

Overview of Head Start/ECAP Outcomes Study: State of Delaware

The Delaware Head Start/ECAP Outcomes study was initially commissioned by the Interagency Resource Management Committee (IRMC) in 1998 to measure the effectiveness of Head Start and Early Childhood Assistance Programs (ECAP) serving all four year olds in their pre-kindergarten year and their families on an annual basis.

The study was designed to be helpful by:

- Providing information for families on the effectiveness of the programs in which their children are enrolled;
- Helping programs monitor how their systems are achieving outcomes and where they need to focus future efforts;
- Offering concrete information to decision makers, including parents, about how programs are addressing needs at the local and state level, and identifying areas requiring technical assistance or training for program personnel.

The Head Start/ECAP Outcomes study is an analysis of program description, child outcome, and family outcome information. The study is conducted annually collecting information from all Head Start and ECAP programs related to children in their pre-kindergarten year and the families served by these programs.

About the Delaware Department of Education

The State of Delaware is committed to supporting early education for young children. In April 2000, Delaware published *Early Success: Creating a Quality Early Care and Education System for Delaware's Children*. In 2006, the Delaware Early Care & Education Council published *Early Success: Delaware's Early Childhood Plan*. This document is a revised and expanded plan that better reflects current research and systems development. "Delaware recognizes that what children experience from birth to age five has a direct impact on their future success in school and life. We are committed to ensuring that all young children enter school prepared to succeed. *Early Success: Delaware's Early Childhood Plan* outlines what we need to accomplish to meet this goal. It

defines the components of a comprehensive early childhood system to support Delaware’s youngest children and their families.”
(Early Success, 2006, p.1)

Building the system is summarized by the following math equation:

$$\begin{array}{ccccccc} \text{Ready} & + & \text{Ready Early Care} & + & \text{Ready} & + & \text{Ready} & = & \text{Ready} \\ \text{Families} & & \text{\& Education} & & \text{Communities} & & \text{Schools} & & \text{Children} \end{array}$$

The Delaware Department of Education (DOE) is actively involved in providing a variety of early education services to children from infancy through kindergarten entry. Within the DOE is the Department of Curriculum and Instructional Improvement. Within that department is the Division of Exceptional Children/Early Childhood, which currently focuses on the following early childhood initiatives:

- Early care and education;
- Social-emotional development;
- Full-day Kindergarten;
- Literacy;
- Head Start Collaboration;
- Pre-Kindergarten; and
- Home-based parent education.

The Education Specialist responsible for the Early Childhood Assistance Program and Parents As Teachers, and the liaison from DOE for the Head Start/ECAP Outcomes Study is Connie Moran (cmoran@doe.k12.de.us).

About the Interagency Resource Management Committee (IRMC)

The Interagency Resource Management Committee (IRMC) was established by the legislature in Fiscal Year 1992. It was composed of five members: the Secretary of Education (who also serves as chairperson); the Secretary of Health and Social Services; the Secretary of Services for Children, Youth and Their Families; the Budget Director; and the Controller General. The coordination and collaboration of these state agencies is necessary to establish an early childhood system. The IRMC was charged with fostering an interagency approach in coordinating the delivery of early care and education services in Delaware, promoting interagency collaboration in providing services to those eligible for the Program for Children with Disabilities, providing administrative oversight for the state Early Childhood Assistance Program (ECAP) and coordinating the implementation of the report: *Early Success: Delaware's Early Childhood Plan (2006)*. The IRMC initiated the Head Start/ECAP Outcomes Project as a means to measure the effectiveness of the Pre-K programs and as a justification for program funding and support.

About the Delaware Early Childhood Center

The Delaware Early Childhood Center (DECC) has operated statewide since 1979. Its mission is to identify and build on strengths and interests of young children and families through partnerships, education, services and supports in order to enhance their lives in the community. DECC operates the following programs: Early CHOICES; Kent/Sussex Even Start/English Language Learners ; Early Childhood Assistance Program; Sussex County Parents as Teachers ; New Directions Early Head Start-Kent County and RELATE.

DECC is administered by the Lake Forest School District and has offices in Harrington, Dover, Georgetown, and New Castle. DECC has a staff of more than 100 employees, including professionals and paraprofessionals, who bring with them extensive and diverse training and experience in early childhood, special education and related areas. At any point in time, DECC serves more than 800 young children and their families in Delaware. The Delaware Department of Education contracts with DECC for data analysis

and report generation for the Head Start/ECAP Outcomes study. The Director of the Delaware Early Childhood Center and the Principal Investigator for the Head Start/ECAP Outcomes Project is Dr. Janet Cornwell (jrcornwell@lf.k12.de.us).

About Head Start and the Early Childhood Assistance Program

The Head Start/ECAP Outcomes Study measures child and family outcomes for four-year-olds served in Head Start and ECAP programs in their pre-kindergarten year in the state of Delaware. **Head Start** is a comprehensive federally funded child development program (Title V of the Economic Opportunity Act of 1964) serving pre-school children. The overall goal of Head Start is to increase the social competence of young children in low-income families. In 1969, Head Start was transferred from the Office of Economic Opportunity to the Office of Child Development in the U.S. Department of Health, Education and Welfare and is a program within the Administration on Children, Youth and Families in the Department of Health and Human Services. The program is locally administered by community-based non-profit organizations.

The **Early Childhood Assistance Program (ECAP)** consists of state funded pre-kindergarten programs for four-year-olds living at or below the federal poverty level administered by the Delaware Department of Education and operated by community-based organizations throughout the state, including existing Head Start grantees, school districts, community organizations and other early childhood agencies. The Department of Education, in cooperation with the Interagency Resource Management Committee (IRMC), oversees the implementation and operation of the state's pre-kindergarten initiative, called the Early Childhood Assistance Program (ECAP). ECAP was established in 1994 to address the need for improved school readiness by giving income eligible four-year-old children at least one year of preschool and reducing the waiting lists at Head Start centers.

Both Head Start and ECAP programs operate according to the Head Start Performance Standards (45 CFR part 1304) to serve preschool children and their families. Programs address the comprehensive needs of children and families by linking with existing services at the local level. These services are designed to meet the emotional, social, health, nutrition and psychological needs of

preschool children and to respect their parents as the most critical influence in the child's life. Parents serve as partners with the local programs in creating policy and influencing the character of programs. Creating healthy families is an integral part of both Head Start and ECAP, which is why the programs include home visits, parent workshops, community collaborations, and referral services for children and families. Programs are mandated to serve at least ten percent of children classified as disabled and may allow up to ten percent of enrolled children above the income guidelines.

