# English language learners with low native language literacy: A profile and an intervention in NYC

## Introduction

This paper reports on a subgroup of English language learners (ELLs) in the New York City public school system, commonly known as SIFE, Students with Interrupted Formal Education. Today, SIFE are defined by the NY State Education Department (NYSED) as newcomer students

- whose home language is not English,
- who did not attend school in their home country for at least two years, prior to coming to the US,
- who are at least 2 years below expected grade level in reading and math (in English)
- who show very limited literacy in their home language

Part of this definition comes from the study we report here, originally conducted for the New York City (NYC) Office of English Language Learners (OELL) between 2004 and 2008, as part of an ongoing research effort to identify and develop best practices for this group of students. Even when given similar curricular instruction, SIFE typically lag far behind other ELLs in content area knowledge and L2 English language development and are considered one of the most at-risk populations in the public school system (Policy Report from Advocates for Children of New York (AFC), 2010). While SIFE come into NYC schools at all grade levels, by far the most critical age group are the 14-to 20-year-olds, whose placement in high school is based on age, rather than academic ability. In fact, it has been reported that ELLs comprise one quarter of high school dropouts across the US, while the SIFE dropout rate is anecdotally even higher (DeCapua et al., 2010).

Prior to this study, incoming ELL students were classified as SIFE only via informal methods. This typically consisted of a form filled out by the parent/guardian of the student upon entry to the schools, containing questions about home language and educational history; and an ad-hoc writing sample in the home language, also taken upon entry. While this rudimentary method was sufficient to indicate whether a student had writing problems in the native language, it was far from adequate as a diagnostic tool to pinpoint students' level of acquired literacy. Foundational skills built up in the native language are a significant predictor of academic success in any subsequently learned language (e.g. Cummins, 1981). Our primary objectives were thus a) to identify which, if any, language and academic skills were lacking in SIFE, distinguishing them from their regular ELL peers; and b) develop an intervention program that would bolster SIFE chances of academic success.

This paper is organized as follows: In Part I we describe the original research leading to the SIFE profile, the identification of SIFE academic strengths and weaknesses and the recommendations made to accelerate SIFE academic development. In Part II we describe the development and implementation of a curricular high school program, Bridges to Academic Success, designed to meet the specific needs of SIFE.

## Part I: SIFE Identification Research

We report the results of one of a series of SIFE studies conducted by RISLUS, <sup>1</sup> a longitudinal study of 98 students from five NYC high schools, placed in the 9<sup>th</sup> and 10<sup>th</sup> grade at the time, whose native or home language was Spanish.

## **Research Questions**

Our research questions were:

- What are the characteristics of SIFE that distinguish them from regular ELLs?
- What competencies do they bring when they enter US schools?
- What are their academic needs?

Our approach was to zero in on fairly recent arrivals at the most vulnerable grade level, namely 9<sup>th</sup> and 10<sup>th</sup> grade (AFC report, 2010). We included only those who, at the beginning of the study, had not been in the country for more than one year. We also first focused on their abilities in the native language, Spanish, to assess what linguistic resources they bring with them. Below is a list of the instruments administered at the beginning of the study, followed by a more detailed description.

- 1. A questionnaire
- 2. A listening comprehension test evaluating typical development of complex sentence structure, (RISLUS Syntax test)
- 3. A commercially developed oral/aural proficiency test, the Versant (Pearson).
- 4. An diagnostic test of academic literacy skills in the native language (Academic Language and Literacy Diagnostic or ALLD)

## 1. Questionnaire

The purpose of this instrument was to obtain information on familial and educational background, including language and literacy practices at home. Questions included personal information about themselves (e.g. age, provenance), their parents/guardians (e.g. years of education, profession), whether they had attended school primarily in an urban or rural environment, how much, if any, English they heard or spoke in the home, and what their goals and aspirations were.

2. Assessments of oral/aural language and typical development:

#### a. Versant

An oral language proficiency in both Spanish and English, the Versant is a standardized and automated test of comprehension and production. Participants are tested individually over the phone for a period of ten minutes on sentence mastery, vocabulary, fluency and pronunciation.

## b. Syntax test

The syntax test, developed by RISLUS, measures typical development of syntactic

<sup>&</sup>lt;sup>1</sup> RISLUS refers to the Research Institute for the Study of Language in Urban Society at the Graduate Center of the City University of New York.

comprehension and is based on sentence types that are benchmarks of normal child language development. The purpose of giving this instrument in the native language, even though the participants were in their teens, was to detect potential language delays. The test is orally presented in a group setting. Participants hear a sentence and have to match it to one of three pictures in front of them. The sentences are syntactically complex and include coordination, subordination and adverbial temporal clauses.

