Journal of the National Council of Less Commonly Taught Languages

Volume 28

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The Journal of the National Council of Less Commonly Taught Languages, published annually by the Council, is dedicated to the issues and concerns related to the teaching and learning of Less Commonly Taught Languages. The Journal primarily seeks to address the interests of language teachers, administrators, and researchers. Articles that describe innovative and successful teaching methods that are relevant to the concerns or problems of the profession, or that report educational research or experimentation in Less Commonly Taught Languages are welcome. Papers presented at the Council's annual conference will be considered for publication, but additional manuscripts from members of the profession are also welcome.

Besides the Journal Editor, the process of selecting material for publication is overseen by the Advisory Editorial Board, which consists of the foremost scholars, advocates, and practitioners of LCTL pedagogy. The members of the Board represent diverse linguistic and geographical categories, as well as the academic, government, and business sectors.

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- Double-line spaced throughout, including notes, references, and tables, using 12-point **Garamond** font with an inch left margin. *(Please ensure that this specified formatting is followed).*
- Accompanied by a 150 word (or less) abstract and a cover sheet containing the manuscript title, name, address, office and home telephone numbers, fax number, email address, and full names and institutions of each author. *(Because the manuscript will be blind reviewed, identifying information should be on the cover sheet only, and not appear in the manuscript).*

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Subscriptions and address changes to the journal should be sent to

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National Council of Less Commonly Taught Languages
601 S Woodscrest Dr, Bloomington, IN 47401.

Subscription Rates:

1 Year	Individual	U.S. $60
1 Year	Institutional	U.S. $200

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National Council of Less Commonly Taught Languages (NCOLCTL)

NCOLCTL is an organization dedicated to the teaching and learning of Less Commonly Taught Languages. Membership is open to individuals and organizations that share this interest.

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NCOLCTL's mission is to increase the number of Americans who choose to learn one or more of the less commonly taught languages (LCTLs) as a means of enhancing cross-cultural communication among citizens of the United States. NCOLCTL's work focuses on the less commonly taught languages which are becoming increasingly vital to the economic, social and political welfare of the United States. Furthermore, NCOLCTL seeks to improve the teaching and learning of these languages and to make them more generally available. We are the national voice for organizations and individuals who represent the teaching of these less commonly taught languages.

Both the collegiate and precollegiate level. NCOLCTL also promotes the use of technology, especially computers and the Internet, to enable a new era in cross-cultural understanding, communication, and language education.

NCOLCTL constitutes a national mechanism devoted to strengthening the less commonly taught language professions through enabling NCOLCTL members to work toward "shared solutions to common problems." NCOLCTL principally directs its efforts toward building a national architecture for the LCTL field and in making the field's resources easily accessible to language programs and individual learners around the United States.

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Since its establishment in 1990, the NCOLCTL has carried out a variety of activities to raise awareness about the importance of less commonly taught languages. NCOLCTL achieves its goals through the following activities:

- Annual Conference in conjunction with Delegate Assembly
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- Planning for and establishing a national policy for building the national capacity for the study of the LCTLs
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Editor's Introduction

Danko Šipka
Arizona State University

The spring 2020 issue features eight papers and one review article, representing various topics of interest to the entire NCOLCTL community and various languages in the field, and it comes in two volumes. In this volume, the first two papers discuss Portuguese, with far-reaching conclusions about program evaluation (*Portuguese Language Program Evaluation: Implementation, Results and Follow-up Strategies*) and reduced forms (*Perspectives on Reduced Forms Instruction in Portuguese*). The paper titled *Developing Indonesian Oral Proficiency Guidelines* addresses the question of standards, which is increasingly of interest to all LCTLS. The issues of teaching writing systems are discussed in the final paper, titled *The Arabic Writing System: Understanding the Challenges Facing Students and Teachers.*

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The Arabic Writing System: Understanding the Challenges Facing Students and Teachers

Hezi Brosh

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Introduction

A foreign language learner typically expects to become proficient in reading, writing, speaking, and listening in the new language. To develop such linguistic proficiency, including literacy skills, it is essential that one controls the language's writing system (Treiman & Kessler, 2014).

English speakers who learn a Romance language, such as Spanish or French, have very little difficulty with the writing system because those languages share the Latin alphabet with English; students are learning something new while they build on familiar information. When trying to learn a new language with a non-Latin alphabetic writing system, such as Hebrew or Arabic, students encounter challenges. They must take on an entirely new set of symbols which represent sounds that they already know and establish new habits. They must not only retain a new set of vocabulary and linguistic rules but must also decode and match those rules to an entirely foreign writing system. Students have to figure out the shapes of characters and how they are connected, spaces between letters, the direction of writing, how the print representation differs from the script, and the sounds attached to those characters. This first encounter with the language is essential, since it impacts students' success in learning and

using the language and influences their motivation to learn it beyond initial phases.

Much attention is given to children learning the writing system of their native language (Abu-Rabia, 2001; Ehri, 2005), however, only marginal attention is given to challenges facing native English speakers when learning an unfamiliar writing system and to the impact of those challenges on the development of literacy skills and instruction. This article seeks to address these challenges by exploring phonological and orthographic aspects of the Arabic alphabetic writing system and eliciting instructors' and students' perceptions regarding hardships they encounter in teaching and learning it.

