

THE CONNECTICUT
DOCUMENTATION & OBSERVATION
FOR TEACHING SYSTEM (CT DOTS):

INSTRUMENT DEVELOPMENT & PILOT REPORT

Submitted to the Office of Early Childhood

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EXECUTIVE SUMMARY

The Connecticut Documentation & Observation for Teaching System (CT DOTS) is a framework to guide early care and education providers in a process of monitoring children's progress on the skills, abilities and behaviors in the Connecticut Early Learning and Development Standards (CT ELDS). CT DOTS consists of 27 CT DOTS Observation Progressions across seven age bands. Each progression includes a description of the skill and examples of observable behaviors that reflect the skill, as well as guidance for observing the skill through naturalistic observations, planned experiences and family input. The tool was conceptualized and designed by the Connecticut Office of Early Childhood in partnership with the University of Connecticut and an advisory group in 2016 and 2017.

Stakeholder engagement was a priority in the development of CT DOTS. As a foundation for the work, the development team led a series of six focus groups with 64 Connecticut educators and administrators to learn about best practices for collecting and sharing evidence about young children's learning and development across the state. A diverse group of 17 community stakeholders helped target and consolidate progressions from the CT ELDS for CT DOTS. This blueprint was circulated widely for review and feedback. After the content was drafted, it was reviewed by eight local experts and then revised. The revised content and supporting materials were then reviewed by seven national experts with experience in both the specific content areas and early childhood assessment. A cross-sector advisory committee met with the development team four times over the two-year period to guide the work.

In Spring 2017, 71 providers from 36 different programs piloted CT DOTS. A majority of the providers were from center-based community programs (59%, $n = 42$) and public schools (30%, $n = 21$). One family child care provider and seven Birth to Three providers also participated. Sixty-four percent of the providers worked with preschool-aged children and 31% worked with infants and toddlers. The providers received approximately three hours of training regarding the use of the tool. They were provided with a paper-based version of CT DOTS and were asked to enter their child ratings and feedback surveys online at the conclusion of the eight-week observation period.

The Pilot data showed that providers found CT DOTS a useful tool to guide the observation and documentation of learning and development at the specified age bands. The tool was seen as useful for instructional planning, goal setting for individual children and to support program improvement. Participants found the skill Descriptions to be clear and to appropriately describe growth and development across the age bands. The Examples supported providers' interpretation of the Descriptions. Both the Naturalistic Observations and the Planned Experiences were overwhelmingly viewed as useful and appropriate. The Family Input guidance was well-received by providers and families. While this portion of the tool was broadly viewed as an important component of CT DOTS, providers had some suggestions for improvement in this area, including the need for more explicit guidance on the different ways in which programs and providers might use the Family Input section.

The Pilot also identified some concerns regarding the utility of the tool for certain populations. The data suggest some level of concern about using CT DOTS to track growth over time for children in Birth to Three, as well as for dual language learners and children with communication challenges or other developmental issues. Further, providers Finally, future implementation of CT DOTS should incorporate robust professional learning opportunities and ongoing support for providers regarding the use of the tool and the resulting data.

The CT DOTS Pilot was an important step in the instrument development process and it motivated a number of substantial improvements to the tool and supporting materials. Additional field testing with a broad range of programs is recommended.

AN OVERVIEW OF THE TOOL

The Connecticut Documentation & Observation for Teaching System (CT DOTS) was conceptualized and designed by the Connecticut Office of Early Childhood in partnership with the University of Connecticut and an advisory group in 2016 and 2017.

This section of the report is an overview of CT DOTS and the findings from the Spring 2017 Pilot. The sections below provide an overview of CT DOTS: the purpose and use, the structure and the observation process. Pilot results follow the overview.

PURPOSE OF CT DOTS

CT DOTS PURPOSE

The Connecticut Documentation & Observation for Teaching System (CT DOTS) is a framework to guide early care and education providers in a process of monitoring children's progress on the skills, abilities and behaviors in the Connecticut Early Learning and Development Standards (CT ELDS). CT DOTS supports early care and education providers to observe children in naturally occurring situations and to plan engaging experiences that allow for more intentional observations. CT DOTS also provides a structure for providers to partner with families in sharing information about individual children.

Used in conjunction with the CT ELDS, CT DOTS is a foundation for:

- gathering data about children's skills, abilities and behaviors;
- planning additional supports (e.g., curriculum, instruction, professional development, family activities, adult support);
- summarizing evidence of children's progress; and
- communicating around common goals.

CT DOTS NON-PURPOSES

CT DOTS should not be used for the following purposes:

1. To evaluate program or educator effectiveness
2. As a developmental screening tool
3. To determine the need for additional services (beyond planning instructional supports to be offered as a part of an existing early care and education program)

STRUCTURE OF CT DOTS

There are 27 CT DOTS *Observation Progressions*. CT DOTS currently includes seven age bands spanning from birth to five years of age: 0 – 6 months, 6 – 12 months, 12 – 18 months, 18 – 24 months, 24 – 36 months, 3 to 4 years, and 4 to 5 years.

DESCRIPTION AND EXAMPLES

For each *Observation Progression*, there is a general *Description* of the expected behavior or skill for each age band.

Age Bands	0-6 months	6-12 months	12-18 months	18-24 months
Description	Uses a variety of facial expressions and sounds	Communicates wants and needs through a combination of crying, babbling, word approximations, and/or gestures	Uses a few words and some conventional gestures to communicate and have needs met	Uses a variety of words and gestures to communicate and have needs met

Below the *Description*, there are more specific *Examples* of how a child might exhibit the skill reflected in the *Description*. These *Examples* are included to help clarify observable behaviors or skills that align to the general *Description*.

Examples	Smiles and coos with familiar caregivers Babbles using a variety of sounds when interacting with familiar caregivers Cries with different intensities and tone depending upon circumstances	Uses hand and facial gestures to indicate "more" or "no" Vocalizes (babbles or cries) in a manner that shows an intent to communicate Babbles using a variety of sound similar to common words May begin to use one or two words or word approximations for family members or favorite objects (e.g., "dad" or "da" for dad)	Waves "bye-bye" Lifts arms and says, "up" Signs and says "more" Uses some sounds or approximation of words consistently to have needs met (e.g., "wawa" for water, "Bebe" to refer to comfort blanket)	Uses a variety of words and gestures to communicate and have needs met
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GUIDANCE FOR NATURALISTIC OBSERVATIONS

Naturalistic Observation	Observe child during interactions with primary caregiver(s) and when a child's need arises (hunger, discomfort).	Observe child with familiar adults. Note efforts to communicate needs and wants, including efforts to use gestures or other physical means to gain shared attention.	Observe when familiar adults initiate interactions and when familiar adults are available to respond but wait for communication (e.g., waiting for child to show they want "up" or want "more").	Observe when familiar adults initiate interactions and when familiar adults are available to respond but wait for communication (e.g., waiting for child to show they want "up" or want "more").
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Naturalistic Observations offer an opportunity to observe children's spontaneous use of skills or behaviors. The *Guidance for Naturalistic Observations* describes situations in which the described behaviors are most likely to be observed, but does not include ALL situations in which the behaviors may be observed. In many progressions, suggestions to help focus observations are also included.