# 3. The Academic Language and Literacy Diagnostic Test (ALLD)

This was the main instrument used to obtain a detailed profile of literacy abilities in the first and second languages. The ALLD consists of two parts, a pre-literacy test of basic reading skills (phonological and orthographic awareness; word reading and simple sentence comprehension), and a regular reading test measuring reading vocabulary (synonyms, multiple meaning words and context clues) and reading comprehension (ability to read and understand passages, assessing 'basic understanding' and text level skills such as 'critical analysis', 'strategies' and 'interpretation'). The reading section of the ALLD contains items from grades 2- 11 in increasing order of difficulty. The ALLD was expressly developed for this study and is based on standardized tests (Stanford and Aprenda; Pearson).<sup>2</sup> Items were carefully selected, so as to avoid cultural bias or culturally-specific background knowledge.

#### Results

## 1. Questionnaire

Background

Participants in this study were between fourteen and nineteen years old (mean age 16). All had come from the Caribbean and Latin America.

# Family and Home Background

86% reported living with at least one parent in the US and 14% reported that they did not live with either parent, but with another relative. 60% reported high school as the highest level of education in the household.

## Exposure to Spanish and English

For all participants, Spanish was the native language and the primary language spoken at home. 69% reported that both Spanish and English were spoken in their neighborhoods. 78% reported some interaction in English with a person in their household. A great majority (95%) also reported being exposed to some English outside of school in the form of watching television, via Internet access or through other means.

## **Education History**

Since determining the extent to which SIFE indeed have gaps in schooling was an important question in our study, we carefully devised this section in such a way as to record the number and the duration of interruptions in schooling for every year they were of school-year age in their home country. Asked this way, 67% reported having no gaps in their education, a result that was quite surprising, given that educational gaps (as

<sup>&</sup>lt;sup>2</sup> It has since been published by Pearson (2009) for sole distribution in NYC schools.

reported on the Home Language Survey) constitute a classificational criterion for this group. 27% reported gaps of 2 years and only 7% reported gaps of more than two years.

## Goals and Aspirations

The majority of students, 61 %, aspired to a professional career (e.g. teacher, lawyer, doctor), while 33% planned to work at jobs that did not necessarily require higher education (e.g. plumbers, electricians) and 6% reported goals unrelated to work (e.g. travel, raise a family).

# 2. Typical Language Development Measure

Svntax Test

Scores on the complex sentence comprehension test were high, with a mean percent correct of 89%, a standard deviation of 12 and a range of 36% to 100%.

#### Versant

The mean score on the Versant test score was 80% correct, with a standard deviation of 16 and a range of 34% to 100%. The scoring program describes 80% correct as indicating that the student has "fluent, smooth, intelligible speech; controls appropriate language structure for speaking about complex material."

Together, these two measures indicate that our participants had typical native language development, showing fluency in comprehension and production in the oral and aural modes.

## 3. Literacy Diagnostics

Results on the ALLD, measuring basic and academic literacy skills, showed sharp differences between basic skills (preliteracy) and higher-level skills (academic reading vocabulary and reading comprehension). On the preliteracy section, measuring phonological & orthographic awareness, word reading and simplex sentence comprehension, our participants had a mean score of 96% (SD 4.5). This indicated that there were no developmental delays in basic reading skills, further supporting the results obtained on typical language development, and importantly also suggesting absence of dyslexia.

Results on the higher-level skills, by comparison, revealed serious deficits, with academic reading vocabulary averaging at 5<sup>th</sup> grade and reading comprehension at 3<sup>rd</sup> grade, well below expected grade level scores. Figures 1 and 2 show how participants distributed across grade levels in vocabulary and reading comprehension. In vocabulary comprehension, participant placement ranges from below 3<sup>rd</sup> grade to 7<sup>th</sup> grade, with about 40% of the group placing at 6<sup>th</sup> and 7<sup>th</sup> grade, and 30% placing at 3<sup>rd</sup> grade and below. Scores in reading comprehension showed a narrower and lower distribution, with more than 50% of the students placing at 3<sup>rd</sup> grade and below.