Introduction to 2006-2007 Outcomes Study

The 2006-2007 Outcomes study is a systematic method for measuring child and family outcomes for Head Start and Early Childhood Assistance Programs (ECAP) in the state of Delaware, consistent with the federal Head Start Performance Standards. In addition, the study is guided by the *Early Success* plan's guiding principle "for achieving school readiness for all children by measuring effectiveness. Objective 1.6 (p.6) of the plan states that, "Every child will have access to monitoring of his or her development to support learning." For more information about the initial design of the Outcomes Study, see the *Head Start/ECAP Outcome Evaluation Proposal* (Gamel-McCormick & Lovett, 1998).

Study of Child Outcomes

The goal of this phase of the Head Start/ECAP Outcomes Project was to track the progress of children attending twelve of the fourteen Head Start and ECAP programs in the state of Delaware. Programs were asked to report assessment data for a randomly selected number of children including those with IEPs. For programs with more than 35 enrolled, 25% of children were selected. For programs with less than 35 enrolled, 50% (or a minimum of 10) children were selected. In order to track child development outcomes, programs selected either the *Creative Curriculum Development Continuum Assessment* or the *Work Sampling for Head Start*. Programs submitted completed instruments for randomly selected children for the Fall, 2006, and Spring, 2007.

Delaware's Work on Child Outcomes

Having children come to kindergarten ready to be successful is an important aspect to early education services. The State of Delaware is committed to supporting early education for young children. In Delaware's *Early Success* plan, there are seven guiding principles that guide quality program enhancement. One of those goals is to address child outcomes: "to employ a wide range of proven approaches for achieving quality" (Early Success, April 2000). One critical component that was identified as having an impact on quality is instruction, based on the solid framework of a developmentally appropriate curriculum.

A Delaware advisory workgroup gave careful consideration to identifying preschool outcomes and linking them to Delaware's K-12 standards and kindergarten performance indicators. The group's mission was to create a framework for learning opportunities that provides information to parents and educators to support each child's developmental growth. *DELAWARE: Early Learning Foundations for School Success* was created, which organized outcomes into seven developmental domains.

Delaware's Early Learning Foundations (DE Department of Education, March 2003) is "a document that can be used as a guide by parents, preschool teachers, family child care providers and others. The intent is to outline the types of learning experiences children ideally should have before they come to kindergarten. The Early Learning Foundations are aligned with the K-12 kindergarten expectations. They are used as a guide for promoting high quality early learning experiences for children. The Foundations document is organized by seven developmental domains which correspond to domains included in the Head Start Child Outcomes Framework" (Department of Health & Human Services, September 2003). The assessment instruments used by Head Start and ECAP programs for the Delaware Outcomes study, Work Sampling and Creative Curriculum, have been aligned below and throughout this report.

Head Start Program Performance Standards provide a sound foundation for achieving positive child outcomes. Released in 2000, the *Head Start Child Outcomes Framework* (Head Start, revised Summer 2003) is intended to guide Head Start programs in their curriculum planning and ongoing assessment of the progress and accomplishments of children. There are Domains, Elements and Indicators presented as a framework of building blocks that are important for school success. Except for the Literacy domain which is only included in the Head Start Outcomes, there is a direct parallel between the Head Start outcomes and those presented in the Delaware framework. Both of these documents are intended for use as instructional guides for early childhood educators as they plan for the short-term and long range individual development of each child served in the programs. Table 1, below, shows the comparisons in developmental domains for the DE Early Learning Foundations, Head Start Outcomes, Work Sampling and Creative Curriculum.

Table 1: of DE Early Learning Foundations, Head Start Outcomes, Work Sampling and Creative Curriculum

Delaware Early Learning Foundations	Head Start Child Outcomes	Work Sampling	Creative Curriculum
<u>Language development</u> Language Literacy	<u>Language development</u> Language: listening & understanding; speaking & communicating Literacy: phonological awareness; book knowledge; print awareness; early writing; alphabet knowledge	<u>Language development</u> Listening & understanding Speaking & communicating <u>Literacy</u> Book knowledge/ appreciation Print/alphabet awareness Early writing	<u>Language development</u> Listening and speaking <u>Reading and writing</u> Reading/print recognition Alphabet Books Writing
<u>Mathematics</u> Numbers and operations Geometry and spatial sense Patterns and measurement	<u>Mathematics</u> Numbers & operations Geometry & spatial sense Patterns & measurements	<u>Mathematics</u> Problem solving Number and operations Geometry and spatial sense Patterns Measurement	<u>Cognitive (Mathematics)</u> Seriation Patterns Time/sequence Space One-one correspondence Numbers & counting
<u>Science</u> Scientific skills & methods Scientific knowledge	<u>Science</u> Scientific skills & methods Scientific knowledge	<u>Science</u> Scientific skills & methods Scientific knowledge	<u>Cognitive (Science)</u> Cause & effect Classification Comparisons
<u>Creative Arts</u> Music Art Movement Dramatic play	<u>Creative Arts</u> Music Art Movement Dramatic play	<u>Creative Arts</u> Music Art/ Appreciation Movement Dramatic play	<u>Representation & Symbolic Thinking</u> Pretend roles & situations Makes believe with objects Makes/ interprets representations
<u>Emotional and Social Development</u> Self-concept Self-control Cooperation Social relationships Knowledge of families & communities	<u>Social & Emotional Development</u> Self-concept Self-control Cooperation Social relationships Knowledge of families & communities	<u>Social & Emotional Development</u> Self concept Self control Cooperation Social relationships Knowledge of families & communities	<u>Social/ Emotional Development</u> Sense of self Responsibility for self & others Prosocial behaviors
<u>Approaches to Learning</u> Initiative & curiosity Engagement & persistence Reasoning & problem solving	<u>Approaches to Learning</u> Initiative & curiosity Engagement & persistence Reasoning & problem solving	<u>Approaches to Learning</u> Initiative and curiosity Engagement and persistence Reasoning and problem solving	<u>Cognitive (Approaches to Learning)</u> Observes with curiosity Problem solving approaches Persistence with tasks Applies knowledge to new context
<u>Physical Health and Development</u> Fine motor skills Gross motor skills Health status & practices	<u>Physical Health & Development</u> Gross motor skills Fine motor skills Health Status & practices	<u>Physical Health & Development</u> Gross motor skills Fine motor skills Health status and practices	<u>Physical Development</u> Gross motor Fine motor

Characteristics of Delaware Head Start/ECAP Children

The goal of this component of the Head Start/ECAP Outcomes Project was to provide an overall description of the four-year-olds and families served by Delaware Head Starts and ECAPs. Demographic data is reported for 1320 children served by 13 programs.

