

# District of Columbia Child Outcomes Summary (COS) Supporting Resources and Documents

Measuring the Progress of Preschool Children with Developmental Delays and Disabilities

June 5, 2013

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# **Additional COS Resources**

*Links to helpful websites, video clips, training resource documents, developmental milestones, COS crosswalks for commercial assessments, and other COS tools and resources.* 

## **OSSE COS Resource Homepage**

http://osse.dc.gov/page/childoutcomessummaryformcosf

DC CATS: www.dccats.spedsis.com

## Early Childhood Outcomes Center (ECO)

<u>Training resources</u> <u>http://www.fpg.unc.edu/~eco/index.cfm</u> <u>http://www.fpg.unc.edu/~eco/pages/training\_resources.cfm#ChildDevelopment</u>

What is a Functional Outcomes? http://projects.fpg.unc.edu/~eco/assets/pdfs/Functional\_outcomesHO.pdf

<u>Subjectivity and COS Ratings: Is the COS Rating Subjective?</u> <u>http://www.fpg.unc.edu/~eco/assets/pdfs/SubjectivityandCOSRatings.pdf</u>

<u>Immediate foundational skills</u> http://www.fpg.unc.edu/~eco/assets/pdfs/Immediate foundational skills.pdf

<u>Consensus—What if we can't reach consensus?</u> <u>http://www.fpg.unc.edu/~eco/assets/pdfs/Consensus.pdf</u>

Implementation Issues Activity

http://www.fpg.unc.edu/~eco/pages/training\_activities.cfm#implementation

Maryland Dept. of Education Early Childhood COS Materials http://www.fpg.unc.edu/~eco/pages/training\_md.cfm

Other States: COS Resources and training modules used by other states: http://www.fpg.unc.edu/~eco/pages/training\_resources.cfm#SampleTrainings

## **Developmental Milestones & Resources**

Below are selected resources helpful in understanding typical child development. These resources can help educators and service providers more accurately assign COS ratings for the three childhood outcome areas.

<u>North Dakota DPI Age Expectation Developmental Milestones [PDF]</u> This document was developed by North Dakota's Department of Public Instruction and documents age-expected functioning according to the three child outcomes for COS.

- Full Version (20 pages): <u>http://www.dpi.state.nd.us/speced/early/full\_version%20.pdf</u>
- Summary version (8 pages): <u>http://www.dpi.state.nd.us/speced/early/age\_groups%20.pdf</u>
- Quick Reference (3 pages): <a href="http://www.dpi.state.nd.us/speced/early/quick-ref.pdf">http://www.dpi.state.nd.us/speced/early/quick-ref.pdf</a>

## Centers for Disease Control

http://www.fpg.unc.edu/~eco/pages/training\_resources.cfm#ChildDevelopment

This website provides information on developmental milestones for children from 3 months to 5 years of age and offers developmental warning signs for each age group. The site also offers interactive tools for users to specify certain ages, select areas of development, and examine expected changes in milestones over time.

Maryland "Healthy Beginnings" Crosswalk for Infant/Toddler Development by Age and the <u>Three Early Childhood Outcomes</u> <u>http://www.fpg.unc.edu/~eco/assets/pdfs/HealthyBeginningsCrosswalkforMaryland.pdf</u>

<u>Virginia's Infant/Toddler Development by Age and Early Childhood Outcomes</u> <u>http://www.fpg.unc.edu/~eco/assets/pdfs/VATYPICALDEVELOPMENTResource.pdf</u>

American Academy of Pediatrics

<u>http://www.fpg.unc.edu/~eco/pages/training\_resources.cfm#ChildDevelopment</u> Offers health and developmental milestones for different stages, and developmental signs which may need further evaluation.

## Illinois Child Development Modules: Understanding Young Children's

<u>Development http://www.fpg.unc.edu/~eco/pages/training resources.cfm#ChildDevelopment</u> Two narrated modules were developed by training personnel in Illinois based on content developed by the University of Connecticut Center for Excellence in Developmental Disabilities. The modules correspond to two of the three child outcome areas and are focused on identifying age-appropriate skills among children zero to three:

- Understanding Young Children's Development: Taking Action to Meet Needs
- Understanding Young Children's Development: A Focus on Positive Social Emotional Skills
- Understanding Young Children's Development: A Focus on Children's Acquisition and Use of Knowledge and Skills

## The National Institute on Deafness and Other Communication Disorders

This site provides background information on speech and language development from birth to 5 years. Interactive checklists for different ages are available

Parenting Counts Developmental Timeline

http://www.parentingcounts.org/information/timeline/

This online resource from Talaris Institute provides research-based information about children's developmental milestones from birth to age 5.

<u>University of Connecticut Center for Excellence in Developmental Disabilities</u> <u>http://www.uconnucedd.org/</u>

An online training module on social-emotional development in infants and toddlers related to the three OSEP chid outcomes.

