

Streamlining the Placement of Spanish Heritage Language Learners

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Abstract

The rise in Spanish heritage language and Spanish native speaker (SHL/SNS) learners in language programs traditionally designed for second language (L2) learners has prompted an interest in the development of a more inclusive placement exam for diverse learners. Some practitioners opt for an instrument that compiles a comprehensive profile of the learner's ability. Taking the perspective of the natural acquisition of SHL/SNS of select linguistic areas as well as background information on the learners' exposure to Spanish, we developed a simplified placement exam that efficiently identifies learners of different backgrounds and abilities. A one-way ANOVA demonstrates that the small number of items developed in the test effectively index different levels of ability. Additional informal analyses indicate that once the parameters for course recommendations are applied, levels of ability can still be observed after the SHL/SNS and L2 learners are separated. The present article outlines the approach and outcomes of the placement test to illustrate how an in-house instrument can be designed to meet the needs of an institution's programs and diverse learners.

Keywords: *Spanish heritage language learners, placement, assessment*

Introduction

Students in today's Spanish courses come from varied linguistic and cultural backgrounds, including Spanish heritage language (SHL) and Spanish native speaker (SNS) households. U.S.-born Latinos comprise the principal group driving the increase in diversity in both K-12 schools and institutions of higher education (Gramlich, 2017; Krogstad & Fry, 2014). Despite this demographic shift, SHL/SNS learners, whose knowledge about the language has been built on a variety of lived experiences in the U.S. and/or abroad, continue to be placed in courses that are designed with second language (L2) learners in mind. Even with a strong desire to meet the needs of students from diverse populations, the placement of SNS/SHL learners in Spanish language programs often remains inadequate, inconsistent or haphazard.

The task of developing Spanish placement exams with a diverse student population in mind is recognized as challenging (e.g. Fairclough, 2012; MacGregor-Men-

doza, 2012; Potowski, Parada, & Morgan-Short, 2012; Vergara Wilson, 2012). Both the traditional L2 orientation of the field as well as the elusive nature of SHL/SNS learners' implicit knowledge have steered test designers toward more prescriptive, grammar-based measures centered on idealized native speaker norms (Fairclough, 2012; MacGregor-Mendoza, 2012). Since most placement measures reflect knowledge that centers on formally learned skills, SHL/SNS learners, whose foundation of linguistic knowledge does not reside in declarative, rule-based categories, are at a disadvantage. As a result, their true linguistic abilities are sorely underestimated and/or misinterpreted, and they are often misplaced in lower-level courses designed for L2 learners (e.g. Belpoliti, 2015).

Commercially produced placement measures are often selected as an expedient solution to identifying learners' skills since few individuals undertake the task of designing a customized test (Fairclough, Belpoliti & Bermejo, 2010). However, while appearing to be efficient, a one-size-fits-all approach may be better suited for the larger L2 population whose knowledge can be more readily quantified in terms of mastery of grammatical features and is rarely appropriate for identifying the abilities of SHL/SNS learners. By not considering and integrating the breadth and depth of SHL/SNS knowledge, commercial measures tend to highlight the formal grammatical features that SHL/SNS have failed to master, rather than identifying their linguistic skills. Such a deficit approach favors L2 learners, whose grammatical knowledge is highly regulated and traceable, and simultaneously fails to acknowledge the vast array of skills that SHL/SNS learners possess. Ultimately, such measures provide little in the way of meaningful placement for SHL/SNS populations because they fail to gauge their level and skill of language acquired primarily orally. While customized tests may require more initial effort in design, they can render results that are more meaningful and appropriate to the institution and underserved student populations, particularly with respect to the needs of SHL/SNS learners (Fairclough, 2012; MacGregor-Mendoza, 2012; Vergara Wilson, 2012).

Rather than measure grammatical deficits from a prescriptive perspective, a more appropriate approach for placement could involve tapping into the knowledge that represents authentic language use from a SHL/SNS point of view. That is, finding areas of linguistic knowledge that "seem" or "feel" right to SHL/SNS learners but would be unlikely to represent information that could be easily learned in a classroom setting. Such an approach means shedding comparisons of SHL/SNS speakers with the idealized norms associated with speakers raised and educated in the country of origin, and instead, searching for areas of knowledge that can represent an intuitive foundation of language.

The present paper offers just such an approach to placement. Here, we examine the results of a new Spanish placement measure which replaces a previous test that had been used at a Hispanic Serving Institution near the U.S.-Mexico border for more than two decades. While the previous placement measure was lengthier, more comprehensive, and had been developed for use at an institution with a similar student population, it was ultimately found to be inaccurate with regard to the placement of SHL/SNS students (MacGregor-Mendoza, 2012). Conducting a detailed item analysis of the test questions, author MacGregor-Mendoza found the previous Spanish placement test (SPT) to be problematic concerning item difficulty, with

nearly half of the items classified as either too easy or too difficult. Moreover, she found that the discriminatory power of all 90 content items was low to non-existent in the ability to distinguish between learners' ability levels, invalidating the test as a whole with regard to SHL/SNS learners. She concluded:

For our SHL learner population, the SPT is working poorly at best and, more likely, not at all. This is a disturbing result as it implies that not only are we not aiding our SHL learners in confirming their skills and finding an appropriate place in our program in which they can grow, we are likely doing them harm (MacGregor-Mendoza, 2012, p. 14).

Our need to develop an accurate placement measure was urgent, given that our Hispanic Serving Institution has a diverse student body with over 56% self-identified as Hispanic (NMSU Office of Institutional Analysis, n.d.). Although our Spanish language program offers two tracks—a traditional L2 Spanish course track and a track for Spanish Heritage Learners/Spanish Native Speakers—we have found that SHL/SNS students are more frequently misplaced in the L2 courses than are L2 learners in SHL/SNS courses. SHL/SNS learner misplacement has typically arisen from the flaws in the previous placement exam, a reticence on the part of SHL/SNS learners to recognize the purpose and validity of the courses, or a lack of awareness on the part of formal and informal advisors of our programmatic structure and objectives. Once the failures of the former placement measure had been revealed and the test had been discarded, students began to be placed through a time-consuming process consisting of an individual interview conducted by author Moreno, the director of the SHL/SNS program, and her teaching assistants who conducted further diagnostic writing exercises to confirm placements in the SHL/SNS courses.

Mindful that our previous flawed placement test was designed with the traditional focus on assessing knowledge learned through formal study rather than the lived language skills of SHL/SNS, we endeavored to create a brand-new assessment that focused on SHL/SNS students first, yet simultaneously serve as a means to accurately measure the abilities of L2 learners, while considering the courses into which both groups of students would enter. Through pilot testing items over several semesters with both SHL/SNS and L2 learners in our student population, we were able to identify items that conformed to parameters of item difficulty, item discrimination and reliability for both L2 and SHL/SNS populations. These pilot tests also allowed us to identify performance levels that could be set as thresholds for courses and designed an algorithm based on these outcomes to automatize placement (MacGregor-Mendoza & Moreno, 2015). In the end, we arrived at a measure that is accurate and streamlines the placement process for our L2 and SHL/SNS learners.