Table 2: Description of Children and Families Served by Head Start/ECAP programs in 2006-2007

GENDER	NUMBER	PERCENTAGE
Males	649	49.17%
Females	671	50.83%
ETHNICITY	NUMBER	PERCENTAGE
African-American	693	52.50%
Caucasian	130	9.85%
Hispanic	447	33.86%
Other	50	3.79%
PRIMARY LANGUAGE	NUMBER	PERCENTAGE
English	894	67.93%
Spanish	403	30.62%
Other	19	1.44%
CHILDREN WITH SPECIAL NEEDS	NUMBER	PERCENTAGE
Children with IEP	59	4.47%
OTHER CHILD CARE/ HEAD START EXPERIENCE	NUMBER	PERCENTAGE
Attended Head Start last year	540	40.91%
Attend other child care programs in addition to ECAP this year	266	20.15%
PROGRAM OPERATIONS	PROGRAM RESPONSE	
Full or part-year program operation	Full-year: 187- 14.22% Part-year: 1,128-85.78%	
Number of days per week program operates	Five days per week	
Number of hours per day program operates	Less than 4 hrs: 765-57.95% 4-6 hrs: 413-31.29% More than 6 hrs: 142-10.76%	

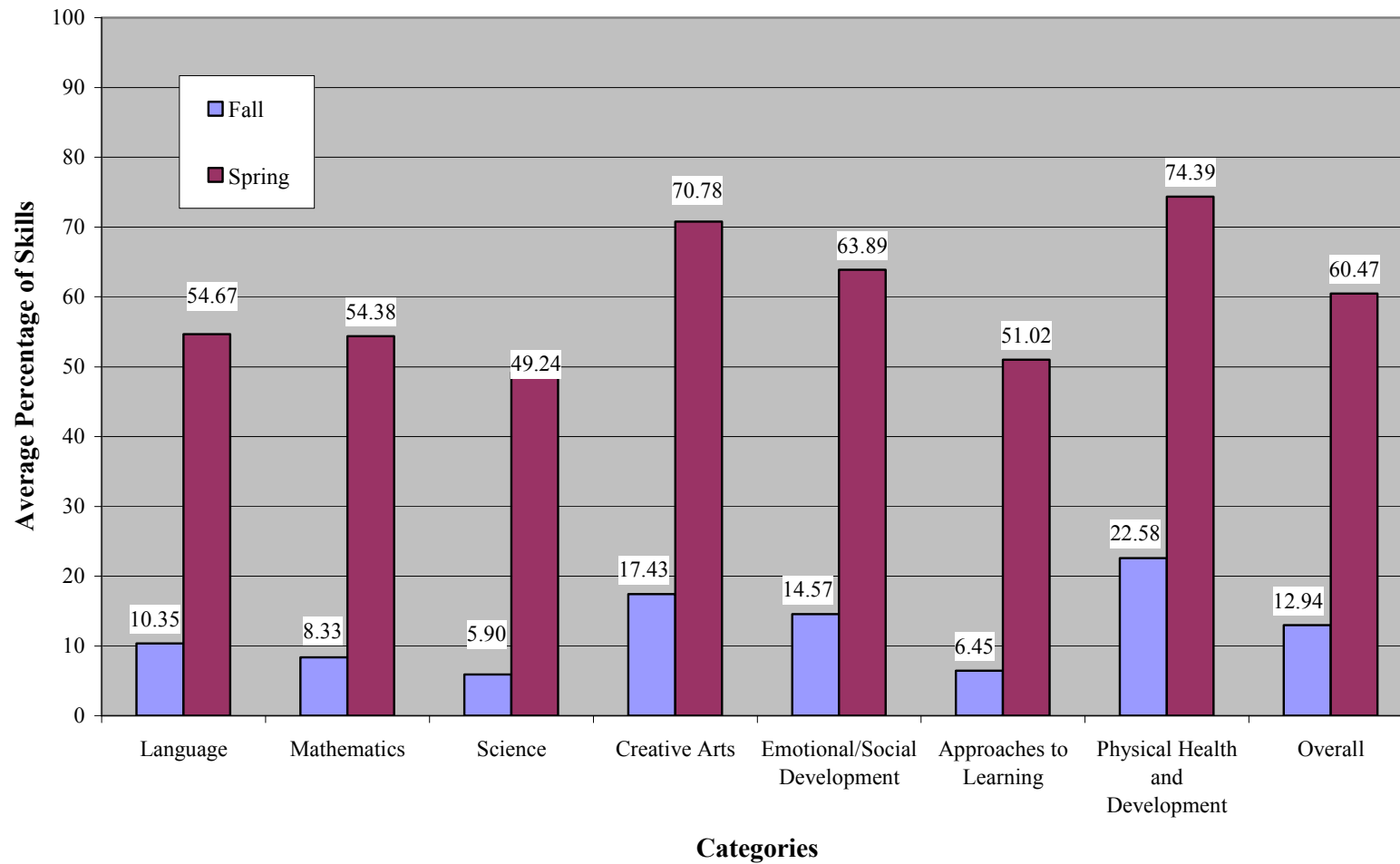
Child outcome data from 347 four-year-olds in 13 Head Start/ECAP programs in Delaware were studied in the Outcomes Project. The children were all assessed in the Fall of 2006 and the Spring of 2007, using either the *Creative Curriculum Developmental Continuum for Ages 3-5* (10 programs-308 children) or the *Work Sampling for Head Start Developmental Checklist* (3 programs-39 children). Summary data are depicted in three ways for this report. Initially, aggregated data from the 347 children in the 13 Head Start/ECAP programs are presented comparing the percentage of skills mastered in the seven developmental areas: Language, Mathematics, Science, Creative Arts, Emotional and Social Development, Approaches to Learning, and Physical Health & Development. The percentage of skills mastered overall is also presented. Then data is presented on the 308 children who were assessed using the *Creative Curriculum Developmental Continuum for Ages 3-5*. Finally, data is presented on the 39 children who were assessed using *Work Sampling for Head Start Developmental Checklist*.

