Collier County Early Literacy Partnership for Educational Success

Early literacy skills form the foundation for school success

2005-2006 Year II Implementation and Evaluation Report

Prepared by:
Florida Institute of Education at the University of North Florida in collaboration with Collier County Early Literacy Partnership for Educational Success
THE COLLIER COUNTY EARLY LITERACY PARTNERSHIP FOR SUCCESS
2005-2006: YEAR 2 IMPLEMENTATION AND EVALUATION REPORT

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COLLIER COUNTY EARLY LITERACY PARTNERSHIP FOR EDUCATIONAL SUCCESS

Introduction

A changing society, economy, and workplace make improving the achievement of all children a top priority at the local, state, and national levels. Learning to read well is necessary if children are to be successful in school and to later participate in the knowledge-based economy of the 21st century. Despite efforts over the past 50 years, a large achievement gap persists between children from low-income families and their peers from more affluent families. We know this gap forms before children enter formal schooling; therefore, efforts to close the gap must begin before children enter formal schooling.

Furthermore, if we are to ensure that we have a well-educated workforce, we must create and sustain a high-quality education system that begins in preschool. The Florida Institute of Education (FIE) at the University of North Florida (UNF), in collaboration with the UNF College of Education and Human Services, addressed this need by applying academic research to create practical, user-friendly tools designed to improve the quality of early education, with particular emphasis on literacy. The first such tool is the Early Literacy and Learning Model (ELLM), a standards-based curriculum and instructional support system that focuses on increasing the literacy instruction and experiences of preschool and kindergarten children. Later, FIE developed a companion piece to ELLM—the Skills-based Educational Experiences Delivery System (SEEDS). SEEDS provides volunteer tutors with activities and materials that enrich children’s learning, as they become emergent readers. More information on ELLM and ELLM/SEEDS is included on pages 4-8 of this report.

Collier County Early Literacy Partnership for Educational Success

Even the best tools are only beneficial when used consistently and with regularity in all of the environments in which today’s children learn. Successful early education therefore demands a coordinated effort among child- and learning-focused agencies and community groups willing to work across organizational boundaries. A 3-year partnership of three anchor organizations committed to the dramatic improvement of
children's literacy was forged to focus on Collier County and its children in greatest need. The partnership, the *Collier County Early Literacy Partnership for Educational Success* (the Partnership), is led by Fun Time Early Childhood Academy, Florida Gulf Coast University (FGCU), and FIE.

**Fun Time Early Childhood Academy**

The Fun Time Early Childhood Academy is committed to improving the early learning and school readiness of young children, particularly those living in low-income neighborhoods. Fun Time functions as a preschool demonstration site and hosts ELLM and ELLM/SEEDS.

**Florida Gulf Coast University**

FGCU is committed to raising the quality of learning and instruction at all levels in Southwest Florida. FGCU has numerous partnerships with the public schools, including the *Public Schools Enrichment Partnership*, which is designed to provide assistance and enrichment opportunities for at-risk minority and multicultural students in grades K-16. FGCU serves as the fiscal agent for the Partnership and works with FIE in implementing ELLM and ELLM/SEEDS in Collier County preschool and Head Start classrooms.

**Florida Institute of Education**

FIE is a statewide research center hosted by UNF. FIE provides statewide leadership to improve education at all levels by working collaboratively with Florida’s universities, community colleges, public schools, school readiness agencies, and communities. FIE developed ELLM and ELLM/SEEDS.

**Community Partners**

Five community agencies work together to improve the quality of early education for Collier County children living in low-income neighborhoods by supporting the implementation of ELLM and ELLM/SEEDS. Table 1 lists the community partners that support the implementation of Partnership activities.
### Table 1

**Collier County Community Agency Partners**

<table>
<thead>
<tr>
<th>Agency Partners</th>
<th>Service to the Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naples Children and Education Foundation</td>
<td>Provided funding for 57 ELLM classes in Naples and Immokalee</td>
</tr>
<tr>
<td>Stranahan Foundation</td>
<td>Provided funding for SEEDS tutoring</td>
</tr>
<tr>
<td>Christ Child Society</td>
<td>Provided SEEDS volunteers</td>
</tr>
<tr>
<td>District School Board of Collier County together with the Collier County Public Schools Head Start Program</td>
<td>Hosted ELLM in Head Start preschool classes across Collier County</td>
</tr>
<tr>
<td>Chairman’s Council of the Community Foundation</td>
<td>Provided project oversight and support</td>
</tr>
</tbody>
</table>

Additionally, Collier County faith-based, for-profit, and nonprofit early care and learning centers serving children from low-income neighborhoods supported the Partnership by working diligently to implement ELLM and ELLM/SEEDS in their classrooms.

**Partnership Goals**

Three long-term goals guide the work of the Partnership: establish a model infrastructure for a community partnership advocating early literacy and learning; establish a network of high-performing, literacy-focused, and results-driven early care and learning centers to serve children living in low-income neighborhoods; and increase levels of emergent literacy ability and language development of the neighborhood children.
Partnership Expected Outcomes

Over the 3-year course of the project, the Partnership expects approximately 3000 children (1000 per year) from low-income neighborhoods to participate in high-quality emergent literacy instruction and learning experiences that are aligned with the Collier County’s Reading First initiative. Expected outcomes include:

- Improved literacy- and print-rich environments in Partnership classrooms.
- Increased use of research-based, literacy-focused instructional practices by Partnership teachers.
- Greater use by Partnership teachers of assessment results to guide instruction.
- Improved emergent literacy skills of Partnership children.
- Improved alphabet letter recognition of Partnership children.
- Improved levels of oral language/vocabulary development of Partnership children.
- Establishment of a model infrastructure for a community partnership advocating early literacy and learning that other communities can emulate.

The Early Literacy and Learning Model (ELLM)

ELLM Vision

All children enter school with the skills, knowledge, and dispositions they need to become successful readers and learners.

ELLM Overview

ELLM is based on a long and rich history of implementing successful collaborative educational reform efforts linking teacher preparation and urban public school practices. ELLM was developed in 1996 to decrease readiness gaps and improve literacy achievement among children in urban Head Start and subsidized child care, kindergarten, and first-grade programs. Beginning in the fall of 2004, the implementation of ELLM was narrowed to focus on children enrolled in preschool and kindergarten programs.
Undergirded by scientific and evidence-based research, ELLM is a standards-based program that utilizes a professional development delivery system designed to improve the language and emergent literacy skills of at-risk children. Five ELLM components—a research- and standards-based literacy curriculum for the classroom, family involvement, professional development, research and evaluation, and working partnerships—help focus instruction and increase the literacy for opportunities young children.

ELLM incorporates successful literacy strategies that are known to influence and enhance reading success; provides regular and ongoing coaching/teaching sessions that develop and model effective instructional strategies; provides monthly Literacy Packets and children's books for classroom use; promotes family and community partnerships; and provides ELLM Classroom Lending Libraries, family literacy calendars, and regular family and school activities.

**ELLM Goals**

- Increase literacy achievement of preschool and kindergarten children.
- Establish literacy and learning networks to share evidence-based practices, build teacher instructional expertise, and encourage community collaboration to address barriers to improving children’s literacy and learning.
- Increase policy makers’ understanding of and support for the structures and support needed to improve at-risk children’s early literacy skills and readiness for school.

**A Look Inside an ELLM Classroom**

The ELLM classroom is, first and foremost, a language- and print-rich environment. Words are everywhere. Posters and materials are affixed to the walls at the child's eye-level, and even the classroom furniture (tables, chairs, bookcases, etc.) is labeled so that children begin to associate a word with its object. A Word Wall is always prominently displayed in an ELLM classroom. The Word Wall contains the upper- and lowercase letters of the alphabet, and underneath each letter is a removable card. Under the letter Ee, for example, a card with the word elephant and a picture of an elephant may be posted. The names and photographs of the children in the class are also on Word Wall cards, so that children may use the Wall to learn the letters of their names, to associate
words with pictures, to learn their classmates' names. ELLM activities are designed to make frequent use of the Word Wall, and teachers are encouraged to incorporate props such as pointers and puppets as they refer to the Wall.

The ELLM classroom is arranged to encourage both small-group and whole-group center work. Writing, Letter, Art, Listening, and Housekeeping Centers, a space with blocks, and sand/water tables are some of the areas that invite children to engage in creative and educational play. While similar centers may be found in other preschool classrooms, the emphasis in an ELLM class is on offering opportunities for frequent, purposeful early literacy experiences. The Independent Reading Center contains at least 100 books and comfortable places for children to sit and enjoy them. In addition, each ELLM classroom is equipped with a Classroom Lending Library so that children and their families can read together throughout the year. Every center includes props that relate to the books being read in the classroom, so that what the children have heard is continually reinforced.

Well-defined rituals and routines are an important part of the ELLM environment. The class schedule is posted, and an ELLM chart allows the teacher to move a marker to show students the next planned activity. With each transition from one activity to the next, teachers are trained to engage children in conversations, listen to what the children say, and respond. This affords an opportunity for children to practice oral language skills and learn new vocabulary. Reading aloud is not a once-a-day event; teachers read four times during the day, from a variety of book genres. Read-aloud time involves the children in the activity by asking them specific questions and giving them an opportunity to share their own experiences in the context of the story being read. Children are given time to explore books independently, so that they become familiar with the proper care and handling of books, understand that printed words convey meaning, and learn that text is read from left to right, top to bottom.

Songs, poems, and nursery rhymes are also integral to the ELLM classroom routine. The morning often starts with a welcome song. Themed songs and rhymes are written for every ELLM read-aloud book, and teachers use songs and chants to help children transition from one activity to the next.
The result of all of these elements is a transformed classroom in which everything is geared toward increasing children's acquisition of literacy skills, and no opportunity is lost to weave language and learning into the daily routine.

ELLM is referred to as a curriculum and system because it does not merely provide classrooms with instructional materials and planned activities. ELLM goes much farther by supplementing its curriculum with explicit, one-on-one professional development. The largest part of this professional development—over and above intensive, introductory group training during the summer—is delivered by credentialed ELLM literacy coaches who visit the classroom on an ongoing basis.