GUIDANCE FOR PLANNED EXPERIENCES

Planned Experiences	Have familiar adult make eye contact and make simple babbling sounds (e.g., "be, be, be"). Observe whether the child responds by imitating. Pause and see if the child initiates further babbling.	Play with a toy that has multiple parts (e.g., shape sorter). Provide the child with one item at a time. Pause and observe whether words or gestures are used to indicate desire for another item.	Plan a situation in which a child will need to request additional items. If the child does not spontaneously request the item(s) using words, signs or other gestures, model language to request another item (e.g., "more" or "block") and observe for imitation. If child is able to use one word to request an item, model putting words together ("more cars") and observe response.	Pi tr ol ac tr la oi tv
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Planned Experiences offer the opportunity to observe skills, abilities and behaviors while supporting learning and development at the same time. By intentionally planning experiences that use the skills, abilities or behaviors from one or more observation progression, data are easily collected. This type of experience also allows the opportunity to observe skills that require adult support or prompting.

GUIDANCE FOR FAMILY INPUT

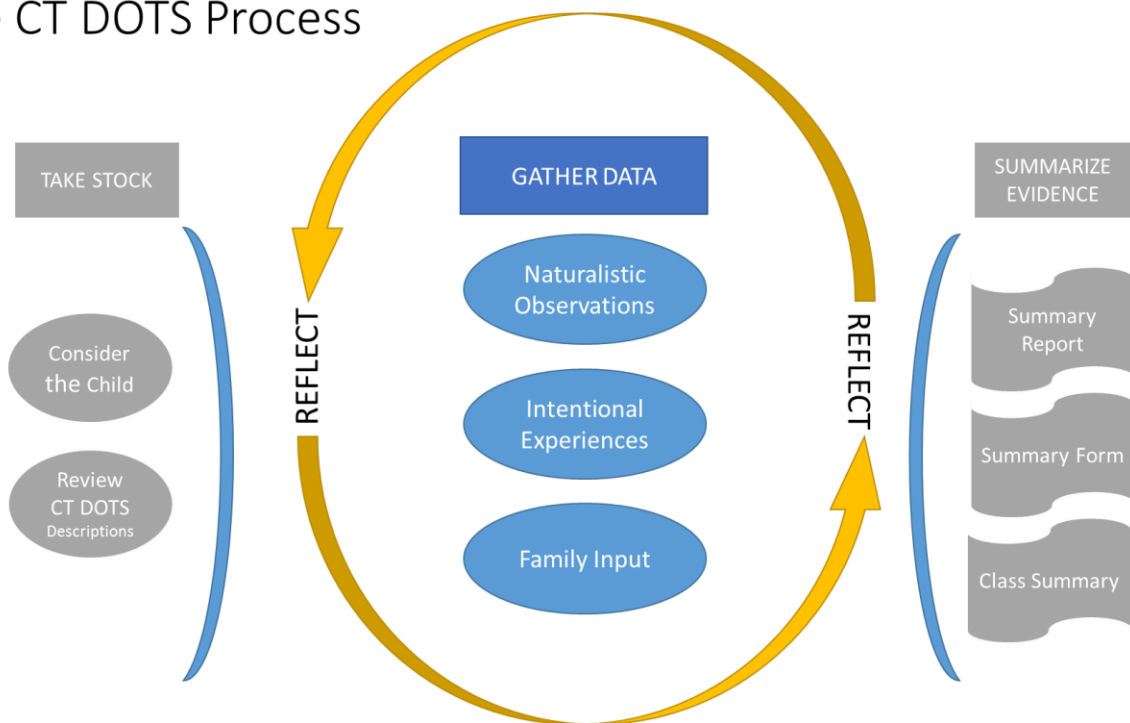
Family Input Asking some initial questions focused on language and literacy activities in the home may provide information useful for gathering input about children's skills. Suggestions for these questions include: Who spends time with your child at home? What language does he/she speak? Does he/she talk with your child or read books with him/her?	How does your child respond when you look at him/her and smile? How does he/she respond when you talk to him/her? Does your child show you he/she needs something using facial expressions or crying? Does your child have cries that are different depending upon the circumstances?	What does your child do to show you he/she wants something? Does he/she use body language or gestures to let you know when he/she wants something or doesn't want something? What does your child do when he/she is upset? Does your child make sounds that are used in their home language?	Tell me about how your child uses words or gestures to communicate with you. Does your child wave or point? Does your child gesture or say something to show they want to be picked up? Does your child have names for any of your family members?	W ct yc hi "j tv oi cc
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Family Input offers an opportunity to gather valuable information about the skills, abilities and behaviors children use at home or in the community. Involving families in the CT DOTS process provides a focused way to engage families in discussions about their children's learning and development. The questions included in *Family Input* are designed as suggestions that can be adjusted for each child or family.

THE CT DOTS PROCESS

CT DOTS provides a framework to guide a process of collecting and reflecting on data related to children's growth and development. The CT DOTS process begins with *taking stock* so that the naturalistic observations, planned experiences and family input are focused appropriately for the children involved. To focus the CT DOTS process, providers are asked to consider both the Observation Progression and the child(ren) to be observed, including any available information about their skills, interests and needs. After taking stock, providers *gather data* using one of the three approaches (the Naturalistic Observations, Planned Experiences and Family Input). After providers gather data, they *reflect* on the data to inform current practice and help plan for the child(ren). This process repeats over time. Following this reflective process, at various points throughout the year, the providers can use the child summary form to *summarize the evidence* about what each child knows and can do.

The CT DOTS Process



DEVELOPMENT OF CT DOTS

STAKEHOLDER ENGAGEMENT

In January 2016, the development team led a series of six focus groups with 64 Connecticut educators and administrators from the following stakeholder groups:

1. Infant/toddler providers;
2. Birth to Three providers and early interventionists;
3. Preschool educators;
4. Preschool special educators and administrators;
5. Community program administrators; and
6. Head Start providers.

The focus groups were designed to gather information about current practices for collecting and sharing evidence about young children's learning and development and to gather input about helpful supports for providers. Our goal was to create a practitioner-led vision for a new system of documentation and observation in Connecticut. Based on feedback from the different stakeholder groups, we concluded that:

- CT DOTS should include ideas for experiences that are open-ended and adaptable both to diverse learners and to different learning environments (e.g., the home and early care and education settings).
- CT DOTS should incorporate guidelines for naturalistic observations that draw on functional skills and daily routines (e.g., diapering and meals).
- CT DOTS should incorporate learning experiences that address multiple standards simultaneously.
- CT DOTS can be a family engagement tool. Practitioners will get the best information from families when they engage in conversation using open-ended questions. Family input questions can also be formatted by the CT DOTS development team or individual programs to educate parents about growth and development. Some participants in these focus groups were cautious about the utility of forms designed for families to complete.
- CT DOTS reports must be self-explanatory. The reader must be able to understand a child's strengths and growth areas without having knowledge of the CT DOTS system. Participants in these groups value the narrative, as it helps to contextualize a child's needs and adds detail to more structured reporting mechanisms.
- A tool that guides users through appropriate observation and documentation practices will help educate the workforce.
- Clear language enhances usability.
- Several stakeholder groups have unique federal and/or state reporting requirements. These focus groups were designed to better understand each groups' current assessment practices as well as their vision for a new system. Further study is needed to better understand whether CT DOTS can be used to fulfill these federal and/or state requirements.