We illustrate here how adopting the perspective of the SHL/SNS learner as our point of departure, lends to a more efficient means of identifying and placing SHL/SNS learners without compromising the accuracy of placement for L2 learners. That is to say, by focusing on items that correspond to SHL/SNS learners' intuitive knowledge about language, we find that we can also identify levels of language ability in L2 learners. This is the reverse of the perspective traditionally adopted. Given the known flaws of the test we replaced and the dangers of a lack of oversight, we endeavored to closely monitor the outcomes of our placement measure to ensure that it was performing adequately for our student population and curricula, particularly

with respect to our SHL/SNS learners who, for a variety of reasons, often erroneously enroll in courses designed for L2 learners (e.g. Belpoliti, 2015). Accordingly, the purpose of this article is to provide background on the areas of items we selected for inclusion in our redesigned placement test and demonstrate how well it could identify misplaced learners to recommend placement in courses more appropriate to their needs and abilities.

Review of the Literature

Accurate and efficient placement with mixed populations is necessary because SHL/SNS and L2 students enter the classroom with distinct cultural and linguistic knowledge and skills. One of the first tasks in designing an effective placement measure is distinguishing between heritage language (HL) and L2 students. Attempts at making this distinction have been forwarded by Valdés (2001), who defined a HL learner as an individual “who is raised in a home where a non-English language is spoken, who speaks or at least understands the language, and who is to some degree bilingual in that language and in English” (p. 38). While this definition is useful as a general description and essential for understanding the diverse conditions in which SHL/SNS learners experience language linguistically and culturally, it is overly broad to be applied in operational terms to be directly transformed into measurable characteristics on a placement test. While Valdés clearly signals home language exposure as critical to discerning SHL/SNS learners, the concept of “to some degree bilingual” in Valdés’ definition remains ambiguous. Thus, placement exams should elicit both information about the environment in which learners were first exposed to Spanish and assess linguistic elements likely to be acquired “in a home where a non-English language is spoken” and rarely accessible to L2 learners (Valdés, 2001, p. 38). Nonetheless, Valdés (2001) clearly acknowledges that SHL/SNS and L2 speakers will both display a range of skills based on their myriad of ways in which they are exposed to Spanish; it is precisely the range of abilities espoused by learners between and within their respective groups that a placement exam should be able to detect.

A first step in the distinction between SHL/SNS and L2 learners is grounded in the ways that each group is hypothesized to process linguistic information differently (Hulstijn, 2011; Zyzik, 2016). While L2 learners may have little to no prior knowledge of Spanish as a baseline before entering a classroom, the same cannot be said for SHL/SNS learners. Because of their early exposure to Spanish in a natural environment, SHL/SNS learners have access to information at the level of Basic Language Cognition (BLC) (Hulstijn, 2011). BLC forms the foundation of how the language is put together and references learners’ implicit or intuitive understanding about the language. This knowledge has been learned primarily through oral communication, exclusive of exposure to literacy. Lying below the level of conscious knowledge, this linguistic foundation of skills represents more procedural rather than declarative knowledge (see Table 1).

Table 1

Characteristics of Basic Language Cognition (BLC) and Higher Language Cognition (HLC)

Basic Language Cognition (BLC)	Higher Language Cognition (HLC)
<ul style="list-style-type: none"> ● Generated by early exposure to language in oral form ● Entails common words and structures that are accessible to all speakers with early exposure ● Acquires and processes knowledge of phonetics, phonology, prosody, morphology & syntax unconsciously (instinctively) ● Matches meanings to forms of lexical items consciously ● Is processed automatically ● Accessible to all L1 learners (Heritage and Native speakers) ● Not accessible to L2 learners 	<ul style="list-style-type: none"> ● Does not require early exposure to language ● Acquired through exposure to both oral and written forms of language ● Entails less frequent vocabulary, more complex grammatical structures ● Is promoted by greater exposure to literacy ● Can entail transfer of complex skills from L1 ● Only means of access to target language for L2 learners; can become highly proficient through purposeful effort ● L1 learners (Heritage and Native speakers) will have variable knowledge based on lived experiences with the language

Due to the automatic and performative nature of BLC, individuals processing knowledge at this level may know how to perform a linguistic task or make linguistic judgements regarding what appears to be correct, but may not be able to explain the reasoning behind their decisions (Hulstijn, 2011; Zyzik, 2016). Possessing unexpressed abilities does not mean that their linguistic knowledge is unorganized, rather it implies that the knowledge and the ways that it is compiled and categorized is done so in a fashion that is not consciously recognized by the SHL/SNS learner. By contrast, L2 learners' exposure to their second language is learned primarily through a more formal setting at a stage of their lives where it is more difficult to develop intuitive nuances about language. Although L2 learners can become highly proficient through practice, access to the foundational linguistic knowledge at the level of BLC is expected to be the exclusive domain of heritage and native speaking (HL/NS) learners of any language and thus differences in performance at this level are anticipated (Hulstijn, 2011; Zyzik, 2016).

Complementing Hulstijn's notion of BLC is what is termed Higher Language Cognition or HLC (Hulstijn, 2011; Zyzik, 2016). While there is no hard and fast line delineating between these concepts, Hulstijn argues that HLC extends the reach of BLC and integrates less frequent vocabulary as well as more complex grammatical struc-

tures. These linguistic features are consumed and produced orally as well as in writing. Thus, while all HL/NS will be assumed to be similar with regard to their access to BLC knowledge, it is anticipated that they will be different with regard to their HLC depending on their exposure to higher level structures, vocabulary and literacy skills (Hulstijn, 2011). Hulstijn emphasizes that the universal acquisition of BLC does not discount the existence of a range of linguistic abilities which can be attributed to HLC. He notes,

[t]he fundamental question of why almost all people appear to possess the cognitive abilities to succeed in acquiring their L1 to an impressive extent, and why people nevertheless differ in intellectual skills, causing substantial differences in L1 [proficiency] (HLC), is likely to remain a mystery for a considerable time, requiring a multi-disciplinary approach (Hulstijn, 2011, p. 234).

A further distinction from BLC is that HLC is not assumed to be exclusive to HL/NS speakers. Given enough exposure to the language in a range of contexts and formats, "L2 learners can be as proficient in HLC as L1-ers of the same intellectual, educational, professional, and cultural profile, despite some deficiencies in their L2 BLC" (Hulstijn, 2011, p. 242).

Research lends support to these theoretical notions with respect to the outcomes of L2 and SHL/SNS learners on grammatical tasks (e.g. Montrul, Foote, & Perpiñán, 2008; Montrul & Perpiñán, 2011; Montrul & Potowski, 2007; Potowski, Jegerski, & Morgan-Short, 2009). For example, Potowski et al. (2009), noted L2 learners to be more accurate on tasks that are grounded in overt grammatical rules acquired explicitly through the exposure to text and through practice as compared to HL learners. Exposure to explicit grammatical rules in the classroom has some benefits, at least in the short-term for HL learners (e.g. Montrul & Bowles, 2010; Potowski, et al., 2009). However, such explicit learning has not been demonstrated to be sufficient or consistent in being able to unseat or modify a lifetime of informal learning that entails linguistic processes that SHL/SNS learners are unaware of even when they apply them (see Montrul & Perpiñán, 2011). Contrastively, other areas of grammar defy mastery by L2 learners yet fit into the internalized, experiential knowledge of SHL/SNS learners.