Aggregated data in terms of percentage of skills mastered by 347 four-year-olds in all 13 programs was analyzed initially. (See Figure 1)

- In the area of Language Development, children were reported as having mastered 10.35% of their skills in the Fall of 2006. In the Spring of 2007, these children had mastered 54.67% of the skills in this area. Therefore, they had progressed in mastery 44.32% in the area of Language Development in 2006-2007.
- In the area of Mathematics, children were reported as having mastered 8.33% of their skills in the Fall. In the Spring, these children had mastered 54.38% of the skills in this area. Therefore, they had progressed in mastery 46.05% in the area of Mathematics in 2006-2007.
- In the area of Science, children were reported as having mastered 5.90% of their skills in the Fall. In the Spring, these children had mastered 49.24% of the skills in this area. Therefore, they had progressed in mastery a total of 43.34% in the area of Science in 2006-2007.

- In the area of Creative Arts, children were reported as having mastered 17.43% of their skills in the Fall of 2006. In the Spring of 2007, these children had mastered 70.78% of the skills in this area. Therefore, they had progressed in mastery 53.35% in the area of Creative Arts in 2006-2007.
- In the area of Emotional and Social Development, children were reported as having mastered 14.57% of their skills in the Fall of 2006. In the Spring of 2007, these children had mastered 63.89% of the skills in this area. Therefore, they had progressed in mastery 49.32% in the area of Emotional and Social Development in 2006-2007.
- In the area of Approaches to Learning, children were reported as having mastered 6.45% of their skills in the Fall of 2006. In the Spring of 2007, these children had mastered 51.02% of the skills in this area. Therefore, they had progressed in mastery 44.57% in the area of Approaches to Learning in 2006-2007.
- In the area of Physical Health and Development, children were reported as having mastered 22.58% of their skills in the Fall of 2006. In the Spring of 2007, these children had mastered 74.39% of the skills in this area. Therefore, they had progressed in mastery 51.81% in the area of Physical Development in 2006-2007.
- Overall, children were reported to have mastered 12.94% of their skills in the Fall of 2006. By Spring, 2007, they had mastered 60.47% of their skills overall. Children served by Head Start/ ECAP progressed 47.53% in skill mastery overall in 2006-2007.

**Figure 1: Aggregated Average Percentage of Skills in Fall 2006 and Spring 2007
in Delaware Head Start/ ECAP Programs
N=347**



About the Creative Curriculum Developmental Continuum Assessment System

The *Creative Curriculum Developmental Continuum* (Dodge,D. et.al., 2001) is a strengths-based approach that focuses on developmentally appropriate practice. The assessment shows the sequence of development for each of 50 curriculum objectives for 3-5 year old children, and forerunner skills for children who may not be at a typical level of development. It is a roadmap for determining where each child is developmentally, for tracking each child's progress, and for planning learning experiences. It provides a context for observation and assessment and a direction for program planning for individualization.

The *Developmental Continuum* addresses four areas of development – social/emotional, physical, cognitive and language (communication). Under these four areas there are 10 goals and 50 objectives.

- I. Social/Emotional Development (13 items)** focuses on the process by which children learn the values and behaviors accepted by society and also about becoming a competent and confident person. Subcategories include Sense of Self, Responsibility for Self and Others, and Pro-social Behavior.
- II. Physical Development (8 items)** includes items related to gross motor and fine motor development.
- III. Cognitive Development (16 items)** involves how children think, how they see their world, and how they use what they learn. Subcategories include Learning and Problem Solving, Logical Thinking, and Representation and Symbolic Thinking.
- IV. Language or Communication Development (13 items)** includes understanding and communicating through words, spoken and written. Subcategories include Listening and Speaking, and Reading and Writing.

For the 2006-2007 Outcomes study, Child Outcomes data for programs using the *Creative Curriculum Developmental Continuum* is reported in seven developmental domains aligning with the Delaware Early Learning Foundations. Items have been assigned to each of these categories (see Figure 1).

1. Language development (13 items)
2. Mathematics (6 items)
3. Science (3 items)
4. Creative Arts (3 items)
5. Emotional and social development (13 items)
6. Approaches to learning (4 items)
7. Physical health and development (8 items)

Each objective is broken down into developmental steps and children are observed and scored at their skill levels to indicate which category of rating describes what has been observed:

1. **Forerunner**: describes a skill that is not in the typical range of development but lags behind; this is an emerging skill.
2. **Step 1**: describes a skill that approximates the beginning level.
3. **Step 2**: describes a skill at the next level in reaching the objective.
4. **Step 3**: describes a skill that represents the highest level of skill development or mastery.

(Source: www.teachingstrategies.com)

