THE USE OF THE INITIAL TEACHING ALPHABET (I.T.A.) FOR ACQUISITION OF ENGLISH PHONOLOGY, VOCABULARY, GRAMMAR, READING, AND WRITING BY SPEAKERS OF OTHER LANGUAGES

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Abstract

English is considered one of the most difficult languages to learn. Linguistic domains that present special difficulties for English learners include phonology, orthography, vocabulary, grammar, and fluency. Phonologically, English has 44 sounds, and although many of the consonants may be present in a person’s native language, the 16 vowel sounds of English present a daunting challenge for many English learners. Orthographically, the 44 sounds of English can be written in more than 1,100 ways. For example, the “long” (open) vowel sound /a/ may be spelled as a, ai, ay, a_e, ea, eigh, or aigh. Vocabulary acquisition can be facilitated by cognates that are similar in both the native language and English (e.g., psicologia, psychology) but “false friends” can leave one embarrassed by the use of “embarazada”. The ultimate challenge for English learners is to speak, read, and write correctly.

This presentation discusses the theoretical advantages and methodology of using the initial teaching alphabet (i.t.a.) to master English pronunciation, minimize the difficulties of English orthography, and develop fluency in speaking, reading and writing using a language experience approach. The initial teaching alphabet represents each of the 44 sounds of spoken English with a unique symbol. For example, the letter a represents the sound of “apple,” and a picture of an apple helps with sound/symbol acquisition. In contrast, the symbol æ represents the sound of “acorn.”

Intelligible pronunciation is often a struggle for English sounds that do not exist in the native language. For example, /th/ is not present in Spanish. Using the i.t.a. sound/symbol/picture chart, the English as a Second Language (ESL) teacher can complete a contrastive analysis with English learners, marking the English letter-sound combinations that occur in both languages (usually consonants), noting letters that are the same but sound different in the two languages (e.g. i and e in Spanish and English), and emphasizing English sounds that are not present in the native language (e.g., sh, th). Letter-sound combinations in the native language not present in English (e.g., ll, ñ) can be added to the chart.

While focus on the individual sounds of English embedded in common English words is helpful to new English learners, the greatest advantage of using i.t.a. is in a language experience approach to speaking, reading, and writing. Because i.t.a. allows English learners to write phonetically any words that are in their speaking vocabulary, i.t.a. facilitates rapid acquisition of spoken and written language. Speaking fluency is reinforced when they read what they have written. Using i.t.a. to write personal narratives is an organic approach to learning grammar and vocabulary because it focuses on whole sentences and connected discourse. Rather than teaching isolated vocabulary terms and rules for verb tenses, pronouns, etc., the ESL teacher can focus on helping students formulate spoken sentences correctly, followed by phonetic representation of each word in writing.

The experiences of ESL teachers who have used i.t.a. for mastery of English speaking, reading, and writing will be discussed in this presentation. For example, Somali newcomers in an ESL class answered questions about their family and what they like to do after school. Next, they wrote these sentences in i.t.a. and read their stories to each other for reinforcement of both reading and speaking.

Keywords: English Language Learners, English phonology, Second Language Acquisition, Initial Teaching Alphabet.

1 INTRODUCTION

Because English is an amalgam of many languages assembled across centuries of conquest, exploration and cultural assimilation, it presents a formidable challenge to new English learners. Unlike more transparent languages where sounds and symbols match more consistently, English orthography is very dense, with variable sound-symbol matches. Crystal [1] summarized the “task of...
attempting to find some order in the chaos” due to the sheer number of English words (over one
million) and 1,300 years of history marked by numerous sound-spelling changes. An example of the
challenge for English learners is the grapheme ough. The following words, all ending in ough,
illustrate the challenge for English learners who have not yet reached near-native reading ability:
tough, though, through, bough, hiccough, cough.

Another challenge for English learners is pronunciation of sounds that do not exist in their native
language. For example, /p/ does not exist in Arabic, and may be pronounced as /b/ by English
learners. Similarly, because /r/ does not exist in Chinese dialects, English learners from China  often
substitute the English /r/ with /l/.

A solution for the problem of acquiring English phonology and orthography is the initial teaching
alphabet (i.t.a.). This phonetic alphabet, where each of the 44 sounds of English is represented by a
unique symbol, was first developed by Sir James Pitman [2] as a teaching device for the initial
acquisition of reading. Harrison [3] reported that Sir James was adamant that the new alphabet was
not an attempt to reform spelling, but an early reading tool, “one to be left behind and forgotten when it
achieved its teaching purpose.” Fig. 1 illustrates the contemporary version of the initial teaching
alphabet (i.t.a.) that we have used in our work with dyslexics across four decades, and more recently,
with children and adults who are learning English as another language, the focus of this paper.

