

The Transitioning English Language Learners (TELLs) study: situating TELL in mathematics in the USA

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The education of English language learners (ELL) who transition from advanced English as a second language (ESL) classes into adult Second Education (ASE), General Education Diploma (GED), or adult basic education (ABE) classes is of major concern in the United States today as the need for ESL intensify amidst global economic and workforce challenges. To address this concern, in 2008, the US department of Education funded the Transitioning English Language Learner (TELL) Project to lay the foundation for future works designed to enhance the quality of services that support ELL transition to secondary education credential and ultimately to college. The TELL project aims to examine and describe policies and instructional and programmatic strategies that support advanced adult ELLs continued development of English proficiency, including cognitive academic language proficiency in order to successfully transfer into ABE or ASE, complete a high school equivalency program, and become prepared for postsecondary education and the 21st century workplace.

The project is only in its first year, but preliminary collection of extant data suggests a critical need for programmatic and instructional systems that will enhance educational practices in numeracy for transitioning English language learners. The purpose of this article is to report on the TELL research project, describe the state of literature in the US relative to educational practices in numeracy with TELLs, and to prompt discussions about promising practices with similar students in other countries.

Introduction

Of all industrialized nations, the United States (U.S.) has the fifth-highest percentage of foreign-born individuals in its adult population (Wedgeworth, 2004), and research estimates that “at least 40 percent, and perhaps as much as 52 percent, of the net growth in the U.S. resident population during the decade of the 1990s was due to new foreign immigration” (Sum Kirsch, & Taggart, 2002, p. 29). The vast majority of these immigrants have arrived from non-English speaking countries, and many face the dual challenge of having limited formal schooling and limited English skills.

The large-scale expansion of the language minority population in the U.S. has implications for the schooling of language minorities, especially adults who are expected to make contributions to the US workforce. “Given immigrants’ growing

share of our nation’s citizens, workers, and families, promoting their acquisition of English is arguably the most important integration challenge - and opportunity - facing our city, state, and federal governments” (McHugh, Gelatt, & Fix, 2007, p. 3). This population is characterized primarily by its *diversity* of culture, native language, formal schooling, background knowledge, and experience.

Amidst this growing need for English as a Second Language (ESL)¹ and English literacy and language skills, little is known about the nature of effective transitioning approaches to move students from ESL to adult basic education (ABE) or adult secondary education (ASE) programs, which serve as gateways to community colleges and other training programs and to improvement in economic status. Even less is known about the numeracy practices of Transitioning English Language Learners (henceforth referred to as TELLs), and about the mathematical literacy practices that would propel them towards upward academic mobility. This lack of knowledge is reflected in the inadequate literature base related to ELLs, including limited systematic information about the diverse characteristics of students who transition from ESL to ABE or ASE.

For the most part, current literature on the transition of ELLs to ABE or ASE is fragmented, exploratory in nature, and based on local practice, with little rigorous qualitative or quantitative research to identify effective transition practices in adult ESL programs. To a great extent, the field of adult ESL depends on either the public school or the higher education literature corpus to support practices. In fact, practices from those arenas are transferred easily into adult ESL, due to the part-time nature of the adult ESL teaching field, and the fact that many of the adult ESL teachers come from the K-12 and college arenas.

This issue, plus the paucity of research potentially restricts knowledge of transition trends — crucial information that can inform effective transition practices that fosters adequate teacher training, student advancement, and lifelong learning. To fully understand the whole issue, the US Department of Education sponsored a two year descriptive study (The Transitioning English Language Learners study) to examine and describe policies, and instructional and programmatic strategies that support advanced adult English language learners (ELLs) continued development. This paper describes the characteristics of TELLs, including a description of students transitioning from ESL to ABE and GED classes, then provides a description of the TELL study, including findings regarding mathematics and TELLs.