Coaches spend one hour a week helping each ELLM teacher develop expertise in the use of research-based instructional strategies. Early in the school year, the coaches conduct model literacy lessons with children, giving teachers a chance to observe how the ELLM instructional strategies are used. In turn, coaches later observe as teachers conduct lessons and then provide feedback on how instruction might be improved or adjusted to meet the needs of the children. This frequent, interactive training also opens a two-way communications line from ELLM developers to ELLM practitioners. As coaches hear from ELLM teachers what works well and what does not, they return to the developers and suggest ways to modify the ELLM materials and activities. This further breaks down the wall between researchers and actual users (and recipients) of the fruits of research.

With ELLM, very little happens in a vacuum. Research leads to the development of tools, teachers receive training and feedback on how to use the tools effectively, teachers relate how the tools behave under real-life conditions, and the tools are perfected to better deliver the results we seek—improved literacy outcomes for every child in Collier County.

The ELLM Skills-based Educational Experiences Delivery System (SEEDS) was inaugurated in Collier County ELLM classrooms during the 2004-2005 school year. With this program, trained SEEDS volunteers, referred to as LARKs (Learning Advocates Reaching Kids), work with pairs of children in ELLM classrooms twice a week for thirty minutes. They use self-contained SEEDS Literacy Packets, that include activities related to the ELLM book being read aloud in the classroom and the materials needed to implement each activity. Another group of volunteers, who call themselves Bag
Assembly Ladies, assist the LARK volunteers by organizing the materials used in ELLM/SEEDS activities.

The SEEDS extension specifically addresses the development of concepts and oral language skills the children will need to become successful readers by providing children with a deeper immersion in literacy activities. This deeper experience supports and expands the skills they learn in the classroom under the leadership of the teacher. In addition, interaction with LARKs gives children more face-to-face time with an adult, enabling them to participate in more sophisticated, complex conversations.

2005-2006 Implementation of ELLM in Collier County

The first year of the project (the 2004-2005 school year) resulted in the implementation of ELLM in 49 classes serving approximately 825 children in Collier County. During the second year of implementation (the 2005-2006 school year), the Partnership expanded implementation and continued to be guided by an Implementation Team composed of representatives from the three anchor partners, a representative from each community partner agency, and the project director. The Implementation Team was charged with creating a culture of cooperation, supporting mutual and ongoing learning, developing effective communication, connecting with similar initiatives, and developing strategies to institutionalize effective practices.

The Partnership implemented ELLM during the 2005-2006 school year with 22 early care and learning center partners in 57 classes serving approximately 940 preschool children. Table 2 lists the participating agencies, their directors or principals, and the number of classes served.
Table 2
*Community Early Care and Learning Centers, the Directors, and the Number of Classes Served by the Partnership*

<table>
<thead>
<tr>
<th>Early Care and Learning Center Community Partners</th>
<th>Director</th>
<th>Number of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalon Elementary School</td>
<td>Dr. Marilyn Moser</td>
<td>1</td>
</tr>
<tr>
<td>Corkscrew Elementary School</td>
<td>Mrs. Terri Lonneman</td>
<td>1</td>
</tr>
<tr>
<td>Estates Elementary School</td>
<td>Mr. Oliver Phipps</td>
<td>1</td>
</tr>
<tr>
<td>FGCU Family Resource</td>
<td>Dr. Beth Elliott</td>
<td>2</td>
</tr>
<tr>
<td>Fun Time Early Childhood Academy</td>
<td>Ms. Kim Long</td>
<td>2</td>
</tr>
<tr>
<td>Golden Gate Elementary School</td>
<td>Mr. Daryl Mattison</td>
<td>4</td>
</tr>
<tr>
<td>Golden Terrace Elementary School</td>
<td>Dr. Jan Messer</td>
<td>3</td>
</tr>
<tr>
<td>Guadalupe Family Center</td>
<td>Ms. Mary Jo Welch</td>
<td>2</td>
</tr>
<tr>
<td>Immokalee Child Care Center</td>
<td>Ms. Valarie Bostic</td>
<td>1</td>
</tr>
<tr>
<td>Lake Trafford Elementary School</td>
<td>Mrs. Irma Miller</td>
<td>2</td>
</tr>
<tr>
<td>Lely Elementary School</td>
<td>Ms. Kerey Stewart</td>
<td>2</td>
</tr>
<tr>
<td>Manatee Elementary School</td>
<td>Ms. Connie Cox</td>
<td>4</td>
</tr>
<tr>
<td>Naples Park Elementary School</td>
<td>Dr. Linda Chapman</td>
<td>2</td>
</tr>
<tr>
<td>Osceola Elementary School</td>
<td>Ms. Jody Jordan</td>
<td>1</td>
</tr>
<tr>
<td>Pat's Tot Care</td>
<td>Ms. Sharon Kirkpatrick</td>
<td>2</td>
</tr>
<tr>
<td>Pinecrest Elementary School</td>
<td>Ms. Pamela James</td>
<td>2</td>
</tr>
<tr>
<td>Redlands Christian Migrant Association</td>
<td>Ms. Ana Neuhauser</td>
<td>8</td>
</tr>
<tr>
<td>Shadowlawn Elementary School</td>
<td>Dr. Natalie Psenicka</td>
<td>1</td>
</tr>
<tr>
<td>The Learning Center - Immokalee</td>
<td>Mrs. Geraldine Miller</td>
<td>11</td>
</tr>
<tr>
<td>Village Oaks Elementary School</td>
<td>Mrs. Dorcas Howard</td>
<td>2</td>
</tr>
<tr>
<td>Vineyards Elementary School</td>
<td>Mrs. Mary Smith</td>
<td>1</td>
</tr>
<tr>
<td>YMCA Child Development Center</td>
<td>Ms. Beth Hatch</td>
<td>2</td>
</tr>
</tbody>
</table>

The teachers in the 57 classes were coached weekly by three full-time and one part-time highly trained ELLM literacy coach plus one lead coach (hereafter all are referred to as ELLM literacy coaches). Over the school year, the ELLM literacy coaches visited sites and classrooms weekly. During classroom visits, ELLM literacy coaches either observed teachers or modeled demonstrations lessons and conducted teacher-coach feedback conferences. Table 3 summarizes the ELLM literacy coaches’ activities and indicates the number of books Collier County ELLM children checked out from the ELLM Classroom Lending Libraries. They also arranged at least four family events each year.
### Table 3
*Activities of the ELLM Literacy Coaches over the 2005-2006 School Year*

<table>
<thead>
<tr>
<th>ELLM Literacy Coach Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to Classroom</td>
<td>1438</td>
</tr>
<tr>
<td>Teacher Observations</td>
<td>651</td>
</tr>
<tr>
<td>Demonstration Lessons</td>
<td>787</td>
</tr>
<tr>
<td>Teacher Conferences</td>
<td>1602</td>
</tr>
<tr>
<td>Director Conferences</td>
<td>782</td>
</tr>
<tr>
<td>Literacy Team Meetings</td>
<td>256</td>
</tr>
<tr>
<td>Classroom Lending Library Use</td>
<td>44439</td>
</tr>
</tbody>
</table>

ELLM/SEEDS was implemented through the work of volunteers recruited by the Christ Child Society. Seventy-one LARKs and 10 Bag Assembly Ladies implemented the SEEDS component of ELLM in 33 classrooms at 16 sites. Table 4 summarizes the activities of the LARKs who volunteered in ELLM/SEEDS classrooms during the 2005-2006 school year.

### Table 4
*Activities of the ELLM/SEEDS LARK Volunteers during the 2005-2006 School Year*

<table>
<thead>
<tr>
<th>LARK Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of LARKs</td>
<td>71</td>
</tr>
<tr>
<td>Number of LARKs returned</td>
<td>36</td>
</tr>
<tr>
<td>Number of LARKs newly trained</td>
<td>35</td>
</tr>
<tr>
<td>Number of SEEDS Classes</td>
<td>33</td>
</tr>
<tr>
<td>25% in Immokalee</td>
<td></td>
</tr>
<tr>
<td>45% in East Naples</td>
<td></td>
</tr>
<tr>
<td>Number of SEEDS Sites</td>
<td>16</td>
</tr>
<tr>
<td>Number of 2-Hour LARK Visits</td>
<td>928</td>
</tr>
<tr>
<td>Number of Bag Assembly Ladies</td>
<td>10</td>
</tr>
<tr>
<td>Bag Assembly Ladies’ Volunteer Hours</td>
<td>165</td>
</tr>
<tr>
<td>Total Number of SEEDS Volunteer Hours</td>
<td>4000</td>
</tr>
<tr>
<td>Including Travel, Training, and Preparation</td>
<td></td>
</tr>
</tbody>
</table>

As a result of working with the ELLM/SEEDS program, the LARK volunteers expanded their interest in local literacy projects, and as they became aware of the need for books in children’s homes, many of them gave books as gifts to the children they served. It was apparent that more could be done if the effort were organized and permanent. The volunteers decided to partner with a national nonprofit organization called *First Book*, whose mission is to provide children from low-income families with books that they can own. *First Book* distributes books primarily through a network of...
local volunteer advisory boards which raise funds and grant books to qualified programs serving children in their communities. The LARKs spearheaded the founding of *First Book Collier County* and chose the Partnership children as the initial recipients of grant books. Every participant—approximately 900 Partnership children—received seven books to take home and keep.

### 2005-2006 Evaluation of ELLM in Collier County

**Measurement**

Three instruments were used to measure children’s emergent literacy and language development, the *Test of Early Reading Ability-3* (TERA-3), *Test of Language Development-Primary: Third Edition* (TOLD-P:3), and the Alphabet Letter Recognition Inventory (ALRI). Trained assessors using scannable forms administered the TERA-3 and TOLD-P:3 to children in one-on-one settings. Classroom teachers using scannable forms collected ALRI pretest, mid-year, and posttest data from all children. The TERA-3, TOLD-P:3, and the ALRI tests were electronically scored.

