Preschool-to-Kindergarten: A Longitudinal Study of the Effectiveness of the Early Literacy and Learning Model (ELLM)

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The Early Literacy and Learning Model (ELLM)

Researchers at the Florida Institute of Education (FIE) at the University of North Florida developed the Early Literacy and Learning Model (ELLM) to increase the school readiness of children.

- **ELLM** is a research- and standards-based early literacy curriculum and instructional support system for teachers and coaches.
- ELLM targets 3- and 4-year-old preschool children from low-income families by enhancing teachers’ use of research-based practices.
- Create research-practitioner partnerships that address the challenges to improving early literacy outcomes of young children.
- Intense policy- and decision-makers’ understanding and support for what is required of children to become proficient readers.

**ELLM Goals**

- Increase the literacy achievement and school readiness of 3- and 4-year-old preschool children from low-income families by enhancing teachers’ use of research-based practices.
- Create research-practitioner partnerships that address the challenges to improving early literacy outcomes of young children.
- Increase policy- and decision-makers’ understanding and support for what is required of children to become proficient readers.

**ELLM Curriculum and Instructional Support System**

- Early literacy curriculum consists of instructional strategies and learning materials teachers use to help children acquire emergent literacy by explicitly teaching literacy skills and providing structured literacy experiences.
- **Literacy Skills** include:
  - Letter and Sound Knowledge
  - Phonological Awareness and Phonics Connections
  - Print Concepts and Emergent Writing
- **Strategies** include:
  - Reading Aloud and Emergent Comprehension
  - Independent Reading
  - Oral Language, Listening, and Vocabulary Development
- Teachers implement ELLM for at least one hour every day.

**Evaluation of the Study**

**Purpose of the Study**

- Research Questions: Is ELLM more effective in raising the literacy-related achievement of 4-year-old preschool children from low-income neighborhoods than traditional preschool curricula? Do children who participate in ELLM preschool classes sustain any emergent literacy advantage at the end of their kindergarten year?

**Methodology of the Study**

- Participants: In 2002, ELLM became part of a 3-year longitudinal study funded by the Preschool Curriculum Evaluation Research (PCER) grant from the USDOE Institute of Education Sciences (IES). Both FIE and a national evaluator collected data from preschool children, their families, and teachers during the 2002-2003 school year. FIE used two measures of emergent literacy to assess 470 children in fall 2002 before the ELLM intervention and in spring 2003 at the end of the preschool year. During fall 2002 and spring 2003, the national evaluator collected an extensive set of measures related to 25% of the children.

- In summer 2002, IEI abandoned the longitudinal study involving these PCEFs children. However, FIE continued the study and involved kindergarten children who had been assessed as prescriptors by both the national evaluator and FIE. The spring kindergarten data combined with FIE prescript data was used to answer the research questions.

**Sample**

- Preschool children in three geographic locations representing differing degrees of urbanity participated in the study.
- All pilot study classrooms were designated to either ELLM or wait-list control states.
- The children advanced to 76 kindergarten sites.

The predominant comprehensive preschool curricula used in both ELLM and wait-list control settings were Creative Curriculum, High Scope, and High Arach.

**Preschool Sample**

- **ELLM**
- Number of Classes: 21
- Number of Children: 209
- Number of Preschool Teachers: 26

- **Control**
- Number of Classes: 24
- Number of Children: 241
- Number of Preschool Teachers: 30

- The sample included Head Start, school-based, faith-based, and subsidized child care centers.
- Sites were located within the attendance boundaries of six elementary schools.

**Ongoing Professional Development**

- Intensive and ongoing ELLM professional development for both coaches and teachers is guided by a shared vision related to the needs of students. To equip coaches and teachers with the knowledge and skills necessary for effective teaching, a two-pronged professional development approach is used.
- One prong supports the development of teachers, and the other supports the development of the coaches who work with the teachers.

**Instructional Support: Two Programs**

- The ELLM coaching cycle addresses effective teaching practices that target each of the literacy components. The cycle begins with the coach modeling a lesson and ends with the coaches working with the children. The ELLM coaching cycle addresses effective teaching practices that target each of the literacy components. The cycle begins with the coach modeling a lesson and ends with the coaches working with the children.

**Results: HLM Analyses Using TERA-3 Raw Scores**

- The Geographic Challenges of Following Preschool Children to Kindergarten

**Conclusions of the Study**

- **Summary: The Effectiveness of ELLM**
- **Expected and Actual Growth in TERA-3 Meaning Raw Scores Over the Kindergarten Year**
- **Secondary Findings**

1. The lower mean ranking of the kindergarten Meaning standardized scores results from the children’s inability to correctly respond to a sufficient number of additional items. The figure below shows the children’s growth compared to the growth necessary to sustain the ranking of their PCER kindergarten Meaning standardized scores.

2. All measures an explicitly taught skill, and at the beginning of preschool, the scores mostly represent previous opportunities to learn. However, the fall-prepared AllS scores predict all other measures of kindergarten emergent literacy achievement. The figure below shows the relationship between the percentiles of the kindergarten Reading Quotient standardized scores and the percentiles of the AllS scores.

3. The kindergarten Conventions of Print and Meaning achievement scores reflect a gender effect—on average, girls correctly responded to about one more item than boys on each of the scales.

4. The importance of preschool achievement cannot be overstated. When standardized Reading Quotient scores are categorized as below if they are below the 95th percentile of the normative mean score and above otherwise, the following are noted:

- **50% (50) of kindergarten scores ranked above:**
- **49% (49) of kindergarten scores ranked below:**
- **77% (77) of kindergarten scores ranked below and also ranked below the kindergarten end of preschool:**
- **Conversely, 23% of the kindergarten scores ranked below were ranked above the end of preschool:**

- For more information: http://www.ies.ed.gov

**Research Conducted By:**

Florida Institute of Education at the University of North Florida