Literature review

Writing and reading skills are key in students' overall academic success in school. Students' ability to communicate, perform, and succeed inside and outside the classroom rests on their command of the language (Powell, 2009). Reading is a process of decoding and understanding the ideas behind written words. Reading efficacy refers to the students' ability to accurately and fluently process written words and their components. This process involves letters and sounds. Students generate sounds for letters, blend the sounds, and thereby produce recognizable words (Ehri & Roberts, 2006).

Two main processes play an indispensable role in reading: The first is orthographic knowledge and the second is phonological awareness. "Orthographic knowledge is the understanding of how spoken language is

represented in print" (Apel, Henbest, & Masterson, 2018:873; Apel, 2011), which includes sensitivity to the organization of letters and written words, such as the fact that Arabic script runs from right to left. This knowledge is one of the best predictors of future reading success (Deacon, Chen, Luo, & Ramirez, 2013). Phonological awareness is the establishment of a precise relationship between letters (graphemes) and sounds (phonemes) and the ability to manipulate them to read words (Stanovich, 1986). This awareness also comprises the understanding that the discrete letters of the alphabet represent discrete sounds of speech. Being able to break a word down into its sounds enables the learner to understand the relationship between these sounds and the letters to which they correspond and thus identify unfamiliar words with ease (Abu-Rabia, 2001; Ehri, 2005).

Studies focused on children acquiring literacy (Abu-Rabia, 2001; Ehri, 2005; Fletcher, 1996; Juel, 1991; Stanovich, 1986), found that the ability to correspond letters and sounds (the *alphabetic principle*) to identify and produce words differentiates good readers from poor readers. Once learners can consistently connect letters to their corresponding sounds within a word, they can correctly pronounce the word and understand its meaning (Ehri, 2005). For this reason, the alphabetic principle is considered the cornerstone on which language literacy is built and can also be used to predict later success or failure in reading (Ehri, 1987, 1998; Stanovich, 1986).

Children who acquire and apply the alphabetic principle in the early phases of reading reap the long-term benefits in developing literacy skills (Juel, 1991; Stanovich,

1986). In contrast, when they fail to reach automaticity in applying the alphabetic principle while reading unfamiliar words, reading remains slow and laborious (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996). As a result, these learners are exposed to less text than their peers, a development that further slows their decoding of words, thereby prohibiting them from effectively comprehending whatever text they are exposed to. Consequently, competent readers become better while poor ones worsen. In a study focused on literacy development that included a sample of 54 children, Juel (1988) found that those who were poor readers at the end of first grade had an 88% likelihood of still being poor readers at the end of fourth grade. Similarly, Francis, Shaywitz, Stuebing, and Fletcher (1996) in a nine-year longitudinal assessment of 403 children, tracked the reading performance from first through ninth grade. They found that learners who were struggling to learn how to read in first grade rarely caught up to their peers.

Along with the alphabetic principle, handwriting is a crucial skill for literacy success among children. Learning to write letters and spell words has been shown to support letter formation and word reading (Ritchey, 2008). Writing letters by hand directly contributes to their visual recognition, helps in the development of reading, and could also predict reading proficiency. It has been proven that handwriting helps children recognize and remember letters more easily than if they only typed them (James & Engelhardt, 2012; Longcamp, Zerbato-Poudou, & Velay, 2005**).**

Khaldieh (1991) compared the reading competence of 36 college-level, American students who studied Arabic at different levels—beginners, intermediate, and advanced, as well as native speakers of Arabic. He found that students made fewer errors as they advanced through levels. Beginners tended to make more visual errors than phonological ones, due to their unfamiliarity with the alphabet. Although advanced students made fewer visual errors than phonological ones (clear evidence that they had substantially improved in visual identification), the fact that they were making those phonological errors indicated that they still had not mastered the alphabetic principle.

The Complex Arabic Orthography

As a Semitic language, Arabic has an alphabetic writing system which contains 28 consonantal letters and is written and read in right-to-left horizontal lines. It does not include short vowels and the reader should supply them. Scholars believe that the Arabic script developed out of the Nabataean script—or *abjad* (Daniels, 1990), where each symbol almost always stands for a consonant. During the fourth and fifth centuries CE, these symbols became known as the Arabic alphabet (Grundler, 1993). In the seventh century CE, diacritical dots were added above or below letters that share a basic shape to differentiate between them. The visual letter similarity was found to cause a challenge in learning the Arabic alphabet not only among children but also among adult foreign language learners of Arabic (Russak & Fragman, 2014; Saiegh-Haddad, 2017).

Arabic letters take different shapes (allographs) according to their position within the word (initial, medial, final, or isolated). The majority of letters are written in a cursive fashion and are joined in both print and handwriting. There are, however, six non-connector letters—*'alif* < ا >, *daal* < د >, *ḏaal* < ذ >, *raa* < ر >, *ẓaai* <ز >, and *waaw*   < و >—where one must stop the continuum when writing them. They are connected only to the previous letter in a word, not to the letter that follows them. This particularity creates differences in the internal connectivity of written words. Whereas most written words are fully connected such as < جلس > [he sat], others are partially connected such as <ذهبت > [I went], and some words are formed with only non-connector letters; that is, the letters appear only in their isolated forms—for example, <ورد> [flowers].