To develop items for placing today's HL/NS learners appropriately in language courses test designers need to reflect on the linguistic skills that HL are likely to exhibit in their own lives. These skills take into account the areas that represent linguistic information likely early acquired and processed at the BLC level. Hulstijn (2011) admits that this theory has not been fully tested. Nonetheless, the alignment of his theory with research on differential performance represents an appealing approach to attempt to distinguish SHL/SNS learners from L2 learners from a processing point of view. Consequently, this approach offers an operational point of departure for developing a placement measure since it suggests that learners from different learning/acquisition backgrounds will respond to particular linguistic data differently. Primarily, SHL/SNS learners will display knowledge about how language is put together that is not accessible to L2 learners. Moreover, a fuller range of linguistic concepts, rather than explicitly learned grammar elements, which tend to favor L2 and/or advanced SHL/SNS learners, can be used to distinguish these two types of learners from one another at lower levels. Instead, we view this information as enhancing placement decisions.

The approach adopted here strikes a balance between placement effectiveness

and efficiency with a resident population that comprises a heterogeneous mix of SHL/SNS and L2 learners who must both be placed in Spanish courses according to their background and linguistic abilities. Thus, rather than amass a thorough account of our learners' mastery of concepts, as has been done traditionally, we instead created a small number of items intended to provide a general estimation of a learner's overall language ability. That is, we are not seeking to have a complete profile of learners' abilities, rather, only identify abilities in a select number of areas, supported by research, that are indicative of a broader range of language skills.

Creating a New Placement Measure

To accomplish this task in our new placement measure, we first compiled information regarding the background of students in a series of sociodemographic questions to gain insight into how they learned Spanish prior to presenting language items. We then coupled that information with a series of content language items that we purposely chose due to their relationship to BLC and HLC. We anticipated some of these items would tap into the more automatic, instinctive knowledge (BLC) of SHL/SNS learners, which may only enter as HLC for more advanced L2 learners. We also chose a small number of items that would reveal formal linguistic abilities (HLC) of SHL/SNS learners and L2 learners, albeit to differing degrees. The specific content areas chosen for inclusion in our placement measure are ones that previous research suggested might illustrate differences in mastery by L2 and SHL/SNS learners. We summarize how we anticipate these areas will align with BLC and HLC in Table 2.

Table 2

Alignment of Test Categories with BLC and HLC

	SHL/SNS learners	L2 learners
Canonical <i>Ser/Está</i>	<ul style="list-style-type: none"> • Early acquired (BLC) 	<ul style="list-style-type: none"> • Mastery of concepts takes time (HLC)
Spelling	<ul style="list-style-type: none"> • Highly variable; depends on formal exposure to written forms (HLC) 	<ul style="list-style-type: none"> • Written forms dominate exposure, build familiarity/stability with common words and writing patterns (HLC)
Conversational Reading Task	<ul style="list-style-type: none"> • Familiarity of lexical items and idiomatic expressions accessible to most learners (BLC) • Discursive cohesion and reading fluency (HLC) 	<ul style="list-style-type: none"> • Lexical items, idiomatic expressions, discursive cohesion, reading fluency inaccessible to novice learners; varies in accessibility with advanced learners (HLC)
Subjunctive	<ul style="list-style-type: none"> • Direct/indirect commands (BLC) • Adverbial clauses requiring subjunctive (BLC/HLC) • Adverbial clauses with optional subjunctive depending on meaning (HLC) 	<ul style="list-style-type: none"> • All forms only accessible to advanced learners (HLC)

In brief, the areas of included items were canonical uses of copular verbs *ser* and *estar*, spelling, and uses of the subjunctive. The students' reading skills were assessed by a series of items that accompanied an innovative, nontraditional reading passage that followed these more traditional items. It is important to note that although we estimate that L2 and SHL/SNS learners perform differently on these items, we are not asserting that any one category of items is definitive in making a determination of either background or ability, rather it is the cumulative outcome of learner performance in all categories, coupled with the information derived from the series of background items, that aid in making a placement decision.

Methods

Data Collection Procedures

Acknowledging that students enroll in courses through a variety of avenues and that SHL/SNS learners in our program are often misplaced in L2 courses, we administer the placement test to all students enrolled in all L2 courses during the first week of the semester. The placement test is available online and graded automatically. Placement recommendations are automated based on the parameters developed in the pilot testing phase of the test development. These recommendations are communicated individually to test-takers through an automated email program. Students are encouraged, but not required to switch into courses that are identified by the placement exam. Some students may not switch due to a lack of knowledge about the program and the different courses and sequences, scheduling conflicts, or financial concerns.

Participants

Data accumulated over the first three semesters of administration of the exam were compiled for initial review. Collectively, a total of 962 separate records were generated and analyzed across the four content areas—*ser/estar*, spelling, reading, and subjunctive—in relation to their course level (Spanish 1 (L2 I), Spanish 2 (L2 II), Spanish 3 (L2 III), and Spanish 4 (L2 IV)). Outliers from the mean score were identified either for potential Heritage Language Learner status (High scores in *Ser/Estar*, Reading, and Subjunctive) or for a more appropriate level of L2 coursework. The fourth semester after the study, we conducted a supplemental post-hoc analysis of misplacements which entailed a total of 1218 unduplicated records.

Context

Our Spanish language program addresses the needs of SHL/SNS and L2 learners in separate tracks. The L2 track represents the typical four-course 100-200-level sequence of basic language instruction; the initial courses at the 300-level are comprised of grammar review and composition which are taught separately. While the SHL/SNS courses do not directly parallel the L2 four-course sequence, we use the comparison for ease of reference. Our SHL/SNS basic language sequence consists of three courses, one at the 100-level (labeled SHL I & II in our tables) that is similar to a combination of the first two semesters of the L2 track. The remaining SHL/SNS courses include two courses at the 200-level, prior to advancing to separate grammar and composition courses at the 300-level. Be-

cause the expectations in a four-course L2 sequence are familiar to language teachers, we will not belabor a description here, however the characteristics displayed by typical learners enrolled in each of the SHL/SNS courses is outlined in Table 3.

Table 3

Skills Exhibited by a Typical Student Enrolled in SHL/SNS Courses

Learner characteristics	SHL I & II	SHL III	SHL IV	SHL Grammar	SHL Composition
Exposure	*Limited or inconsistent exposure to Spanish	*Somewhat consistent exposure to Spanish	*Consistent exposure to Spanish in certain contexts	*Consistent exposure to Spanish in multiple contexts	*High exposure to Spanish in multiple contexts
Sociocultural identity with Spanish	*Limited exposure to positive models of Spanish language use *Looking for appreciation of own language variety	*Comfortable using code-switching and other language varieties *Acquiring appreciation for standard and community language varieties	*Learning how to utilize standard and community language varieties outside of the academic setting	*Recognizes standard and community language varieties in diverse environments; academic, family and employment	*Utilizes standard and community language varieties in the academic, family and employment
Listening	*Comprehends minimal use of Spanish in an informal setting *Not very comfortable listening Spanish in the classroom	*Comprehends simple conversations in Spanish *More comfortable listening to Spanish in classroom	*Possesses existing but still developing listening abilities *Comfortable with listening to Spanish in the classroom	*Very comfortable with listening Spanish in the classroom *Demonstrates solid foundation of listening skills	*Very comfortable with listening and using Spanish in the classroom *Demonstrates solid foundation of listening skills
Speaking	*Uncomfortable with speaking Spanish in the classroom *Unable to engage in conversation entirely in Spanish *Prefers the use of English in the classroom	*Engages in simple conversations in Spanish *Uncomfortable speaking Spanish in the classroom	*Comprehends and engages in conversations in Spanish comfortably *Possesses existing but still developing speaking abilities	*Engages in complex activities and interactions *Very comfortable speaking Spanish *Able to express knowledge with ease about topics related to culture, literature, and linguistics *Demonstrates solid foundation of speaking skills	*Engages in complex activities and interactions *Able to express knowledge with ease about topics related to culture, literature, and linguistics *Demonstrates solid foundation of speaking skills
Reading	*No formal literacy skills	*Limited abilities in reading	*Possesses existing but still developing literacy abilities	*Demonstrates solid foundation of reading skills	*Demonstrates solid foundation of reading skills
Writing	*No formal writing skills	*Limited abilities in writing	*Possesses existing but still developing writing abilities	*Demonstrates solid foundation of writing skills	*Demonstrates solid foundation of writing skills
Grammar/Vocabulary	*No formal grammatical knowledge *Very limited vocabulary	*Limited grammatical knowledge *Limited vocabulary	*Has limited grammatical knowledge of metalanguage *Expanding range of vocabulary	*Acquiring knowledge of grammar and vocabulary-metalanguage	*Acquiring knowledge of grammar, orthography, and vocabulary

(Adapted from MacGregor-Mendoza & Moreno, 2016).