ADVISORY COMMITTEE

In addition to the focus groups, the development team convened an Advisory Committee to guide development. The members were:

Name	Affiliation
Carol Annette	Gateway Community College
Paige Bray	University of Hartford
Andrea Brinnel	School Readiness/Office of Early Childhood
Kimberly Brown	Clinton Public Schools
Betsey DeWolf	East Windsor
Adreena D'Orlando	Yale New Haven
Andy Gonzalez	Lebanon Public Schools
Lee Helmerich	Bridgeport Public Schools
Cindy Jackson	Children's Therapy Services
Ann Perzan	Middletown Public Schools
Linda Bamonte	Connecticut Birth to Three/Office of Early Childhood
Iris Rich	Women's League Child Development Center
Donna Rooney	CREC
Kathy Sandgren	TVCCA Childcare and Preschool Center
Amanda Mathieu	TVCCA Childcare and Preschool Center
Harriet Feldlaufer	Office of Early Childhood
Jennifer Johnson	Office of Early Childhood
Michelle Levy	Office of Early Childhood
Jessica Goldstein	University of Connecticut

In 2016, the Committee met in April and September. In 2017, the Committee met in January and July.

DEVELOPMENT OF CT DOTS

CONSOLIDATION OF CT ELDS

In March 2016, the development team led a review of the Connecticut Early Learning and Development Standards (CT ELDS) for the purpose of identifying content for CT DOTS. A total of 17 community stakeholders participated in the review. The group of stakeholders represented urban, suburban, and rural communities and included infant/toddler providers, Birth to Three providers and early interventionists, preschool educators, preschool special educators and administrators, community program administrators, and Head Start providers. Many of the stakeholders had participated in other CT DOTS development work.

The meeting began with a review of the purpose and proposed structure of CT DOTS. After the review, the stakeholders self-selected into four different groups to review a subset of CT ELDS domains. Within the four groups, the stakeholders worked to consolidate the content into smaller units for assessment. After the small group review, the stakeholders shared their discussion with the larger group. The larger group discussion led to some revisions on the smaller group discussions. Each of the stakeholders at the review agreed to the consolidation of content.

After the stakeholder review, the consolidation of content was reviewed by consultants at the Office of Early Childhood as well as local content experts in Connecticut. Some adjustments were made to the consolidation after this review. The resulting Blueprint, reflecting 26 areas of learning and development from the CT ELDS, was the foundation of the content development process.

CONTENT DEVELOPMENT

The content was written and reviewed by the development team based on the CT ELDS. CT DOTS spans seven age bands: 0 to 6 months, 6 to 12 months, 12 to 18 months, 18 to 24 months, 24 to 36 months, 3 to 4 years, and 4 to 5 years. Each Observation Progression spans the age bands for which it is appropriate and feasible to observe skills in a particular area. For each relevant age band within an Observation Progression, there is a description of the skill, examples of the skill, and guidance for naturalistic observations, planned experiences and family input. The content was reviewed and revised by the development team over several months before it was shared for expert review, described below.

EXPERT REVIEW

After the content was drafted by the development team, a working draft of 26 progressions was shared with in-state reviewers. The review team included:

Name	Affiliation
Elizabeth Bicio	Early Childhood Consultation Partnership (Advanced Behavioral Health, Inc.)
Elizabeth Aschenbrenner	EASTCONN
Kathy Gavin	Goodwin College

Laurie Noe	Housatonic Community College
Sue Vivian	Independent Education Consultant
Donna Notti	Cheshire Public Schools
Erica Gittleman	Beacon Health Options
Sudha Swaminathan	Eastern Connecticut State University

Each reviewer was assigned a set of progressions based on their expertise. For each progression, the reviewers were asked to respond to the following questions:

1. Can you suggest any improvements to the way the language of the progression reflects the skills from the roadmap and CT ELDS?
2. Do you have any suggestions to improve the way the skills are organized across the age bands?
3. For each age band, does the rubric support the observation and documentation process? Are there any cells that might be more challenging than others when using the rubric?
4. Comments on opportunities for naturalistic observations
 - For each age band, do the opportunities for naturalistic observations describe viable opportunities to observe the skills in the CT DOTS progression?
 - Are these scenarios developmentally appropriate?
 - Would they be relevant in homes or centers?
 - Do you have any suggestions for improvements?
5. Comments on the learning experiences for common observations
 - For each age band, do the learning experiences described provide a viable opportunity to observe the skills in the CT DOTS progression?
 - Are these scenarios developmentally appropriate?
 - Would they be relevant in homes or centers?
 - Do you have any suggestions for improvements?
6. Please note any phrases that may not be widely understood by practitioners.
7. Comments on the suggestions for family input
 - Are the suggestions for family input reasonable questions for families to answer?
 - For each age band, do the questions capture the skills in the CT DOTS progression?
 - Are these questions likely to be understood by most families? (Note that we hope to translate these questions into the most prevalent languages in CT).
 - Do you have any suggestions for improvements?
8. Do you have any recommendations for any part of this progression?

The development team used this feedback to revise the set of progressions. After this review, the development team shared CT DOTS with a set of national experts. The national experts were:

Name	Affiliation	Domain for Review
Linda Hestenes	University of North Carolina-Greensboro	Physical Development and Health
Barbara Wasik	Temple University	Language and Literacy
Juanita Copley	Independent Consultant	Mathematics
Jill Fox	University of Houston	Creative Arts

Elena Bodrova	Tools of the Mind	Cognition / Executive Function
Lise Fox	University of South Florida	Social and Emotional Development
Cindy Hoisington	Education Development Center	Science and Social Studies

The national experts received a small stipend for their reviews. Based on their collective feedback, the development team made further revisions to the language of the progressions, the organization of the progressions and the User's Manual. This process resulted in the following number of Observation progressions at each age band:

Age Band	Number of Observation Progressions
0 to 6 months	16
6 to 12 months	16
12 to 18 months	20
18 to 24 months	23
24 to 36 months	25
3 to 4 years	27
4 to 5 years	27

CT DOTS PILOT

PURPOSE

The primary purpose of the pilot of CT DOTS was to explore the use of the tool by early care and education providers. Specifically, we examined three issues.

Issue	Research Question
1. Use and utility of the Observation Progressions	As a whole, are the progressions a useful tool for providers to observe early learning and development in the specified age bands?
2. Support for the observation and documentation process	To what extent is the observation and documentation process supported by the guidance for: a) Naturalistic observations; b) Planned experiences; and c) Family input?
3. CT DOTS components	Does the rubric support monitoring children's progress over time? Does the Users' Manual support providers' use of CT DOTS?

In addition to these primary purposes, there were two smaller studies designed to explore (1) the relationship of CT DOTS data to data from other assessment tools and (2) providers' and families' perceptions of the family input questions.

RECRUITMENT

The recruitment procedures were reviewed and approved by the Institutional Review Board (IRB) at the Office of Early Childhood (OEC).

Programs were recruited via professional listservs and email through convenience sampling. Interested programs were asked to complete a recruitment survey (Appendix A). The recruitment survey helped the study team stratify the sample by location, program type and age of students served. Programs were also asked to indicate whether they would participate in a pilot of the full system or a portion of the system.

In total, 109 programs responded to the recruitment survey. Of those programs, 9% served infants and toddlers, 47% served children from birth through kindergarten entry, and 41% served preschool-aged children. A large majority of the programs were center-based community settings, but respondents also included public schools, home daycares, and Birth to Three programs. The recruited programs also used a variety of funding streams, including: School Readiness, Child Day Care, Family Resource Center, 619, Head Start, Smart Start, Preschool Development Grants, and full tuition. There was geographic diversity as well: New Haven (27%), Fairfield (25%), Hartford (24%), New London (6%), Litchfield (7%), Windham (5%), Middlesex (3%), and Tolland (3%).