Arabic orthography also includes a special form of the letter *taa - taa marbuuṭa*,   < ة >, and the letter *yaa - 'alif maqṣuura*, < ى >. Both letter-forms exist only at the end of words and are preceded by the vowel *fatḥa* (/a/). Other orthographic marks, are *sukuun* < ˚ > >, a mark representing the absence of a vowel; *šadda* < ّ >, which serves as a doubling symbol written above the consonant; dagger *'alif* < ٰ >, a short vertical stroke on top of a consonant, which indicates a long /a/ sound; *madda* < آ > and *waṣla* < ٱ >, which can appear only on the top of an *'alif* - the first indicating a glottal stop followed by a long /a/ (*'alif mamduuda*), and the second, *hamzatu-lwaṣl* < همزة الوصل >, indicating a connector. (For in depth description of the Arabic orthography see Saiegh-Haddad, 2017).

The sound system

Teaching letters involves teaching the corresponding sounds. Students of Arabic have to familiarize themselves with new sounds that do not have equivalents in the English phonemic repertoire — such as the emphatic (velarized or pharyngealized) consonants *ṣaad* < ص >, *ḍaad* < ض >, *ṭaa* < ط >, and *ẓaa* < ظ >; the voiceless uvular stop *qaaf* < ق >; the pharyngeal voiceless *ḥaa* <ح>; the voiced *ʕayn* <ع>, the fricative voiceless *xaa* < خ >, and the fricative voiced *ġayin* < غ >.

In addition, the consonant *jiim* < ج > and *laam* < ل > have allophones (same phonemes with different sounds). The consonant *jiim* < ج > can be sounded as the voiced alveopalatal affricate /j/ as in 'Jordan', as the voiced fricative /zh/ as in 'measure', and (in spoken Egyptian and Sudanese) as the voiced velar stop /g/ as in 'great'. The fronted and palatalized *laam* as in 'light' has an additional "darker" /l/ sound, as in < الله > *'allaah* [God] (Ryding, 2014).

Furthermore, the letters < ت > and < ط > create the sounds /t/ and /ṭ/ (emphatic), respectively. To English speakers, having two phonemes for what is conveyed by the single letter *t* seems confusing. They have to distinguish between two sounds that they never would have distinguished between before. Students must also differentiate between similar new sounds that do not exist in English and to articulate them appropriately. For example, they have to differentiate between < سورة >, *suura* [chapter in the Qur'an] and < صورة >, *ṣuura* [picture]. Even if they can hear the difference between the two when

somebody else speaks, native English speakers, in many cases, have problems articulating these sounds appropriately so that others can hear the distinction. Discriminating between such sounds and producing them accurately requires practice and time on the part of students.

On a subtler note, students should be aware that the letters *taa* < ت > and *siin* < س > sound emphatic if the word that either letter is in also contains an emphatic letter, such as *ṭaa* < ط > or *ṣaad* < ص >. This phenomenon is known as the *emphasis spread* (see Davis, 1995). For example, in the word *ṣawt* < صوت > [voice], the letter *taa* < ت > sounds like the emphatic letter *ṭaa* < ط >, and in the word *sawṭ* < سوط > [whip], the letter *siin* < س > sounds like the emphatic letter *ṣaad* < ص >. As a result, these two words sound the same and the meaning is decided according to context.

Shallow and deep orthography

Modern Standard Arabic (MSA) uses a six-vowel system: three short vowels and three long vowels. Short vowels are diacritic marks written above or beneath letters, and long vowels are represented by letters within the word that can also be used as consonants. The short vowels are /u/ *ḍamma* < ُ- >, /a/ *fatḥa* < َ- >, and /i/ *kasra* < -ِ >. A *ḍamma* or a *fatḥa* is positioned above a letter, and *kasra* is generally positioned below a letter. These vowels are considered optional in most Arabic texts, but they do provide phonological information within an orthographic string (Ibrahim, Khateb, & Taha, 2013). Long vowels are

represented by three of the letters known as *ḥuruufu-lmadd* <حروف المـد > [the lengthening letters]: *waaw* <و >, *'alif* < ا >, and *yaa* < ي >. As such, they are silent and represent vocalic length. Each of these three letters increases the difficulty of reading because students must determine whether the letter is a consonant or a vowel.

The Arabic writing system also includes two semivowels (diphthongs): /aw/ and /ay/ (Ryding, 2014). The voiceless glottal stop, *hamza* < ء >, is treated as a diacritical mark and depending on its position in the word, can be written either in isolation (ء) or on different letters, which serve as "chairs" (أ - ـُ - ئ - ى or ؤ or إ).

Arabic also uses three additional diacritics: double *ḍamma* < ٌ > , double *fatḥa* < اً > and double *kasra* < ٍ >, each of which can appear only at the end of a word. Each of these diacritics indicates that the vowel is followed by the sound /n/: /un/ for < ٌ >, /an/ for < اً >, or /en/ for < ٍ > . This phenomenon is known as *tanwin*, or *nunation*. Double *fatḥa* is usually spelled with the letter *'alif* at the end of the word such as < شـاهد فيـلـمًا > (*shaahada filman* 'He watched a movie').

Short vowels and other orthographic symbols that are written as diacritics above or below letters appear in the Qur'an, classical poetry, children's books, and Arabic textbooks. These vowelized scripts (shallow orthography or transparent orthography) assist the reader to pronounce words properly with ease and predict their accurate

meaning. In other printed media, such as ordinary books and journals, however, Aabic script is usually deep orthography—that is, it appears without visible short vowels or other orthographic marks; this reduces the level of phonological transparency and readers are expected to deduce the vowels, depending on context (Abu-Rabia & Taha, 2006; Mahfoudhi, Everatt, & Elbeheri, 2011).