The University of Maryland Medical Center http://www.umm.edu/ency/article/002348.htm

This site provides an overview of common developmental milestones and recommendations for play activities at various ages from birth to 5 years.

## **Crosswalks for Commercial Assessments Used in COS Process**

Sample crosswalks for ASQ, AEPS, Battelle, Brigance, Carolina Curriculum, Creative Curriculum, DAYC, HELP, ELAP, Teaching Strategies GOLD, etc. http://projects.fpg.unc.edu/~eco/pages/crosswalks.cfm#Crosswalks http://projects.fpg.unc.edu/~eco/pages/crosswalks.cfm

## **Videos for COS Trainings**

http://www.draccess.org/videolibrary/

- Ari at lunch
- Carmen counting at lunch
- Gina takes off her hoodie
- Logan makes a pattern
- Logan reads a book

http://www.cde.state.co.us/resultsmatter/RMVideoSeries PracticingObservation.htm#top

- Asia and Lyric build road together
- Davana and Jozlynn at sand table
- The construction site
- Henry at mealtime



## The Child Outcomes Summary (COS) Data Collection Process

#### The Three Child Outcomes: Measured and Reported Annually to the Office of Special Education Programs (OSEP) US Department of Education

Each year, states report to OSEP the percent of infants and toddlers with IFSPs who demonstrate improved:

#### 1. Positive social-emotional skills (including social relationships)

- Relating with adults
- Relating with other children
- · For older children, following rules related to groups or interacting with others

Includes areas like:

- Attachment/separation/autonomy
- Expressing emotions and feelings
- Learning rules and expectations
- Social interactions and play
- 2. Acquisition and use of knowledge and skills (including early language/ communication)
  - Reasoning
  - Remembering
  - Problem solving
  - Using symbols and language
  - Understanding physical and social worlds

Includes areas like:

- Early concepts—symbols, pictures, numbers, classification, spatial relationships
- Imitation
- Object permanence
- Expressive language and communication
- Early literacy

#### 3. Use of appropriate behaviors to meet their needs

- Taking care of basic needs
- · Getting from place to place
- Using tools (e.g., fork, toothbrush)
- In older children, contributing to their own health and safety

Includes areas like:

- Integrating motor skills to complete tasks
- Self-help skills (e.g., dressing, feeding, grooming, toileting, household responsibility)
- Acting on the world to get what one wants

Child Outcomes Summary (COS) Training - DC-Part C and Section 619- May 2012 - MSRRC/NECTAC

## ND Early Childhood Outcomes Process Age Expectation Developmental Milestones Quick Reference

<ul> <li>Outcome 1: Positive Social-Emotional Skills Children demonstrate age appropriate functioning by</li> <li>Birth - 6 Months <ul> <li>Fixating on the human face and tracking or following movements</li> <li>Being comforted and appearing to enjoy touch and being held by a familiar adult</li> <li>Smiling spontaneously to human contact smiling in play, and smiling at self in mirror</li> <li>Vocalizing in response to vocalizations and speech produced by an adult</li> </ul> </li> </ul>	<ul> <li>Outcome 2: Acquiring and Using Knowledge and Skills Children demonstrate age appropriate functioning by</li> <li>Birth - 6 Months <ul> <li>Trying to cause things to happen such as kicking a mobile and smiling</li> <li>Developing more precise imitation skills of facial movements and speech sounds</li> <li>Securing an object that is partially hidden with a cloth</li> <li>Demonstrating exploratory behaviors with objects</li> <li>Pitch and intonation vary</li> </ul> </li> </ul>	<ul> <li>Outcome 3: Taking Appropriate Action to Meet Needs Children demonstrate age appropriate functioning by</li> <li>Birth - 6 Months <ul> <li>Beginning to reach for objects</li> <li>Bringing hands together at midline</li> <li>Walking reflex; when held upright with feet resting on flat surface, lifts feet alternately in walking-like motion</li> <li>Holding small objects or toys</li> </ul> </li> </ul>
<ul> <li>7 - 12 Months</li> <li>Imitating familiar words in turn-taking</li> <li>Exhibiting anxious behavior around unfamiliar adults</li> <li>Repeating a behavior (shows off) to maintain adult attention</li> <li>Briefly stopping behavior when told "no"</li> </ul>	<ul> <li>7 - 12 Months</li> <li>Transferring objects from one hand to another</li> <li>Demonstrating a refined neat-pincer grasp with thumb opposition</li> <li>Demonstrating emerging problem solving skills</li> <li>Maintaining attention to speaker</li> <li>Imitating consonant and vowel combinations</li> <li>Vocalizing with intent</li> <li>Identifying two body parts on self</li> </ul>	<ul> <li>7 - 12 Months</li> <li>Pulling self up to standing posture next to furniture</li> <li>Drinking from a cup</li> <li>Beginning to feed self finger food</li> <li>Beginning to grab for spoon when being fed</li> <li>Pointing with index finger</li> <li>Pulling off own socks</li> <li>Beginning to cooperate when being dressed</li> </ul>
<ul> <li>13 - 24 Months</li> <li>Demonstrating more complex exploration and play skills with toys and objects</li> <li>Initiating familiar turn-taking routines</li> <li>Discriminating between familiar and unfamiliar people</li> <li>"Checking in" with familiar adults while playing</li> <li>Gaining enjoyment from peer play and joint exploration</li> </ul>	<ul> <li>13 - 24 Months</li> <li>Looking at, pointing and naming pictures in book</li> <li>Using 2 to 3 word phrases</li> <li>Following a 2 or 3 step direction</li> <li>Referring to self by name</li> <li>Using sentence-like intonations</li> <li>Stacking 5 or 6 blocks</li> </ul>	<ul> <li>13 - 24 Months</li> <li>Beginning to explore the environment independently</li> <li>Demonstrating more advanced movement and motor skills such as running and climbing</li> <li>Picking up small items (food or toys) with ends of thumb and index finger (neat pincer grasp)</li> <li>Trying to wash own hands and face</li> </ul>