Respondents were asked to note their current assessment practices. Over 90% of the respondents used assessments in their programs. Of those programs, 72% used the Connecticut Preschool Assessment Framework, 14% used Teaching Strategies GOLD, 16% used the Battelle Developmental Inventory, and 12% used the Brigance Inventory of Early Development III.

PARTICIPANT SELECTION

The goal of the recruitment process was to identify 40-50 programs serving children across age spans in a variety of settings and locations. While most programs were asked to use the full pilot, one smaller group was asked to use CT DOTS along with an assessment tool already used in the program and one smaller group was asked to focus specifically on the family input portion of CT DOTS (see Study Structure, below).

After a careful review of the recruitment survey data, 58 programs were invited to participate in the Pilot. Program directors were contacted directly by the study team using information shared during the recruitment process.

At each participating program, one to five providers were asked to use CT DOTS with five different children each. Participation in the Pilot was voluntary for programs, providers and families.

PROCEDURES

The CT DOTS Pilot had three phases: training, data collection and evaluation. These phases are described below.

TRAINING

There were two options for training: a 3-hour in-person training or two 1.5-hour webinars. Both training modes addressed the same material, which included:

- CT DOTS history;
- CT DOTS structure;
- CT DOTS documentation and observation process;
- Pilot materials;
- Recruitment of families and children; and
- Pilot study assignment.

Each participant received a copy of the 27 CT DOTS observation progressions and a draft User's Manual.

The study team also maintained a group site on Schoology.com, an online learning management site, as an extension of the training. The CT DOTS Pilot site on Schoology.com housed all of the resources for the project (User's Manual, evaluation surveys, consent forms). The site served as a platform for participants to ask questions of each other and the study team. The study team was also accessible via email and phone.

CONSENT

Consent forms were collected from program administrators, families and providers. The consent procedures were reviewed and approved by the Institutional Review Board (IRB) at the Office of Early Childhood (OEC).

Program administrators and providers were encouraged to seek consent forms from all of the families of the children in their care. From the consenting families, each provider selected up to five children to participate in the study who were representative of the diverse abilities of their classroom (i.e., children that vary by age and ability).

Program administrators' and providers' consent forms were returned to the OEC. Family consent forms were kept at the program level.

STUDY ASSIGNMENT

Providers were assigned to three different variations of the Pilot.

1. **Full CT DOTS Pilot**

Providers in the Full CT DOTS Pilot used the entire set of CT DOTS progressions to observe children over the 8-week observation window.

2. **Family Input Pilot**

Providers that participated in the Family Input Pilot were asked to focus on evaluating CT DOTS as a tool for family engagement, using the Language and Literacy domains.

3. **Concurrent Validity Study**

Providers in the Concurrent Validity Study focused on five to seven CT DOTS observation progressions and also submitted data for each child from a second instrument (Battelle Developmental Inventory, Brigance, CT Preschool Assessment Framework or Teaching Strategies GOLD).

The number of providers and programs assigned to each CT DOTS Pilot study is included in the table below.

Study Assignment	# Programs	# Providers
Full CT DOTS Pilot	18	41
Family Input Pilot	5	9
Concurrent Validity Study	23	64
Total	46	114

DATA COLLECTION

The data collection period spanned an eight-week period from April 3, 2017 until June 9, 2017. Data collection was expected to be integrated into providers' existing processes and practices. Providers were guided to collect evidence in the context of the daily routine and during large and small group times as appropriate. The study team estimated that participation in the pilot would take approximately 4-6 hours per child, though implementation time was expected to vary from provider to provider.

EVALUATION

There were multiple evaluation surveys in the CT DOTS Pilot. Every participating provider was required to complete a child summary form (Appendix B) and an evaluation survey (Appendix C). Participants in the Family Input Pilot also completed a survey about their experience, which is included in Appendix D.

STUDY PARTICIPANTS

Overall, 71 providers from 36 different programs completed all aspects of the CT DOTS Pilot (i.e., 62% of the providers recruited for the Pilot completed the study).

A majority of the providers were from center-based community programs (59%, n = 42) and public schools (30%, n = 21). One home or family child care provider and seven Birth to Three providers also participated. Sixty-four percent of the providers worked with preschool-aged children and 31% worked with infants and toddlers. Three providers noted that they worked in multi-age settings. Funding for the providers' programs came from a variety of sources:

Funding Source	Count	%
Full parent tuition	27	28%
State-funded Child Day Care Contracts	22	23%
Preschool Development Grant	11	11%
Birth to Three	9	9%
Preschool Special Education (619)	8	8%
Head Start	8	8%
Smart Start	6	6%
Family Resource Center	5	5%

The participants had a wide range of training and professional experience. Over 70% had a Bachelor's or Master's degree, while 10% had an Associate's degree, 3% had a CDA and 17% had a high school diploma or G.E.D. Additionally, of the 37 providers who noted that they had experience teaching infants and toddlers, 30% had worked with this population for ten or more years. Similarly, over half of the 60 providers who noted they had experience with preschool-aged children had more than ten years of experience with this age group. Forty-four providers indicated they had experience with infants and toddlers and 14 of those had worked with infants and toddlers for at least ten years. In addition to this experience, 18 providers had worked with kindergarten students and 17 had worked with elementary school students.

Jointly, these providers collected data on 246 children. However, not every provider used the entire instrument with each child both because of the study design and the limitation of an eight-week data collection window. In this study, we focus on the providers' perceptions of CT DOTS

EVALUATION SURVEY

The Evaluation Survey was designed to elicit provider perceptions on the structure and utility of CT DOTS. The survey included both Likert-type items and questions that allowed for open-ended responses. Results from the close-ended questions are presented below.

SURVEY ITEMS

Overall, the survey responses show very clear support for CT DOTS among the Pilot participants. An initial set of questions were targeted at the structure of CT DOTS and the extent to which the different components of the tool support the documentation and observation process.

Responses to the items that pertained to the Description and Examples were:

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
The Descriptions are generally clear.	15%	68%	14%	-	-	2%	2%
The Descriptions are appropriately split across the age bands.	17%	57%	15%	-	5%	5%	2%
For the age bands I referenced, the Descriptions were appropriate.	19%	69%	7%	1%	1%	-	1%
The Observation Progression language describes typical growth and development.	17%	74%	5%	-	3%	-	2%
It is easy to apply the rubric to the Descriptions.	9%	55%	22%	3%	8%	-	3%
The Examples add information that is helpful in interpreting the Descriptions.	35%	55%	5%	5%	-	-	2%
The Examples are developmentally appropriate.	32%	58%	5%	3%	-	-	2%
I believe that different educators would have a similar understanding of this skill, based on the Description and Examples.	21%	49%	22%	1%	4%	-	1%
With accommodations and supports, I feel comfortable rating a child with disabilities or special needs using CT DOTS.	12%	49%	21%	12%	4%	1%	1%
The Observation Progressions are appropriate for children who are dual language learners.	7%	49%	19%	18%	3%	3%	1%

While the data show clear support for the utility of the Examples, survey responses suggest a slight concern about providers' comfort with rating children with disabilities or special needs, as well as the appropriateness of the tool for dual language learners. The survey data also suggest a degree of concern about consistent use of the rubric and interpretation of the skills across providers. These issues should be investigated further in additional studies.

Responses to items related to the Naturalistic Observations are below.