Print and script: Connecting letters

To further complicate matters, there are two types of writings - print and script (handwriting). The differences between the two create yet another possibility that learners might confuse letters when writing and reading them. Additionally, connecting letters in script is complex because the shapes of letters change when connected to specific letters. Table 1 shows examples of the differences in letter-shape and letter-connection between print and script.

Arabic print vs script

Example	Print	script	Transliteration and translation
a	ألـحـجـاج محمد	الحجاج محمد	*Alḥajjaaj* (m. name) *Muḥammad* (m. name)
b	كاتب كلب	كاتب كلب	*kaatib* (writer, clerk) *kalb* (dog)

c	مجتمع يبحث	مجتمع يبحث	*mujtamaʕ* (society) *yabḥaṯhu* (to discuss)
d	معلم	بعلم	*muʕallim* (teacher)
e	بيت ثلاثة	بيت ثلاثة	*Bayt* (house) *ṯhalaaṯha* (three)

Whereas print letters within words are presented on a horizontal baseline as seen in Table 1—for example, < الحجاج > or < محمد >, in script, these same letters appear with more than one layer (Table 1, example a). Here are some more examples: the letter *laam* < ل > changes its shape when it is connected to the letter *'alif* < ا > following it: *laam-'alif* < لا >. Any letter following *laam-'alif* is not connected—for example, < كلاب > [dogs]; the letter *kaaf* < ك > changes its shape when connected to the letter *'alif* < ا > or *laam* < ل > that follows it (Table 1, example b); and the letters *baa* <ب>, *taa* < ت >, *ṯaa* < ث >, *noon* < ن >, and *yaa* < ي > change their shape when connected to the letters *miim* < م >, *jiim* < ج >, *ḥaa* < ح >, or *xaa* < خ > that follows them (Table 1, example c).

Still another difficulty in identifying graphemes stems from different letters whose shapes are similar when nesting within a word. For example, the letters *ġayin* < غ > and *faa* < ف >, which look different in the isolated, initial, and final positions, become similar when connected to letters on both sides: Compare < المغرب > (ʾ*almaġrib* [Morocco]) with < مفرد > (*mufrad* [singular]) (Treiman & Kessler, 2014).

Arabic instructors are well aware of other differences between print and script, such as the writing of the *kasra* underneath the *šadda* in print < مُعَلِّم > 'teacher' (Table 1, example d), or the different appearance of the diacritical dots in print and script (Table 1, example e). Such differences add to the orthographic complexities thus influencing students' reading accuracy and reading rate (Eviatar, Ibrahim, & Ganayim, 2004; Ibrahim, Khateb, & Taha, 2013; Saiegh-Haddad, 2003).

Research questions

Framed by an understanding that mastering the Arabic alphabet and the letter-sound correspondence is key for success in acquiring literacy skills, the present study addresses the following research questions to examine challenges facing both instructors and learners,

1. What are instructors' perspectives regarding challenges facing students when learning the Arabic writing system?
2. What are students' perspectives regarding the challenges they face when learning the Arabic writing system?

Methods
Participants

The participants were 33 Arabic instructors, and 44 second and third-year college-level students studying Arabic as a foreign language. The instructors were mostly native speakers of Arabic (88%) females (79%). Most instructors (67%) teach in four-year colleges and the rest (33%) teach in high schools. The majority of instructors (64%) have seven years or more of teaching experience, and the rest (36%) have two to six years of experience. Table 2 displays numbers of contact hours instructors use to teach the Arabic writing system.

Table 2

Number of contact hours used by college and high school Arabic instructors for teaching the Arabic writing system.

Number of contact hours	College instructors	High school instructors	Total
10 - 20	12 (36%)	4 (12%)	16 (48%)
21 - 30	5 (15%)	3 (9%)	8 (24%)
31 - 40	3 (9%)	3 (9%)	6 (18%)
41 - 50	2 (6%)	1 (3%)	3 (9%)

- The percentages in columns 2 & 3 were calculated based on the total number of instructors.
- The separation between high school and college instructors (columns 2 & 3) was done due to differences between the two groups in the intensity of teaching/learning, age of students, and in many cases, the instructor's level of education.

As seen in table 2, 48% of the instructors who participated in this study, use between ten to twenty contact hours to teach the Arabic writing system; 24% of them use between twenty to thirty contact hours; and 27% of instructors use 31 to 50 contact hours.

Data Collection

In line with the guidelines recognized by the Institutional Review Board (IRB) for ethical research, participants received general information about the study, its aim, its methods, its means of data storage and handling, and the fact that participation was voluntary and could be terminated at any time. After receiving this information, the participants signed a consent form. The data from instructors and students were collected through questionnaires and follow-up semi-structured interviews. IRB approval was obtained prior to conducting the study.

The Survey Questionnaire

The instructor survey questionnaire was designed to gather background data regarding the gender, ethnic background, teaching experience, and level of schooling. The questionnaire also asked about the number of contact hours teachers use to teach the writing system, and learning challenges they identify among students that are related to an insufficient command of the writing system. The survey questionnaire for students included one open-ended question asking about the challenges they face in learning the Arabic writing system.