Rationale for the Content Areas of the New Placement Test

For the purposes of placement in our Spanish program, we only needed an estimate of students' skills sufficient to determine whether or not the student has crossed the threshold of knowledge between any two particular courses for which s/he might be eligible. Keeping the entry-level expectations in mind for each course, we sought to find a brief set of items that would allow us to identify when students might show enough skill to cross into a higher-level course. While a small number of items may be cause for concern for test developers regarding the potential for sampling error, we follow Ebel and Frisbie's (1986) advice noting that representative items are representative of a sample, not the entire population and that as such, "... population size does not place a *lower* limit on the size of the sample. A population of 1000 potential items can be sampled by a test of ten, 50, or 100 items" (p. 120). We attempted to mitigate the potential effects of sampling error through our development and piloting of the items. The final new placement test had a total of 17 items—two *Ser/Estar*, four Spelling, five Reading, and six Subjunctive.

Ser/Estar. Canonical uses of *ser* and *estar*, two forms of the copular verb *be*, highlight differences of SHL/SNS and L2 learners with respect to BLC and HLC (see examples 1a and 1b, below). For SHL/SNS learners, frequent early exposure to these forms renders a solid foundation of knowledge of their use by age three (e.g. Geeslin & Guijarro-Fuentes, 2006; Montrul, 2004). For L2 learners, the aspectual properties that contrast their use are not readily learned despite their frequent presence in L2 classrooms at all levels (Bruhn de Garavito & Valenzuela, 2006; Silva-Corvalán & Montanari, 2008; VanPatten, 2010). We therefore anticipate that items using these copular forms would align with SHL/SNS general linguistic knowledge at all levels and only L2 learners' knowledge at more advanced levels.

- (1) a. *Yo estoy contenta con mi nueva computadora.*
[I am (cop.: *estar*) happy with my new computer]
- b. *Nosotros somos los mejores amigos de Luis.*
[We are (cop.: *ser*) Luis' best friends.]

Spelling. By contrast, the spelling of words falls into the area of HLC for both L2 and SHL/SNS. L2 learners, whose primary exposure to words in Spanish is through literacy, the written form of words with full diacritic marks is recognizable and replicable. However, for SHL/SNS learners, many of whom have acquired their language skills primarily in oral form, identifying a standard spelling of certain words varies broadly (Fairclough, Belpoliti, & Bermejo, 2010). Additionally, SHL/SNS learners may rarely have seen particular words, even ones in their active vocabulary, in written form or may have seen accepted variations in spelling (e.g. *pozole*, *posole*, referencing a typical hominy-based stew).

Moreover, their BLC-acquired knowledge regarding the sound inventory of Spanish, combined with the sound-form mapping conventions of English, the language in which many learners have received some or all of their schooling, may interfere with SHL/SNS learners' mapping of sounds to written forms in Spanish (Meschyan & Hernández, 2006). SHL/SNS learners who have had more exposure to literacy in Spanish will possess enhanced knowledge of spelling conventions. For all SHL/SNS learners, an increase of exposure to text in Spanish will hone the

sound-form associations and enhance SHL/SNS learners' recognition of how words are spelled.

With respect to placement, the spelling accuracy of common words will generally vary less for L2 learners than for SHL/SNS learners. As such, we predicted spelling items to be moderately useful for detecting previous exposure to Spanish classes for L2 learners, but more beneficial for SHL/SNS placement since exposure to literacy can suggest greater exposure to formal, academic aspects of language study, suggesting placement in higher classes.

Subjunctive Forms. Subjunctive constructions were also selected because of their varied relationship to both BLC and HLC (Blake, 1983; Carreira & Potowski, 2011; Lynch, 1999; Pérez-Leroux, 1998). For SHL/SNS learners, research indicates that some subjunctive forms begin to emerge in children's speech as early as age three (Blake, 1983). Complete mastery of the full range of subjunctive expressions, however, takes time and may not occur until adolescence (Collentine, 2003; Pérez-Leroux, 1998). Blake (1983) posits that in SNS populations, mastery of subjunctive forms is achieved in sequential developmental increments according to their pragmatic uses or syntactic requirements. For Blake, subjunctive use in direct and indirect commands, such as those seen below in examples 2a and 2b, is acquired first. Subjunctive forms in adverbial and relative clauses that explicitly require the subjunctive, such as those seen in examples 3a and 3b, are acquired next. Adverbial clauses that can either take an indicative form when they indicate a habitual action or a subjunctive form when they refer to a specific anticipated event, seen in examples 4a and 4b, are acquired later. In comparing three generations of SHL speakers, Ocampo (1990) finds that each subsequent generation shows a diminished use of the subjunctive as compared to native speakers indicating a subtle unmooring of the semantic and pragmatic features in which their use is grounded. Nonetheless, the pattern of reduction indicates that the obligatory categories, such as those indicated by volition (such as those in 2a and 2b) were the most resistant to loss followed by obligatory adverbial clauses (such as those in 3a and 3b) with variable cases being the most vulnerable to disappear.

- (2) a. *No abras eso.*
[Don't open (subj.; you fam.) that.]
- b. *Quiere que abras eso.*
[(S/he) wants you to open (subj.; you fam.) that.]
- (3) a. *Mandamos dinero **en caso de que** lo ocupes.*
[We'll send money **in case** you need (subj.; you fam.) it.]
- b. *Iremos **a menos que** nos recomiendes que no.*
[We will go **unless** you recommend (subj.; you fam.) us not to.]
- (4) a. ***En cuanto** llegas le hablas.*
[**As soon as** you arrive (indic.; you fam.) you call her (every time).]
- b. ***En cuanto** llegues le hablas.*
[As soon as you arrive (subj.; you fam.) you'll call her (next time).]

The many uses of the subjunctive are largely elusive for English-speaking L2 learners as these forms represent a complex interface between syntactic, semantic, and pragmatic concerns for which there is little grammatical foundation in English on which L2 learners can anchor their knowledge (Collentine, 2010; Correa, 2008). The subtle phonetic and orthographic differences between subjunctive and indicative forms in Spanish, combined with the relative infrequency of the forms only adds to this complexity and diminishes L2 learners' ability to recognize appropriate uses of the subjunctive (Collentine, 2010; Pérez-Leroux, 1998; Potowski et al., 2009). As such, the uses of the subjunctive are not readily transparent and mastery of some forms by L2 learners begins to emerge around the intermediate (fourth semester) and advanced (fourth year and graduate student) stages (Gudmestad, 2006). The triggers for L2 subjunctive use in intermediate learners are not consistent (Gudmestad, 2006). With advanced learners, however, they appear to hinge on the presence of specific sentence features such that "Spanish L2 learners build a representation of mood that is different from that of native speakers, with the former adhering to syntactic, morphological, and semantic features while the latter tend to consider pragmatic features" (Collentine, 2014, p. 277).