<ul> <li>25 - 30 Months</li> <li>Having difficulty sharing with peers</li> <li>Obeying adult request approximately half of the time</li> <li>Continuing to try difficult tasks for brief periods of time</li> <li>Seeking and accepting assistance when encountering difficulty</li> <li>Wanting to do favorite activities over and over</li> <li>Separating from parent in familiar surroundings without crying</li> </ul>	<ul> <li>25 - 30 Months</li> <li>Understanding approximately 500 words and says 200 words</li> <li>Speaking in 2 to 3 word sentences, jargon and echolalia almost gone</li> <li>Answering and asking simple "who," "what," and "where," questions</li> <li>Naming at least one color</li> <li>Matching simple shapes such as circle, square and triangle</li> <li>Understanding size differences (big, little)</li> </ul>	<ul> <li>25 - 30 Months</li> <li>Independently eating with spoon</li> <li>Taking off own shoes, socks, and some pants</li> <li>Imitating circular, vertical and horizontal strokes</li> <li>Walking up steps, alternating feet in adult fashion while holding rail or hand</li> <li>Snipping paper with scissors</li> <li>Catching ball (by trapping against body) when playing with adult or peer</li> </ul>
<ul> <li>31 - 36 Months</li> <li>Associative play predominates</li> <li>Separating easily from parent in familiar environment</li> <li>Throwing tantrums when thwarted or unable to express urgent needs</li> <li>Following simple rules</li> <li>Taking turns in games</li> <li>Listening and participating in group activities with adult supervision</li> <li>Pretending and using imagination during play</li> </ul>	<ul> <li>31 - 36 Months</li> <li>Giving first and last name when asked</li> <li>Using 4 to 6 word phrases or sentences</li> <li>Beginning to use contractions</li> <li>Using past tense</li> <li>Drawing a face from a model</li> <li>Matching three colors</li> <li>Matching objects by color, shape and size</li> <li>Stating whether they are a boy or girl</li> </ul>	<ul> <li>31 - 36 Months</li> <li>Using a fork to spear bite size chunks of food</li> <li>Hopping in one place on one foot three times</li> <li>Verbalizing toileting needs fairly consistently</li> <li>Washing and drying hands, brushing teeth</li> <li>Copying a circle</li> <li>Unbuttoning buttons</li> </ul>
<ul> <li>37 - 48 Months</li> <li>Responding to and making a verbal greeting</li> <li>Beginning to show cooperative play without adult supervision</li> <li>Demonstrating fears (mechanical toys, vacuum cleaner, thunder, dark)</li> <li>Wanting to be "big girl," "big boy," and acquire new skills</li> <li>Accepting suggestions and follows simple directions</li> <li>Accepting the consequences of one's own actions</li> <li>Following routines independently and completes familiar routines</li> <li>Showing persistence when completing difficult tasks</li> </ul>	<ul> <li>37 - 48 Months</li> <li>Drawing a person with head and 1 to 3 additional features</li> <li>Following three step commands in a complex sentence</li> <li>Listening attentively to short stories; enjoying familiar stories told without any changes in words</li> <li>Responding to questions with appropriate answers</li> <li>Speaking clearly enough so that 75 to 80 percent of speech is understandable to an unfamiliar listener</li> <li>Names four colors</li> <li>Telling own age and gender</li> <li>Matching objects that have the same function</li> <li>Understanding the concept of the number 3</li> </ul>	<ul> <li>37 - 48 Months</li> <li>Using the toilet with some help</li> <li>Performing more refined tasks (buttoning, zipping, attempts at tying shoes)</li> <li>Walking upstairs and downstairs alternating feet without holding on to rail or hand</li> <li>Feeding self with fork, spoon and buttering bread with knife</li> <li>Putting on boots and mittens</li> <li>Wiping nose, unassisted</li> <li>Brushing teeth independently</li> <li>Using vertical, horizontal, and circular motions when drawing</li> <li>Copying drawing a cross</li> </ul>

