for the teacher to laminate and then use when testing the pupils individually. The teacher shows the pupil the word card and asks him/her to read the words on the card aloud. If a pupil cannot read a particular word, the teacher should encourage him/her to try. Note that the pupil should not be forced to provide an answer. If he/she stumbles over a word, the teacher should skip it and prompt him/her to move to the next word. The teacher scores responses as correct or incorrect on the scoring sheet while the pupil is reading.

Once the administration of all tasks has been completed, the teacher should go back to the answer sheet for Task 4 and tick the errors with the appropriate consonant/digraph or vowel columns and total up these types of mistakes for the various categories. Note that there may be more than one error in reading a single word, for example, if a pupil reads the target word *thin* as *ten*, the teacher should mark both the consonant/digraph and the vowel columns. When examining the errors that a pupil has made, the teacher should ask him/herself: Is this a regular or an irregular word? If irregular, what makes it irregular (a vowel, a consonant, etc.)? What do I need to teach my pupil so that he/she will not make this error again: a particular sound-letter correspondence pattern, a syllable type, an orthographic pattern (word family), or a spelling rule? Based on the answers to these questions, the teacher can know what to teach the pupil.

2) Decoding Low-Frequency Words

The task of decoding low-frequency words was designed with the aim of testing the ability of readers to read new unfamiliar words (word attack skills). Therefore, it is assumed that the words in this task have not been encountered previously by the pupils at this level because they do not occur frequently at the foundation level of the EFL curriculum. The decoding of these words requires the use of GPC knowledge and rime-based orthographic patterns rather than logographic skills. Therefore, performance on this task contributes additional insight into the difficulties that pupils may experience in these areas, which constitute a critical foundation for reading development. The task consists of fifteen words – eight regular mono-syllabic words and seven regular bi-syllabic words. The words for this task were chosen on the basis of the same-syllable word patterns that were targeted in the decoding of high-frequency words task, but they do not appear on the frequency chart that was consulted in the creation of the high-frequency task, thereby reducing the possibility of the pupils having seen the words previously.

Administration of this task takes approximately two minutes. Directions for administering and scoring this task are similar to those described above for the decoding high-frequency words task.

A close and careful examination of the errors made by the pupils in the two decoding tasks is very important. This information affords the teacher very clear direction regarding the skills and knowledge that the pupil still requires in order to become an accurate decoder. Based on this information, the teacher can create a specific individualized intervention plan whereby he/she teaches (knowledge) and gives practice (automaticity and fluency) in the GPC rule, syllable types, and rime-based orthographic patterns that the pupil needs in order to decode English words.

3) Spelling

The sixth task in the diagnostic test and the third in this cluster is spelling. Note that this task is administered as part of the Screening Test. Often a pupil can read a word correctly because he/she can recognize it from context and based on partial cues and knowledge. However, when asked to spell the word, he/she might manifest unexpected difficulties. The Spelling Task taps into the ability to use GPC rules, rime-based orthographic patterns, and irregular representation of high-frequency words. This task is described in

more detail in the section on the Screening Test. As previously mentioned, if a pupil did not take the Screening Test, but the teacher feels nonetheless that he/she should take the Diagnostic Test, the teacher should remember to administer the Spelling Task along with the five other tasks that make up the Diagnostic Test. When summing up the pupil's performance on the Spelling Task, the teacher should return to the pupil's answers and tick the consonant and/or vowel errors in the appropriate column. As mentioned above, accurate information about the kinds of errors that beginning spellers make can inform individualized remedial intervention plans.

D. Scoring Procedure

Scoring pupil perfomance on the Diagnostic Test is slightly different from scoring performance on the Screening Test. Each task is presented as a table which includes the content to be administered, the documentation of performance (which is later transformed into a total score) and clear instructions for documenting and scoring pupil performance. **In contrast to scoring the Screening Test, in which a pupil's score represents correct answers, the scores on the Diagnostic Test represent the total number of errors made by the pupil on any given task.** After the pupil has taken the Diagnostic Test the teacher then maps the pupils scores onto the pupil profile chart (last page of the pupil's test booklet).

VI. Summing Up Performance on the Diagnostic Test

After a pupil has taken the diagnostic test, the teacher should review the scores for each task and map the scores onto the Pupil Profile chart (see page 189 or 207). Based on the number of errors that the pupil has made in each task, the teacher will know which skill areas require personal remedial attention.

Chapter 3:
Testing Materials

The following materials are samples of the actual tests you will be giving to the pupils.

Included are the Screening Test and the Diagnostic Test. The Screening Test has been published in two versions – one for Hebrew speakers (pages 43–94) and one for Arabic speakers (pages 95–146). Recordings of the listening comprehension and spelling tasks (both for Hebrew and Arabic speakers) are on the attached disc and can be accessed fron the RAMA site. Also included are transcripts of these recording (pages 147–162). The Diagnostic Test has also also been published in versions for Hebrew speakers (pages 173–190) and for Arabic speakers (pages 191–208). The test includes cards (pages 209–220) for tasks 3, 4, and 5. These cards should be laminated.

All testing materials can be found on the attached disc in separate folders, and also can be accessed from the RAMA site.