The advantages of this phonetic alphabet include assistance with mastery of English pronunciation
and an early entry into reading and writing by using text that is transparent, e.g., where each sound is
consistently represented by the same letter symbol rather than the variable spelling in traditional
English orthography. For example, the sound / æ / may be written as a(acorn), ay(stay), ai(rain),
ea(break), a-e(skate), eigh(neighbor), or aigh(straight). Dyslexics and speakers new to the English
language generally are not able to crack this sound code without explicit instruction; i.t.a., with its
consistent sound-symbol relationships and picture cues, provides the medium for accomplishing this.
Note also that there are no capital letters represented. Thus, two forms of the same letter are
eliminated in the early stage of learning to read and write English, simplifying the process. It is for this
reason that the name of this alphabet, initial teaching alphabet (i.t.a.) is not capitalized.

The next section of this paper explicates the process by which this instruction is carried out. We
conclude with examples of i.t.a. writing by English learners and qualitative data attesting to the
effectiveness of this alphabet for helping speakers of other languages master English pronunciation,
reading, writing, and grammar.

2 METHODOLOGY

Our project uses the i.t.a. transparent alphabet with English learners to accomplish two goals: (1)
assist newcomers to the English language with pronunciation of English phonemes not represented in
their native language through contrastive analysis; and (2) facilitate the rapid acquisition of reading and writing in English through spelling by sound using the language experience approach. These instructional procedures are usually implemented in individual tutoring sessions, but are also conducive to small-group instructional settings.

2.1 Contrastive analysis using i.t.a.

Babies are born with the capacity to master the phonemes of any language, but quickly demonstrate a preference for the sounds of their native language. Somewhere around seven years of age, the neuronal pathways for the language that they hear and use every day are well established. That is the reason why, while young bilingual children can speak with native pronunciation in both languages, older bilingual speakers often retain the phonology (pronunciation) of their first language when speaking English.

To help English learners acquire reading skills in English, English as a Second Language (ESL) instructors need to be aware of the similarities and differences between their students’ native language and English. This may be a formidable task when the class is a mini-United Nations, with Spanish, Karen, Chinese, Krio, Somali, Russian, and Tagalog representatives! But it is very important that ESL instructors are able to call their students’ attention to what's the same and what's different in English phonology. Speakers of other languages who are learning to speak, read, and write English need direct instruction in English phonology in order to hardwire the sounds of their new language. The process by which this is done is contrastive analysis: Comparing what's the same and what's different between their native language and English.

Using the i.t.a. chart (Fig. 1), English learners are first introduced to the sounds of English consonants, with special emphasis on sounds that do not exist in their native languages. While the pictures that represent English phonemes on this chart were chosen to depict common American English words, instructors are free to substitute other pictures that may be more recognizable by students from a particular language or culture. For example, one of our projects working with Somali newcomers substituted a picture of an avocado for the ostrich picture.

Before using this chart to introduce English phonology, the teacher or tutor should conduct a contrastive analysis of English compared to his students’ native language. This process can be accomplished by circling the sound-symbol combinations that exist in both languages (primarily consonants), noting letters that are the same but sound different (for example, i would be substituted for the E sound in a Spanish-English contrastive analysis), and highlighting the sounds that do not exist in the student's native language. This will give the instructor an idea of where to focus instruction in English phonology. Older English learners may benefit from participation in this exercise, as it gives them insight into the differences and similarities of the sound systems of the two languages. The phonology of virtually any language can be researched by doing a Google search. For example, one ESL graduate student assigned to work with a young boy adopted from Bolivia was able to complete a contrastive analysis of English and Quechua, an Andean language common in Bolivia and Ecuador, by consulting Wikipedia.

Another resource for helping English learners hear and see how English phonemes are pronounced is a cellphone app available for free, with an expanded paid version, from the Android store at https://play.google.com/store/apps/details?id=edu.uiowa.uirf.soundsofspeech&hl=en and from the Apple iTunes store at https://itunes.apple.com/us/app/sounds-of-speech/id780656219?mt=8. There is a free version, but the US $3.99 version also includes text translations in Korean, Spanish, and Chinese. Both auditory and visual supports the pronunciation of the consonants and vowels. Fig. 2 shows the video depiction of how the articulatory mechanism moves in pronunciation of English phonemes. This may be especially useful for independent practice of phonemes presented by the ESL instructor.
2.2 Using i.t.a. to master English reading

Native English speakers who are emerging readers begin by representing the sounds they hear through spelling by sound. Thus, *said* is written as *sed* and *was* is written as *wuz*. At the same time that they are spelling by sound, they frequently encounter the regular orthography of the words in their reading books. Soon the sound spelling *sed* is hooked to the orthographic representation *said*, so that the orthographic representation of the word calls up the pronunciation of the word without a conscious awareness of the underlying sound spelling. That phenomenon is what Berninger [4] called the Multiple Connections Model of coding orthographic-phonological relationships in learning to recognize and spell printed words. According to this theory, for every word we know how to read, there exists in our lexicon (our brain) both a phonemic representation (a sound spelling of the word) and the orthographic representation (how it is actually spelled). That is the reason why proficient English readers have no trouble distinguishing the correct pronunciation of words like *tough, cough, and thorough* even when these words are decontextualized, i.e., in isolation.