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
The Naturalistic Observation are appropriate for my program or setting.	53%	44%	3%	-	-	-	-
The Naturalistic Observation occur frequently enough during daily routines for observations to be made.	54%	36%	7%	-	1%	1%	-
The Naturalistic Observation are appropriate for each age band.	43%	51%	6%	-	-	-	-
The Naturalistic Observation will help educators observe this skill.	47%	42%	11%	-	-	-	-
I used the Naturalistic Observation to observe this skill.	47%	49%	3%	1%	-	-	-

The feedback on the Naturalistic Observations was overwhelmingly positive, with a specific strength being the appropriateness of this component for a multitude of settings and its easy integration into daily routines.

The responses to items relating to the Planned Experiences were also positive. The responses were:

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
The Planned Experiences are appropriate for my program or setting.	33%	52%	9%	2%	3%	2%	-
The Planned Experiences are appropriate for each age band.	28%	57%	12%	3%	-	-	-
The Planned Experiences will help educators observe this skill.	30%	53%	12%	5%	-	-	-
The Planned Experiences will support educators observe this skill over time.	27%	56%	14%	3%	-	-	-
The Planned Experiences will support educators to assess children while they are engaged	35%	47%	14%	3%	2%	-	-

in rich, developmentally appropriate activities.							
I used the Planned Experiences to observe this skill.	26%	49%	15%	7%	1%	-	1%

Though the responses to the items related to Family Input were largely positive, they are more neutral than the responses to the survey items related to other components of CT DOTS. We believe this may be a result of participants' belief that the Family Input questions were required to be asked as written in their entirety. This issue is described in detail in the elaboration of the open-ended responses in the section below.

The responses to the items related to Family Input were:

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
The Guidance for Family Input is useful to engage families.	17%	52%	17%	4%	3%	4%	1%
The Guidance for Family Input is appropriate for families in my program.	16%	43%	21%	9%	4%	3%	3%
The Guidance for Family Input is clear.	15%	53%	15%	8%	5%	3%	2%
The Guidance for Family Input will help educators learn from families about their child's learning and development.	19%	50%	19%	3%	3%	4%	1%
The Guidance for Family Input will help families understand child development.	19%	35%	28%	10%	3%	3%	1%
The Guidance for Family Input is useful to engage families.	17%	52%	17%	4%	3%	4%	1%

Participants were also asked to rate aspects of the use and utility of CT DOTS. The responses to these items were:

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
CT DOTS can be used with all children.	32%	45%	12%	2%	6%	2%	2%
CT DOTS covers important aspects of learning and development.	39%	55%	3%	-	2%	-	2%
The information gathered from CT DOTS will support planning of learning experiences or curriculum.	37%	55%	3%	-	2%	2%	2%

The information gathered from CT DOTS will support planning for individual children.	40%	51%	3%	2%	2%	2%	2%
The information gathered from CT DOTS will support goal setting for individual children.	37%	51%	8%	-	2%	2%	2%
The information gathered from CT DOTS will support program improvement (ex., planning professional development).	23%	54%	12%	5%	2%	3%	2%
CT DOTS can be easily used with the CT ELDS.	38%	41%	9%	5%	5%	2%	2%
CT DOTS will support communication about children's growth and development with families.	25%	46%	20%	-	5%	3%	2%
CT DOTS will support communication about children's growth and development with other professionals/programs.	25%	52%	9%	5%	6%	2%	2%
CT DOTS can be used by different providers across settings.	21%	56%	17%	0%	3%	2%	2%
CT DOTS will support the use of standards-based IEPs.	20%	45%	18%	14%	2%	-	2%
The User's Manual helped me understand how to use CT DOTS.	18%	46%	12%	10%	9%	1%	3%
The User's Manual is clear.	13%	42%	25%	6%	7%	4%	3%

Overall, these response patterns are evidence that providers see CT DOTS as a tool to plan learning experiences and to support learning and goal setting for individual children. Similarly, there is support that providers believe the tool can be used with the CT ELDS and that it covers important aspects of learning and development. It can also be used to communicate with families and other professionals, and be used by a variety of providers across settings. Compared to the other items, the response patterns for the items related to the User's Manual and the extent to which CT DOTS can support the use of standards-based IEPs were less positive.

OPEN-ENDED ITEMS

Participants were asked to comment on different components of CT DOTS. These comments help contextualize the survey data. While the comments were supportive of the tool, the participants were able to offer constructive feedback regarding accessibility, the structure of the tool, and avenues for professional development. These issues are described below.

ACCESSIBILITY

For both the Descriptions and Examples as well as the Family Input questions, many participants felt that CT DOTS should include more supports for dual language learners and non-English speaking families. One participant eloquently commented on the accessibility of the Family Input section. She said, “Though the Family input provides questions regarding the stage of development of the child which is very clear and specific for a teacher to understand, some families do not have the appropriate education to understand the meaning of the questions on their own and some will have language barrier.” Another participant suggested that the Child Summary Form include a place to note if a child is a dual language learner.

STRUCTURE

Of all the feedback, the greatest number of participants commented that the tool should be presented with a larger font size. The CT DOTS developers recognized this issue during the Pilot training and have a plan to work with a graphic designer after the tool is revised based on Pilot feedback. Others suggested that users would benefit from viewing descriptions and examples from multiple progressions within a domain on one page. Several participants mentioned that it would be helpful to include alignment with the CT ELDS on each CT DOTS progression.

One component of CT DOTS that garnered a lot of positive feedback was the Examples that were included to elaborate upon the Descriptions. Participants saw great value in this section, but felt that the nature of the Examples was inconsistent across the document. Some progressions had very detailed Examples while other progressions had more broad Examples. Participants also suggested including guidance for Naturalistic Observations at every age band rather than combining across age bands. Another participant noted that a similar pattern for the Planned Experiences. Some Planned Experiences were very general while others were more broad. Still, the Planned Experiences are an important component of CT DOTS. One participant said, “The descriptions were very helpful because I often think of a planned experience to be a teacher-led activity. The descriptions helped me to add in some planned experiences that were child-led.”

The Family Input section was well-received in that the questions helped providers connect to families around children’s development. One participant said, “The family input component is so crucial! I think it helps guide families as to what age-appropriate expectations are for each child. It also offers support to the teachers from families who think we play all day and may not see merit in all of our activities.” Still another participant said, “The information received gave us a greater understanding of the families' history and past and present experiences.” A number of participants suggested that the CT DOTS developers continue to simplify the language in each of the questions. While some participants felt yes/no questions or a checklist would be easier for families, others saw the value in the open-ended questions as a vehicle for families to share more details about their children. Other suggestions related to Family Input are included in the Process section, below.

There were some important comments about individual domains and strands as well:

- As written, the science progressions rely on vocalizations from children.
- There was a suggestion to separate Measurement from Data.
- One user noted that she was less comfortable in her own professional practice with the Social Studies progression as compared to other progressions.
- Several users suggested extending the age bands to six years of age.

- A number of participants were concerned about sharing the age bands with families.

One Birth to Three provider commented extensively about the age bands for infants and toddlers. We share her comments here in their entirety because the concern is so far-reaching. She said:

The age bands are too wide for the first three years of life. For the first year there should be monthly milestones, some with a range of 3 months. There are not enough skills covered for the first 3 years of life. Sharing concerns with families and other providers will be difficult due to the wide age range and the limit of milestones/skills; it may seem as though the skill does not need to be mastered until the child reaches the end of the age band. Families in Birth to Three typically do not have a foundation of knowledge of typical development and in order to empower families to understand what is expected of children at each age the use of a curriculum based assessment is helpful.