Creative Curriculum Results for Head Start/ ECAP Children

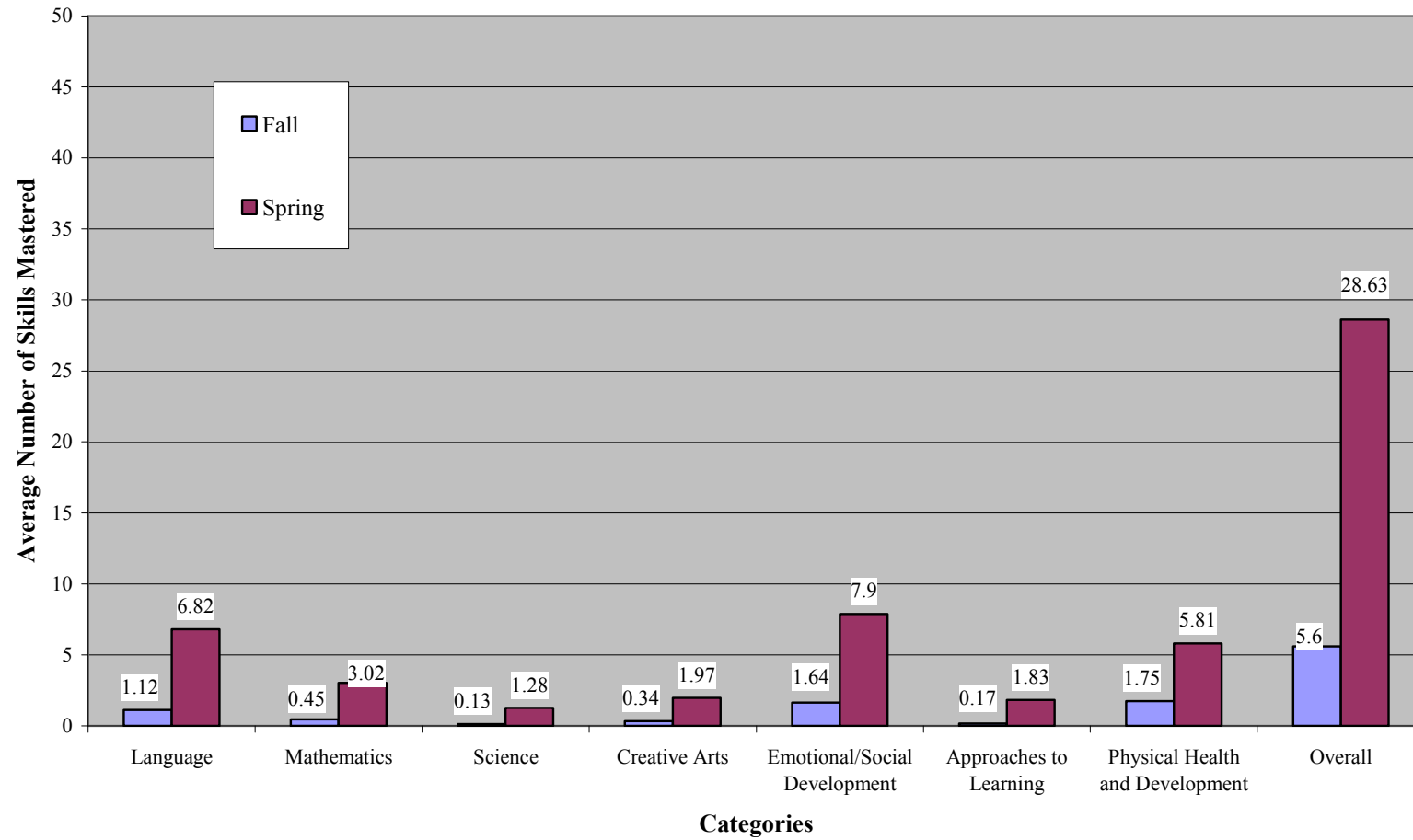
Information was collected from the ten Head Start/ECAP programs using the *Creative Curriculum Developmental Continuum*.

A complete assessment instrument was collected for a random number of children in each program and analyzed for all fifty items of the tool. Results are reported for seven developmental domains and overall development. The average number of skills reported for Fall 2006 and Spring 2007 can be compared to reveal progress children have made. This progress demonstrates the programs' efficacy in guiding children's developmental growth and in curriculum instruction.

- In Language Development, the 308 four year olds in seven Head Start/ECAP programs had mastered 1.12 skills at the Step 3 level by the Fall of 2006 and 6.82 skills out of a total of 13 items in the Spring of 2007. Children progressed in mastering an average of 5.70 skills in the area of Language Development in 2006-2007.
- In Mathematics, the 308 children had mastered 0.45 skills at the Step 3 level by the Fall of 2006 and 3.02 skills out of a total of 6 skills in the Spring of 2007. Children progressed in mastering an average of 2.57 skills in the area of Mathematics in 2006-2007.
- In Science, the 308 children had mastered 0.13 skills at the Step 3 level by the Fall of 2006 and 1.28 skills out of a total of 3 skills in the Spring of 2007. Children progressed in mastering an average of 1.15 skills in the area of Mathematics in 2006-2007.
- In Creative Arts, the 308 children had mastered 0.34 skills at the Step 3 level by the Fall of 2006 and 1.97 skills out of a total of 3 skills in the Spring of 2007. Children progressed in mastering an average of 1.63 skills in the area of Creative Arts in 2006-2007.
- In Emotional and Social Development, the 308 children had mastered 1.64 skills at the Step 3 level by the Fall of 2006 and 7.90 skills out of a total of 13 skills in the Spring of 2007. Children progressed in mastering an average of 6.26 skills in the area of Emotional and Social Development in 2006-2007.

- In Approaches to Learning, the 308 children had mastered 0.17 skills at the Step 3 level by the Fall of 2006 and 1.83 skills out of a total of 4 skills in the Spring of 2007. Children progressed in mastering an average of 1.66 skills in the area of Approaches to Learning in 2006-2007.
- In Physical Health and Development, the 308 children had mastered 1.75 skills at the Step 3 level by the Fall of 2006 and 5.81 skills out of a total of 8 skills in the Spring of 2007. Children progressed in mastering an average of 4.06 skills in the area of Physical Health and Development in 2006-2007.
- Overall, the 308 children had mastered 5.60 skills at the Step 3 level by the Fall of 2006 and 28.63 skills out of a total of 50 items in the Spring of 2007. Children progressed in mastering an average of 23.03 of the 50 total skills overall in 2006-2007.

Figure 2: Progress in Skills Mastery on Creative Curriculum in 2006-2007
N=308



About the Work Sampling System

Work Sampling for Head Start (Meisels, S. et al, 2001) assists teachers in observing, recording, and evaluating an individual child's skills, knowledge, behaviors, and accomplishments. This system is used by six Head Start and ECAP programs for child assessment. It is intended to help teachers monitor what children know and can do, and to assist teachers in planning learning experiences. Teachers are able to complete this checklist without actually testing their children since it reflects common experiences and expectations in classrooms that are structured around activities appropriate for most children of this age. This is completed three times per year, fall, winter and spring, following a period of ongoing observation.

There are eight (8) domains in the *Work Sampling for Head Start* checklist. Each item is in the form of a one-sentence performance indicator.