What does this mean for students who are learning to read and write in English as a second or third language? Theoretically, reproducing the normal course of learning to write for native English speakers should facilitate the emergence into reading words that are not phonetically regular. Based on this theory, we have studied introducing English newcomers to writing and reading by using i.t.a. After some time of spelling words the way they sound, our experience has shown that they easily master orthographically-complex words; they have now internalized the sound spelling of a word with its orthographic representation.

This process is operationalized through a language experience approach, where the instructor elicits personal narratives from the English learner, using leading questions such as: How many brothers and sisters do you have? What do you like to do after school? Working one-on-one, the instructor dictates back the first sentence word by word and helps the student find the sound-symbol matches on the i.t.a. chart. When a sentence is finished, the student reads it back to the teacher. This process is repeated until the narrative is completed.

Flynn [5] demonstrated the process for introducing sound-spelling using i.t.a. in a video available at https://www.youtube.com/watch?v=43It6uBzdw. Although this video demonstrates sound spelling (i.t.a.) with a native English speaker, the process is the same for English learners. An example of this would be working with upper elementary Somali students who have been in the United States for about a year. At this point, their familiarity with common school, neighborhood, sports, and family vocabulary would be sufficient to write a story (with prompts from the instructor) about how many brothers and sisters they have and what they like to do after school. It is likely that their oral production would be characterized by incomplete sentences or tense, pronoun, or preposition inaccuracies. By rephrasing sentences, the ESL instructor can guide the students’ writing of simple narratives using i.t.a. to sound-spell each word. In this process, students use the i.t.a. chart to find sound-symbol matches that they are unfamiliar with. The completed stories also serve as reading practice for the students in the ESL class. Fig. 3 illustrates a personal narrative by a Somali elementary student after six months of a newcomer class for English learners.
Fig. 4 is an excerpt from a more-advanced English learner after two years of twice-weekly tutoring to develop her English reading, writing, grammar, and vocabulary. This story about a fictional character searching for his mother was written and illustrated by a 12-year old adoptee from Haiti. Reading and writing in standard English followed very quickly for this creative writer and illustrator.

3 RESULTS

Because the use of i.t.a. for beginning reading and writing with English learners is a relatively new project for us, quantitative data about its effectiveness is not yet available. Therefore, this section highlights qualitative information—experiences of students and ESL instructors who have used i.t.a. for this purpose.

3.1 Feedback from Adult English Learners

Conversations with bilingual/biliterate adults reflecting on their journey to English reinforces the benefit of using the i.t.a. chart to master English phonology. For example:

- A research colleague from Iran with a Ph.D in Mathematics, on seeing the i.t.a. chart in our dyslexia research lab, commented: “Why didn’t I learn English this way? It would have been so much easier.”

- Another colleague, a Latina who spoke only Spanish until she went to kindergarten, reflected that her years of speech therapy and lingering pronunciation, spelling, and reading frustrations
would have been resolved much sooner had she had the concrete images of the i.t.a. chart when she first learned to speak and read English.

3.2 Feedback from ESL Instructors

ESL graduate students in our university have been introduced to the use of i.t.a. for newcomers to the English language. Representative comments from these instructors include:

- Blending, segmenting, deletion and substitution seem simple but are important skills for students. English Language Learners need lots of support to master this stage, especially if they are coming from a world of different sounds.
- It makes sense to me to start at the auditory level identifying words, syllables, and sounds with my EL students. It was challenging to distinguish voiced/voiceless sounds and other ways that sounds differ (place and manner of articulation), which opened my eyes to what must be twice as challenging for my students.
- When we wrote stories in i.t.a. mode is where I really figured out how well this method can help an ESL student learn to sound out English and learn to read!

4 CONCLUSIONS

While the use of i.t.a. for remediation of dyslexia has been documented through three decades of research [6] [7] [8], its use for initiation of English learners to the pronunciation, reading, and writing of English is a relatively new development. The use of applied linguistics principles to this process has led to a clinical protocol that includes contrastive analysis and sound spelling within a language experience approach. Clinical observations and feedback of English learners and ESL instructors confirm the usefulness of a transparent alphabet for newcomers to the complex orthography of written English. Because i.t.a. replicates the process by which young children “crack the code” of written English and become proficient readers, it assists English learners in their daunting task of mastering literacy in English.

Although the writing examples in this paper feature students in K-12 schools, we theorize that this same process will be equally effective with adult English learners. The i.t.a. Foundation is currently funding a grant to investigate the usefulness of this transparent alphabet for initiation of adult newcomers to mastery of English pronunciation, reading, vocabulary, and grammar.

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REFERENCES

[7] S. Moore. Using a Phonetic Alphabet, the initial teaching alphabet (i.t.a.), to Remediate Reading Disabilities in First-Year College Students. EDUlearn, 2017.