Based on this research we estimated that mastery of a variety of pragmatically based subjunctive forms could serve as an estimator of broader aspects of overall language ability. Accuracy of basic subjunctive forms would align with SHL/SNS learners' early exposure to these linguistic features in a home environment. Accordingly, accuracy of a greater variety of subjunctive forms would point to greater mastery of more complex structures. We thus estimated that primarily advanced L2 learners, placed near or at the fourth-semester level course, would demonstrate limited use of a few subjunctive forms. Since lower-level L2 learners would have had less opportunity to learn the forms and would have a lesser foundation of knowledge regarding their pragmatic usage, we estimated that their accuracy with the forms would be somewhat sporadic. Thus, for most L2 learners we projected an overall floor effect with respect to the subjunctive items, with accuracy of even the basic items suggesting learners' placement in higher level L2 courses.

Reading. The final element included in the new placement test was an innovative, non-traditional reading task. Although reading tasks integrate a variety of linguistic skills and background knowledge in a more holistic perspective (Alderson, Figueras, & Kuijper, 2006), they are frequently poorly suited for the placement of L2 and SHL/SNS learners. Reading passages in traditional assessments often fall into an informational genre, are written in a formal, academic tone and touch on topics that may be unfamiliar to readers and are distinct from the cultural frames of literacy to which they are accustomed (Au, 1998; May, Bingham, & Pendergast, 2014). If passages happen to examine cultural features associated with speakers of Spanish they do so superficially, through their choice of topic or through the setting where the events in the reading take place and/or use of isolated elements of academic vocabulary (Gay, 2002). Tasks associated with the reading selections often call upon learners to identify the meaning of individual words or phrases or to extract specific pieces of information to which they have little prior connection (Ermis, 2008).

Given these limitations, traditional reading tasks generally favor L2 learners who have learned Spanish through engaging their academic literacy skills. SHL/SNS

learners, whose acquisition of the language occurs primarily orally and whose exposure to written forms of Spanish may be either nonexistent or inconsistent, are at a disadvantage since such activities are not only out of step with their prior knowledge of language and culture, but may also require they expend more cognitive effort at lower-level decoding skills as they read, limiting their interpretation of the overall meaning of the text they are reading, raising doubts about their language abilities. To minimize the influence of such “construct-irrelevant difficulty” (Messick, 1995) we sought to integrate a reading task that was more relevant to the literate forms to which SHL/SNS were exposed to and engaged in regularly to engage SHL/SNS learners’ culturally-bound literacy knowledge (Garth-McCullough, 2008).

Given the nature of SHL/SNS learners’ acquisition of Spanish and the unpredictability of their exposure to formal texts, we use an alternative text genre that represents a familiar form of modern-day literacy events such as those found in social media. Such a reading task was intended to provide a more authentic means of accessing the intuitive knowledge of SHL/SNS learners through writing. Although they appear in written form, social media exchanges replicate conversational dialogues and as such provide a bridge between the oral and written aspects of language. By presenting a text that represented a (re)creation of a dialogic exchange we decreased the formality and artificiality of traditional test passages and instead provided learners of all backgrounds with a format that was both familiar, but also represented a more authentic use of Spanish (See example 5).

(5) **Carlos:** Estoy muy triste. Ya es hora de regresar a casa.

Adriana: Gracias por haber visitado mi país. Espero que te haya gustado México.

Carlos: Sí. Es muy bonito. Además la gente es muy cálida.

Adriana: Y no te puedes quejar de la comida.

Carlos: Claro que no. Aquí sí se usa bien el dicho de “panza llena, corazón contento”

Adriana: ¿Qué es lo que más vas a extrañar de mi país?

Carlos: Lo que más voy a extrañar son los apapachos de tu mami. Ella es una linda persona.

Adriana: Sí. Mi madre es muy consentidora. Me tiene muy chiple.

Carlos: Lo malo es que a mí también y yo ni soy su hijo.

Adriana: Te voy a extrañar amigo.

Carlos: No es un adiós, sino un hasta luego.

Adriana: Nunca olvides que mi México lindo y mi familia siempre te esperan.

[**Carlos:** I am so sad. It’s time to head back home.

Adriana: Thanks for visiting my country. I hope you enjoyed Mexico.

Carlos: Yes. It’s beautiful. Plus, people are so warm.

Adriana: And you can’t complain about the food.

Carlos: Of course not. The saying of “full belly, jolly heart” fits here.

Adriana: What will you miss the most from my country?

Carlos: I will miss your mom fussing over me. She is a wonderful person.

Adriana: Yes. My mom pampers everyone. I am pretty spoiled by her.

Carlos: That's the bad part, she does that for me too and I am not her son.

Adriana: I am going to miss you, friend.

Carlos: It's not a goodbye, just a see you later.

Adriana: Never forget that my beautiful Mexico and my family will always be here for you.]

Because of their informal conversational style such texts require students to comprehend the reading at the discourse level rather than at the word or sentence level. The informality of the format and authenticity of the language and cultural references diminish the disadvantage SHL/SNS learners experience in traditional reading tasks and allow for a more accurate measurement of their literacy skills while still providing a sound measure of L2 learners' literacy skills in Spanish.

Data Analysis

Initial confidence in the new placement exam's ability to distinguish between learners was established during the piloting phase of the exam's development. The data in this article provide a measure of oversight regarding the new exam's outcomes and continued ability to identify and place learners in our unique program. We present here an analysis of the performance of the new placement exam based on the results compiled over several semesters of data. The responses analyzed in Tables 4 and 5 represent the accumulated results of three semesters' worth of testing; Table 6 provides a summary of the first four semesters' results. Students who were already enrolled in L2 courses took the test during the first week of classes. Additionally, students who were not currently enrolled in courses but had been independently advised to take the exam in order to determine a recommended Spanish course to take during that same time period are included.

The primary analysis for examining placement outcomes consisted of a one-way ANOVA with corresponding Tukey's HSD post hoc tests. The mean scores for both the overall test as well as the separate content areas served as dependent variables. The independent variable in the ANOVA was the L2 course in which the learner had initially enrolled at the time s/he took the test; students who had taken the test independent of a course enrollment were also included in the data set. Any duplications of students were eliminated prior to analysis.

A secondary, more informal analysis reorganized these same data around the courses into which individuals had been recommended by the exam. These reorganized results represent the outcomes of the application of the placement algorithms mentioned above. When compared with the results of the ANOVA we can observe differences in the profile of the average performance of students suited for each course.

Findings

Performance of Students Enrolled in L2 Courses

The results of the ANOVA and post hoc analyses examining the means of the test overall and the subcategories of the content items by enrolled course are presented in Table 4.