- I. **Social and Emotional Development** (13 items) emphasizes emotional and social competence and includes subcategories of Self-concept, Self-control, Cooperation, Social Relationships, & Knowledge of families and communities;
- II. **Approaches to Learning** (5 items) focuses on how children become involved in learning and includes subcategories of Initiative and Curiosity, Engagement & Persistence, & Reasoning and Problem Solving;
- III. **Language Development** (5 items) is organized into two components : Listening & Understanding and Speaking & Communicating and includes the subcategories of Listening and Understanding, Speaking and Communicating;
- IV. **Literacy** (7 items) looks at experiences with language, print and literature in a variety of contexts and includes the subcategories of Book knowledge & Appreciation, Print & Alphabet Awareness, and Early Writing.
- V. **Mathematics** (8 items) is focused on children's approach to mathematical thinking and problem solving. Emphasis is placed on how children acquire and use strategies and includes the subcategories of Problem Solving, Numbers & Operations, Geometry & Spatial Sense, Patterns, and Measurement;

- VI. **Science** (5 items) addresses thinking and inquiry skills as well as scientific knowledge and includes the subcategories of Scientific skills & Methods and Scientific Knowledge;
- VII. **Creative Arts** (5 items) emphasizes children's engagement with the arts, both actively and receptively and includes the subcategories of Music, Art, Movement, Dramatic Play and Appreciation;
- VIII. **Physical Health and Development** (7 items) emphasizes physical development as an integral part of children's well being and includes the subcategories of Gross Motor Skills, Fine Motor Skills and Health Status and Practices.

For the 2006-2007 Head Start/ ECAP Outcomes Study, aligning domains with the Delaware Early Learning Foundations, results are reported in seven domains, combining the Language and Literacy areas, as well as reporting on overall development.

The categories on the checklist rating reflect the degree to which children have acquired the skill, behavior, and/or demonstrated the accomplishments required by each of the performance indicators. Three types of ratings are possible:

1. **Not Yet** indicates that this child cannot perform this indicator; the child has not yet acquired this behavior or skill;
2. **In Process** implies that the skills, knowledge, behaviors or accomplishments are intermittent or emergent and not demonstrated reliably or consistently;
3. **Proficient** means that this child can reliably demonstrate the skills, knowledge, behaviors or accomplishments represented by this performance indicator.

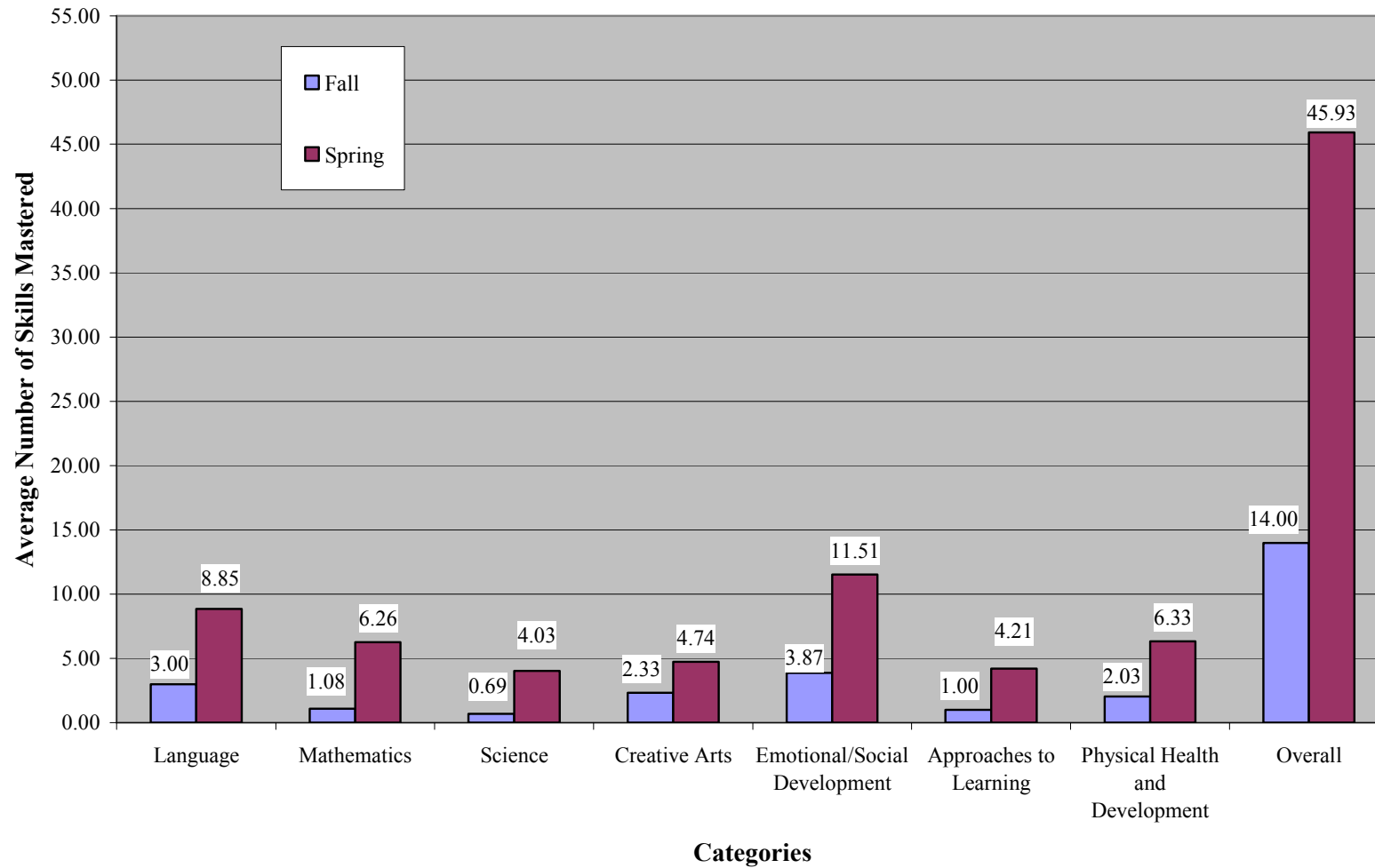
Work Sampling Results for Head Start/ECAP Children

Information was collected from the three Head Start/ECAP programs using *Work Sampling for Head Start*. The programs were asked to report results for the 2006-2007 year for each of the randomly selected children (n=39). Results are reported for seven developmental domains and overall development. The language and literacy categories have been combined for reporting in keeping with the domains established in the Delaware Early learning Foundations. The average number of skills reported for Fall 2006 and Spring 2007 can be compared to reveal progress children have made. This progress demonstrates the program's efficacy in guiding children's developmental growth and in curriculum instruction. This report presents skills mastered in each area and overall in the fall and spring, therefore only skills rated as proficient are shared.