TELL Characteristics

While commonalities exist between ELLs who have advanced to pre-GED levels and their U.S.-born counterparts, the differences between them and ABE learners are significant and must be taken into account in considering TELL models. The unique characteristics of ELLs transitioning to GED and ABE programs also have implications for teaching and professional development and include diverse educational and cultural backgrounds and associated barriers (sociological, educational, personal, etc.) that impact students’ readiness and capacity to learn English and transition to higher levels.

¹ Please note that this term is used often interchangeably with “English Language Learners (ELL)”, although “ESL” tends to refer more to the name of the program or class.

Diverse Education Levels. Adult ELLs have a wider range of educational backgrounds than ABE learners, many of whom do not have a high-school diploma. In fact, educational backgrounds among all foreign-born individuals show a bimodal distribution: one-third lack a high school education, a proportion twice as large as among native-born adults. Educational needs are even greater for immigrants from Mexico, two thirds of whom have not completed high school (Wrigley et al., 2003; Schmidley, 2001). This disparity in education levels suggests that there are two types of ELLs: (1) *students with higher levels of education who exit ESL with goals such as taking the GED tests and moving into postsecondary education*, and (2) *students who need to enter ABE from ESL to fill educational gaps and build their literacy skills before they are ready for ASE*.

Varied English Proficiency. Although most ESL program participants are foreign-born, there is another type of student that may benefit from ESL transitioning: students who were born in the United States, but have not acquired full proficiency in English. Many such students live in Texas and California. Both the oral language and writing of these students may show traces of non-native language transfer,² and learners may still have difficulties creating the kind of writing expected in college. Their profiles are similar in many ways to those of ABE students whose reading and writing skills leave them underprepared to be successful in postsecondary education and training.

Another group of students, also concentrated in Texas and California, are known as Generation 1.5 (Crandall & Sheppard, 2004; Thonus, 2003). These students may have been born in the United States, or may have come to the U.S. as young children, but have grown up in households where a language other than English is spoken (Sadler, 2004). Generation 1.5 students share characteristics of both first and second-generation immigrants. They fit neither the traditional profile of academically underprepared ABE students, who grew up speaking English, nor that of foreign-born immigrant students who acquire English language skills and want to improve their literacy. The insights gained by teachers working with these students might help inform adult literacy programs regarding the support that TELLs need.

Differences in English Language Levels. One of the things that distinguish ELLs from native speakers of English who have literacy challenges is the fact that ELLs need *both* language development and literacy development. TELLs, then, may still need vocabulary development and need to build an awareness of the structure and meaning of sentences likely to appear writing but seldom heard in conversational language. Consequently, TELL models need to be sensitive to the need to continue teaching English vocabulary and structure.

Differences in Writing Systems. TELLs who have English speaking skills and transition into ABE may also have difficulty learning the English writing system — particularly those whose home languages involve different writing systems. If these students come from a logographic³ system that uses characters (such as Chinese), they may need to become familiar with the alphabetic system, including decoding

² Sometimes called language interference or language integration.

³ This involves graphemes (e.g., alphabetic letters, Chinese characters, numerals, punctuation) that represent words or morphemes.

information in this system. For these students, acquisition of skills associated with “alphabets” may be significantly slower, especially among older learners.

Students Transitioning into ABE and GED Classes

The significant differences among low-literate and high-literate ELLs and ABE students tend to level off over time. As ELLs advance in their language skills their profile begins to look similar to ABE students who grew up speaking English. Nonetheless, there are still likely to be marked differences in vocabulary, cultural background knowledge, use of sentence structure, and ways of approaching texts and decoding strategies (Strucker & Davidson, 2003). TELLs may experience difficulties attributable to language transfer from the first language, insufficient exposure to more sophisticated language structures, and lack of practice in more cognitively demanding academic forms of English. There are cultural differences as well. TELLs need to develop socio-cultural skills and cultural adjustment strategies (appropriate things to say and do in various circumstances, Hector-Mason, 2004) and “strategic competence” — the ability to deal with language that is only partially understood.