INSERT FIGS 1 and 2

Reading Comprehension Sub-skills: We further analyzed results on the reading comprehension section by looking specifically at two subskills: basic understanding and text level skills. Answers to items assessing basic understanding are explicitly stated in the text. Text level skills are higher level comprehension skills, and require the student to think critically, make connections, and use reading strategies. Such skills increase in importance beginning at  $5^{th}$  grade, becoming critical to academic success in high school. Participants scored significantly higher on basic understanding skills (73%) than on text level skills (49%) (t(97) = 14.07; p < .001).

We also separated responses to the sub-skills into two levels of difficulty: grades 2 and 3 and grades 4 and 5 (5 being the highest grade level achieved among these 9<sup>th</sup> and 10<sup>th</sup> graders). At the lower grade level sections of the diagnostic, when texts are easier to read and questions are simpler to answer, participants scored at nearly 80% correct on both basic understanding and text level skills. At the next level (grades 4 and 5) both basic understanding and text-level skills show a decline, with basic understanding dropping to 65% and text-level to 42%.

Taken together, the native language results reveal a typical SIFE profile as showing normal, age-appropriate development in oral and aural language skills with expected levels of basic literacy skills at the word and sentence level. However, serious delays are shown in their ability to navigate academic language and literacy, indicating that in spite of most SIFE having attended school continuously in their home countries, there is inadequate school preparation in the native language. As a result, upon entrance into the 9<sup>th</sup> grade in the US, SIFE are at least 4 grades below expected grade level, and this in the language they master orally at expected levels. The deficit is therefore clearly at the academic language and literacy level. Academic vocabulary and reading comprehension skills are the areas of greatest weakness, with scores well below expected grade levels, in many cases six years below. In particular, it seems that once the test items reach beyond 3<sup>rd</sup> grade level, the typical SIFE in this group flounders. Furthermore, while these adolescent readers can arrive at an answer to a comprehension question if that answer is explicitly stated in the text, and if the text is short and relatively simple (basic understanding), they falter when the answer requires text-level skills, such as inferencing and critical thinking, and this even for items at the elementary grade levels.

#### Recommendations

At the conclusion of our study, we made several recommendations to the NYC Department of Education. Most importantly, these included at least one additional year of schooling, prior to entry into 'regular' high school, for those SIFE with very low levels of native language literacy. Such a program should consist of 'sheltered' classes and a focus on academic language and literacy and the development of critical thinking skills.

## Part II: Bridges to Academic Success: Intervention for SIFE

Based on our study of the SIFE population described in Part I and our concluding recommendations, we developed and implemented an intervention for SIFE in greatest

need of additional services. The program, called "Bridges to Academic Success" (or "Bridges")<sup>3</sup> drew upon the following observations among this student group to determine the strategies that Bridges would address to meet their instructional needs:

- Observation 1: For many SIFE, native language literacy is under-developed and the students with the greatest challenges upon entrance to secondary school are those whose home language literacy is severely limited.
- Bridges strategy 1: a) Assess the literacy skills of SIFE in their native languages; b) select those with the lowest home literacy levels for participation in the program; c) focus on "learning to read" in every subject or content area (i.e. science, social studies, math, English language arts), for those SIFE with severely limited reading skills, along with "reading to learn," for students ready to develop text level literacy skills.
- Observation 2: SIFE native oral language skills are 'typically developed' → Bridges strategy 2: Use native oral language skills to build academic language in the second language (L2) English.
- Observation 3: L2 English is very limited for all SIFE →
- Bridges strategy 3: Focus on the learning of English language and literacy skills in all content area classes through the use of native language support and specialized and differentiated instruction geared to meet the needs of a very diverse student group.
- Observation 4: School experience and academic/background knowledge and skills are severely limited for these students →
- Bridges strategy 4: Develop and implement a specialized Bridges Curriculum and instructional framework to build academic and literacy skills and background knowledge and accelerate the learning needed for upper level school readiness; include in this framework is a focus on critical thinking skills and the development of good academic and social habits to help in the school and cultural adjustment process.
- Observation 5: As distinct from other ELLs, SIFE have 'triple the work' needed for academic success: 1. Unlike other ELLs, they would benefit from furthering their native language literacy skills to help develop L2 literacy; 2. Unlike other ELLs, they need to develop the background knowledge prerequisites for learning grade level academic content 3. Like other ELLs, they must acquire L2 English language and literacy skills →
  - *Bridges strategy 5:* Provide an additional year of schooling, prior to secondary school, to "frontload" as many skills and as much knowledge as possible in preparation for entrance into mainstream secondary school classes.