<ul> <li>49 - 60 Months</li> <li>Recognizing other's needs and giving assistance</li> <li>Preferring to play with other children to playing alone, except when involved in a project</li> <li>Engaging in cooperative play</li> <li>Attending during large group for ten minutes</li> <li>Waiting in turn for adult attention</li> <li>Having a best friend of the same gender</li> </ul>	<ul> <li>49 - 60 Months</li> <li>Drawing a person with at least five parts</li> <li>Matching sounds in familiar songs</li> <li>Clapping syllables in name</li> <li>Articulating the difference between beginning and ending sounds</li> <li>Substituting sounds in words</li> <li>Identifying letters in first and last name</li> <li>Using print in imaginary play</li> <li>Copying symbols and letters of first name</li> <li>Giving 3, 5, 7 objects upon request</li> <li>Rote counting to 10</li> <li>Recognizing symbols 1 to 10</li> <li>Counting objects to 5</li> <li>Telling age, middle name, last name, parent's name, address/town, telephone number, birthday, days of week</li> <li>Naming 6 to 8 colors</li> </ul>	<ul> <li>49 - 60 Months</li> <li>Wiping nose independently</li> <li>Demonstrating hand dominance</li> <li>Holding a pencil with 3 finger grasp</li> <li>Zipping zippers</li> <li>Lacing shoes</li> <li>Dressing and undressing independently, including front fasteners, requiring assistance with ties and back fasteners</li> <li>Cutting a circle with scissors</li> </ul>
<ul> <li>61 - 72 Months</li> <li>Recognizing that there are "good" and "bad" touches</li> <li>Responding verbally and positively to good fortunes of others</li> <li>Demonstrating tenderness and protectiveness toward younger children and pets</li> <li>Working alone at chore for 20 to 30 minutes</li> <li>Predicting classroom routines and guiding other children in routines</li> <li>Expressing anger with non-aggressive words rather than with physical actions</li> <li>Comforting friends in distress</li> </ul>	<ul> <li>61 - 72 Months</li> <li>Telling similarities and differences</li> <li>Predicting what will happen next</li> <li>Pointing out common words in stories</li> <li>Discriminating and articulating middle sounds in words</li> <li>Identifying beginning sound of name and finding another word with same sound</li> <li>Identifying most letter sounds</li> <li>Recognizing and naming most letters</li> <li>Printing name independently</li> <li>Matching numbers with objects</li> <li>Pointing to and naming hip, waist, toenails, chest, eyebrows, jaw, stomach, fingernails, back, wrist, cheek</li> <li>Telling own city, state, months of year, current year</li> <li>Drawing a person with six parts</li> </ul>	<ul> <li>61 - 72 Months</li> <li>Obeying traffic lights and signs</li> <li>Covering mouth and nose when coughing and sneezing</li> <li>Understanding that it is unsafe to accept rides, food, or money from strangers</li> <li>Cutting soft food with knife</li> <li>Making simple breakfast and lunch</li> <li>Bathing without assistance</li> <li>Selects clothing appropriate for temperature and occasion</li> <li>Making own bed when asked</li> <li>Being responsible for one household chore</li> <li>Skipping on alternating feet, maintaining balance</li> <li>Running smoothly with changes in speed</li> </ul>

Adapted from the ND Early Childhood Outcomes Process – Age Expectation Developmental Milestones - June 2010 http://www.dpi.state.nd.us/speced/early/index.shtm

## **Decision Tree for Summary Ratings & Selection of Descriptor Statements**



The Early Childhood Outcomes Center (Modified by OSSE 4/10/2012)