**TERA-3 and TOLD-P:3**

The TERA-3 is a norm-referenced test that assesses components of early developing reading skills, including familiarity with the letters of the alphabet and numerals, discovery of the arbitrary conventions used in reading and writing English, and recognizing that print conveys information, ideas, and thought. The test is composed of three scales: Alphabet, Conventions of Print, and Meaning, each measuring one of the three components. A composite score, the Reading Quotient, is the unweighted sum of the three standardized scale scores.

- **Alphabet Scale**—(ALP) measures whether children can differentiate alphabet letters from numbers or designs; recognize names of letters; and isolate beginning, middle, or ending sounds.

- **Conventions of Print Scale**—(CN) measures whether children can differentiate upper- and lowercase letters and can understand book orientation and parts of books.

- **Meaning Scale** (MG)—measures whether children can use labels, figures, or logos as early or proto-reading activities and can identify correct use of relational vocabulary.
**Reading Quotient (RQ)**—indicates the child’s overall reading ability and is the best single predictor of future reading ability.

The TOLD-P:3 is a norm-referenced test that measures language development predicated on three linguistic features (phonology, syntax, and semantics) which combine to form three linguistic systems (listening, organizing, and speaking). Nine scales assess the three features, and the measures combine in pairs to measure the systems. This evaluation used three of the scales—Picture Vocabulary, Oral Vocabulary, and Grammatic Understanding—and a measure of listening.

**Picture Vocabulary (PV)**—measures the extent to which children understand meanings associated with spoken English words. The items require no verbal response.

**Oral Vocabulary (OV)**—measures children’s ability to give oral definition of common English words spoken by the examiner. The items provide no visual cues.

**Grammatic Understanding (GU)**—measures children’s ability to comprehend meaning of sentences. The items require no verbal response.

**Listening Quotient (LiQ)**—represents children’s ability to understand speech, sometimes called receptive language, and is a composite of the GU and PV scales.

The TERA-3 RQ and TOLD-P:3 LiQ scores are reported as norm-referenced, standardized scores with a mean of 100 and a standard deviation of 15. The TERA-3 ALP, CN, and MG scores and the TOLD-P:3 PV, OV, and GU scores are reported as norm-referenced, standardized scores with a mean of 10 and a standard deviation of three. However, standardized scale scores do not represent an absolute gain in knowledge. Because standardized scores represent the ranking of scores relative to a national normative population, a change in scores represents a change in ranking relative to a normative population. The TERA-3 can be administered to children as young as three years, six months and as old as eight years, six months, and the TOLD-P:3 to children as young as four years, zero months and as old as eight years, eleven months. Because children undergo rapid development over the age spans of the assessments, there are 14 normative populations that cover the age span of the TERA-3 and ten that cover
the age span of the TOLD-P:3. Depending upon the time between the pretest and posttest assessments and the age of the child at pretest, a posttest score may be ranked relative to a normative population that is between one and four age increments older than the pretest normative population. This process adjusts the standardized scores for the maturation of the children between the pretest and posttest assessments and allows gains resulting from the normal maturation to be separated from gains resulting from program effectiveness.

The implementation of ELLM and ELLM/SEEDS served 3- and 4-year-old preschool and Head Start classrooms in Collier County. TERA-3 and TOLD-P:3 assessments were not collected from all of the children because of their availability at the time of the fall assessments; they were not four years old on or before September 1, 2005, making them ineligible for public kindergarten in fall 2006; and because of the special education status of their classes.

Table 5 provides categories delimiting the lower, middle two, and upper quartiles of the TERA-3 and TOLD-P:3 scores of the normative populations. These categories are used in this report to indicate the range of early literacy ability and language development of the Collier County ELLM children.

Table 5
*TERA-3 and TOLD-P:3 Scale Scores by Ability Categories*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Superior</th>
<th>Very Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading and Listening Quotient Score Intervals</strong></td>
<td>Below 70</td>
<td>70-79</td>
<td>80-89</td>
<td>90-110</td>
<td>111-120</td>
<td>121-130</td>
<td>Above 130</td>
</tr>
<tr>
<td><strong>Scale Score Intervals</strong></td>
<td>Below 4</td>
<td>4-5</td>
<td>6-7</td>
<td>8-12</td>
<td>13-14</td>
<td>15-16</td>
<td>17-20</td>
</tr>
<tr>
<td><strong>Percentiles</strong></td>
<td>2½ or lower</td>
<td>2½ to 9th</td>
<td>9th to 25th</td>
<td>25th to 75th</td>
<td>75th to 91st</td>
<td>91st to 98th</td>
<td>98th or higher</td>
</tr>
<tr>
<td><strong>Percent of Scores</strong></td>
<td>2.3</td>
<td>6.9</td>
<td>16.1</td>
<td>49.5</td>
<td>16.1</td>
<td>6.9</td>
<td>2.3</td>
</tr>
</tbody>
</table>
**ALRI**

The ALRI is a locally developed test measuring children’s ability to recognize the upper- and lowercase letters of the alphabet when arranged in non-alphabetic order. The children’s classroom teachers used alphabet letter flashcards to administer the test one-on-one to the children. The uppercase letters were presented first, followed by the lowercase letters.

ALRI scores are reported in four recognition categories, 0 to 13 letters, 14 to 26 letters, 27 to 39 letters, and 40 to 52 letters. The *Early Childhood Longitudinal Study-Kindergarten* (ECLS-K) provided national benchmarks for alphabet letter recognition. Using a random sample of upper- and lowercase letters, scores were categorized as *proficient* if children recognized at least 75% of the sampled letters.\(^1\) Reports from the ECLS-K state that 66% of the children entering kindergarten for the first time were *proficient* at letter recognition.\(^2\) In this report, ALRI posttest scores are compared to these national benchmarks.

The set of instruments was administered one-on-one to the children with parental consent in fall 2005 during September and again in spring 2006 between the end of April and the end of May. Teachers collected ALRI data in the fall, winter (first month after the winter holidays), and spring. Table 6 shows the number of fall and spring assessments that were made in Collier County.

**Table 6**
The Number of Pretest and Posttest Assessments in Collier County ELLM Classes

<table>
<thead>
<tr>
<th>Test</th>
<th>Number Of Pretests</th>
<th>Number Of Posttests</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>632</td>
<td>570</td>
</tr>
<tr>
<td>TOLD-P:3</td>
<td>632</td>
<td>570</td>
</tr>
<tr>
<td>ALRI</td>
<td>647</td>
<td>572</td>
</tr>
</tbody>
</table>

Note: Redlands Christian Migrant Association scores are not included in this count.

---


**Attrition of Children**

The attrition rate of the Collier County ELLM children is based on TERA-3 scores as it was administered first in the testing sequence. In the fall and spring, 632 and 570 children were assessed, respectively. These numbers represent approximately 10% attrition. There was no evidence suggesting that the attrition of the children did not occur at random. The 570 children with complete TERA-3 scores attended 45 preschool classes supported by 21 community child care and learning centers.

**Special Implementations**

Researchers discovered over the history of ELLM implementation that children with very low scores on the TERA-3 Reading Quotient and Alphabet scale pretests showed little, if any, improvement on the posttest. Therefore, beginning in 1999-2000 and continuing through 2005-2006, children with very low TERA-3 pretest scores were selected for targeted instruction in phonological awareness (PA). The selected children receive small-group instruction in phonological awareness in addition to that provided the entire ELLM class.

Also during the 2005-2006 school year, 71 Learning Advocates Reaching Kids (LARKs) from the Christ Child Society worked with approximately 389 children in 30 ELLM preschool and Head Start classrooms implementing ELLM/SEEDS in Immokalee and Naples. (The numbers reflect children with complete TERA-3 scores.)

The Redlands Migrant Association (RCMA) implemented ELLM in eight preschool classes serving the children of migrant workers. The children arrive in early November and are not part of the fall assessments. However, beginning in the second year of the Partnership, the letter recognition ability of 4-year-old children in RCMA classes was assessed in the winter and spring and their emergent literacy ability was assessed in the spring.
Evaluation Questions

All ELLM Children

**Question 1**: Who were the 2005-2006 Collier County ELLM children?

**Question 2**: Was ELLM effective in improving the emergent literacy ability and language development of the children based on improved TERA-3 and TOLD-P:3 scores?

**Question 3**: How did Collier County ELLM children compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

ELLM Children Selected for Targeted Instruction in Phonological Awareness, ELLM PA

**Question 4**: Who were the Collier County ELLM children selected for targeted instruction in phonological awareness, and was ELLM effective in improving their emergent literacy ability based on improved TERA-3 Reading Quotient and Alphabet scale scores?

**Question 5**: How did Collier County ELLM children selected for targeted instruction in phonological awareness compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

ELLM/SEEDS Children

**Question 6**: Who were the Collier County ELLM children who participated in SEEDS, and was ELLM/SEEDS effective in improving the emergent literacy ability and language development of the children based on improved TERA-3 and TOLD-P:3 scores?

**Question 7**: How did Collier County ELLM children who participated in ELLM/SEEDS compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

ELLM Redlands Christian Migrant Association (RCMA) Classes

**Question 8**: How did the Collier County Redlands Christian Migrant Association (RCMA) ELLM children progress in alphabet letter recognition, and what was their emergent literacy status at the end of the school year?
The answers to these research questions come from data obtained in the fall and spring on the TERA-3, TOLD-P:3, and ALRI assessments. Both summary statistics and statistical analyses of pretest and posttest mean differences provide the answers. Data from all scales were analyzed as repeated measures ANOVA models. To determine the importance of all statistically significant differences, effect sizes are reported. Cohen classified effect sizes of 20 to 49 percent of a standard deviation as small, between 50 and 79 percent of a standard deviation as medium, and 80 percent or more of a standard deviation as large. Small, medium, and large effect sizes represent meaningful differences.

Moreover, Whitehurst and Massetti, in a critique of Head Start, noted when evaluation designs lack control or comparison groups, small effect sizes of 20-to-25 percent of a standard deviation should not be attributed to programs. Small effects could easily be associated with regression toward the mean, increased familiarity with tests and assessment procedures in general or ordinary maturation and experiences. Because this evaluation of ELLM does not involve a comparison or control group other than the TERA-3 and TOLD-P:3 normative populations, only effects larger than 33 percent of a standard deviation are attributed to the children’s participation in ELLM.