- In Language Development, the 39 four year olds in three Head Start/ECAP programs had mastered 3.00 skills at the Proficient level by the Fall of 2006 and 8.85 skills out of a total of 12 items in the Spring of 2007. Children progressed in mastering an average of 5.85 skills in the area of Language Development in 2006-2007.
- In Mathematics , the 39 four year olds had mastered 1.08 skills at the Proficient level by the Fall of 2006 and 6.26 skills out of a total of 8 items in the Spring of 2007. Children progressed in mastering an average of 5.18 skills in the area of Mathematics in 2006-2007.
- In Science, the 39 four year olds had mastered 0.69 skills at the Proficient level by the Fall of 2006 and 4.03 skills out of a total of 5 items in the Spring of 2007. Children progressed in mastering an average of 3.34 skills in the area of Science in 2006-2007.
- In Creative Arts, the 39 four year olds had mastered 2.33 skills at the Proficient level by the Fall of 2006 and 4.74 skills out of a total of 5 items in the Spring of 2007. Children progressed in mastering an average of 2.41 skills in the area of Creative Arts in 2006-2007.

- In Emotional and Social Development, the 39 four year olds had mastered 3.87 skills at the Proficient level by the Fall of 2006 and 11.51 skills out of a total of 13 items in the Spring of 2007. Children progressed in mastering an average of 7.64 skills in the area of Emotional and Social Development in 2006-2007.
- In Approaches to Learning, the 39 four year olds had mastered 1.00 skill at the Proficient level by the Fall of 2006 and 4.21 skills out of a total of 5 items in the Spring of 2007. Children progressed in mastering an average of 3.21 skills in the area of Approaches to Learning in 2006-2007.
- In Physical Health and Development, the 39 four year olds had mastered 2.03 skills at the Proficient level by the Fall of 2006 and 6.33 skills out of a total of 7 items in the Spring of 2007. Children progressed in mastering an average of 4.30 skills in the area of Physical Health and Development in 2006-2007.
- In Overall Development, the 39 four year olds in three Head Start/ECAP programs had mastered 14.00 skills at the Proficient level by the Fall of 2006 and 45.93 skills out of a total of 55 items in the Spring of 2007. Children progressed in mastering an average of 31.92 skills overall in 2006-2007.

Figure 3: Progress in Skills Mastery on Work Sampling in 2006-2007
N=39



CONCLUSION

In their Overall Development, the 347 randomly selected four-year-olds served in Head Start/ECAP programs made progress in skill mastery during 2006-2007. When comparing the percentage of skills mastered in the Fall of 2006 and Spring of 2007, children progressed in all areas. They progressed from mastery of 12.94% of skills overall in the Fall of 2006 to mastery of 60.47% of overall skills in the Spring of 2007. Children served by Head Start/ECAPs progressed 47.53% in skill mastery overall in 2006-2007.

The 308 children in ten Head Start/ECAP programs using the *Creative Curriculum Development Continuum* progressed in mastery in an average of 28.63 skills overall in the Spring of 2007, starting from 5.60 skills mastered in the Fall of 2006. Therefore, the 308 four-year-olds served by ten Head Start/ECAP programs progressed in mastering an average of 23.03 of the 50 total skills overall in 2006-2007.

The 39 children in three Head Start/ECAP programs using *Work Sampling for Head Start* progressed in proficiency an average of 45.93 skills overall in the Spring of 2007, starting from 14.00 skills mastered in the Fall of 2006. Therefore, the 39 four-year-olds served by three Head Start/ECAP programs progressed in mastering an average of 31.93 of the 55 total skills overall in 2006-2007.

The results of the data collected from Head Start/ECAP programs indicate that children being served by these programs have made significant progress in all areas of development tracked by the assessment instrument for the period of Fall 2006 through Spring 2007. This progress demonstrates Head Start/ECAP's efficacy in guiding children's developmental growth and in curriculum instruction.

Study of Family Outcomes

One of the five goals of *Early Success: Delaware's Early Childhood Plan* is Ready Families. "Families are the prime educators of their children; it is their responsibility to assist their children to become healthy and productive citizens. In order to be successful at parenting, families need access to information, services and community resources in varying levels to support them in this important task." (*Early Success, 2006, p.20*) One of the core indicators of Ready Families in the *Early Success* plan is the percentage of progress on the Family Outcomes indicators in Delaware's Part C program, Head Start and Early Childhood Assistance Programs (ECAP). The Head Start/ECAP Outcomes study asks programs to report on family goals developed and implemented in their Family Partnership Agreements.

For the 2006-2007 Outcomes study program year, family goals were summarized and reported in twelve goal categories: Health/Nutrition (including medical care, family safety & family health) , Mental Health (including family wellness, substance abuse, counseling), Child Care, Parenting Skills, Housing, Adult Education (including literacy, training, advocacy and leadership), Employment, Transportation, Relationships (including communication, social support and self-concept), Finances (including budget and money management), Basic Needs (including food and clothing) and Child Education.

For the current program year, a total of 897 goals were identified by 333 families in the family partnership process in twelve of the thirteen programs.