Semi-structured Interviews

To supplement the primary data gathered through the survey questionnaire and enhancing the validity and accuracy of the findings, the author of this study conducted semi-structured interviews with twenty-six participants, twelve instructors (four males and eight females) and fourteen students (7 males and 7 females). To randomly select interviewees, participants from each group were assigned consecutive numbers from 1 to N followed by the word *male* or *female*; then numbers were selected from the two lists of participants. The interviews lasted about fifteen minutes and were conducted in an informal, friendly atmosphere that facilitated a "natural" flow of ideas and opinions. After greeting the interviewee, the interviewer explained the context and purpose of the interview and asked the interviewee for his or her consent to tape-record the interview. To gain the trust of interviewees, it was made clear to them from the beginning that their responses would be kept confidential and anonymous and be used only for this study. The interviewees were asked to express their views about the challenges in teaching and learning the Arabic alphabet and the sound system and to provide ideas to overcome them. The students were also asked whether or not the time allocated for learning the alphabet is sufficient to master it. The interview questions were phrased in a way not to affect the interviewees' answers or to lead to specific ones, and they also allowed the interviewer flexibility to probe for details or discuss issues. Interviews were recorded, transcribed, coded, and organized to provide insight about challenges instructors and students face when teaching and learning the writing system.

Finding and discussion

Many instructors view the teaching of the Arabic writing system as a preliminary technical phase that should be short for the instructor to move on to the 'real' teaching of the language. Yet, 79% of them believe that students face learning difficulties that are related to an insufficient command of the Arabic alphabet and the sound system. Students struggle with pronunciation, speaking, spelling, reading, listening and sometimes even with identifying letters. One teacher explains:

> "Students who have gaps in their
> command of the sound system or the
> letters struggle quite a bit in higher levels.
> They are slower to read and write. They
> also suffer when it comes to speaking and
> listening because they are not able to
> differentiate between sounds and produce
> them correctly."

Another instructor stated: "A good number of students have difficulties with letter recognition, connecting the letters and differentiating between short and long vowels."

About seventy percent of students and forty-eight percent of instructors believed that 10 to 20 contact hours allocated to learning the Arabic writing system is adequate. Students, however, feel that they could have benefited from additional time to practice the shapes of the letters and mainly the sound system. A student explains:

"The Arabic writing is not the problem,
the pronunciation is. I think that the
teachers did not correct our pronunciation
as much as they should. Pronunciation
and vowels should be stressed more from
the beginning" (male, third year).

The rest (30%) believed that this number of hours allocated to the teaching of the writing system is not sufficient. They felt that additional hours and practice is needed to properly write, identify, and pronounce the consonants. One of them indicated: "There was not enough time spent on mastering the alphabet. It is quickly taught but proper writing and pronunciation were not emphasized" (female, third year).

Eighty-nine percent of students felt that acquiring the sounds is their biggest challenge, especially sounds that do not exist in the English phonemic repertoire. They felt that a lack of adequate exposure to sounds through listening and reading hindered their ability to pronounce words correctly, to read at a reasonable pace, and to speak. A student stated: "The sounds are a challenge for me. I know how the letters should sound but I don't know how to get there. I need more time and instruction" (female, second year). Another student added: "I am pretty good in identifying shapes of the letter but not so good in identifying and creating new sounds that I have never heard or used before" (male, second year).

The findings uncover an inconsistency in the teaching of the Arabic writing system. Most instructors believe that the small number of contact hours is

satisfactory to accomplish that goal. Yet, those same instructors detected a host of learning challenges that students face in all language skills due to insufficient command of the letters and the sound system. Instructors reported:

- "My advanced students have problems in distinguishing and pronouncing the emphatic letters;"
- "Students do not know how to pronounce < > صباح الخير [sabaahu-lkhayr], some still mispronounce it saying <صبلكير > [sabalkir];"
- "My students have a hard time coping with the different shapes of some letters that look similar;"
- "I encountered cases where letters would be mistaken for other letters or pronounced in a very American way and also cases where students were not confident reading out loud in class."

Despite these hardships, it seems that instructors feel pressure to move forward with their teaching even before students fully master the writing system. One instructor stated: "I finish the letters in two or three weeks and start teaching the language." This instructor explained that it is necessary to get through the writing system fast to start teaching vocabulary and grammar. Perhaps, it is due to the number of objectives set for instructors to accomplish during the semester in a given number of contact hours. One instructor explained: "I have goals set for me to accomplish, whether it is the syllabus or the needs of the department or the program coordinator. Not accomplishing these goals, means failure on my part." This indicates that the message communicated to instructors by their superiors is to follow the curriculum set for the

program in all circumstances. Aside from pressure put on instructors, moving to a new topic sends a signal to students that they have already grasped the topic at hand. This can lead to cases where instructors question a student's competence in learning the language rather than realizing that the student is suffering from a gap in his or her linguistic foundation**.**

Instructors also believe that learning and practicing the alphabet is an easy task for adult American students. One instructor explained: *"students can learn the letters on their own from the textbook. It is easy and it is their responsibility."* Another instructor stated:

"Learning the alphabet is less challenging compared to other topics that I have to tackle. Therefore, I leave the less challenging topic for students to handle and I take on the more demanding ones."