Table 4

Analysis of Performance on Test Items by Current Course Enrollment

	Total Content (17 Items)	Ser/Estar (2 Items)	Spelling (4 Items)	Reading (5 Items)	Subjunctive (6 Items)
Current Course	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)
None (N= 197)	8.62 (5.695)	1.43 (.803)	2.27 (1.384)	2.49 (2.082)	2.43 (2.188)
L2 I (N= 454)	4.21 (4.160)	0.84 (.816)	1.45 (1.266)	0.97 (1.554)	0.94 (1.496)
L2 II (N= 139)	6.56 (3.955)	1.27 (.797)	1.97 (1.142)	1.89 (1.731)	1.42 (1.579)
L2 III (N= 103)	8.82 (3.798)	1.50 (.684)	2.49 (.917)	2.80 (1.694)	2.04 (1.715)
L2 IV (N= 69)	9.88 (4.507)	1.52 (.720)	2.57 (1.144)	2.91 (1.900)	2.88 (1.967)
significance	p = .000 F(4,957) =57.22	p = .000 F(4,957)= 32.81	p = .000 F(4,957)= 30.29	p = .000 F(4,957)= 48.86	p = .000 F(4,957)= 39.57
significant post hoc tests	all but None/L2 III None/L2 IV L2 III/L2 IV	only L2 I compared with all other levels	all but None/L2 II None/L2 III None/L2 IV L2 III/L2 IV	all but None/L2 III None/L2 IV L2 III/L2 IV	all but None/L2 III None/L2 IV

The mean for the overall score as well as the scores in the subcategories followed a similar pattern. When we examine the range of scores from the known courses (L2 I to L2 IV) we see that the means all increase as the course level increases in the total content (4.21 to 9.88), *ser/estar* (0.84 - 1.52), spelling (1.45 - 2.57), reading (0.97 - 2.91) and the subjunctive (0.94 - 2.88). This observation confirmed the findings of our previous pilot tests that rising scores likely correspond to different levels of ability as indexed by course levels. In the case of individuals who took the test prior to enrolling in a course, identified as “None,” the mean does not follow a clear pattern. Instead, the means for the “None” category align most closely with the means for L2 III in all categories. This observation is consistent with a typical placement scenario, indicating that these individuals’ skills prior to placement are more likely to be wide ranging for both the test overall as well as for each subcategory of items.

It is also noteworthy to recognize that there are large differences in standard deviations that characterize each course level both in overall scores and in each subcategory. The standard deviation indicates the average number of points each individual’s score differs from the mean. Thus, for those students enrolled in L2 I, the 4.160 standard deviation for the total content means that the scores differ from the mean by an average of slightly more than 4 points, a figure that is close to the mean itself. L2 I standard deviations for reading (1.554) and subjunctive (1.496) actually exceed the means for their categories (0.97 and 0.94, respectively), indicating that students enrolled in that course vary wide score ranges in each of those categories. Similarly large standard deviations can be observed in all other courses across all content categories. In nearly all of the categories, the standard deviation is greatest among “None” learners, signaling that the true test of the new placement measure will be in adequately placing learners who possess a wide variety of skill levels who are not yet enrolled.

Overall, these findings suggest that while there are detectable differences between learners at each level, there are also large ranges of ability represented within

The data in this table are presented for the purposes of comparison only to observe the benefits of the placement measure. While Table 4 represents the performance of students on the test based on the classes in which they were enrolled, without the benefit of the placement measure, Table 5 represents these same outcomes reorganized around the courses they were recommended to enroll in by the exam parameters. In essence, this table represents the courses in which students should have enrolled had they all had the opportunity to take the placement test prior to signing up for courses.

Similar to what was observed in Table 4, the average scores for subcategories of items and for the test overall were seen to increase as course levels rose. These results were found to be consistent even within both the L2 and the SHL/SNS sequence of courses. For example, average scores for total content ranged from 1.76 to 11.61 for learners placed in L2 courses. For learners placed in SHL/SNS courses, their total content scores ranged from 6.07 to 16.12. Standard deviation scores have also gone down considerably indicating that the placement algorithms developed during the pilot phase have placed similar students in similar categories, as would be expected.

Reading. Examining the scores obtained in the reading items illustrates their value. In Table 4 the average reading scores ranged from 0.97 to 2.91 with standard deviations ranging from 1.554 to 2.082, again, showing low, but widely ranging average scores within each course level. After placement, indicated in Table 5, the reading items for L2 learners demonstrated averages ranging from 0.16 to 3.97 with standard deviations from 0.462 to 1.205; the lowest standard deviation was found at the beginning L2 course while greater variation was found in higher level L2 courses. This finding suggests a floor effect for beginning L2 learners, but that as learners had more experience with the language, they varied in their ability to understand the cultural and linguistic nuances of the discourse.

With respect to SHL/SNS learners, the average scores for the reading items ranged from 1.69 to 4.83 and standard deviations ranged from 0.408 to 1.437. However, a larger standard deviation, indicating a wider range of reading abilities, was seen at the beginning SHL/SNS level; the standard deviation narrowed among students in more advanced courses. Thus, even beginning level SHL/SNS learners were able to extract meaning from the discourse to a greater extent than were beginning level L2 learners. Beginning level SHL/SNS learners were more widely varied in this ability, which reflects these students' variability in exposure to Spanish in written form. As language ability increased, SHL/SNS showed less variety in their ability to apply their linguistic knowledge to a written text. Overall, extracting the scores of SHL/SNS learners from the overall L2 course results placed SHL/SNS learners' literacy skills in greater relief and illustrated that integrating an innovative reading, imbued with authentic cultural and linguistic information shows promise for placement measures.

Subjunctive Forms. Subjunctive items also played a role in illustrating differences between SHL/SNS and L2 learners and levels of ability, though more so for SHL/SNS groups. L2 learners' average scores on the six subjunctive items ranged from 0.25 at the beginning L2 I course to a high of 2.86 at the Grammar course stage, which would be the first course after the basic four-course sequence. Average scores at the intervening course levels are statistically tied. With respect to SHL/SNS learn-

ers, accuracy on subjunctive items at the lowest level, SHL I & II (1.12), mirrored that of the L2 learners. However, at all subsequent levels average scores on the subjunctive exceeded even the highest L2 score, ranging from 3.11 to 5.68. Although not evident at the beginning SHL/SNS level where we would still expect a greater level of accuracy than that displayed by L2 learners at the same level, the degree of exposure to a variety of subjunctive forms in a home environment appears to influence SHL/SNS learners' outcomes on these items.

As noted with the reading items, the range of standard deviations for subjunctive items has reduced from those observed in Table 4 prior to the disaggregation of the scores of the two groups of students. It is again interesting to note that for L2 learners, the standard deviations increase as course level rises, reflecting more variety in skill as course level rises and exposure to more sophisticated features of the language increases. The standard deviations hold steady for all levels of SHL/SNS learners until they narrow at the level of grammar. These results indicate that collectively, even as SHL/SNS learners display increased accuracy across course levels, they also are more cohesive at each level than are L2 learners.

While we have yet to objectively confirm the appropriateness of the placement outcomes, author Moreno conducts regular informal checks with her teaching assistants in SHL/SNS courses to ensure that students in the courses, whether placed through the recommendation of the placement exam or enrolled by other means, reflect the range of skills expected in each course. These anecdotal reports have not revealed distinctions related to the placement exam, suggesting a good fit between the exam recommendations and the course expectations.