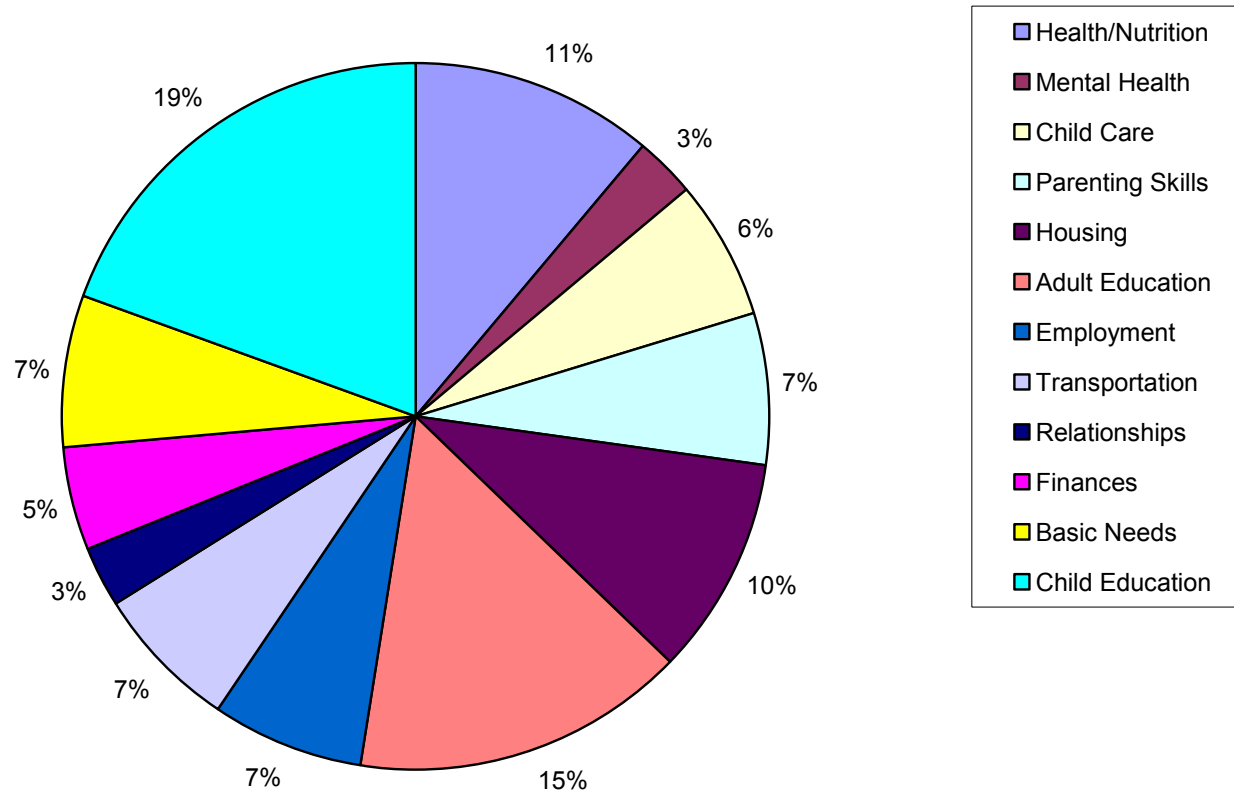
- 99 goals were identified in the Health/Nutrition category. 91 goals were completed (91.92%).
- 26 goals were identified in the Mental Health category. 24 goals were completed (92.31%).
- 58 goals were identified in the Child Care category. 42 goals were completed (72.41%).
- 61 goals were identified in the Parenting category. 45 goals were completed (73.77%).
- 91 goals were identified in the Housing category. 50 goals were completed (54.95%).

- 136 goals were identified in the Adult Education category. 102 goals were completed (75.00%).
- 61 goals were identified in the Employment category. 49 goals were completed (80.33%).
- 61 goals were identified in the Transportation category. 56 goals were completed (91.80%).
- 26 goals were identified in the Relationships category. 20 goals were completed (76.92%).
- 42 goals were identified in the Finances category. 32 goals were completed (76.19%).
- 61 goals were identified in the Basic Needs category. 60 goals were completed (98.36%).
- 175 goals were identified in the Child Education category. 173 goals were completed (98.86%).

Table 3: Head Start/ECAP Family Goal Categories 2006-2007
Number of Goals and Number and Percentage of Goals Completed
(N=333)

Category	Total Family Goals	Family Goals Completed	Percentage of Goals Completed
Health/Nutrition	99	91	91.92%
Mental Health	26	24	92.31%
Child Care	58	42	72.41%
Parenting Skills	61	45	73.77%
Housing	91	50	54.95%
Adult Education	136	102	75.00%
Employment	61	49	80.33%
Transportation	61	56	91.80%
Interpersonal Relationships	26	20	76.92%
Finances	42	32	76.19%
Food/Clothing/Basic Needs	61	60	98.36%
Child Education	175	173	98.86%
Total	897	744	82.94%

**Figure 9: Head Start/ECAP Programs
2006-2007 Total Family Goals
(n=333)**



Conclusion

The results of the data collected from the Family Outcomes data for all programs for 2006-2007 shows that goals were identified in all categories. These represent the areas that a random selection of 333 families, working in partnership with the program's family service workers, identified as areas of family need. The families completed 744 goals out of 897 (82.94%) for the program year. Families were supported by their Head Start and ECAP programs in identifying and achieving their goals.

References

- Delaware Department of Education. (March 2003) *DELAWARE Early Learning Foundations for School Success*. Contact: Dr. Jim Lesko, jlesko@doe.k12.de.us
- Dodge, D. T., Colker, L. J. & Heroman, C. (2001) *The Creative Curriculum: Developmental Continuum Assessment System, A Teacher's Guide*. Washington, D.C.: Teaching Strategies, Inc. www.TeachingStrategies.com
- Dichtelmiller, M. L., Jablon, J. R., Meisels, S. J. & Marsden, D. B. (2001) *Work Sampling for Head Start: A Teacher's Manual*. Ann Arbor, MI: Pearson Education Inc. www.worksamplingonline.com
- Early Success: Delaware's Early Childhood Plan*. (November 2006). The Delaware Early Care and Education Council & Early Childhood Comprehensive System Steering Committee. Contact: Janet Carter, Delaware Office of Early Care and Education, jcarter@doe.k12.de.us .
- Early Success: Creating a Quality Early Care and Education System for Delaware's Children*. (April 2000). Contact: Janet Carter, Delaware Office of Early Care and Education, jcarter@doe.k12.de.us.
- Gamel-McCormick, M. & Lovett, K. (May 1998) *Head Start/ECAP Outcome Evaluation Proposal*. Newark, DE: Center for Disabilities Studies at University of Delaware.
- Meisels, S. J., Dichtelmiller, M. L., Jablon, J. R. & Marsden, D. B. (2001) *Work Sampling for Head Start: Developmental Guidelines for Four Year Olds*. Ann Arbor, MI: Pearson Education, Inc.
- U.S. Department of Health and Human Services, Administration for Children and Families, Head Start Bureau. (Revised December 15, 1999) *Head Start Program Performance Standards and Other Regulations*. Washington, DC.
- U.S. Department of Health and Human Services, Administration for Children and Families, Head Start Bureau. (amended Oct. 27, 1998) *Head Start Program Regulations and Program Guidance*. Head Start Act.
- U.S. Department of Health and Human Services, Administration for Children and Families, Head Start Bureau. (Summer 2003) *The Head Start Path to Positive Child Outcomes*. Washington, DC. www.headstartinfo.org