Evaluation Results

**Question 1: Who were the 2005-2006 Collier County ELLM children?**

The answer to this evaluation question involves a description of the children by gender, ethnicity, classification as English for Speakers of Other Languages (ESOL), and age.

*Gender*

There were 282 boys and 288 girls with complete TERA-3 scores.

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**Ethnicity**

Ethnicity of the children was reported in four categories: Black, White, Hispanic, and Other. Of the children with complete TERA-3 scores, 5.3% were Black, 9.9% were White, 55.3% were Hispanic, and 29.5% were Other.

**ESOL**

Of the children with complete TERA-3 scores, 56.8% were classified as ESOL.

**Age**

The age of the typical Collier County ELLM child was 54 and ½ months on September 1, the most common age was 57 months, and the median age was 55 months. The categorization of the children as four year olds does not indicate the distribution of the ages of the children. Because of the September 1 birthday cut-off for children attending public kindergarten in Florida, the typical 4-year-old child is between 48 and 60 months old on September 1 of the school year. Figure 1 displays the ages in months on September 1, 2005, of the Collier County ELLM children with complete TERA-3 scores.

![Figure 1. Ages of the Collier County ELLM children on September 1, 2005 (n=570).](image-url)
As can be seen, the ages were evenly spaced across the expected span. There were eight children in the sample who were older than the typical age of this population.

**Question 2: Was ELLM effective in improving the emergent literacy ability and language development of the children based on improved TERA-3 and TOLD-P:3 scores?**

**Outlying TOLD-P:3 Oral Vocabulary Scale Data**

Children need not be conversant in English to respond to TERA-3 items, because most provide picture cues and only require that children point to a response. The same is true for the TOLD-P:3 Picture Vocabulary and Grammatic Understanding scales. However, on the TOLD-P:3 Oral Vocabulary scale (OV), which measures expressive vocabulary, items do require children to verbally respond to the assessor, and there are no visual clues provided. For this scale, the assessor and the child have a dialogue. There are no OV scale practice items that enable the assessor to determine the extent to which the children can express themselves in English prior to the administration of the OV scale. Because the assessed Collier County ELLM population includes a large number of children classified as ESOL, the children’s responses to items on the OV scale are important. The responses of children who responded correctly to no more than one item on the TOLD-P:3 OV scale at year’s end were investigated to determine whether or not the children’s ability to express themselves in English was sufficient to use the TOLD-P:3 OV scale scores. The inclusion of invalid test scores undermines the evaluation process; therefore, after thoughtful consideration of the data, decisions were made concerning the removal of data that threaten the interpretation of results of the program evaluation. These decisions were based on population mean gains made in raw and standardized scores over the school year. Slightly more than 12% of the children had all of their TOLD-P:3 scale scores removed from analyses, 27% of the children had their TOLD-P:3 OV scale scores removed, and slightly more than 73% of the children’s scores were unaffected.

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**Results of Analyses**

Table 7 presents summary statistics and results from the analyses of the TERA-3 and TOLD-P:3 pretest and posttest scale scores of the Collier County ELLM children.

Table 7  
**Summary Statistics and ANOVA Results: Collier County ELLM Children’s TERA-3 and TOLD-P:3 Scores**

<table>
<thead>
<tr>
<th>Scale</th>
<th>n</th>
<th>Mean</th>
<th>St.Dev.</th>
<th>Mean</th>
<th>St.Dev.</th>
<th>F-Ratio</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ</td>
<td>570</td>
<td>77.8</td>
<td>11.2</td>
<td>90.7</td>
<td>15.6</td>
<td>578.3</td>
<td>&lt;.0001</td>
<td>0.86***</td>
</tr>
<tr>
<td>ALP</td>
<td>570</td>
<td>6.8</td>
<td>2.5</td>
<td>10.1</td>
<td>3.7</td>
<td>546.5</td>
<td>&lt;.0001</td>
<td>1.10***</td>
</tr>
<tr>
<td>CN</td>
<td>570</td>
<td>6.6</td>
<td>1.7</td>
<td>8.2</td>
<td>2.9</td>
<td>166.8</td>
<td>&lt;.0001</td>
<td>0.53**</td>
</tr>
<tr>
<td>MG</td>
<td>570</td>
<td>6.2</td>
<td>2.4</td>
<td>7.5</td>
<td>2.5</td>
<td>163.3</td>
<td>&lt;.0001</td>
<td>0.43*</td>
</tr>
<tr>
<td>LiQ</td>
<td>499</td>
<td>83.9</td>
<td>14.3</td>
<td>93.7</td>
<td>13.1</td>
<td>261.7</td>
<td>&lt;.0001</td>
<td>0.65**</td>
</tr>
<tr>
<td>PV</td>
<td>499</td>
<td>7.8</td>
<td>3.1</td>
<td>9.2</td>
<td>2.8</td>
<td>92.7</td>
<td>&lt;.0001</td>
<td>0.47*</td>
</tr>
<tr>
<td>OV</td>
<td>416</td>
<td>8.0</td>
<td>2.2</td>
<td>9.2</td>
<td>2.5</td>
<td>92.4</td>
<td>&lt;.0001</td>
<td>0.40*</td>
</tr>
<tr>
<td>GU</td>
<td>499</td>
<td>6.8</td>
<td>2.5</td>
<td>8.7</td>
<td>2.6</td>
<td>235.3</td>
<td>&lt;.0001</td>
<td>0.63**</td>
</tr>
</tbody>
</table>

*Note.* * Denotes the difference in the pretest and posttest mean scores represents a small, but meaningful effect.  
** Denotes the difference in the pretest and posttest mean scores represents a medium effect.  
*** Denotes the difference in the pretest and posttest mean scores represents a large effect.

All gains in the measured abilities were statistically significant, and all effect sizes were large enough to attribute the children’s gains to their participation in ELLM classes. The gain on the ALP (Alphabet) scale was larger than one full standard deviation, and the mean ALP posttest score (10.1) ranked at the mean of the TERA-3 normative population (10.0). The small and medium gains on the TOLD-P:3 scales indicate gains made by the children whose language development could be measured with validity.

**TERA-3 Summary**

One way to look at the Collier County ELLM children’s year-end achievement in emergent literacy ability is by looking at the differences in the percentage of scores ranked in the top and bottom quartiles from the beginning to the end of the school year. Figure 2 shows the rankings of the TERA-3 pretest and posttest scores.
Across all measures, the largest changes in the percentage of scores in the quartiles result from scores ranked in the bottom quartile (green portion) at pretest moving to higher quartiles at posttest. The percentage of scores ranked in the bottom quartile was less at the end than at the beginning of the school year for all TERA-3 scales; moreover, the percentage of Alphabet scale posttest scores ranked in the bottom quartile, 31 percent, is close to the expected 25 percent. The percentage of scores ranked in the top quartile (lavender) was basically unchanged from the beginning to the end of the school year for the Meaning scale, indicating all of the changes in the distribution of scores were between the bottom and middle quartiles. The percentage of scores ranked in the top quartile increased from pretest to posttest for the Reading Quotient, Alphabet, and Conventions of Print scales. Moreover, there was a higher percentage of Alphabet scale posttest scores ranked in the top quartile, 36 percent, than the 25 percent expected.
To enable a closer look at the improvement on the TERA-3 Alphabet scale, scores are displayed in Figure 3 in seven ability categories: three categories representing the lowest 25 percentiles, one category representing the middle 50 percentiles, and three categories representing the highest 25 percentiles. (See Table 5 on page 13 of this report.)

![Figure 3. The percentage of TERA-3 Alphabet scale pretest, posttest, and national normative population scores in the seven categories of the ability scale (n=570).](image)

The percentage of posttest scores (blue bars) ranked in the bottom quartile (three bars at the left of the figure) remains only slightly higher than in the national normative population (light green bars), and there were 40% fewer Collier County ELLM children’s posttest scores ranked in the bottom quartile than at pretest (dark green bars). Additionally, 12% of the posttest scores ranked below the 9th percentile (the Very Poor and Poor categories combined). This nearly matches the national normative population. Twenty-eight percent more posttest scores ranked in the top quartile than at pretest, and the percentage of posttest scores (blue bars) ranked in the top quartile (three bars at the right of the figure) was 7% more than in the normative population. Additionally, 14% of the Collier County ELLM children’s posttest scores ranked above the 90th percentile (the Superior and Very Superior categories combined). As can be seen, the distribution of
posttest scores shifted further toward the top quartile than the distribution of the national normative population.

A second way to look at emergent literacy achievement is through the percentile rankings of the mean scores in the fall and spring of the school year. Figure 4 shows the percentile rankings of the mean TERA-3 scores.

![Figure 4](image)

*Figure 4. The percentile ranking of the mean TERA-3 scale scores in the fall and spring of the school year.*

As can be seen, the greatest increases in percentile rankings from fall to spring occurred in the achievement measured by the Reading Quotient and the Alphabet scale. However, at year’s end the mean ranking of all TERA-3 scales, with the exception of the Meaning scale, ranked above the bottom quartile (25th percentile) and the mean Alphabet scale score ranked at the national average.

**TOLD-P:3 Summary**

One way to look at the Collier County ELLM children’s year-end achievement in language development is by looking at the differences in the percentage of scores ranked
in the top and bottom quartiles from pretest to posttest. Figure 5 shows the rankings of the TOLD-P:3 pretest and posttest scores.

Across all measures, the largest changes in the percentage of scores in the quartiles result from scores ranked in the bottom quartile at pretest moving to higher quartiles at posttest. The percentage of scores ranked in the bottom quartile (green portion) was less at the end than at the beginning of the school year for all TOLD-P:3 scales; moreover, the percentage of mean Oral Vocabulary and Grammatic Understanding scale spring scores ranked in the bottom quartile, 31 and 30 percent, respectively, is close to the expected 25 percent. The increases in the percentage of mean posttest scale scores ranked in the top quartile (lavender) ranged from four to eight percentile points across the TOLD-P:3 scales.