Rance-Roney (1995) has described the instructional implications that result from these student differences. She describes an academic instructional approach for TELLs where instruction must focus more on vocabulary, especially less frequently used words; use more content-focused readings on academic subjects; include reading that is either context-reduced or context-embedded; and stress writing because ELL writing often still shows influences of native language structure and vocabulary.

The critical differences between ABE students and TELLs suggest that two types of transition models are needed to help students improve their reading and writing skills in English and build enough English literacy capacity to succeed in postsecondary education. One model (ESL to GED) may be appropriate for students with higher levels of education who have goals such as taking the GED tests and moving into postsecondary education and another model (ESL to ABE) may be appropriate for students who need ABE to fill educational gaps and build literacy (reading and writing skills). These latter students need additional assistance as they transition to ASE or taking the GED tests. However, the literature and most program models related to TELL do not make this critical distinction and focus on the former model, overlooking the potential need for corresponding programmatic variations to meet student needs. Ignoring this difference means that many potential TELLs are poorly served and will be unable to transition successfully.

Study Background and Description

The Transitioning English Language Learners (TELLs) Study is a qualitative, descriptive study sponsored by the United States Department of Education’s Office of Vocational and Adult Education. The purpose of the study is to describe the instructional and programmatic practices that support the transition of intermediate and advanced English Language Learners (ELLs) who are transitioning into adult basic education (ABE), adult secondary education (ASE), or General Education Diploma (GED) or other non-English classes and programs in the adult education system. The study was launched in response to the a huge paucity of research in the field of adult education, and the growing lack of understanding about which practices best support advanced ELLs.

To best understand the issues related to TELLs, it was important to first conduct a critical review of the literature to identify areas of needs and gaps.⁴ In addition, it was important to conduct a qualitative study that would provide the best opportunities for exploration, as well as provide the field with the most descriptive data about practices with this population.

Program Selection Criteria: Selection of programs included a review of data received from 180 programs, which were screened based on three fundamental principles, as well as criteria developed by Subject Matter Experts (SMEs):

1. **Data** – Programs needed to show that they systematically collected data or information about Learners (e.g., entry & exit; Learner transition numbers; Learner outcomes & gains; Learner Characteristics; and Learner persistence)
2. **Mechanisms** – Programs needed to show that their programmatic structures were part of a coherent set of systems designed to support student transition (Program Design, Administration and Policy; Professional development and training; Intake-Exit Coordination; Support systems/Collaborations)
3. **Strategies** – Programs needed to show that they had coherent plans and policies for supporting student transition (e.g., Instructional Strategies Curriculum and Instruction; Assessment and program evaluation)

Transition Processes: A systematic examination of the preliminary selection data revealed information that supported the selection process in terms of the types of sites to include in the study. For example, two emergent transition processes were identified: (1) Distinct and (2) Indistinct. Programs were labeled distinct if they had well defined transition class (or set of classes) that is physically situated and that is instructionally and programmatically designed for the purposes of preparing distinct ELL cohorts for ABE, ASE, or GED classes. Indistinct programs were those programs that had no defined transition class or program, but had varied programmatic and instructional practices said to promote student transition.

Transition Program Types: In addition, amongst these two types of programs, two types of transition processes emerged: (1) Full/ Comprehensive Programming and (2) Partial/Targeted Programming. In programs with Full/Comprehensive Programming, all transition activities were internal, and movement of students from ESL to ABE/GED/ASE occurred in one location/program. In contrast, programs with Partial/Targeted Programming had both internal and external activities in which student transition from ESL to ABE/GED/ASE occurred in two or more programs. For example, student destination points from ESL were external to the place where they learned ESL.

Site Selection and Data Collection: Ten programs in 9 states were identified for inclusion in the study based on criteria. Collection of data included interviews with teachers, students, program directors and other administrative staff, as well as program artifacts such as forms, reports, and applications. The study was conducted in two

⁴The TELL Critical Annotated Bibliography (Hector-Mason, et al, 2008) was developed, which informed the remainder of the research.

phases with data collection and analysis in the first four programs informing the conduct of the research with the remaining six programs.