## Child Outcomes Summary (COS) Ratings and Maryland COS Descriptors w/Buckets

Overall Age-Appropriate	Completely means:	7	<ul> <li>Child shows functioning expected for his or her age in all or almost all everyday situations that are part of the child's life. Functioning is considered appropriate for his or her age.</li> <li>No one has any concerns about the child's functioning in this outcome area.</li> <li>Relative to same age peers, has all of the skills that we would expect of a child his age in the area of (outcome [e.g., taking action to meet needs]).</li> <li>Child's functioning generally is considered appropriate for his or her age but there are some significant concerns about the child's functioning in this outcome area. These concerns are substantial enough to suggest monitoring or possible additional support.</li> <li>Although age-appropriate, the child's functioning may border on not keeping pace with age expectations.</li> </ul>
Ó			Relative to same age peers, has the skills that we would expect of his age in regard to (outcome); however, there are concerns with how he (functional area that is of concern/quality of ability/lacking skill).
Some Not Age-Appropriate/Some Age-Appropriate	Somewhat means:	5	<ul> <li>Child shows functioning expected for his or her age some of the time and/or in some settings and situations. Child's functioning is a mix of age-appropriate and not age-appropriate behaviors and skills.</li> <li>Child's functioning might be described as like that of a slightly younger child.</li> <li>Relative to same age peers, shows many age expected skills, but continues to show some functioning that might be described like that of a slightly younger child in the area of (outcome).</li> </ul>
Some Not Age Age-A	AE	4	<ul> <li>Child shows occasional age-appropriate functioning across settings and situations. More functioning is not age-appropriate than age-appropriate.</li> <li>Relative to same age peers, shows occasional use of some age expected skills, but more of his skills are not yet age expected in the area of (outcome).</li> </ul>
ate	Nearly means:	3	<ul> <li>Child does not yet show functioning expected of a child of his or her age in any situation.</li> <li>Child uses immediate foundational skills, most or all of the time, across settings and situations. Immediate foundational skills are the skills upon which to build age-appropriate functioning.</li> <li>Functioning might be described as like that of a younger child*.</li> <li>Relative to same age peers, is not yet using skills expected of his age. He does however use many important and immediate foundational skills to build upon in the area of (outcome).</li> </ul>
Not Age Appropriate	F	2	<ul> <li>Child occasionally uses immediate foundational skills across settings and situations. More functioning reflects skills that are not immediate foundational than are immediate foundational.</li> <li>Relative to same age peers, is showing some emerging or immediate foundational skills, which will help him to work toward age appropriate skills in the area of (outcome).</li> </ul>
	Not yet means:	1	<ul> <li>Child does not yet show functioning expected of a child his or her age in any situation.</li> <li>Child's functioning does not yet include immediate foundational skills upon which to build age-appropriate functioning.</li> <li>Child functioning reflects skills that developmentally come before immediate foundational skills.</li> <li>Relative to same age peers, functioning might be described as like that of a much younger child. He shows early skills, but not yet immediate foundational or age expected skills in the (outcome) area.</li> </ul>

1

#### Summary Information: Brigance Inventory of Early Development (IED-II; 2004)

The IED-II can be used as either a criterion-referenced tool for ongoing monitoring and assessment or as a standardized assessment approach. In some cases, the characteristics of the tool differ depending on which set of procedures are implemented. When characteristics differ on the chart below, statements have been written to reflect which administration approach is referenced.

Publisher	Curriculum Associates, Inc.		
Website for information	www.curriculumassociates.com		
Cost	Inventory of Early Development II = \$159.00 IED-II Developmental Record Book 10-Pack = \$35.00 ; 100 –pack= \$329.00		
Age range	Birth to developmental age seven		
Purpose	<ul> <li>This Inventory is designed to:</li> <li>Determine readiness for schools</li> <li>Track developmental progress</li> <li>Provide a range of scores needed for documenting eligibility for special education services</li> <li>Enable a comparison of children's skills within and across developmental domains in order to view strengths and weaknesses</li> <li>Determine entry points for instruction</li> <li>Assist with program evaluation</li> </ul>		
Areas included	<ul> <li>Fine and gross motor skills</li> <li>Receptive - expressive language</li> <li>Academic-cognitive and graphomotor development</li> <li>Daily living skills</li> <li>Social-emotional skills</li> <li>Overall adaptive behavior</li> </ul>		
Time to administer	Ongoing observation summarized periodically, or if using the standardized approach option, 20-55 minutes for administration and scoring		

Scored	Generates criterion-referenced data related to curricular objectives or, if using the standardized approach option, provides standardized scores for norm-referenced assessments, including raw scores, age equivalents, percentiles, quotients, age level of instructional range, and total adaptive behavior scores
Age norms	Yes, when using the standardized approach option
Age ranges given for items	Yes, for both criterion-referenced and standardized approaches
How frequently it can be given	Ongoing for criterion-referenced usage. Not specified for the standardized approach option
Standardized tasks	Yes. Definitions and guidelines provided for observations in criterion-referenced usage. Greater structure in procedures when using standardized approach option
Based on observation in natural settings	Yes, when using the criterion-referenced approach
Instructions related to parent role	Parent observations/report to standardized questions if unable to elicit participation from child
Data provided on reliability	Yes. Internal consistency, test-retest, and inter-examiner reliability data for standardized approach option
Data provided on validity	Yes. Content, construct, concurrent and discriminate validity verified for standardized approach option
Web-based data entry	Yes. Online record book to track child's performance and generate customizable reports for both criterion- referenced and standardized options
Electronic scoring	Yes. Conversion of raw scores to quotients, percentiles, and age equivalents for standardized approach option
Other languages	Not noted
Who administers	Teacher, developmental/school psychologists, or other early childhood professionals
Training available through the publisher	Yes. For workshops or online training, see <u>CAtraining.com</u>

#### Brigance Diagnostic Inventory of Early Development II (2004): Crosswalk to Child Outcomes

Crosswalk content for users of the IED-II as a criterion-referenced tool.

