

The Children

Children are screened for Math Magic program readiness beginning at about 3 1/2 years of age. The chronological age range of children participating in Math Magic is 3.8 - 5.5 years of age. All children participate in Math Magic instruction with a designated Direct Instruction teacher, who conducts small groups throughout the preschool day. Children typically participate in math groups which meet two days each week (TTH) and early literacy groups (ELF Program) which meet three days each week (MWF).

The Math Magic Program

Math Magic groups are organized according to the social-emotional needs and readiness levels of individual children. In keeping with guidelines of the National Association for the Education of Young Children and the National Reading Panel, skill development activities are provided in small groups of no more than 3-5 children, and focus on goals that are challenging, yet achievable with sufficient adult support. The table below illustrates a sampling of the goals and skills addressed in *Connecting Math Concepts - Level A*.

Mathematics Skills Development

FOLLOWING INSTRUCTIONS

- Crosses Out Specified Pictures

COUNTING

- Counting Backwards
- Counting by 10

SYMBOLS

- Symbol Writing + - = < and >
- Numerals and Counters

MORE/LESS/EQUAL

- Discriminates Numbers as More, Less or Equal
- Circles the Larger Number

ADDITION/SUBTRACTION

- Says/Writes Answers to +1 Questions
- Says/Writes Answers to -1 and -0 Questions

PLACE VALUE

- Writes 2-digit numbers beyond 20 from dictation
- Works with facts or numbers in columns

PROBLEM SOLVING

- Listens to a Story and Indicates Operation (addition or subtraction)
- Solves Comparison Problems

APPLICATION

- Identifies Coins and Values
- Measures Lines to the Nearest Inch
- Estimates then Measures Height (Non-Standard Units)

*Material published by Science Research Associates.

Instructional Resources

Initial teacher trainings are conducted by a part-time Direct Instruction consultant. The consultant is also available approximately 5 hours per week to assist with all aspects of the Math Magic program implementation, including follow-up trainings, teacher mentoring and coaching, child placement and assessment, group scheduling, and overall program development and evaluation.

Individual Child Outcomes

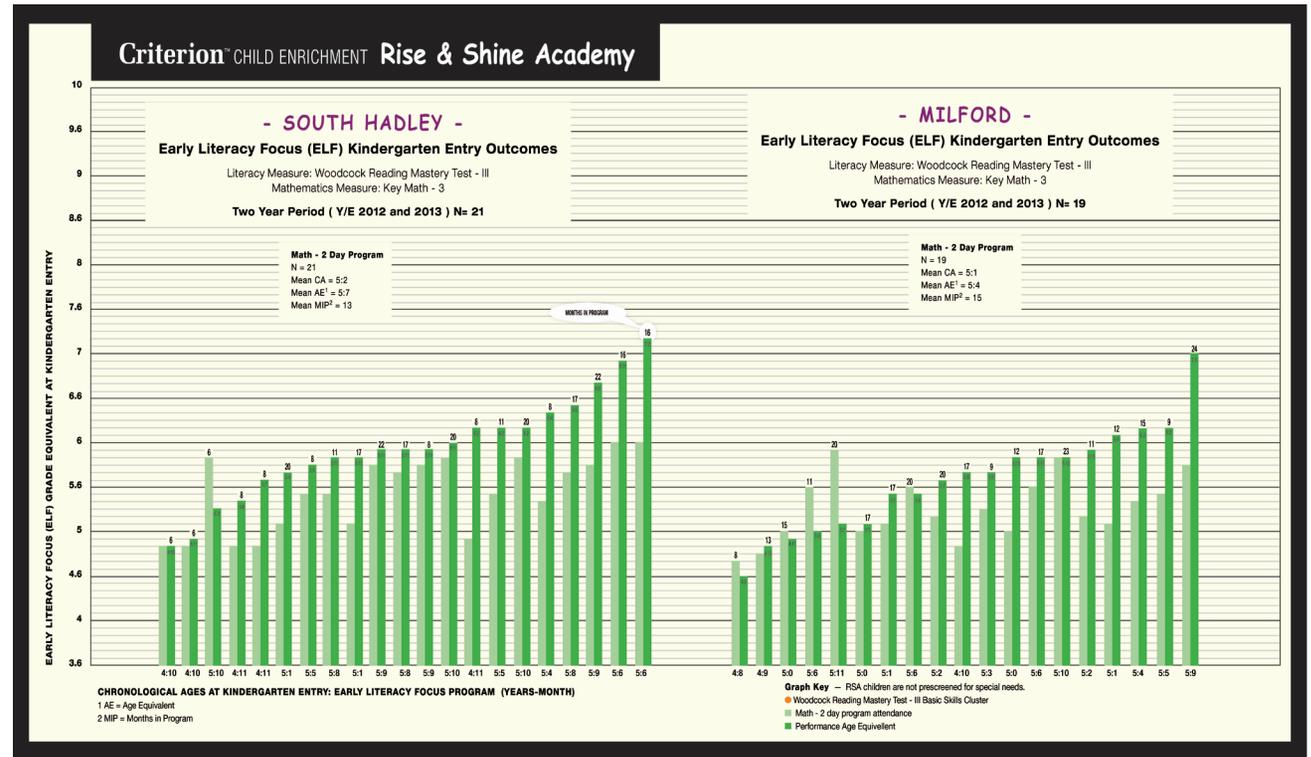
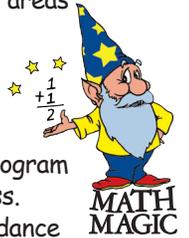
The teaching methods and instructional strategies inherent in Direct Instruction programs increase the efficiency of teaching and can reliably accelerate child learning. Standardized assessments provide insight regarding the rate of skill acquisition, one indicator of instructional effectiveness. Child progress is also monitored using program specific mastery assessments. This information is helpful as teachers address the developmental and instructional needs of individual children.

Math Literacy Program Outcomes

Progress toward mastery of learning objectives is measured regularly using a variety of formal and informal assessment procedures. For preschool children entering Kindergarten, outcome data provides parents and future teachers with an accurate account of student strengths while targeting skill areas needing further development.

Math Literacy Program Implementation

Regular participation in Math Magic program activities is essential for child progress. Math Magic teachers keep daily attendance records and complete weekly lesson progress summaries. The Direct Instruction consultant and program administrators use the attendance and lesson progress data to guide instructional planning and decision making.



Mastery test results are also useful for assessing progress toward overall literacy program goals and objectives. While outcomes vary, many children participating in the Math Magic program demonstrate two months' growth per one month of participation.



The Early Literacy Focus (ELF) and Math Magic programs are based upon a commitment to child enrichment, encouraged by recent federal early childhood learning initiatives.

The Math Magic program incorporates Connecting Math Concepts - Comprehensive Edition Levels A and B.

This program is a component of an approach to academic skills development called "Direct Instruction".

Direct Instruction teaches decoding, reading comprehension, and mathematical skills using scripted instruction in a format of repeated practice designed to create an environment that nurtures a high level of success for all children.



For more information or to bring Math Magic to your early childhood education program: www.elfliteracy.com



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MATH MAGIC

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Math Magic

Annual Report on Child Progress