Additional age bands for birth through 36 months will be considered as a potential revision.

PROCESS

As designed, the Family Input was intended to be used as a guide for providers to have conversations with families. It seems from the responses that a number of participants felt that they were required to ask each family each question in the tool. One participant said, “Having this family input piece may be nearly impossible to completely put into practice...I just see this piece being pushed on the teachers and the teachers feeling a sense of failure and frustration when the families do not comply.” Yet another participant who also felt this section was cumbersome said, “We decided to use the most important questions and give [families] those.” While most participants felt there was value to the Family Input, a number of participants suggested it would be easier to elicit feedback from parents if they could distribute a survey or quick checklist to families for them to fill out on their own time. Others noted the most appropriate time to engage with families about these issues is during a fall or spring conference; the CT DOTS Pilot began after spring conferences. Perhaps more clarity is needed about the intended use of the Family Input section in the User’s Manual.

Multiple participants felt it was time-consuming and unnecessary to count the pieces of evidence collected for each progression. One participant noted, “This process has been a challenge from the beginning with all the necessary components for this tool. Perhaps, if we had examples of all the components and a strong overview from the beginning, it would seem more cohesive.”

One additional challenge was the data collection on Qualtrics. On Qualtrics, several participants noted that they could not edit their responses, including both typographical errors and revised judgments. Qualtrics will not be the data collection platform for the Field Test or final implementation of CT DOTS. Similarly, the User’s Manual included a place for providers to provide a narrative description of the child’s growth and development. While this form was included in the User’s Manual, it was not required for the Pilot. It was initially felt that leaving the narrative summary out of the Pilot would alleviate the administrative burden of the Pilot for the participants. More clarity is needed about processes related to piloting and testing of CT DOTS that may be different from processes proposed for ongoing use of CT DOTS in its full implementation phase.

PROFESSIONAL DEVELOPMENT

Many participants noted that they needed more time with the tool and more structured discussions about their use of the tool. One participant said, “It definitely takes some time to become familiar with the DOTS, but after time, I did find it easy to use and worthwhile.” Another important issue that came from the open-ended responses is the efficiency of observing multiple progressions simultaneously. One participant said, “I realized how many observations can be done just by watching a specific child for a short period of time. Many of the standards could be seen in every day normal play as well as during routines and transitions.” Some saw the value quickly while others saw the value towards the end of the observation time window.

FAMILY EXPERIENCE SURVEY

For the Family Input portion of the Pilot, providers were asked to focus on using all of the Family Input questions with families specifically for the Language and Literacy progressions. The Language and Literacy progressions were: Receptive Language, Expressive Language, Literacy, Print Concepts, Phonological Awareness, and Drawing and Writing. After the data collection process, families were invited to complete a survey of their experience (see Appendix D). In total, 32 families responded to the survey.

In the first section of the survey, respondents were asked to identify how their child’s teacher or provider communicated with them for the CT DOTS Pilot. The most frequent modes of communication were informal conversations (47%) and written questions and answers (50%). Teachers and providers were less likely to use conferences or meetings (12%), telephone calls (9%), and text messages (6%).

Respondents were also asked to comment on the structure of the questions. Approximately half of the respondents noted a preference for the combination of yes/no questions and questions that elicited a more elaborate response (53%). Of the remaining respondents, 25% suggested they had no preference by skipping the survey item, 12% preferred open-ended questions, and 9% indicated a preference for yes/no questions. One respondent said, “I think yes/no questions are easier/quicker to complete but I like being able to provide feedback as some questions need more explanations. This whole process has made me feel very involved in my child's education.” Still another respondent said, “The questions made me think about her skills and abilities in a more structured way and provided opportunities to discuss how I might help her more at home.”

Based on the survey responses below, the respondents found the questions to be a useful tool for communicating with teachers that allow for a valuable process of sharing information. The questions were also perceived as easy to answer.

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree	Missing
The way that the questions were presented helped me to communicate with my child’s teacher.	34%	34%	3%	3%	-	-	-	25%
The questions that were asked were easy for me to answer.	31%	41%	3%	-	-	-	-	25%
The questions that were asked allowed me to share valuable information about my child.	47%	22%	6%	-	-	-	-	25%

The family input questions helped me to learn about child's language and literacy development.	31%	34%	9%	-	-	-	-	25%
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Respondents were also asked to answer questions about the overall process of sharing information with teachers. Similar to the items above, the responses indicate that the sharing of information was a positive process.

Question	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree	Missing
Sharing information about my child's learning and development was a positive experience.	47%	25%	-	-	-	-	-	28%
Sharing information about my child's learning and development helped to build my relationship with my child's provider or teacher.	38%	28%	9%	-	-	-	-	25%
Sharing information about my child's learning and development made me want to become more involved in my child's center or program (if applicable).	34%	19%	3%	16%	3%	-	-	25%
Sharing information about my child's learning and development made me want to become more involved in supporting my child's learning at home.	34%	34%	-	-	-	3%	-	28%

The items related to the extent to which information sharing motivated program involvement and learning at home were more mixed, but this may be reflective of the question wording (as respondents could have already been involved in these aspects of their child's growth). As one respondent noted, "I am already involved as much as I need to be. I am very much a part of my daughter's learning at home or wherever she is. If my input helps anyone else, I am very happy to help."

When respondents were asked to comment on the overall process, the comments were overwhelmingly positive. One respondent said, "I think everything was perfect. The questions hit right in the target. The input was really good. I love participating and in my child's education and I really think the program is wonderful. I don't have any suggestions regarding the program. In about questions for the family, I think you guys are doing an amazing job. All those questions are perfect." Another said, "It actually made me feel more involved. It made me think about/become more aware of how far he has come. He has definitely learned a lot in such a short period of time." Still another respondent said, "It gives me confidence, assurance and satisfaction to be a part of my child's development academically, socially and her confidence in learning and level of understanding."

CONCURRENT VALIDITY EXPLORATION

Another component of the Pilot was the Concurrent Validity study. The Concurrent Validity study was designed to examine the relationship between CT DOTS data and data from several other widely used measures, including: Battelle Developmental Inventory, Brigance, CT Preschool Assessment Framework, or Teaching Strategies GOLD. For ease of data collection, each provider was assigned a sub-section of both instruments to complete with five children in their care. While 23 providers from 64 programs were initially slated to participate in this portion of the Pilot, many switched to work only with CT DOTS after the initial training. Others transitioned from the Concurrent Validity study to focus only on CT DOTS after the start of the data collection window.

At the conclusion of the Pilot, one provider submitted Teaching Strategies GOLD data, four providers submitted data from the Battelle Developmental Inventory, and eight providers submitted data from the Preschool Assessment Framework. In addition to the significant drop in participation, the participating providers did not complete all of the assigned observations.

The Concurrent Validity study did not yield enough data for either descriptive or inferential statistical analyses. Data were evaluated on a case-by-case basis. Overall, the data showed consistent rating patterns between the CT DOTS and Teaching Strategies GOLD, as well as CT DOTS and the Preschool Assessment Framework. For the Battelle, the data indicated that most of the children who participated in the Pilot had identified special needs or disabilities. Providers commented that the age equivalency on the Battelle was not a representative indicator of a child's skill and could not be properly compared to the CT DOTS ratings. Two providers noted that while the Battelle was used to identify eligibility for services, CT DOTS provides more information. One noted that CT DOTS offers a "deeper understanding of the children's needs and the family's needs and priorities." Another said, "I feel that CT DOTS looks more closely at self-regulation and expression of emotions than the Battelle."