Outcome 1: Positive social relationships	Outcome 2: Acquires and uses knowledge and skills	Outcome 3: Takes appropriate action to meet needs	
G. Social and Emotional Development	C. Fine-Motor Skills and Behaviors	A. Preambulatory Motor Skills and	
G-1 General social and emotional	C-3 Prehandwriting	Behaviors	
development	C-4 Draw a person	A-1 Supine position skills and behaviors*	
G-2 Play skills and behaviors	C-5 Forms	A-2 Prone position skills and behaviors*	
		A-3 Sitting position skills and behaviors*	
	E. Speech and Language Skills	A-4 Standing position skills and behaviors*	
	E-1 Prespeech receptive language		
	E-2 Prespeech gestures	B. Gross-Motor Skills and Behaviors	
	E-3 Prespeech vocalization	B-1 Standing*	
	E-4 General speech and language	B-2 Walking <sup>*</sup>	
	development	B-3 Stairs and climbing*	
	E-5 Length of sentences	B-4 Running*	
	E-6 Personal data response	B-7 Kicking*	
	E-7 Verbal directions		
	E-8 Picture vocabulary	C. Fine-Motor Skills and Behaviors	
	E-9 Repeats numbers	C-1 General eye/finger/hand manipulative	
	E-10b Sentence memory	skills*	
	,	C-3 Prehandwriting	
	F. General Knowledge and Comprehension	C-5 Forms	
	F-1 Response to experience with books	C-6 Cutting with scissors	
	F-2a Body parts—receptive		
	F-2b Body parts—expressive	D. Self-Help Skills	
	F-3 Colors	D-1 Feeding/eating	
	F-4 Shape concepts	D-2 Undressing	
	F-5 Quantitative concepts	D-3 Dressing	
	F-6 Directional/positional concepts	D-4 Unfastening	
	F-7 Classifying	D-5 Fastening	
	F-8 Knows what to do in different situations	D-6 Toileting	
	F-9 Knows use of objects	D-7 Bathing	
	F-10 Knows function of community helpers	D-8 Grooming	
	F-11 Knows where to go for services		

Note: Draft developed by the Early Childhood Outcomes (ECO) Center and revised based on preliminary feedback from users and the tool publisher and/or 3 developers. The draft may be subject to further changes. We welcome your feedback to staff@the-eco-center.org.

Outcome 1: Positive social relationships	Outcome 2: Acquires and uses knowledge and skills	Outcome 3: Takes appropriate action to meet needs
	<ul> <li>I-8 Matches initial consonants with pictures</li> <li>I-9 Substitutes initial consonant sounds</li> <li>I-10 Substitutes short-vowel sounds</li> <li>I-11 Substitutes long-vowel sounds</li> <li>J. Manuscript Writing</li> <li>J-1 Prints personal data</li> <li>J-2 Prints uppercase letters in sequence</li> <li>J-3 Prints lowercase letters in sequence</li> </ul>	
	<ul> <li>J-4 Prints uppercase letters dictated</li> <li>J-5 Prints lowercase letters dictated</li> <li>J-6 Prints simple sentences</li> <li>J-7 Quality of printing</li> </ul>	

Outcome 1:	Outcome 2:	Outcome 3:
Positive social relationships	Acquires and uses knowledge and skills	Takes appropriate action to meet needs
	<ul> <li>K. Basic Math</li> <li>K-1 Number concepts</li> <li>K-2 Rote counting</li> <li>K-3 Reads numerals</li> <li>K-4 Numeral comprehension</li> <li>K-5 Ordinal position</li> <li>K-6 Numerals in sequence</li> <li>K-7 Writes following and preceding numerals</li> <li>K-8 Writes numerals dictated</li> <li>K-9 Addition combinations</li> <li>K-10 Subtraction combinations</li> <li>K-11a Recognition of money (U.S.)</li> <li>K-11b Recognition of money (Canada)</li> <li>K-12 Time</li> </ul>	

\*Precursor skills for functional behaviors. These skills may not be appropriate or expected for some children, including those with sensory, motor, or other impairments.