A second way to look at the language development achievement is through the percentile rankings of the mean scores at fall and spring of the school. Figure 6 shows the percentile rankings of the TOLD-P:3 mean pretest and posttest scores.
Figure 6. The percentile ranking of TOLD-P:3 scale scores in the fall and spring of the school year.

As can be seen, the greatest increases in percentile rankings from fall to spring occurred in the achievement measured by the Listening Quotient and Grammatic Understanding scales. Moreover, at year’s end the mean ranking of all TOLD-P:3 scales was at or above the 33<sup>rd</sup> percentile, above the bottom quartile. However, gains on the TOLD-P:3 scales indicate gains made by the children whose language development could be measured with validity.

**Question 3:** How did Collier County ELLM children compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

In 2005-2006, 540 Collier County ELLM children had Alphabet Letter Recognition Inventory (ALRI) and TERA-3 fall and spring scores. The ALRI mean fall score indicates the typical ELLM child recognized 17% of the letters (9 letters). The ALRI mean spring score indicates the typical child recognized 73% of the letters (38 letters). The *Early Childhood Longitudinal Study-Kindergarten* (ECLS-K) described...
recognizing 75% of the sampled letters as proficient; therefore, the typical Collier County ELLM child was almost proficient in letter recognition at the end of the school year.

Additionally, there were 532 Collier County ELLM children who had fall, winter, and spring ALRI scores. To determine the range of alphabet letter recognition ability of the children, these 532 ALRI scores are displayed in Figure 7 using four recognition categories: 0-13 letters, 14-26 letters, 27-39 letters, and 40-52 letters.

![Figure 7. The Alphabet Letter Recognition Inventory scores of the 532 Collier County ELLM children.](image)

Inspection of Figure 7 indicates the children made steady progress in letter recognition throughout the school year with the percentage of proficient children changing from 7% at the beginning of the school year, to 34% at mid-year, and to 63% at the end of the school year. Therefore, at year’s end 63% of the 532 children were proficient, recognizing at least 75% of the letters. The end of the 4-year-old preschool year is somewhat similar to entering kindergarten for the first time, and ECLS-K researchers reported 66% of all children entering kindergarten for the first time were proficient. Collier County ELLM children’s letter recognition ability almost matches the national ECLS-K sample of all children entering kindergarten for the first time.
Additionally, at the end of the school year 7% of the children recognized eight or fewer letters (the minimal federal standard for Head Start achievement in letter recognition is eight letters), 40% of the children recognized 50 or more letters, and 26% of the children recognized all 52 letters.

**Question 4:** Who were the Collier County ELLM children selected for targeted instruction in phonological awareness, and was ELLM effective in improving their emergent literacy ability based on improved TERA-3 Reading Quotient and Alphabet scale scores?

Selection for targeted instruction in phonological awareness, PA, was based on fall TERA-3 Reading Quotient and Alphabet scale scores. Two hundred forty children (42% of the general Collier County ELLM population) whose fall scores ranked below the 7th percentile on either scale or ranked in the bottom quartile of the local scores on both scales were selected. The answer to the evaluation question, *Who were the Collier County ELLM children selected for targeted instruction in phonological awareness?* involves a description of these 240 children by gender, ethnicity, classification as ESOL, age, and by categories of TOLD-P:3 Oral Vocabulary scale scores.

**Gender**

There were 125 boys and 115 girls selected for PA. The percentage of boys in the ELLM PA population, 52%, is slightly higher than in the general Collier County ELLM population, 49%.

**Ethnicity**

Ethnicity of the ELLM PA children was reported in four categories: *Black, White, Hispanic, and Other*. Of the ELLM PA children, 3.3% were *Black*, 1.7% were *White*, 62.9% were *Hispanic*, and 32.1% were *Other*. The percentage of *Hispanic* children in the ELLM PA population was greater than in the general Collier County ELLM population, 55%.
ESOL

Of the ELLM PA children, 70.8% were classified as ESOL. It is not surprising, based on selection criterion, that there was a greater percentage of ESOL children in the PA population than in the general Collier County ELLM population.

Age

The typical age of the Collier County ELLM PA child was 55 months on September 1, the most common ages were 55, 57, and 58 months, and the median age was 56 months. The Collier County ELLM PA children were slightly older than general Collier County ELLM population.

TOLD-P:3 Scores

Approximately 19% of the ELLM PA children had all of their TOLD-P:3 scale scores removed from analyses, 41% of the children had their TOLD-P:3 Oral Vocabulary scale scores removed, and approximately 59% of the children’s scores were unaffected. These numbers differ from the general Collier County ELLM population in expected ways—more TOLD-P:3 scale scores were removed, and fewer TOLD-P:3 scale scores were unaffected.
Results of Analyses

Table 8 presents summary statistics and results of the analyses of the TERA-3 and TOLD-P:3 pretest and posttest scores of the Collier County ELLM PA children.

Table 8
Summary Statistics and ANOVA Results: Collier County ELLM PA Children’s TERA-3 and TOLD-P:3 Scores

<table>
<thead>
<tr>
<th>Test</th>
<th>Scale</th>
<th>n</th>
<th>Pretest Mean</th>
<th>Pretest St.Dev.</th>
<th>Posttest Mean</th>
<th>Posttest St.Dev.</th>
<th>F-Ratio</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>RQ</td>
<td>240</td>
<td>68.6</td>
<td>3.7</td>
<td>82.2</td>
<td>13.3</td>
<td>273.7</td>
<td>&lt;.0001</td>
<td>0.91***</td>
</tr>
<tr>
<td></td>
<td>ALP</td>
<td>240</td>
<td>5.2</td>
<td>1.0</td>
<td>8.6</td>
<td>3.4</td>
<td>253.3</td>
<td>&lt;.0001</td>
<td>1.13***</td>
</tr>
<tr>
<td></td>
<td>CN</td>
<td>240</td>
<td>5.7</td>
<td>0.9</td>
<td>6.9</td>
<td>2.4</td>
<td>58.1</td>
<td>&lt;.0001</td>
<td>0.40**</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>240</td>
<td>4.4</td>
<td>1.2</td>
<td>6.1</td>
<td>2.3</td>
<td>137.5</td>
<td>&lt;.0001</td>
<td>0.57**</td>
</tr>
<tr>
<td>TOLD-P:3</td>
<td>LiQ</td>
<td>195</td>
<td>75.8</td>
<td>10.4</td>
<td>88.2</td>
<td>12.1</td>
<td>187.5</td>
<td>&lt;.0001</td>
<td>0.83***</td>
</tr>
<tr>
<td></td>
<td>PV</td>
<td>195</td>
<td>6.3</td>
<td>2.5</td>
<td>8.4</td>
<td>2.8</td>
<td>85.8</td>
<td>&lt;.0001</td>
<td>0.70***</td>
</tr>
<tr>
<td></td>
<td>OV</td>
<td>141</td>
<td>6.9</td>
<td>1.4</td>
<td>8.1</td>
<td>2.3</td>
<td>39.8</td>
<td>&lt;.0001</td>
<td>0.40**</td>
</tr>
<tr>
<td></td>
<td>GU</td>
<td>195</td>
<td>5.6</td>
<td>2.0</td>
<td>7.6</td>
<td>2.4</td>
<td>112.0</td>
<td>&lt;.0001</td>
<td>0.67**</td>
</tr>
</tbody>
</table>

Note. * Denotes the difference in the pretest and posttest mean scores represents a small, but meaningful effect.
** Denotes the difference in the pretest and posttest mean scores represents a medium effect.
*** Denotes the difference in the pretest and posttest mean scores represents a large effect.

All gains in the measured abilities were statistically significant, and all effect sizes are large enough to attribute the children’s gain to their participation in ELLM classes. The large gains on the TERA-3 RQ (Reading Quotient) and ALP (Alphabet scale) are affirmation of PA selection. The gains on the TOLD-P:3 scales reflect gains made by the children whose language development could be measured with validity.

Changes in the percentile rankings of mean scores from fall to spring of the school year provide one way to look at the Collier County ELLM PA children’s year-end achievement in emergent literacy ability. Figure 8 summarizes the gains made in percentile rankings from fall to spring on the TERA-3 mean scale scores.
As can be seen, the greatest increase in percentile rankings from fall to spring occurred in the achievement measured by the Alphabet scale. Moreover, at year’s end the mean ranking of Alphabet scale at the 32\textsuperscript{nd} percentile is above the bottom quartile (25\textsuperscript{th} percentile).

To look more closely at the improvement on the TERA-3 Alphabet scale, scores are displayed in Figure 9 in seven ability categories: three categories representing the lowest 25 percentiles, one category representing the middle 50 percentiles, and three categories representing the highest 25 percentiles. (See Table 5 on page 13 of this report.)
Figure 9. The percentage of ELLM PA TERA-3 Alphabet scale pretest, posttest, and national normative population scores in the seven categories of the ability scale (n = 240).

As expected based on the PA selection criterion, almost 100% of the pretest scores (dark blue bars) ranked in the bottom quartile (three bars at the left of the figure). Additionally, 70% of the pretest scores ranked below the 9th percentiles (the Very Poor and Poor categories combined). At the end of the school year (light blue bars), only 20% of the scores ranked below the 9th percentile. Additionally, slightly more than 16% of the posttest scores ranked in the top quartile (three bars at the right of the figure), and over 4% of the posttest scores ranked above the 90th percentile (the Superior and Very Superior categories combined).
**Question 5:** How did Collier County ELLM children selected for targeted instruction in phonological awareness compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

In 2005-2006, 228 Collier County ELLM children selected for targeted instruction in phonological awareness (PA) had Alphabet Letter Recognition Inventory (ALRI) fall and spring scores. The ALRI mean fall score indicates the typical ELLM PA child recognized about 2% of the letters (1 letter). The ALRI mean posttest score indicates the typical child recognized 63% of the letters (33 letters). *The Early Childhood Longitudinal Study-Kindergarten* (ECLS-K) described recognizing 75% of the sampled letters as *proficient*; therefore, the typical Collier County ELLM PA child was working toward *proficiency* in letter recognition at the end of the school year.