\_

<sup>&</sup>lt;sup>3</sup> We gratefully acknowledge the funders and supporters for this project: The New York Community Trust, the New York City Department of Education, the New York State Education Department, the Research Institute for the Study of Languages and the Center for Advanced Study in Education at the CUNY Graduate Center, NYC.

# The Bridges Program

Bridges was developed as a pilot program three years ago in New York City. It encompasses an additional/ transitional year for a designated group of newly-arrived SIFE prepared to enter secondary school. SIFE are selected for the Bridges Program because of their limited school experiences and home language literacy skills. The highly structured program involves a specialized, interdisciplinary Bridges Curriculum and targeted instruction, integrating language, literacy, and academic content within subject area courses (e.g. Social Studies, Science). The Bridges class is sheltered, with students staying together the whole day in a safe, positive, respectful and communal classroom environment needed for optimal academic development. The class is taught by an interdisciplinary team of teachers, who meet and plan together, and are specifically trained to deliver the Bridges Curriculum and its instructional framework. We report here on the second year of the Bridges Program in NYC, 4 among students who were preparing to enter the ninth grade or the first year of high school.

## I. Goals:

- 1. To prepare selected SIFE for achievement in secondary school.
- 2. To prepare teachers to teach Bridges students through the Bridges Curriculum and Instruction.

# II. Program Structure

The Bridges Program has been initiated in schools serving large numbers of low literacy newcomers. To develop the Program, the school administration selected a team of teachers that attended a special training program (see section V below) to address the needs of these students in each of four academic subject areas (English, Science, Social Studies and Math) through the Bridges Curriculum (see section IV below). There was one Bridges class within a school (though there could be more in theory); students in this sheltered class studied different subjects together over the course of one school year, in preparation for *mainstream* (i.e. *non-sheltered*) classes that they would begin taking with the general school population following the Bridges year. In this way, the Bridges Program provides a transitional year in which instruction is targeted to meet students' needs but accelerated to prepare them for the rigors of academic work. In addition, students develop appropriate academic behaviors in a safe environment where students, all with limited academic backgrounds, work together to learn.

## III. Participants

## The Schools:

During the second year of Bridges, three urban public high schools (grades 9-12) participated. These were located in sections of New York City with large numbers of linguistic minorities.

## The Students:

<sup>&</sup>lt;sup>4</sup> Currently in the middle of its third year, Bridges has expanded to other areas in New York State.

Fifty-eight (58) students of ages 13-18 (M=15.14) participated in the Bridges Program across the three schools. All had recently arrived in the US (< 1.5 years) and were entering 9<sup>th</sup> grade. All students were assessed in reading in their home (i.e. native) language and evidenced  $\leq 5^{th}$  grade literacy: Twelve of the 46 students who participated in the native language reading diagnostic tests had no native language literacy skills, thus distinguishing them from the SIFE in the study reported in Part I, where no one evidenced an total absence of experience with print materials; twenty-five more had fourth grade or lower reading abilities, ten students had the equivalent of a fifth grade reading ability in their home language and none had higher, in line with the SIFE characteristics reported in the study above. Bridges students therefore had home language reading abilities four or more grades below grade level (9th). Math skills, also assessed, were even weaker—six or more grades below grade level.

The students came from twelve different home countries, with the highest percentage from the Dominican Republic (32.7%); some others included Bangladesh (15.5%), Gambia (5.1%), Ivory Coast (3.4%). The students spoke nine different home languages, the highest percentage speaking Spanish (53.4%); some other languages included Bangla (15.5%), Arabic (6.8%), Fulani (1.7%).

## The Teachers:

There were thirteen (13) teachers in the Bridges Program across our schools in one year. Four to five teachers from the following subject areas were on a Bridges team in each of our participating schools: English, Social Studies, Science, Math; two school teams included a Native Language Arts or a literacy teacher. Each teacher met with the Bridges class once a day for at least a 45 minute period; in all schools, the English class was at least one hour long. Teachers also met at a team meeting once a week, to plan their lessons together and discuss their common students; this meeting was led by their Team Leader, who also served as the liaison with researchers.

#### IV. The Curriculum and Instruction

The goal of the Bridges Curriculum is to prepare students for higher level academic work and integration into mainstream classes; in this sense, it is a *preparatory* curriculum rather than a guide to specified grade-level content and skills. The content developed for the Bridges Curriculum consists of a) carefully selected academic topics that provide background knowledge and concepts to help students access the academic material they will encounter when they enter more advanced (unsheltered) classes, and b) language and literacy materials and instruction to help them develop the requisite skills for academic learning.