With this line of thinking, instructors feel that since students have already learned the English writing system, it ought to be a simple matter for them to memorize an additional 28 letters of Arabic. It is, therefore, unnecessary to wait for students to master the alphabet; they can practice the letters on their own and self-correct whenever they notice inconsistencies along the way. The writing system-learning phase, these instructors believe, should be short, fast, and out of the way so that the "real" teaching of the language can begin.

Students are indeed responsible for their learning; instructors cannot do the learning for them. However, the responsibility of instructors is to direct the students' learning and to detect when students need more time and

practice to stay on top of the materials they learn. Teaching vocabulary and grammar when students have partial command of the writing system, results in students perceiving the language as exceedingly difficult and too time-consuming, thus they stop learning it after one or two semesters. Students explained:

> "The sounds were not tested enough. We
> went straight to vocabulary and grammar
> and I felt as if I would have picked up
> vocabulary much easier if I could sound
> the letters and spell correctly." (male, third
> year)

Another student added: "I know students that left Arabic after two semesters because they felt it is difficult and time-consuming" (female, third year). While students believe that instructors are professionals who know how and when to provide learning opportunities, they indicated a variety of orthographic and phonological challenges. Among them are the direction of writing and reading, the multiple shapes of letters in print and script and the differences between them, textbooks using deep orthography, and above all, the letter-sound correspondence.

The letter-sound correspondence

The letter-sound correspondence is more challenging than just putting pencil to paper to form letters and words. A student explained:

> "While we learned how to write and
> connect letters we did not spend enough
> time listening to the pronunciation of each
> letter and practicing the production
> ourselves." (male, second year)

Another student added:

> "I don't feel comfortable with reading a
> paragraph in Arabic in class because I
> know that I will butcher it. I don't know
> how to properly pronounce the sounds
> that do not exist in English and how to
> connect sounds and pronounce words."
> (female, second year)

Not being able to correlate sounds to letters, students are
unable to identify letters representing sounds they try to
convey. The struggle lies within the disconnection between
hearing and sight. In other words, when students write
Arabic words, they must put the sounds that they hear onto
paper. Lack of control of the sound system could result in
mispronunciation, which in turn could lead to a break in
communication. For example, the greeting *kayfa ḥaaluka*
< كيف حالك؟ > 'How are you?' differs from *kayfa*
k̲h̲aaluka < كيف خالك؟ > 'How is your (maternal) uncle?'

Direction of writing and reading

The first challenge, prior even to learning the alphabet, is
simply becoming accustomed to the direction in which
Arabic is read and written. English speakers have always
read from left to right and have never questioned it.
Reading and writing from right to left is quite foreign and
presents a significant difficulty in itself. A student reported:

> "I am so conditioned to read English that
> my mind and my eyes automatically read
> from left to right. When I first got my
> Arabic book, it took me a little while to get
> used to it, because everything was
> backwards to me, and even once I learned

> that Arabic is written from right to left, I
> still had to become accustomed to it."
> (male, second year)

The first-time students pick up an Arabic textbook, they are quick to realize the reverse appearance of the cover. Not only do they find that the placement of words on a page are different, but also, they must contend with the fact that the pages within the book themselves are different from what they have been used to; all of the book's pages are ordered from right to left; where the students would normally find the table of contents, they find the glossary.

New script

It became clear from the interviews that when students first see an Arabic word, they have no clue how to distinguish one letter from another, nor do they know the sounds which the letters might represent. One student reported: "When I first saw an Arabic text, I smiled and said to myself, what is that? I had no clue how to approach it" (female, third year). Arabic, as other writing systems, uses a script other than Latin. Thus, learning its unfamiliar alphabet puts the students at a disadvantage from the beginning. There is no path that they can use to associate the alphabet which they grew up with to the new one. English speakers who learn Spanish, for example, can read words, phrases, and sentences even before they have learned their meanings, but this is not the case with Arabic.

Shapes of letters in print and script

The Arabic writing system presents further complexity in that students have to learn not just the basic 28 letters, but also their different shapes in both print and script. Students quickly realize that "we read with one set of letters and write with another" (male, second year). Arabic textbooks typically present each letter as having four different shapes, depending on its position in the word (see Table 3).

Table 3
Sample of letters featuring four different shapes as they are typically presented in Arabic textbooks

Name and Transliteration	Final Position	Medial Position	Initial position	Independent shape
baa b	ـب	ـبـ	بـ	ب
jiim j	ـج	ـجـ	جـ	ج
daal d	ـد	ـد	د	د
ṣaad ṣ	ـص	ـصـ	صـ	ص
yaa y	ـي	ـيـ	يـ	ي

One student reacted to the many shapes of the Arabic letters by saying, "It is not easy. I have to learn 112 new shapes to read. And this is only in print!" (male, second year). The student further elaborated on handwriting, indicating that it constitutes a challenge as textbooks and instructors do not provide detailed information regarding shaping, sizing, connecting, aligning, slanting, and spacing

of letters. Lack of adequate attention and direct instruction of this skill in the classroom leave students to develop an inappropriate technique for writing, namely, imitating the printed forms. Such writing performance may affect the success of acquiring other language skills and especially impedes students' ability to read handwritten texts.