The Pilot Concurrent Validity study was an important first step in developing evidence of the relationship between CT DOTS data and data from other measures. These studies should be repeated with larger initial samples, but also with ongoing guidance to the participating providers to ensure fidelity to the study protocol.

CONCLUSIONS

The evidence provided in this report demonstrates that providers find CT DOTS a useful tool to observe early learning and development at the specified age bands. The tool was seen as useful for instructional planning, goal setting for individual children and to support program improvement. The skill Descriptions were clear and appropriately describe growth and development across the age bands. The Examples support the interpretation of the Descriptions. Both the Naturalistic Observations and the Planned Experiences were overwhelmingly viewed as useful and appropriate. The Family Input guidance was well-received, especially by families. This is an important component of CT DOTS.

The Pilot also identified some concerns with CT DOTS. The data suggest some level of concern about using CT DOTS to track growth over time for children in Birth to Three, as well as for dual language learners and children with communication challenges or other developmental issues. Further, providers need more explicit guidance on how programs and providers may find different uses for the Family Input section.

Finally, future implementation of CT DOTS should incorporate robust professional learning opportunities and ongoing support for providers regarding the use of the tool and the resulting data.

The CT DOTS Pilot was an important step in the instrument development process and it motivated a number of substantial improvements to the tool and supporting materials. After these revisions, the instrument should be again presented to the field for feedback. This ongoing stakeholder engagement will ensure a tool that is useful for the early care and education providers to support young children and their families.

NEXT STEPS

The CT DOTS Pilot participants offered clear guidance on next steps for the CT DOTS developers. The action items taken from the preceding summaries of the open-ended questions. Next steps are:

1. Review accessibility for special populations of students
 - a. Dual language learners
 - b. Students with communication challenges and nonverbal students
2. Content issues
 - a. Calibrate the Examples and Planned Experiences to include a similar level of detail across progressions
 - b. Simplify the Family Input questions
 - c. Refine the guidance related to the Family Input section in the User's Manual to ensure users are aware they can adapt the questions to suit their needs
 - d. Refine the guidance and/or approach regarding the collected evidence on the data collection form
 - e. Explore possible addition of age bands from birth through 36 months
3. Formatting issues
 - a. Increase the font size
 - b. Include alignment to CT ELDS on each progression
 - c. Include a notation of whether a child is an English language learner on the Child Summary Form
 - d. If possible, create a checklist based on the Family Input section
4. Professional Learning Opportunities
 - a. Create an approach to professional learning that introduces providers to CT DOTS, but also continues during the use of CT DOTS to offer providers more structured discussions and ongoing support related to their use of the tool.

APPENDIX A: RECRUITMENT SURVEY

The CT Office of Early Childhood (OEC) has been working to build a system to support early care and education providers to observe, document and summarize evidence of children's learning and development relative to the CT ELDS. The OEC has worked with experts in assessment and early childhood education and has a strong cross-sector advisory group to guide this work. A draft system, called the Connecticut Documentation and Observation for Teaching System (CT DOTS), is now ready for a pilot within the state.

The OEC is recruiting approximately 100 early care and education programs to participate in a pilot of CT DOTS. We welcome the involvement of all types of early care and education programs including home-based providers, center-based programs, public school preschool and preschool special education programs, Birth to Three providers and others.

There are multiple options for involvement including piloting CT DOTS in its entirety, piloting a portion of CT DOTS along with currently used assessment tools, and participating in a related study of the most effective methods for gaining family input. In order to fit each provider and program to the appropriate option(s), we ask that you complete this brief survey indicating your interest and sharing some information about your program. Although individual providers will be participating in the training and data collection, we ask for this the survey to be completed at a program level. We recognize that in some cases (e.g., home-based settings) the "program" may have only one provider. For each program that is interested we will ask how many individuals are interested in participating. Each individual provider will need to volunteer and consent to participate at a later date; however, the names of individuals do not need to be provided at this time.

Thank you for taking the time to share information about your program. We're glad that you are interested in participating in this exciting opportunity!

1. Program name_____

2. Program location (county):

Fairfield

Hartford

Litchfield

Middlesex

New Haven

New London

Tolland

Windham

3. Program setting:

Center-based community setting

Public school

Home

Other: _____

4. Funding Sources

Child Day Care

Family Resource Center Grant

Head Start, Early Head Start, and/or state Head Start supplement

School Readiness

Smart Start

Full- family-paid tuition

Preschool Development Grant

Preschool Special Education Funding or Birth to Three funding (IDEA)

Other _____

5. Age Ranges Served (not that the age choices included in this survey align only to those ages addressed in CT DOTS).

Infants/toddlers (birth to age three)

Preschool (three to kindergarten entry)

6. How many teachers/providers are interested in participating in the pilot?

Infant/toddler teachers/providers _____

Preschool teachers/providers _____

7. Do you currently use assessments in your program?

8. If yes, please indicate all assessments currently used in your program:

The CT Preschool Assessment Framework (CT PAF)

Teaching Strategies GOLD

The Brigance Inventory of Early Development III

The Battelle Developmental Inventory

9. Which pilot structure would you be interested in?

Piloting the entire CT DOTS system in a specified time frame, collecting as much evidence of learning and development as possible during that time period

Piloting a limited number of CT DOTS progressions and also providing other assessment information for children

Piloting the preschool Language and Literacy portion of CT DOTS using one of several options for family input to determine which one is most effective

10. Program Contact Information

Primary contact name

Phone number

Email

APPENDIX B: CHILD SUMMARY FORM

1. Provider ID (three-digit code assigned by OEC)
2. Program ID (Letter designation provided by OEC)
3. Child Gender (Male / Female)
4. Child age in months _____ (as of May 1)
5. Please indicate the number of months this child has been in your care as an individual teacher/provider (not in the center or program).
6. Please indicate the number of months this child has been in your care as an individual teacher/provider (not in the center or program).
7. Does this child's family speak English at home? (Yes / No / Don't know)
8. Does this child have any identified disabilities or special needs? (Yes / No / Don't know)

Domain	Progression	0-6 months	6-12 months	12-18 months	18-24 months	24-36 months	3 to 4 years	4 to 5 years
Cognition	Initiative and Curiosity							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Cognitive Flexibility							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Engagement In Learning							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
Social and Emotional Development	Logic and Reasoning	n/a	n/a					
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Symbolic Representation	n/a	n/a					
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Regulation							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Emotional Expression							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Sense of Self							
	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input							
	Relationships with							

	Adults	_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input															
	Relationships with Peers															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
Physical Health and Development	Large Muscle (Gross motor)															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
	Small Muscle (Fine Motor)															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
	Self-Care															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
Language and Literacy	Receptive Language															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
	Expressive Language															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
	Literacy/Books															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
	Print Concepts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
																_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input	
Phonological Awareness	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
Drawing and Writing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a							_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
Creative Arts	Appr./Engagement the Arts	n/a	n/a	n/a	n/a										_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
Mathematics	Counting and Cardinality	n/a	n/a	n/a	n/a										_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
	Number Operations	n/a	n/a	n/a	n/a	n/a	n/a								_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
	Measurement and Data	n/a	n/a	n/a	n/a	n/a	n/a								_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
Geometry	n/a	n/a	n/a	n/a										_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input			
														_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input			
Science	Scientific Practices														_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
Social Studies	Social Studies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a				_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		
															_____ Naturalistic Observations _____ Structured Learning Experiences _____ Family Input		

APPENDIX C: EVALUATION SURVEY

Thank you for participating in the CT DOTS Pilot. Please answer the following questions to help us improve the tool.