As an additional informal check, we summarized the overall distribution of placement recommendations to ensure that all courses were represented in the recommendations generated by the exam. By four semesters after beginning the implementation of the new placement exam a total of 1,218 unduplicated student records had been accumulated, representing the data from the first three semesters (analyzed above) plus one additional semester's submissions. The information, presented in Table 6, compares the L2 courses in which students were originally enrolled at the time they took the placement measure with the course recommendations made by the placement test. While we cannot make claims of accuracy of placement based solely on the distribution of recommendations, we can state that learners at all levels of L2 enrollment (again where SHL/SNS learners are more likely to be misplaced), as well as those yet to enroll in a course received a variety of recommendations, both with regard to track (L2 & SHL/SNS) and course level. This fact represents a marked improvement over our previous placement measure which failed to identify all but advanced SHL/SNS learners (MacGregor-Mendoza, 2012). Our next steps in continuing to monitor our placement exam entail examining the student performance and satisfaction post-placement, recalculating the item analysis statistics to ensure that they still fall within expected parameters of item difficulty, discrimination and reliability, and creating a more robust set of items to ensure the integrity of the measure.

Table 6

Distribution of Placement Recommendations

	Recommended Enrollments based on Placement Test Outcomes									Total
	L2 I	L2 II	L2 III	L2 IV	L2 Gr/Cmp	SHL I&II	SHL III	SHL IV	SHL Gr/Cmp	
Current Enrollment										
None	59	17	5	8	45	17	3	10	25	189
L2 I	296	49	21	12	19	104	12	10	20	543
L2 II	68	37	22	10	22	33	5	3	11	211
L2 III	21	24	9	14	30	28	14	9	11	160
L2 IV	12	14	4	10	39	12	4	4	16	115
Total	456	141	61	54	155	194	38	36	83	1218

Limitations and Directions for Future Research

While we have only begun to examine the performance of our new placement measure, we acknowledge that there are nonetheless, limitations in the current study that provide avenues for further research. First, given that students enroll in courses for a number of reasons (e.g. formal or informal advising, scheduling concerns, guessing, etc.) we need to independently confirm that placement recommendations result in courses that are a good fit for students, and ideally, a better fit than other methods. That is, are students who have been recommended for enrollment in particular courses by means of taking the placement test better suited for those courses than when they place themselves in a course by other means? While the small scale of the application of the test (our students at our institution) does not warrant developing a formal predictive analysis model, an evaluation of periodic formative assessment tasks, instructor and student surveys and/or qualitative interviews of students enrolled in different courses could provide insight toward this end.

Second, although we believe we have begun to tap into areas that may correspond to BLC and HLC, these areas could be further explored by increasing the variety and type of areas examined. In particular, listening tasks, some representing authentic conversations and others representing more formal discourse as well as writing tasks, could aid in further discerning linguistic abilities in areas that we have not yet explored. Similarly, a formal reading task, in addition to the innovative reading task may aid in identifying both SHL/SNS and L2 learners who have acquired more formal literacy skills and allow for greater precision in placement at higher levels.

Lastly, test items are not imbued with the quality of timelessness; they need to be monitored and adjusted to the changing characteristics of our student population and the needs of our program. We will continue to develop and introduce new items, based on relevant research, that assist us in our ongoing endeavor to appropriately place SHL/SNS and L2 learners in our courses.

Conclusion

The challenge of a language placement test, particularly when undertaken with a population of learners of SHL/SNS and L2 backgrounds, is to effectively and efficiently discern between different types and levels of learners. While conceptually simple, it is a task that requires a conscientious attention to the linguistic skills to be examined as well as a consideration of the characteristics of the population of learners and the program into which learners will be placed and may take several iterations of testing and analysis. The best way of providing this efficient means of placing students within a program is by developing a placement instrument in-house applying the principles of test design and analysis, selecting items according to research on acquisition of both L2 and SHL/SNS populations and keeping in mind the characteristics of both the students and the program (MacGregor-Mendoza, 2012).

It is also critical to continually monitor the viability of the items as an effective means for placing our population of students within our curriculum. The previous placement test, which did not have that oversight in place, was found not to be up to the task for which it had been employed for decades (MacGregor-Mendoza, 2012). While the pilot testing of the items conducted prior to the launch of the new test as a placement measure pointed to the promise of the items, the results of our analyses here indicate that the items, with the assistance of sociodemographic information, can be useful in making distinctions between both learner types and levels of ability. We further demonstrate that it is possible to identify different learner types and different levels of mastery without the need for an extensive, comprehensive profile of skills in a multitude of areas.

Moreover, the disaggregation of the L2 and SHL/SNS learner data highlights different performance levels for each type of learner. While we cannot claim that findings support Hulstijn (2011) and Zyzik (2016) in their assertions of differential cognitive processing based on learner type, we continue to find the concepts of BLC and HLC useful in creating items that better respond to the different ways in which language is organized from a cognitive point of view, particularly when that perspective aligns with previous research (e.g. Montrul, Foote, & Perpiñán, 2008; Montrul & Perpiñán, 2011; Montrul & Potowski, 2007; Potowski et al., 2009).

We particularly find the contributions of the innovative reading task and the subjunctive items promising in our placement efforts. The reading passage format is familiar and less intimidating than a traditional, more formal reading (Williams, 2005). While the format is equally familiar for L2 learners, their interpretation of the conversational style of Spanish used in its expression offers a way to measure language ability in less prescribed fashion. For both types of learners, the challenge lies in moving away from surface level decoding of passages and toward a broader interpretation at the discourse level.

Similarly, the subjunctive items allowed SHL/SNS learners' pragmatic knowledge about Spanish to shine through. Consistent with Lynch's (1999) and Blake's (1983) theories regarding acquisition of subjunctive forms, learners' responses to the diverse types of subjunctives in the items demonstrated differences in ability that corresponded not only to level but also to learner type. L2 learners, given their limited exposure to and understanding of the forms, demonstrated little mastery of

them, even in advanced levels. By contrast, except for the lowest level of SHL/SNS learners, these learners recognized the appropriate forms to be used in context far more readily than L2 learners.

Overall, the increased presence of Latinos in Spanish classes requires that placement efforts shift from a prescriptive L2 or “foreign” language perspective to one that reflects the linguistic and cultural knowledge that is found within U.S. SHL/SNS communities. Accomplishing such a task requires an investment on the part of faculty and an attention to the research on the different ways that SHL/SNS and L2 learners process linguistic information. Nonetheless, such an objective is not beyond the reach of institutions, and it is a worthwhile endeavor to ensure that learners’ and programmatic needs are being effectively met.

References

- Alderson, J. C., Figueras, N., & Kuijper, K. (2006). Analysing tests of reading and listening in relation to the Common European Framework of Reference: The Experience of the Dutch CEFR Construct Project. *Language Assessment Quarterly*, 3(1), 3-30.
- Au, K. H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research*, 30(2), 297-319.
- Belpoliti, F. (2015). Moving forward: Revisiting the Spanish for High Beginners course. *EuroAmerican Journal of Applied Linguistics and Languages*, 2(1), 1-19.
- Blake, R. (1983). Mood selection among Spanish-speaking children, ages 4 to 12. *The Bilingual Review/La revista bilingüe*, 10, 21-32.
- Bruhn de Garavito, J., & Valenzuela, E. (2006). The status of *ser* and *estar* in late and early bilingual L2 Spanish. In C. A. Klee & T. L. Face (Eds.), *Selected Proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages* (pp. 100-109). Somerville, MA: Cascadilla Proceedings Project.
- Carreira, M., & Potowski, K. (2011). Commentary: Pedagogical implications of experimental SNS research. *Heritage Language Journal*, 8(1), 134-151.
- Collentine, J. (2003). Acquisition of subjunctive. In B. A. Lafford & Salaberry, R. (Eds.) *Spanish second language acquisition: State of the science* (pp. 74-97). Washington, D.C.: Georgetown University Press.
- Collentine, J. (2010). The Acquisition and teaching of the Spanish subjunctive: An update on current findings. *Hispania* 93(1), 39-51.
- Collentine, J. (2014). Subjunctive in second language Spanish. In K. Geeslin (Ed.), *The handbook of Spanish second language acquisition* (pp. 270-286). Hoboken, NJ: John Wiley & Sons.
- Correa, M. (2008). Metalinguistic knowledge and the acquisition of Spanish subjunctive by learners at three proficiency levels. (Unpublished doctoral dissertation). The University of Arizona, Tucson, AZ.
- Ebel, R. L., & Frisbie, D. A. (1986). *Essentials of educational measurement*. Englewood Cliffs, NJ: Prentice Hall.