Additionally, there were 226 Collier County ELLM PA children who had fall, winter, and spring scores. To determine the range of alphabet letter recognition ability of the children, ALRI scores are displayed in Figure 10 using four recognition categories: 0-13 letters, 14-26 letters, 27-39 letters, and 40-52 letters.

*Figure 10.* The Alphabet Letter Recognition Inventory scores of the 226 Collier County ELLM PA children.
Inspection of Figure 10 indicates the greatest growth in letter recognition occurred in the second half of the school year. At year’s end, 47% of the scores were in the 40-to-52 letters recognized category (recognizing at least 75% of the letters; therefore proficient). Furthermore, 11% of the ELLM PA children recognized eight or fewer letters (the minimal federal standard for Head Start achievement in letter recognition is eight letters), and 30% of the children recognized at least 50 letters.

**Question 6:** Who were the Collier County ELLM children who participated in SEEDS, and was ELLM/SEEDS effective in improving the emergent literacy ability and language development of the children based on improved TERA-3 and TOLD-P:3 scores?

Three hundred eighty-seven children with complete TERA-3 data and 71 trained LARKs participated in the ELLM/SEEDS intervention in 30 classes at 14 sites. The answer to the evaluation question *Who were the Collier County ELLM children who participated in SEEDS?* involves a description of these 387 children by gender, ethnicity, classification as ESOL, selection for PA, age, and categories of TOLD-P:3 Oral Vocabulary scale scores. (When children who were not assessed are included, ELLM/SEEDS was implemented in 33 classes located at 16 sites.)

**Gender**

There were 190 boys and 197 girls in the ELLM/SEEDS classes. The percentage of boys in the ELLM/SEEDS population matches the general Collier County ELLM population, 49%.

**Ethnicity**

Ethnicity of the ELLM/SEEDS children was reported in four categories: *Black*, *White*, *Hispanic*, and *Other*. Of the ELLM/SEEDS children, 4.4% were *Black*, 8.8% were *White*, 52.7% were *Hispanic*, and 34.1% were *Other*. The percentage of *Hispanic* children in the ELLM/SEEDS population matches the general Collier County ELLM population.
**ESOL**

Of the ELLM/SEEDS children, 60.2% were categorized as ESOL. There was a slightly higher percentage of ESOL children in the ELLM/SEEDS population than in the general Collier County ELLM population (56.8%).

**Selected for PA**

One hundred twenty-three of the ELLM/SEEDS children, 44%, were selected for PA. Approximately 32% of the ELLM/SEEDS children were selected for PA and categorized as ESOL.

**Age**

The typical age of the Collier County ELLM/SEEDS child was 54.8 months on September 1, the most common age was 57 months, and the median age was 55 months. The distribution of the children’s ages was typical of the general Collier County ELLM population.

**TOLD-P:3 Scores**

Approximately 15% of the ELLM/SEEDS children had all of their TOLD-P:3 scale scores removed from analyses, 28% of the children had their TOLD-P:3 Oral Vocabulary scale scores removed, and approximately 72% of the children’s scores were unaffected.
**Question 6:** Was ELLM/SEEDS effective in improving the emergent literacy ability and language development of the children based on improved TERA-3 and TOLD-P:3 scores?

**Results of Analyses**

Table 9 presents summary statistics and results of analyses of the TERA-3 and TOLD-P:3 pretest and posttest scores of the Collier County ELLM/SEEDS children.

Table 9
**Summary Statistics and ANOVA Results: Collier County ELLM/SEEDS Children’s TERA-3 and TOLD-P:3 Scores**

<table>
<thead>
<tr>
<th>Test</th>
<th>Scale</th>
<th>n</th>
<th>Pretest Mean</th>
<th>Pretest St.Dev.</th>
<th>Posttest Mean</th>
<th>Posttest St.Dev.</th>
<th>F-Ratio</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>RQ</td>
<td>387</td>
<td>77.3</td>
<td>11.2</td>
<td>89.1</td>
<td>15.5</td>
<td>331.1</td>
<td>&lt;.0001</td>
<td>0.79**</td>
</tr>
<tr>
<td></td>
<td>ALP</td>
<td>387</td>
<td>6.8</td>
<td>2.5</td>
<td>9.7</td>
<td>3.7</td>
<td>315.5</td>
<td>&lt;.0001</td>
<td>0.97***</td>
</tr>
<tr>
<td></td>
<td>CN</td>
<td>387</td>
<td>6.5</td>
<td>1.7</td>
<td>7.9</td>
<td>2.9</td>
<td>92.9</td>
<td>&lt;.0001</td>
<td>0.47*</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>387</td>
<td>6.1</td>
<td>2.4</td>
<td>7.2</td>
<td>2.5</td>
<td>83.3</td>
<td>&lt;.0001</td>
<td>0.37*</td>
</tr>
<tr>
<td>TOLD-P:3</td>
<td>LiQ</td>
<td>329</td>
<td>83.7</td>
<td>14.2</td>
<td>93.1</td>
<td>13.1</td>
<td>164.9</td>
<td>&lt;.0001</td>
<td>0.63**</td>
</tr>
<tr>
<td></td>
<td>PV</td>
<td>329</td>
<td>7.7</td>
<td>3.1</td>
<td>9.1</td>
<td>2.8</td>
<td>59.6</td>
<td>&lt;.0001</td>
<td>0.47*</td>
</tr>
<tr>
<td></td>
<td>OV</td>
<td>277</td>
<td>7.9</td>
<td>2.2</td>
<td>9.1</td>
<td>2.5</td>
<td>73.1</td>
<td>&lt;.0001</td>
<td>0.40*</td>
</tr>
<tr>
<td></td>
<td>GU</td>
<td>329</td>
<td>6.8</td>
<td>2.6</td>
<td>8.6</td>
<td>2.6</td>
<td>131.2</td>
<td>&lt;.0001</td>
<td>0.60**</td>
</tr>
</tbody>
</table>

Note. * Denotes the difference in the pretest and posttest mean scores represents a small, but meaningful, effect.

** Denotes the difference in the pretest and posttest mean scores represents a medium effect.

*** Denotes the difference in the pretest and posttest mean scores represents a large effect.

All gains in the measured abilities were statistically significant, and all effect sizes were large enough to attribute the children’s gains to their participation in ELLM/SEEDS classes. The gains on the TERA-3 and TOLD-P:3 scales reflect the same pattern of gains made by the general Collier County ELLM population and reflect gains made by the children whose language development could be measured with validity.

One way to look at the children’s achievement in language development is through the percentile rankings of the mean TOLD-P:3 scores at fall and spring of the school year. Figure 11 shows the percentile rankings of the fall and spring TOLD-P:3 mean scale scores.
As can be seen, the greatest increases in the percentile rankings from fall to spring occurred in the achievement measured by the Grammatic Understanding and Listening Quotient scales; however, all changes in percentile rankings were similar. All posttest mean scores ranked at or above the 32nd percentile.

**Question 7:** How did Collier County ELLM children who participated in SEEDS compare to existing national benchmarks in the recognition of the upper- and lowercase letters of the alphabet at the end of the school year?

In 2005-2006, 369 Collier County ELLM/SEEDS children had Alphabet Letter Recognition Inventory (ALRI) fall and spring scores. The ALRI mean fall score indicates the typical child recognized about 17% of the letters (9 letters). The ALRI mean spring score indicates the typical child recognized 71% of the letters (37 letters). The *Early Childhood Longitudinal Study-Kindergarten* (ECLS-K) described recognizing 75% of the sampled letters as proficient; therefore, the typical Collier County ELLM/SEEDS child was working toward proficiency in letter recognition at the end of the school year.

---

**Figure 11.** The percentile ranking of ELLM/SEEDS TOLD-P:3 scale scores in the fall and spring of the school year.
Additionally, there were 369 Collier County ELLM/SEEDS children who had fall, winter, and spring scores. To determine the range of alphabet letter recognition ability of the children, ALRI scores are displayed in Figure 12 using four recognition categories: 0-13 letters, 14-26 letters, 27-39 letters, and 40-52 letters.

![Figure 12: The Alphabet Letter Recognition Inventory scores of the 369 Collier County ELLM/SEEDS children.](image)

Inspection of Figure 12 indicates that by year’s end 58% of the scores were in the 40-to-52 letters recognized category (recognizing at least 75% of the letters); therefore, proficient. Furthermore, 9% of the children recognized eight or fewer letters (the minimal federal standard for Head Start achievement in letter recognition is eight letters), 38% of the children recognized at least 50 letters, and nearly 24% of the children recognized all 52 letters.
**Question 8:** How did the Collier County Redlands Christian Migrant Association (RCMA) ELLM children progress in alphabet letter recognition, and what was their emergent literacy status at the end of the school year?

There were 21 boys and 20 girls who had TERA-3 test scores and participated in the Redlands Christian Migrant Association (RCMA) ELLM classes. Ninety-three percent of the 41 tested children were Hispanic and all were classified as ESOL. None of the children were selected for PA as selection is based on fall TERA-3 scores and the RCMA children are not available at fall testing.

The children were assessed in the winter and spring using the ALRI and in the spring with the TERA-3. Table 10 shows the number of assessments made in RCMA classes.

Table 10
*The Number of Assessments in Collier County RCMA ELLM Classes*

```
<table>
<thead>
<tr>
<th>Test</th>
<th>Number Winter Tests</th>
<th>Number Spring Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>ALRI</td>
<td>42</td>
<td>40</td>
</tr>
</tbody>
</table>
```

Note: There were 35 children with all three scores.

Table 11 presents summary statistics for the TERA-3 scores of the Collier County RCMA children.

Table 11
*Summary Statistics Collier: County ELLM RCMA Children’s TERA-3 and ALRI Scores*

```
<table>
<thead>
<tr>
<th>Test</th>
<th>Scale</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>RQ</td>
<td>41</td>
<td>80.8</td>
</tr>
<tr>
<td></td>
<td>ALP</td>
<td>41</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>CN</td>
<td>41</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>41</td>
<td>5.7</td>
</tr>
<tr>
<td>ALRI</td>
<td>Winter</td>
<td>40</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td>42</td>
<td>33.1</td>
</tr>
</tbody>
</table>
```
The RCMA children’s mean TERA-3 RQ (Reading Quotient) score ranked at the 10th percentile; however, the children’s mean ALP (Alphabet scale) ranked at the 31st percentile, above the bottom quartile of national scores. The low scores on the CN and MG (Conventions of Print and Meaning) scales reflect the children’s lack of previous experience with print and the English language. Almost 20% of the children could not correctly respond to any items on the Conventions of Print scale and 12% of the children could not correctly respond to any items on the Meaning scale at the end of the year.