Note: Areas that are not precursor to or components of any of the three outcomes, and therefore not included in the crosswalk, were:

#### **B. Gross-Motor Skills and Behaviors**

B-5 Jumping B-6 Hopping B-8 Balance beam B-9 Catching B-10 Rolling and throwing

#### C. Fine-Motor Skills and Behaviors

C-2 Block tower building

#### Brigance Diagnostic Inventory of Early Development II (2004): Crosswalk to Child Outcomes

For users of the IED-II as a standardized, norm-referenced tool, the following crosswalk applies. Because this usage of the IED-II is a normreferenced, standardized assessment, the composites within subdomains are the smallest unit of information that can be used to reach conclusions about the extent to which a child demonstrates each of the functional outcomes. This table shows how each of the composites map to each of the 3 functional outcomes. Under each subscale, an X indicates the outcome area to which the subscale contributes information. The item information below the X provides the rationale for why the subscale was classified as providing information for that outcome.

	Outcome 1 Positive social relationships	Outcome 2 Acquires and uses knowledge and skills	Outcome 3 Takes appropriate action to meet needs
Subdomain: FINE MOTOR*			
Composite: Drawing/Visual Motor*			X**
			<ul> <li>Early fine motor skills*</li> <li>Builds tower with blocks**</li> <li>Visual motor skills</li> <li>Draw a person**</li> </ul>
Composite: Writing*		X	
		<ul> <li>Prints personal data</li> <li>Writes numerals in sequence</li> <li>Prints uppercase letters in sequence</li> <li>Quality of printing</li> </ul>	
Subdomain: GROSS- MOTOR*			
Composite: Nonlocomotor*			X**
			<ul> <li>Standing skills*</li> <li>Jumping and hopping skills**</li> </ul>
Composite: Locomotor*			X
			<ul> <li>Early gross-motor skills*</li> <li>Walking and running skills*</li> <li>Stair climbing*</li> </ul>

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	Outcome 1 Positive social relationships	Outcome 2 Acquires and uses knowledge and skills	Outcome 3 Takes appropriate action to meet needs
Subdomain: RECEPTIVE LANGUAGE			
Composite: Nouns and Early Listening	X		
		<ul><li>Early receptive language</li><li>Receptive objects</li><li>Body parts</li></ul>	
Composite: Actions	X		
		<ul> <li>Verbal concepts</li> <li>Follows verbal directions</li> <li>Receptive verbs</li> </ul>	
Subdomain: EXPRESSIVE LANGUAGE			
Composite: Isolated Skills	X		
		<ul> <li>Expressive objects</li> <li>Expressive verbs</li> <li>Repeats sentences</li> </ul>	
Composite: Contextual Skills	X		
		<ul> <li>Early expressive language</li> <li>Grammar and pragmatics</li> <li>Articulation rating</li> <li>Verbal fluency rating</li> </ul>	
Subdomain: ACADEMIC/ COGNITIVE			
Composite: Quantitative/General	X		
		<ul> <li>Number concepts</li> <li>Rote counting</li> <li>Money</li> <li>Numeral comprehension</li> <li>Ordinal position</li> <li>Color knowledge</li> </ul>	

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	Outcome 1 Positive social relationships	Outcome 2 Acquires and uses knowledge and skills	Outcome 3 Takes appropriate action to meet needs
Composite: Prereading/ Reading		x	
		<ul> <li>Visual discrimination</li> <li>Recites alphabet</li> <li>Lowercase letter knowledge</li> <li>Sounds of lowercase letters</li> <li>Auditory discrimination</li> <li>Survival sight words</li> <li>Basic preprimer vocabulary</li> </ul>	
Subdomain: DAILY LIVING			
Composite: Self-Help			X
			<ul> <li>Eating</li> <li>Dressing and undressing</li> <li>Toileting and bathing</li> </ul>
Composite: Prevocational		X	
		<ul> <li>Work-related</li> <li>Personal data response</li> </ul>	
Subdomain: SOCIAL-EMOTIONAL			
Composite: Play Skills and Behavior	X	X	
Composite: Engagement and Initiative	X		

\*Precursor skills for functional behaviors. These skills may not be appropriate or expected for some children, including those with sensory, motor, or other impairments.

\*\* This composite includes significant content that is not precursor to or components of the specified outcome.

#### Battelle Developmental Inventory—Second Edition (BDI-2) Table 1. Crosswalk of Domain Items to Child Outcomes

When using the BDI-2 as one of multiple sources of information for measuring child outcomes, the following crosswalk applies. As a standardized, norm-referenced assessment tool, the BDI-2's domain scores are the smallest unit of information that can be used if scores are converted directly to measure child outcomes. However, as one of multiple sources of information, items from BDI-2 domains can contribute to the understanding of a child's functioning in each of the three outcome areas. This table shows how various items from domains map to the three child outcomes. If converting domain scores directly to child outcomes, see Table 2 of this document.