The Bridges Curriculum is interdisciplinary: It provides *themes* that are repeated in each of the academic subject areas, across four *units* that integrate language, literacy and content. Thus, some of the same vocabulary and language structures, for example, are often repeated across several disciplines within a given unit, with thematic units intentionally chosen to target universal, high interest ideas (e.g. survival, journeys, adaptation). At the same time, the Bridges Curriculum units are aligned to and informed by City, State and National Learning Standards, as well as by the students themselves.

All Bridges units incorporate subject area content, and language and literacy activities, with the joint goals of developing academic knowledge and the language and literacy skills needed to further acquire academic information and develop critical thinking skills. The Curriculum and instruction also includes a focus on the development of good academic and social habits to help in the acculturation and school adjustment process.

In order to accelerate learning, Bridges instruction is heavily focused on providing a) students with the background knowledge and skills necessary to eventually access grade level materials, and b) teachers with scaffolding techniques for making difficult oral language and texts accessible for student learning. In addition, Bridges Core Instructional Elements represent the major pedagogical principles that guide the Bridges Curriculum and inform the critical instructional practices used in its delivery. These Core Instructional Elements are integrated into the structure and methods that shape the units and lessons in the curriculum. These core elements include: a) The classroom environment as a resource for learning; b) A focus on oral academic language, in both the home language and English, as a precursor and aide to literacy development; c) A focus on foundational literacy instruction (learning to read), for those students who need these skills, along with text level literacy instruction (reading to learn) as students increasingly gain academic language as a basis for such instruction; d) The use of students' home languages as a critical resource for gaining literacy skills; e) The integration of language, literacy and subject area content in all classes; f) Emphasis on activities that promote the development of critical thinking skills; g) The use of multi-media resources and materials to deliver instruction, which includes the development of digital literacy as an important goal.

## V. Teacher Support

Teacher support involved three types of professional development (PD): A series of full- or half- day *group PD sessions*; onsite *curriculum coaching* of individual teachers at their schools by a Bridges facilitator; twice a year *observations and feedback* by an external evaluator.

Group PD Sessions: A series of group PD sessions was offered to Bridges teachers throughout the school year, facilitated by the Bridges instructional staff. The sessions focused on the theories, principles and practices on which Bridges instruction is based. Activities emphasized the use of the core instructional elements to deliver the Bridges Curriculum, with materials supporting the learning of content, language and literacy across the Curriculum. Importantly, teachers of academic subjects like Science and Social Studies were introduced to second language and literacy acquisition principles and practices, with the goal of understanding how to develop and implement lessons that integrate academic content with language and literacy activities that further the academic readiness of their students.

*Curriculum Coaching Sessions:* PD sessions were supplemented by on-site Curriculum coaching of Bridges teachers throughout the year. A curriculum coach helped teachers

plan lessons, observed the execution of these lessons, and gave feedback to teachers to help further their expertise in delivering Bridges instruction.

**Observations and Feedback:** An outside evaluator developed a teacher observation protocol for use in observing Bridges teachers twice in the academic year, once in fall and once in spring. From this protocol, teachers received feedback on their skills and worked with the curriculum coach to continue improving instruction in their Bridges classes.

# V. Student Academic and Language Progress

During their year of instruction, Bridges students made notable progress in their language, literacy and content development. According to teachers and principals, they were also more motivated and more engaged in Bridges classes than similar students typically were in prior years.

**Pre/Post Assessment Measures:** The students participated in pre and post assessments of early literacy (similar to the pre-literacy assessment described in Part 1) in English, English writing, and mathematics. As shown in Tables 1-3, the Bridges students exhibited statistically significant growth (p < .00) in all these areas. In early English literacy development (Table 1), student performance was significant on subsections of the English assessment used<sup>5</sup> as well as on the test overall.

**Table 1. Pre/Post Student Assessment Results** 

	Pre Mean % correct	Post Mean % correct	t	Sig.			
In Early Literacy (N=43)							
All Total	65.3	76.7	5.01	.00			

The other English outcome measure used was a writing assessment given in fall and again in spring. The total possible score was 42. We conducted analyses on a random sample of students from each school, with Table 2 showing that Bridges students exhibited statistically significant growth (p < .00) in writing during the year.