As previously mentioned, many letters have similar graphemes; however, their phonemes can be completely different, which further increases the challenge. They are distinguished from one another by the placement and the number of diacritical dots above or below the basic shapes. For example, the letters *baa* < ب >, *taa* < ت >, and *ṯaa* < ث> have the same shape (whether independently, as illustrated here, or nested within the word), a shape distinguished only by diacritical dots and representing, respectively, three different phonemes /b/*,* /t/*,* and /ṯ/ (Breznitz, 2003).

Shallow vs deep orthography

Interviews reveal that instructors and students are divided concerning using shallow vs deep orthography texts in teaching Arabic. Eight instructors out of twelve (67%) and ten students out of fourteen (71%) support the use of vowelized scripts during the first two or three years of learning Arabic. These participants believed that using shallow orthography makes students feel comfortable with the materials as they accurately read and properly pronounce words and understand them (Abu-Rabia, 2001, 2007). One instructor strongly states that "the elimination of vowels during the first, second, and even third year of study does not serve students well." Another instructor

wonders,

> "how can a beginning or intermediate
> student correctly read or spell words
> without vowels that look identical
> orthographically [homographic words] but
> carry different pronunciations and
> meanings? For example, the words: *fataḥa*
> < فتح > 'he opened,' *futiḥa* < فتـح > 'was
> opened,' *fatḥ* < فتـح > 'opening, victory.'"

These instructors argue that at the advanced level vowels
should gradually be eliminated, since students are already
familiar with structures, patterns, and meanings of words
and thus less dependent on vowels.

A student who supported the use of shallow
orthography explained:

> "I have problems with knowing if an *'alif*
> or *waw* or *yaa* in the middle of a word is a
> silent letter or a consonant. This confuses
> me when I try to pronounce words or
> read" (male, second year).

Another student added:

> "When a word is marked with vowels,
> even if I don't have enough experience
> with the word or I see it for the first time
> I can pronounce it properly and more
> likely to better understand it" (male,
> second year).

Other instructors contended that there is no need
to use vowels even at the beginning phases of teaching
Arabic. One instructor stated: "When I present a new word

for the first time I present it with vowels. After that, I proceed without vowels. This is also what the textbook does." He explained that this is the way to best prepare students for the real world where texts are not vowelized. Instructors who prefer to use vowels from the start risk creating a dependency on them and students will have a hard time reading unvowelized texts in advanced levels.

Even after learning the alphabet, reading and pronunciation are still a challenge for students. Many Arabic textbooks (and instructors) use deep orthography even during the early phases of teaching the language forcing students to identify word pronunciation and infer word meanings from the context on their own. Of course, words that are introduced for the first time might be presented with vowels to facilitate pronunciation and meaning; however, when these words reappear, they typically appear without vowels. The rationale for training students to read and understand Arabic texts without vowels is that most published materials are not vowelized. Such a rationale might be justified if students were able to learn words from their very first encounter with them. However, such is very rarely the case as most students need to read and write words, repeatedly to pronounce them correctly and to understand their meanings.

Implication

It is logical to deduce that literacy difficulties among students are largely related to a lack of solid foundation in orthographic knowledge and letter-sound correspondence. Therefore, rushing the writing system-learning phase and

allowing only a little time for practice to fast-forward into teaching the language's vocabulary and grammar can be self-defeating. It places a great burden on instructors and holds them back, which leaves students feeling lost. While they are still focused on identifying individual Arabic letters and sounds, students cannot be successful in processing advanced materials. Many develop negative attitudes toward the learning situation, become less motivated to learn the language, and choose to discontinue their Arabic education.

While struggling with Arabic orthography and the sound system, an intermediate- level student reports, "I was mistaken in thinking that a B in the first semester was a fine foundation to continue my Arabic" (male, second year). He explained that his B in learning the Arabic alphabet does not necessarily indicate that he has mastered the alphabet and can easily code and decode words. This comment shows that this student's first encounter with the language did not meet his expectations to prepare him for advanced stages of learning Arabic.

The time allocated for teaching the writing system can vary based on class size and students' competence. However, to ensure that students are not overcome by learning the alphabet, instructors should not assume that they can learn the Arabic writing system on their own, relying primarily on textbooks for explanations and adequate practice. Moreover, competence in a new writing system does not develop spontaneously just by students seeing letters and hearing their sounds a few times. Students need a lot of creative practice until the production of letters and sounds becomes automatic.

Arabic instructors and textbook authors should focus on developing innovative teaching methods and materials that present the Arabic writing system in a simple way that makes sense to students while demanding from the very beginning accuracy in reading, writing, and letter-sound relationships. The alphabet can be taught at a steady pace alongside vocabulary, grammar, and expression, allowing students more time to absorb the new characters and the sound system while feeding their interest and increasing their motivation in learning the language. Regardless of the instructional path taken, Arabic instructors should continuously provide corrective feedback and additional practice opportunities when needed regarding the alphabet and the sound system, even in more advanced levels of learning. Such an approach can establish linguistic confidence among students and enable instructors to build upon a more stable linguistic foundation.

Instructors should facilitate and minimize the effort and time students need for learning the Arabic alphabet. Introducing all the letters as having four shapes each, as textbooks present them, is counter-effective; it achieves the opposite goal. It burdens students with additional unnecessary shapes (the middle connected on both sides and the final connected to the preceding letter) which they do not need to identify or write separately—for example < ـطـ > ,< ـل >, < ـطـ >, and < ـصـ >. Instead, instructors should teach students the basic technique of cursive handwriting: "after writing the first letter of the word, reach the starting point of the second letter and write

it, and so on until the whole word is written." Once students understand this technique, instructors can introduce some letters as having one shape (و ظ ط ز ر ا د ذ), some letters as having two shapes, the initial and the isolated final (ب ت ث س ش ص ض ك ل ي ن); and other letters as having three shapes: initial, medial, and isolated final (م ق ف غ ع خ ح ج).