To look more closely at the improvement on the TERA-3 Alphabet scale, scores are displayed in Figure 13 in seven ability categories: three categories representing the lowest 25 percentiles, one category representing the middle 50 percentiles, and three categories representing the highest 25 percentiles. (See Table 5 on page 13 of this report.)

![Figure 13. The spring Alphabet scale scores of the 41 Collier County RCMA children.](chart)

Fifty-one percent of the children’s Alphabet scale scores ranked in the bottom quartile (the three bars to the left of the figure); however only 11%—just 2% more than in the national normative population—ranked below the 9th percentile placing the children at an elevated probability of future placement in special education classes.
Twenty-three percent of the children’s scores ranked in the top quartile (three bars at the right of the figure) which nearly matches the national normative population.

Thirty-nine of the Collier County RCMA ELLM children had both winter and spring ALRI assessments. The ALRI mean winter score indicates the typical RCMA child recognized about 23% of the letters (11 letters). The ALRI mean spring score indicates the typical child recognized 63% of the letters (33 letters). The *Early Childhood Longitudinal Study-Kindergarten* (ECLS-K) described recognizing 75% of the sampled letters as *proficient*; therefore, the typical Collier County ELLM RCMA child was working toward *proficiency* in letter recognition at the end of the school year.

To determine the range of alphabet letter recognition ability of the children, ALRI scores are displayed in Figure 14 using four recognition categories: 0-13 letters, 14-26 letters, 27-39 letters, and 40-52 letters.

![Figure 14. The Alphabet Letter Recognition Inventory scores of the 39 Collier County RCMA ELLM children.](image)

Inspection of Figure 14 indicates that by year’s end 39% of the scores were in the 40-to-52 letters recognized category (recognizing at least 75% of the letters); therefore
proficient in letter recognition, and that 64% of the children recognized at least 50% of
the upper- and lowercase letters. Furthermore, 8% of the children recognized eight or
fewer letters (the minimal federal standard for Head Start achievement in letter
recognition is eight letters), and 20% of the children recognized at least 50 letters.

Conclusions

The Partnership successfully implemented ELLM in 57 preschool and Head Start
classes in Collier County and implemented ELLM/SEEDS in 33 of those classes. The
ELLM/SEEDS program was implemented by 71 volunteer LARKs and ten Bag
Assembly Ladies from the Christ Child Society. Additionally, ELLM was implemented
in early November in eight RCMA classes serving the children of migrant workers. The
effectiveness of ELLM was evaluated in a pretest/posttest design using three measures of
emergent literacy and language development. The achievement of the Collier County
ELLM children was compared to the national normative populations of the two
standardized measures, and the alphabet recognition ability of the Collier County ELLM
children was compared to national benchmarks established by the Early Childhood
Longitudinal Study-Kindergarten (ECLS-K).

Emergent Literacy

The children’s achievement in emergent literacy was assessed using the four
scales of the TERA-3 and the ALRI. The Collier County ELLM children made gains over
the school year of 86%, 110%, 53%, and 43% of a standard deviation on the TERA-3
Reading Quotient, Alphabet, Conventions of Print, and Meaning scales, respectively.
This achievement is attributed to the children’s participation in ELLM classrooms.
Furthermore, at the end of the school year 32% of the children’s Alphabet scale scores
ranked above the 75th percentile and 14% ranked above the 90th percentile. The ALRI
spring scores indicate 63% of the children recognized at least 75% of the letters (ECLS-K
described this as proficient), and 26% recognized all upper- and lowercase letters.
**Language Development**

The children’s language development was assessed using four scales of the TOLD-P:3. However, some scores on the Oral Vocabulary scale were removed because the children could not express themselves in English at the end of the school year. The children with valid TOLD-P:3 scale scores made gains over the school year of 65%, 47%, 40%, and 63% of a standard deviation on the Listening Quotient, Picture Vocabulary, Oral Vocabulary, and Grammatic Understanding scales, respectively. The end of the year language development measured on all TOLD-P:3 scales ranked at or above the 33rd percentile. This achievement is attributed to the children’s participation in ELLM classrooms.

**Achievement of the Children Selected for Targeted Instruction in Phonological Awareness (PA)**

The 240 children selected for small-group targeted instruction in phonological awareness were selected based on low fall TERA-3 Reading Quotient and Alphabet scale scores. In comparison to the general Collier County ELLM population, more of these children’s TOLD-P:3 scores were removed from the analyses and more of these children were classified as ESOL. The targeted instruction in phonological awareness should affect the TERA-3 Alphabet and Reading Quotient scale scores. The Alphabet score is affected because it is the only scale that has any items that measure phonological awareness, and the Reading Quotient scale score is affected because it is a composite formed, in part, by the Alphabet scale score. The ELLM PA children made gains of 91% and 113% of a standard deviation on the Reading Quotient and Alphabet scales, respectively. Furthermore 16% of the Alphabet scale posttest scores ranked above the 75th percentile. This achievement is attributed to the children’s participation in ELLM classrooms.

**ELLM/SEEDS**

The ELLM/SEEDS children made gains of 79%, 97%, 47%, and 37% of a standard deviation on the TERA-3 Reading Quotient, Alphabet, Conventions of Print, and Meaning scales, respectively, and gains of 63%, 47%, 40%, and 60% of a standard
deviation on the TOLD-P:3 Listening Quotient, Picture Vocabulary, Oral Vocabulary, and Grammatic Understanding scales, respectively. These gains reflect the same pattern of achievement as in the general Collier County ELLM population.

**Redlands Christian Migrant (RCMA) Classes**

The RCMA children, all of whom were classified as ESOL, experienced ELLM in Partnership classes from early November to the end of the school year which is less than optimal full school year implementation. The typical RCMA child recognized an additional 20 letters from the winter to spring assessment, and at the end of the school year 39% of the children were proficient. At the end of the school year, the TERA-3 Alphabet scale mean score ranked at the 31st percentile, and 23% of the children’s scores ranked in the top percentile.

**Discussion**

The summary of the achievements of the Collier County ELLM children presented on pages 20-25 of this report indicates that most of the gains made in emergent literacy and language development occurred by shifting scores from rankings in the bottom quartile at the beginning of the school year to rankings in the broad Average category (between the 25th and 75th percentile) at the end of the school year. The percentage of scores ranked in the top quartile (above the 75th percentile) was mostly unchanged across the scales. The only exception to this was the TERA-3 Alphabet scale scores where the percentage of scores ranked in the top quartile increased by 28%.

**Alphabet Knowledge**

Evaluations of ELLM in other areas of Florida have consistently shown a pattern of emergent literacy achievement in alphabet knowledge similar to that found in Collier County. However, this finding is not inconsequential. The importance of alphabet knowledge (letter naming, letter recognition, and letter sounds) to the acquisition of reading should not be underestimated. Table 12 highlights the connection between the TERA-3 Reading Quotient scores (the best predictor of the individual child’s future reading) and other child information and measures. The information is presented for four
groups of TERA-3 Reading Quotient spring scores: Group A, scores ranked in the Poor or Very Poor categories (scores ranked below the 9th percentile); Group B, scores ranked in the Below Average category (scores ranked between the 9th and 25th percentiles); Group C, scores ranked in the broad Average category (scores ranked between the 25th and 75th percentiles); and Group D, score ranked in the Above Average, Superior, and Very Superior categories (scores ranked above the 75th percentile). Scores from Group A—ranked below the 9th percentile—represent scores two standard deviations or more below the national mean score, putting the children at elevated probability of future placement in special education. Thus, it is important to note the differences among the children whose scores are categorized in Group A, B, C, or D—their characteristics and measured abilities. Table 12 shows these differences.

Table 12
Demographics of Group A, B, C, and D Children and Their Measured Abilities

<table>
<thead>
<tr>
<th></th>
<th>Group A (n=133)</th>
<th>Group B (n=166)</th>
<th>Group C (n=206)</th>
<th>Group D (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Boys</td>
<td>60</td>
<td>54</td>
<td>44</td>
<td>34</td>
</tr>
<tr>
<td>% TOLD-P:3 OV Scale Scores Removed</td>
<td>53</td>
<td>25</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>% Classified as ESOL</td>
<td>74</td>
<td>60</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>% Selected PA</td>
<td>77</td>
<td>45</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>% ELLM/SEEDS</td>
<td>77</td>
<td>73</td>
<td>62</td>
<td>55</td>
</tr>
<tr>
<td>% Recognized ≤13 Letters in Spring</td>
<td>37</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TERA-3 RQ Fall</td>
<td>70</td>
<td>75</td>
<td>81</td>
<td>91</td>
</tr>
<tr>
<td>TERA-3 RQ Fall</td>
<td>71</td>
<td>85</td>
<td>100</td>
<td>117</td>
</tr>
</tbody>
</table>

As can be seen, 40% of the posttest scores ranked in the bottom quartile (Groups A and B combined) were in Group A, there were two thirds as many scores in Group C as there were scores ranked in the bottom quartile, and one half as many scores in Group D (ranked above the 75th percentile) as in Group A (ranked below the 9th percentile). As the mean achievement of the children increased, the percent of boys, ESOL, and PA children decreased, and the gains made in Reading Quotient scores from fall to spring increased. Additionally, 29 and 6 percent of the children whose scores were categorized in Groups C and D, respectively, had Reading Quotient and/or Alphabet scale pretest scores so low they were selected for PA. These children’s elevated posttest Reading Quotient scores are a testimony to their benefits of PA participation.
However, the striking differences in these four groups of children lie in two areas—the percentage of spring ALRI scores representing the recognition of 13 or fewer letters and the percentage of children who were unable to express themselves in English at the end of the school year. Of the children whose TERA-3 Reading Quotient scores ranked in Group A, 53% were unable to express themselves in English and 37% recognized no more than 13 letters at the end of the school year. To further highlight the relationship between letter recognition and the Reading Quotient score, Figure 15 shows the mean letter recognition growth trajectories for the four groups of TERA-3 Reading Quotient posttest scores.