1. What was your Program ID for this study? (The three-digit code assigned by the OEC)
2. What is your Provider ID for this study? (The one letter code provided by the OEC)
3. What is the total number of children in your classroom right now? (Note that if you did not use CT DOTS in a classroom setting, please type 0.)
4. What is your program setting? (Please choose one.)
 - a. Center-based community setting
 - b. Public school
 - c. Home or family child care
 - d. Birth to Three Program
 - e. Other
5. If you selected "Other" for the question above, please describe your program.
6. Please select all of the funding sources for your program.
 - a. Preschool Special Education (619)
 - b. Birth to Three
 - c. State-funded Child Day Care Contracts
 - d. Family Resource Center
 - e. Full parent tuition
 - f. Head Start
 - g. Preschool Development Grant
 - h. Smart Start
7. What age group do you primarily work with?
 - a. Infants/Toddlers
 - b. Preschool
 - c. Multi-age setting

8. Which of the following degrees have you earned?
 - a. High school diploma / G.E.D.
 - b. CDA
 - c. Associate's degree
 - d. Bachelor's degree
 - e. Master's degree
 - f. Doctorate degree

9. Which of the following certifications or credentials do you hold?
 - a. Early Childhood Teaching Credential - A Level
 - b. Early Childhood Teaching Credential - A Level
 - c. Department of Education Teaching Credential

10. If you have a Department of Education Teaching Credential, please indicate the endorsement number.

11. How many years of experience have you had teaching each of the following age groups?
 - a. Preschool
 - b. Kindergarten
 - c. Elementary School

12. Think about the Descriptions and Examples in CT DOTS and rate the following statements (Strongly Agree to Strongly Disagree).
 - a. The Descriptions are generally clear.
 - b. The Descriptions are appropriately split across the age bands.
 - c. For the age bands I referenced, the Descriptions were appropriate.
 - d. The Observation Progression language describes typical growth and development.
 - e. It is easy to apply the rubric to the Descriptions.
 - f. The Examples add information that is helpful in interpreting the Descriptions.
 - g. The Examples are developmentally appropriate.
 - h. I believe that different educators would have a similar understanding of this skill, based on the Description and Examples.
 - i. With accommodations and supports, I feel comfortable rating a child with disabilities or special needs using CT DOTS.
 - j. The Observation Progressions are appropriate for children who are dual language learners.

13. Do you have any suggestions to improve any of the Descriptions or Examples? Please note the Observation Progression (include the specific age band if appropriate) and your suggested improvements here.

14. CT DOTS includes three different ways that data about children's learning and development may be gathered. Please respond to the following statements about the Naturalistic Observations (Strongly Agree to Strongly Disagree).
 - a. The Naturalistic Observation are appropriate for my program or setting.
 - b. The Naturalistic Observation occur frequently enough during daily routines for observations to be made.
 - c. The Naturalistic Observation are appropriate for each age band.

- d. The Naturalistic Observation will help educators observe this skill.
 - e. I used the Naturalistic Observation to observe this skill.
15. Do you have any suggestions for improving the guidance for Naturalistic Observations?
16. Please respond to the following statements about the Planned Experiences (Strongly Agree to Strongly Disagree).
- a. The Planned Experiences are appropriate for my program or setting.
 - b. The Planned Experiences are appropriate for each age band.
 - c. The Planned Experiences will help educators observe this skill.
 - d. The Planned Experiences will support educators observe this skill over time.
 - e. The Planned Experiences will support educators to assess children while they are engaged in rich, developmentally appropriate activities.
 - f. I used the Planned Experiences to observe this skill.
17. Do you have any suggestions for improving the guidance for Planned Experiences?
18. Please respond to the following statements about the Guidance for Family Input (Strongly Agree to Strongly Disagree).
- a. The Guidance for Family Input is useful to engage families.
 - b. The Guidance for Family Input is appropriate for families in my program.
 - c. The Guidance for Family Input is clear.
 - d. The Guidance for Family Input will help educators learn from families about their child's learning and development.
 - e. The Guidance for Family Input will help families understand child development.
19. Do you have any suggestions to improve the Guidance for Family Input?
20. Think about the use and usefulness of CT DOTS and rate the following statements (Strongly Agree to Strongly Disagree).
- a. CT DOTS can be used with all children.
 - b. CT DOTS covers important aspects of learning and development.
 - c. The information gathered from CT DOTS will support planning of learning experiences or curriculum.
 - d. The information gathered from CT DOTS will support planning for individual children.
 - e. The information gathered from CT DOTS will support goal setting for individual children.
 - f. The information gathered from CT DOTS will support program improvement (ex., planning professional development).
 - g. CT DOTS can be easily used with the CT ELDS.
 - h. CT DOTS will support communication about children's growth and development with families.
 - i. CT DOTS will support communication about children's growth and development with other professionals/programs.
 - j. CT DOTS can be used by different providers across settings.
 - k. CT DOTS will support the use of standards-based IEPs.
 - l. The User's Manual helped me understand how to use CT DOTS.
 - m. The User's Manual is clear.

21. Do you have any comments about the use and usefulness of CT DOTS? Please share them here.

22. Do you have any suggestions for improving the CT DOTS User's Manual?

APPENDIX D: FAMILY EXPERIENCE SURVEY

Thank you for participating in the CT DOTS Pilot with your child's provider/teacher. This survey will help us learn more about your experience sharing information about your child's learning with his or her teacher.

1. Please indicate the way that you communicated with your child's provider/teacher when you were answering questions about your child's learning for the CT DOTS pilot. Select all that apply.
 - a. Informal conversations
 - b. Telephone calls
 - c. Text messages
 - d. Written questions and answers
 - e. Conferences or meetings
 - f. Other _____
2. CT DOTS included different types of questions that your child's provider/teacher asked you. Which type of question did you like best for sharing information about your child?
 - a. Questions that I could answer yes or no to
 - b. Questions that asked me to describe my child's skills
 - c. I liked having a combination of types of questions
3. Do you have any suggestions regarding the questions for family input?
4. The following statements are about the ways in which you shared information with your child's teacher/provider. Please select one rating for each statement, from Strongly Agree to Strongly Disagree.
 - a. The way that the questions were presented helped me to communicate with my child's teacher.
 - b. The questions that were asked were easy for me to answer.
 - c. The questions that were asked allowed me to share valuable information about my child.
 - d. The family input questions helped me to learn about child's language and literacy development.
 - e. Do you have any suggestions regarding how family input about children's learning and development is gathered?
5. The following statements are about how providing input made you feel or think about your child's learning and development. Please select one rating for each statement, from Strongly Agree to Strongly Disagree.
 - a. Sharing information about my child's learning and development was a positive experience.
 - b. Sharing information about my child's learning and development helped to build my relationship with my child's provider/teacher.

- c. Sharing information about my child's learning and development made me want to become more involved in my child's center or program (if applicable).
 - d. Sharing information about my child's learning and development made me want to become more involved in supporting my child's learning at home.
6. Please describe how participating in the family input process made you feel about your involvement in your child's learning and development.

Thank you for taking the time to participate in the CT DOTS Pilot and to complete this survey. The information you provided will help us improve the ways that teachers involve families in CT DOTS in the future.