As for the proportions between letters, instructors should introduce the three different letter-sizes: 'small,' such as < ت > , < ب > , and < ف >; 'medium,' such as < د > and < ق > (which are twice as tall as the 'small' letters); and 'large,' such as < ل > , < ا > , and < ك > (which are twice as tall as the 'medium' letters). A few 'medium' letters such as < ن > and < ق > and 'large' letters such as < م > and < ع > shift below the line. Realizing the letter size and the proportions between letters can increase students' accuracy in writing and can help them identify letters within words with less effort, which in turn can make their reading much easier.

Internalizing the alphabetic principle (developing phoneme awareness) is essential in the process of learning to read. Students might understand that the letter < ح >, *ḥaa,* for example, stands for the sound /ḥ/ by itself, but this is not sufficient; instructors need to ensure that students understand that the word *muḥammad* < محمد > has a /ḥ/ sound in it and that the same /ḥ/ sound appears at the end of the word < تفاح >, *tuffaaḥ* 'apples', and at the beginning of the word < حال >, *ḥaal* 'condition'. Furthermore, instructors can also raise students' awareness

to the longstanding technique of using minimal pairs (known also as *contrastive distribution,* or *parallel distribution*)— that is, that there are pairs of words that are identical except for a single sound (phoneme) that contrasts with another sound in the same position and invests each word with an entirely different meaning. Consider, for example, such pairs as *kalb* (< كلب > 'dog') and *qalb* (< قلب > ['heart'); *sayf* (< سيف > 'sword') and *ṣayf* (< صيف > 'summer'); *tiin* (< تين > 'figs') and *ṭiin* (< طين > 'clay') (Ryding, 2014). Students who cannot produce or hear the sounds that distinguish one word from another will not be able to communicate effectively in the language. Instructors need to explicitly teach that letters make up written words and that phonemes make up spoken words. This learning needs time and practice. Once the students have a good grasp of the alphabet and the sound system they will be able to devote more attention to the language's advanced concepts.

Future research

This paper aims to unveil the challenges instructors and students face in the teaching and learning of the Arabic writing system as well as to stimulate discussion and new studies in this area. Empirical studies are needed on the interface between literacy skills and alphabet learning. Studies are also needed to evaluate the effectiveness of different teaching methods of the writing system on students' cognitive (reading and writing) and affective (attitudes and motivation) aspects of learning the language as well as to evaluate the students' progress toward individual academic goals. Such studies could propose new

directions for improving student outcomes and could contribute to effective instruction, assessment, and classroom practices geared to adolescents and adults.

Conclusion

Learning a foreign writing system is a complex task that requires learners to adapt to unfamiliar orthographic conventions and habits that go against what they have been accustomed to. This study shows that acquiring the Arabic writing system poses numerous challenges to the native English speaker. They must take on new symbols for both familiar and unfamiliar sounds, acquire new patterns of articulation and learn to convert symbols to sounds and sounds to symbols. Additionally, they need to learn new punctuation marks and establish new eye and hand movements as Arabic is written and read in right-to-left horizontal lines. Rushing this critical first encounter with the language forces instructors to sacrifice students' accuracy in the way letters are written and students' effectiveness in utilizing the letter-sound relationships to code and decode words. Students can benefit from innovative and efficient techniques for teaching the Arabic writing system and from a systematic and explicit step-by-step approach, which treats the writing system as part of the language rather than a prerequisite for learning it.

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Table 1
Arabic print vs script

Example	Print	script	Transliteration and translation
a	ألحجاج محمد	الحجاج كمحد	*Alḥajjaaj* (m. name) *Muḥammad* (m. name)
b	كاتب كلب	كاتب كلب	*kaatib* (writer, clerk) *kalb* (dog)
c	مجتمع يبحث	جتمع يبحث	*mujtamaʕ* (society) *yabḥathu* (to discuss)
d	معلم	بعلم	*muʕallim* (teacher)
e	بيت ثلاثة	بيت ثلاثة	*Bayt* (house) *thalaatha* (three)

Table 2

Number of contact hours used by college and high school Arabic instructors for teaching the Arabic writing system.

Number of contact hours	College instructors	High school instructors	Total
10 – 20	12 (36%)	4 (12%)	16 (48%)
21 – 30	5 (15%)	3 (9%)	8 (24%)
31 – 40	3 (9%)	3 (9%)	6 (18%)
41 – 50	2 (6%)	1 (3%)	3 (9%)

- The percentages in columns 2 & 3 were calculated based on the total number of instructors.
- The separation between high school and college instructors (columns 2 & 3) was done due to differences between the two groups in the intensity of teaching/learning, age of students, and in many cases, the instructor's level of education.

Table 3
Sample of letters featuring four different shapes as they are typically
presented in Arabic textbooks

Name and Transliteration	Final Position	Medial Position	Initial position	Independent shape
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daal d	ـد	ـد	د	د
ṣaad ṣ	ـص	ـصـ	صـ	ص
yaa y	ـي	ـيـ	يـ	ي