![Figure 15. Mean ALRI growth trajectories of children whose spring TERA-3 Reading Quotient score ranked in the Poor and Very Poor categories combined (Group A); the Below Average category (Group B); Average category (Group C); and the Above Average, Superior, and Very Superior categories combined (Group D).](image)

The growth in letter recognition from fall to mid-year was greatest for the children whose Reading Quotient posttest scores ranked Average or above, Groups C and D. These children’s growth in letter recognition slowed from mid-year to the spring assessment due to a ceiling effect—there are only 52 letters to recognize. Group A experienced the flattest growth in letter recognition from fall to mid-year, but letter
recognition ability accelerated from mid-year to spring. However, at mid-year, the mean letter recognition of the Group A (11.5) was almost the same as the initial ability of the Group C (10.9 letters) and was 10 letters less than the mid-year ability of the Group B (21.3 letters).

When the RCMA children’s TERA-3 Reading Quotient scores are classified in Groups A, B, C, or D; there are 18, 9, 7, and 1 scores in each category, respectively. Figure 16 shows the mean letter recognition growth trajectories for the four groups of RCMA TERA-3 Reading Quotient scores.

![Figure 16. Mean ALRI growth trajectories of RCMA children whose spring TERA-3 Reading Quotient score ranked in the Poor and Very Poor categories combined (Group A); the Below Average category (Group B); Average category (Group C); and the Above Average, Superior, and Very Superior categories combined (Group D).](image)

The two time-point trajectories for this small group of scores indicate more rapid growth in letter recognition than the recognition from winter to spring in the full sample of ELLM scores presented in Figure 15. This is especially true for children whose TERA-3 Reading Quotient scores are categorized in Group C. However, what is remarkable across both figures is the similarity of the mean spring letter recognition ability of the
children whose TERA-3 Reading Quotient scores are categorized in Group A, B, C, and D. The TERA-3 Reading Quotient is a predictor of future reading ability (see page 12 of this report), and the spring ALRI may be the best predictor of the year-end TERA-3 Reading Quotient score for these two samples of 4-year-old children.

Moreover, the fall and winter ALRI scores are used primarily to inform classroom instruction. ELLM literacy coaches use alphabet letter profiles derived from the children’s ALRI assessments to show teachers how to cluster letter instruction by which letters the children can and cannot recognize. The importance of the mid-year assessment is clearly evident in the mean growth trajectory of the children whose fall recognition ability was minimal. The children who recognized very few letters in fall and show flat growth relative to the other three groups of children (in this example, recognizing nine additional letters at mid-year) are the children whose year-end Reading Quotient scores ranked below the 9th percentile, placing them at increased probability of future placement in special education.

*Opportunity-to-Learn*

The alphabet letter recognition mean growth trajectories, disaggregated by the children’s TERA-3 Reading Quotient year-end ability, point out the importance of the opportunity-to-learn (OTL) prior to the last year of preschool, whether the opportunity is provided in the context of the family or the availability of high-quality 3-year-old preschool programs. Fall scores often represent that availability of OTL.

Another way to see the importance of the Collier County children’s OTL is to look at the children’s fall responses, measured in raw scores, on six of the TERA-3 and TOLP-P:3 scales. Table 13 shows the number of children who correctly responded to no scale items in the fall, the number of children who correctly responded to no scale items in the spring, and the number of children who correctly responded to no scale items in fall and spring.
Table 13
The Number of Collier County ELLM Children Who Could Correctly Respond to No Scale Items in Fall, Spring, or Both

<table>
<thead>
<tr>
<th>Test</th>
<th>Scale</th>
<th>% Pretest Raw Score = 0</th>
<th>% Posttest Raw Score = 0</th>
<th>% Pretest &amp; Posttest Raw Scores = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERA-3</td>
<td>ALP</td>
<td>21</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>CN</td>
<td>48</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>MG</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOLD-P:3</td>
<td>OV</td>
<td>53</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>PV</td>
<td>12</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GU</td>
<td>22</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

As can be seen and has been previously discussed, the TOLD-P:3 OV (Oral Vocabulary) scale had the greatest number of scores in all three columns. However, the TERA-3 CN (Conventions of Print) scale was the next most difficult scale for the children, with 48% of the children unable to respond correctly to any items in the fall. This indicates that a great many Collier County ELLM children had few experiences with print prior to the 2005-2006 school year and emphasizes the need for high-quality preschool programs for Collier County three year olds.

*Oral Vocabulary*

There are numerous reasons why 4- and 5-year-old preschoolers do not give oral responses to trained assessors. Reasons such as they are too shy to talk, they are not having a good day and choose not to talk, the testing process distracts them, and they have not acquired enough ability (or are too uncertain with their acquired ability) with the English language to respond. As a consequence of the large number of Collier County children with spring raw TOLD-P:3 Oral Vocabulary scores no greater than one, it is logical to theorize that children, who are naturally shy or who are learning English as a second language or both, provide the most prevalent reasons for this group of children’s inability to express themselves in English at the end of the school year. It is surprising, however, how little oral vocabulary ability affected the emergent literacy ability of the children—no TERA-3 scale scores were removed from the data. Additionally, the TOLD-P:3 Oral Vocabulary data used in the analyses (see Figure 5 on page 23 of this report) indicate a movement of scores out of the bottom quartile and of scores into the top quartile at the end of the school year. This suggests there may be a threshold of English
oral language ability that, once overcome, allows oral vocabulary to rapidly develop. For the purposes of this evaluation, that threshold was set at responding correctly to at least one item at the end of the school year. That threshold may need upward adjustment, but the notion of overcoming a threshold before oral language develops is viable. It is important that children in high-quality preschool classes are provided with many opportunities to individually express themselves in English. These opportunities must occur in non-threatening environments and with encouragement.

LARKs

Many Collier County ELLM children had few experiences with books before the beginning of the 2004-2005 school year. LARK visits provide experiences with books and print beyond what all ELLM children receive. Additionally, LARKs develop rapport with their children in the small groups—an excellent, non-threatening place for shy or hesitant children to practice expressing themselves in English. Moreover, if a threshold in oral English language ability does exist, perhaps the emergent literacy achievement the children gained through the work of the LARKs is latent and not immediately measurable. At some future point during the children’s acquisition of reading, when the children overcome the theorized threshold, their oral language development may accelerate because of their small-group work with LARKs during their 4-year-old preschool ELLM/SEEDS experience.

Additionally, LARKS provided Partnership children with seven books to take home through their work with First Book Collier County. Having books in the home provides children with more opportunities to develop print awareness and, as shown in Table 11, 48% of the children correctly responded to no TERA-3 Conventions of Print items at the beginning of the year. This indicates many children have had few experiences with print prior to their last year of preschool before entering kindergarten.
Summary

The Partnership successfully implemented ELLM in 57 preschool and Head Start classes in Collier County. Evaluation results indicated ELLM, ELLM PA, ELLM/SEEDS, and RCMA ELLM were all effective interventions that increased the emergent literacy and language development of the Collier County children. The achievement in the areas of alphabet knowledge is particularly impressive. Evaluation results suggest several future avenues for the Partnership to consider. The first and most obvious is to continue doing what is working, the second is to expand the availability of high-quality preschool classes for three year olds in Collier County, and the third is to expand the use of LARK tutoring.

Analyses of raw scale scores from the beginning of the school year point out the Collier County children’s lack of experiences with oral English language and print prior to their last year of preschool. This lack of previous opportunities-to-learn presents itself again in the analyses of the lowest ranking spring TERA-3 Reading Quotient scores in relationship to the children’s alphabet letter recognition ability throughout the school year. An achievement gap, in part, produced by the lack of OTL has formed by the time the children enter their last year of preschool. Mean alphabet letter recognition growth trajectories indicate this gap represents more than one-half of a preschool year’s achievement. As was pointed out, the typical child whose year-end emergent literacy achievement ranked above the 25th percentile initially recognized 11 letters and while the typical child whose year-end emergent literacy achievement ranked below the 9th percentile placing them at elevated probability of future placement in special education initially recognized two letters and had relatively flat growth in letter recognition.

The Partnership could consider several options that might improve the preschool children’s emergent literacy achievement. The first is to expand the availability of Collier County children’s opportunity-to-learn by increasing the availability of high-quality preschool classes serving three year olds and by extending the work of the LARKs to include three year olds.

The Partnership implements ELLM in classes that enroll three year olds; therefore, there is an opportunity to assess the effectiveness of a high-quality 3-year-old preschool experience. If teachers were to include three year olds in their mid-winter and
spring ALRI assessments, the scores would permit estimating growth trajectories of three year olds. There are no guidelines or benchmarks for the letter recognition ability of three year olds, but the purpose of this assessment would be for researchers and practitioners to gain knowledge about these children’s cognitive development and its effect on their emergent literacy ability as four year olds. Additionally, the ALRI assessments would facilitate locating children in 4-year-old classes who are experiencing a second year of ELLM.

Because alphabet letter recognition shifts to recognition fluency in kindergarten (for example, the DIBELS Letter Naming scale), it is important for all children to start kindergarten with good letter recognition skills. To enhance the letter recognition ability of all children, Redlands Christian Migrant Association classes could collect ALRI assessments in a special scheme that allows for three equally spaced assessments. Additionally, teachers and literacy coaches should use the fall and mid-year ALRI assessment not just to show teachers how to cluster letter instruction by which letters the children can and cannot recognize but also to use growth (the number of additional letters learned) between the initial and mid-year ALRI assessments to select children to participate in intensive small-group work on letter recognition.

Finally, because 57% of the Partnership children with complete scores were classified as ESOL, some books should be available in Spanish for these children either in the Classroom Lending Library or *First Book Collier County* sets. Spanish editions could increase the likelihood that parents would share these books with their children thereby increasing the children’s experiences with print.