Preliminary Results about Mathematical Practices with TELLs

Preliminary findings from an analysis of the first of four programs revealed that mathematics is of secondary concern to the TELL teachers and program administrators in the study. Numeracy skills are not a priority and hardly any ELL teachers taught mathematics to transitioning ELLs, even in the context of learning English. Generally, students were not offered real opportunities to learn mathematics or develop numeracy skills until they transitioned out of English language classes. In some limited situations, mathematics was offered to students who were dually enrolled in both English and non-English programs, but mathematics in these situations was provided in student's native language.

In instances where students are introduced to mathematics in the ESL class, the instruction remains limited to life skills (e.g., money, shopping). For the most part, mathematics instruction is driven by General Educational Development (GED) tests, which help credential students for entry into post-secondary education. In these cases, mathematics tests include basic algebra and geometry, and the format is mostly word problems, which require literacy skills. Students' limited native language or English literacy skills complicate matters further, making it hard for teachers to determine if a student's lack of understanding is a result of limited mathematics, language or literacy skills.

A general limitation in the field of adult education in the United States is in the area of teacher training and professional development. The study showed that many teachers received no professional development in how to teach mathematics to ELLs even though they believe mathematics is an important skill for student advancement into postsecondary education. In fact, many teachers still need professional development in how to teach language skills such as reading and writing to ELLs, and teacher training in these areas seem to be the priority at the moment.

These findings are not surprising, because the notion of numeracy or mathematical literacy hasn't received much attention in the United States. In terms of mathematical knowledge, the situation looks very discouraging. Until fairly recently with the adult numeracy project sponsored by the US Department of Education (Condelli, et al, 2006), mathematical literacy was a relatively tangential adult education topic. It is not surprising, then, that today, the importance of mathematical literacy to the success of English language learners appears to be a peripheral concern left up to the discretion of ELL teachers.

Discussion and Conclusion

Today, in the United States, there is an increase in immigration in states that are unaccustomed to immigrants, such as the rural South and the Midwest parts of the country. Many of these states experience a large influx of immigrants from a wider diversity of countries such as Mexico, Latin America, Asia, Africa, and the Middle East. Many immigrants from these countries come with little education and low literacy skills, and many have limited English proficiency. To some extent, the rapidly aging US population makes the economy dependent on immigrants and their families. Because

the US is a literate society, literacy, including mathematical literacy, will enable many immigrants to have fuller, more productive lives and improved standards of living.

Population data from the US Department of Education highlight the diversity of the ELL population in the United States, showing that more than 40 percent of the 2.6 million students in federally funded adult education program are ESL learners (ED, 2004). Many of these students have diverse characteristics and 40% of them are in the lowest literacy functioning levels, (National Reporting System for Adult Education, 2006). The ELLs with higher education levels have varying English language skills and mathematics backgrounds; those with low literacy skills usually have low English language skills and little to no mathematics skills. Furthermore, even Generation 1.5 students, who are born in the US or came to the US as children and have grown up in households where a language other than English is spoken, have shown low abilities in literacy and mathematics skills.

This shows that there is a need, not only for literacy skills in general, but mathematical literacy skills to help students transition and succeed in non-English courses and post-secondary education. The diversity of students in the adult education system requires that transition programs focus on different instructional opportunities in both language and mathematics to help students succeed after they transition from ESL classes. This is true, because students who need ABE to fill educational gaps and build capacity in reading and writing also need help in mathematics, which is a key prerequisite for success in post-secondary education.

The preliminary findings from the TELL study suggest that more mathematics needs to be infused into ESL instruction at all levels; programs need to include consideration of approaches to mathematics from different cultures and adult experiences (ethnomathematics); TELL programs might benefit from a more learner-centered approach that transitions students to educational success; and finally, that there is a need for more teacher training and professional development that will help students reduce the learning deficits in reading, writing, and mathematics.

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