- Ermis, S. (2008). Using graphic organizers to facilitate elementary students' comprehension of informational text. In M. M. Foote, F. Falk-Ross, S. Szabo, & M. B. Sampson (Eds.), *Navigating the literacy waters: Research, praxis and advocacy* (pp. 87-102). Commerce, TX: The College Reading Association.
- Fairclough, M. (2012). A working model for assessing Spanish heritage language learners' language proficiency through a placement exam. *Heritage Language Journal* 9(1), 121-138.
- Fairclough, M. A., Belpoliti, F., & Bermejo, E. (2010). Developing an electronic placement examination for heritage learners of Spanish: Challenges and payoffs. *Hispania*, 93(2), 273-91.
- Garth-McCullough, R. (2008). Untapped cultural support: The influence of culturally bound prior knowledge on comprehension performance. *Reading Horizons* 49(1), 1-30.
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53(2), 106-116.
- Gramlich, J. (2017). Hispanic dropout rate hits new low, college enrollment at new high. Washington, D.C.: Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/09/29/hispanic-dropout-rate-hits-new-low-college-enrollment-at-new-high>
- Geeslin, K. L., & Guijarro-Fuentes, P. (2006). A longitudinal study of copula choice: Following development in variable structures. In N. Sagarra & A. J. Toribio (Eds.) *Selected proceedings of the 9th Hispanic Linguistics Symposium* (pp. 144-56). Somerville, MA: Cascadilla Proceedings Project.
- Gudmestad, A. (2006). L2 variation and the Spanish subjunctive: Linguistic features predicting mood selection. In C. A. Klee & T. Face (Eds.), *Selected Proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages* (pp. 170-184). Somerville, MA: Cascadilla Proceedings Project.
- Hulstijn, J. H. (2011). Language proficiency in native and nonnative speakers: An agenda for research and suggestions for second-language assessment. *Language Assessment Quarterly*, 8(3), 229-249.
- Krogstad, J. M., & Fry, R. (2014). Dept. of Ed. projects public schools will be "majority-minority" this fall. Washington, D.C.: Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2014/08/18/u-s-public-schools-expected-to-be-majority-minority-starting-this-fall/>
- Lynch, A. (1999). The subjunctive in Miami Cuban Spanish: Bilingualism, contact, and language variability. (Unpublished doctoral dissertation). University of Minnesota, Minneapolis, MN.
- MacGregor-Mendoza, P. (2012). Spanish as a heritage language assessment: Successes, failures, lessons learned. *Heritage Language Journal*, 9(1), 1-26.
- MacGregor-Mendoza, P., & Moreno, G. (2015). *Spanish language assessment: The development of items for an improved SHL/SNS placement measure*. Paper presented at the 25th Conference on Spanish in the U.S., New York, NY.
- May, L. A., Bingham, G. E., & Pendergast, M. L. (2014). Culturally and linguistically relevant read alouds. *Multicultural Perspectives*, 16(4), 210-218.

- Meschyan, G., & Hernandez, A. E. (2006). Impact of language proficiency and orthographic transparency on bilingual word reading: An fMRI investigation. *Neuro-Image*, 29(4), 1135-1140.
- Messick, S. (1995). Validity of psychological assessment. *American Psychologist*, 50(9), 741-749.
- Montrul, S. (2004). Subject and object expression in Spanish heritage speakers: A case of morpho-syntactic convergence. *Bilingualism: Language and Cognition*, 7, 125-42.
- Montrul, S., & Bowles, M. (2010). Is grammar instruction beneficial for heritage language learners? Dative case marking in Spanish. *Heritage Language Journal*, 7(1), 47-73.
- Montrul, S., Foote, R., & Perpiñán, S. (2008). Gender agreement in L2 learners and Spanish heritage speakers: The effects of age and context of acquisition. *Language Learning*, 58(3), 50--553.
- Montrul, S., & Perpiñán, S. (2011). Assessing differences and similarities between instructed L2 learners and heritage language learners in their knowledge of Spanish tense-aspect and mood (TAM) Morphology. *Heritage Language Journal*, 8(1), 90-133.
- Montrul, S., & Potowski, K. (2007). Command of gender agreement in school-age Spanish bilingual children. *International Journal of Bilingualism*, 11(3), 301-328.
- New Mexico State University Office of Institutional Analysis. (n.d.) 2018 Quick Facts. Las Cruces, NM: Author. Retrieved from <https://oia.nmsu.edu/files/2019/01/2018-Quick-Facts-Final.pdf>
- Ocampo, F. (1990). El subjuntivo en tres generaciones de hablantes bilingües. In J. Bergen (Ed.), *Spanish in the United States: Sociolinguistic issues* (pp. 39-48). Washington DC: Georgetown University Press.
- Pérez-Leroux, A. T. (1998). The Acquisition of mood selection in Spanish relative clauses. *Journal of Child Language*, 25(3), 585-604.
- Potowski, K., Jegerski, J., & Morgan-Short, K. (2009). The Effects of instruction on linguistic development in Spanish heritage language speakers. *Language Learning*, 59(3), 537-79.
- Potowski, K., Parada, M., & Morgan-Short, K. (2012). Developing an online placement exam for Spanish heritage speakers and L2 students. *Heritage Language Journal*, 9(1), 51-76.
- Silva-Corvalán, C., & Montanari, S. (2008). The acquisition of *ser*, *estar* (and *be*) by a Spanish-English bilingual child: The early stages. *Bilingualism: Language and Cognition*, 11, 341-60.
- Valdés, G. (2001). Heritage language students: Profiles and possibilities. In J. Kreeft Peyton, D. Ranard & S. McGinnis (Eds.), *Heritage languages in America: Preserving a national resource* (pp. 37-77). McHenry, IL: Delta Systems, Inc.
- VanPatten, B. (2010). Some verbs are more perfect than others why learners have difficulty with *ser* and *estar* and what it means for instruction. *Hispania*, 93(1), 29-38.
- Vergara Wilson, D. (2012). Developing a placement exam for Spanish heritage language learners: Item analysis and learner characteristics. *Heritage Language Journal* 9(1), 27-50.

- Williams, B. T. (2005). Leading double lives: Literacy and technology in and out of school. *Journal of Adolescent & Adult Literacy*, 48(8), 702-706.
- Zyzik, E. (2016). Toward a prototype model of the heritage language learner: Understanding strengths and needs. In M. Fairclough & S. M. Beaudrie (Eds.), *Innovative strategies for heritage language teaching: A practical guide for the classroom* (pp.19-38). Washington, D.C.: Georgetown University Press.