Table 2. Pre/Post Student Assessment Results in English Writing

	Pre	Post	t	Sig.			
	mean raw score	mean raw score					
In English Writing (N=13)							
All Total	6.23	13.0	8.20	.00			

<sup>&</sup>lt;sup>5</sup> Following our development of the ALLD, described in Part I, the LENS (Literacy Evaluation for Newcomer SIFE) was developed by the RISLUS research team for the NYC Department of Education to assess the skills of incoming SIFE to NYC schools.

Table 3 presents pre- and post-test math data. The total possible score was 71, with the results also showing statistically significant growth (p < .00) for the Bridges students.<sup>6</sup>

Table 3. Pre/Post Student Assessment Results in Math

	Pre mean raw score	Post mean raw score	t	Sig.
Math (N=44)				
All Total	28.7	36.0	4.41	.00

# Some Teacher Reflections

Bridges teachers kept (e)logs of their experiences with the Bridges class. They were also interviewed at the end of the school year. Here are a few teacher quotations, which represent the overwhelmingly positive responses we received:

"I heard many of my students' voices for the first time, ... saw their personalities show where before there was only silence and shyness" (English teacher)

"Bridges students are showing increased engagement, a more positive attitude towards school" (Math teacher)

"Teachers said ...they never saw her smile the way she smiles in the Bridges class. This is because we presented her with material that she could work with." (Science teacher)

"Everyone in this [Bridges] class has made huge gains..." (Science teacher)

## Principals' Reactions to Bridges

Interviews with Bridges principals were conducted by our external evaluator at the end of the school year. Her report indicated that all the principals expressed positive views of the Bridges program and planned to continue to offer Bridges the following year (2013-14). They all also reported that students who were in Bridges the prior year seemed to be doing well in their 9<sup>th</sup> grade classes this year. In addition, all have noticed Bridges techniques and strategies spreading to other classes and believe the Bridges program adds value to non-Bridges students, as teachers employ the techniques in more and more of their mainstream classes.

## **Summary and Conclusions**

The study conducted in Part I described the characteristics of SIFE in an urban high school setting, recommending that their unique needs required additional schooling geared to the development of academic language and literacy skills. *Bridges*, described in

<sup>&</sup>lt;sup>6</sup> We also assessed students in English reading comprehension using the LENS (footnote 5). Although students were not pre-tested on these skills (because their entry level skills in English were too low for evaluation), the results of 46 students who participated in an assessment at the end of the year showed that more than half of the them (N=29) reached a reading grade level of Grade 2 or higher, a presumed gain in reading comprehension of at least two years.

the second half of this paper, offers an accelerated, specialized program, teacher-training component, and curriculum to such students, particularly those with very low native language literacy skills. After one year of instruction, with native language support, Bridges students made significant gains in English foundational literacy and math, suggesting the promise of this program for increasing the academic success of SIFE in our schools. The work described here has led to the development of native language literacy diagnostics in all the major home languages of SIFE and other low-literacy adolescents in NYC, i.e. Haitian Creole, Chinese, Arabic, Bengali and Urdu.

# References

- 2013 Demographic Report, Office of English Language Learners, NYCDOE
- Academic Language and Literacy Diagnostic, Spanish Version, developed by RISLUS and NYCDOE. Pearson (2009)
- Advocates for Children of New York (AFC). (2010). Students with Interrupted Formal Education. A challenge for New York City Public Schools. Policy Report (with accompanying Press Release), published by AFC, May 2010.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework. (pp. 3-49). Los Angeles: National Dissemination and Assessment Center.
- DeCapua A., Smathers, W., and Tang, L. (F.) (2010). Meeting the Needs of Students with Limited or Interrupted Schooling: A Guide for Educators. Michigan: University of Michigan Press.

Figure 1: Distribution of SIFE Attainment Across Grade Levels Native Language Reading Comprehension

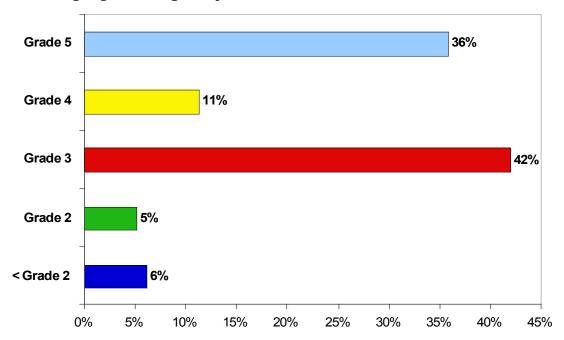


Figure 2: Distribution of SIFE Attainment Across Grade Levels Native Language Reading Vocabulary