	Outcome 1	Outcome 2	Outcome 3
	Positive social relationships	Acquires and use skills and	Takes action to meet needs
		knowledge	
Domain: ADAPTIVE			<ul> <li>Self-care</li> <li>SC1-35 (feeding, dressing, toileting)</li> <li>Personal responsibility</li> <li>PR1-25 (movement, safety, organizes own activities)</li> </ul>
Domain:	Adult interaction		
PERSONAL-	• AI1-30 (looks at, responds to		
SOCIAL	adults, initiates social contact)		
	Peer interaction		
	<ul> <li>PI1-25 (responds to, plays with</li> </ul>		
	other children, shares properly,		
	plays cooperatively)		
	Self-concept and social role		
	<ul> <li>SR1-45 (prescursors to self</li> </ul>		
	awareness and self awareness,		
	describes own feelings)		

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	Outcome 1	Outcome 2	Outcome 3
	Positive social relationships	Acquires and use skills and knowledge	Takes action to meet needs
Domain: COMMUNICATION	<ul> <li>Receptive</li> <li>RC5-8; 27 (responds to person, converses)</li> <li>Expressive</li> <li>EC13, 18 (communicates with others)</li> <li>EC30-31 (follows conventional rules of conversation)</li> </ul>	<ul> <li>Receptive</li> <li>RC1-4; 5-9 (precursors to understanding language</li> <li>RC9-26 (associates words with objects, actions; recalls events from a story)</li> <li>RC28-40 (understands grammar, identifies sounds in words)</li> <li>Expressive</li> <li>EC1-8; 10-11, 13 (precursors to using language)</li> <li>EC12, 14-15, 17, 19-21 (uses words)</li> <li>EC22-29 (asks questions, uses sentences)</li> <li>EC32-37 (uses grammar)</li> <li>EC40-45 (uses words, gives directions)</li> </ul>	<ul> <li>Expressive</li> <li>EC9; 16 (gestures, uses words to indicate wants, needs)</li> <li>EC38 (communicates feelings)</li> </ul>
Domain: MOTOR			<ul> <li>Gross</li> <li>GM1-45 (movement precursors to taking action)*</li> <li>Fine</li> <li>FM1-30 (movement precursors to taking action)*</li> <li>Perceptual</li> <li>PM 1-25 (movement precursors to taking action)*</li> </ul>

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	Outcome 1 Positive social relationships	Outcome 2 Acquires and use skills and	Outcome 3 Takes action to meet needs
	i ostave social relationships	knowledge	Tunes action to meet needs
Domain: COGNITIVE		<ul> <li>Attention and memory</li> <li>AM1-30 (precursors to acquisition and use of skills and knowledge)</li> <li>Reasoning and academic skills</li> <li>RA1-35 (recognizes cause, matches colors, gives objects on requests, completes opposite analogies, sequences events, rote counts, write letters, solves math problems)</li> <li>Perception and concepts</li> <li>PC1-40 (explores, imitates, matches, sorts, identifies shapes and objects, understands time, categorizes objects by function, matches simple words, groups objects, sorts by multiple properties)</li> </ul>	

\*This domain includes precursor skills for functional behaviors, which may not be appropriate or expected for some children, including those with sensory, motor, or other impairments.

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#### **Battelle Developmental Inventory—Second Edition (BDI-2) Table 2. Crosswalk of Domain Scores to Child Outcomes**

If converting scores directly to child outcomes, the following crosswalk applies. As a standardized, norm-referenced assessment tool, the BDI-2's domain scores are the smallest unit of information that can be used. This table shows how the 5 domains map to the three child outcomes. For each domain, an X indicates the outcome area to which the *majority* of items contributes information.

	Outcome 1 Positive social relationships	Outcome 2 Acquires and uses skills and knowledge	Outcome 3 Takes action to meet needs
<ul> <li>Domain:</li> <li>ADAPTIVE</li> <li>Self-care</li> <li>Personal responsibility</li> </ul>			X
<ul> <li>Domain:</li> <li>PERSONAL-</li> <li>SOCIAL</li> <li>Adult interaction</li> <li>Peer interaction</li> <li>Self-concept and social role</li> </ul>	X		
Domain: COMMUNICATION <ul> <li>Receptive</li> <li>Expressive</li> </ul>		X	

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	Outcome 1 Positive social relationships	Outcome 2 Acquires and uses skills and knowledge	Outcome 3 Takes action to meet needs
Domain: MOTOR • Gross • Fine • Perceptual			X*
<ul> <li>Domain: COGNITIVE</li> <li>Attention and memory</li> <li>Reasoning and academic skills</li> <li>Perception and concepts</li> </ul>		X	

\*This domain includes precursor skills for functional behaviors, which may not be appropriate or expected for some children, including those with sensory, motor, or other impairments.

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