

COMPETENCY
ASSESSMENTS FOR
EARLY CHILDHOOD
EDUCATION
PROFESSIONALS

PREPARED BY STRUMPF ASSOCIATES ON BEHALF OF THE EARLY
CHILDHOOD EDUCATION NETWORK

**Literature
Review and
Case Studies
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Project Summary and Overview of Report

In 2018, The Washington Area Women’s Foundation’s (WAWF) Early Childhood Education (ECE) Network engaged Strumpf Associates to “research how early childhood educator competencies are currently assessed across the country and provide a summary of these processes and mechanisms”. Strumpf Associates followed a two-stage process in developing this report. The first stage encompassed a literature review of competency assessment methods in general and within the ECE sector. Nine prospective case studies were identified for consideration for the second stage of more detailed documentation.

In the fall of 2018, the WAWF ECE Network Core Team reviewed the initial literature review report and selected five of the nine cases for further documentation. Each of these is described in this report. They are the states of Colorado, California, and Minnesota, followed by ECE apprenticeship programs in Philadelphia and Vermont.

In developing these case studies, the Strumpf Associates team developed an interview protocol, and conducted interviews with key leaders for each of the states or regional projects. These interviews were supplemented by a review of relevant website information and additional competency assessment materials provided by case study leaders. Initial drafts of each individual case study was reviewed by a case study leader to ensure accuracy.

Following the development of all five case studies, the Strumpf Associates team analyzed and compared the case studies to identify the observations that are included as an Executive Summary in Part I of this report, along with highlighted “promising practices” from the individual case studies. Part II of the report has each of the case studies. At the end of this report is an Appendix, which is the summary of the initial literature review stage of this project.

Part I: Overall Observations and Promising Practices for Assessing Competencies of ECE Professionals

Overall Observations from Literature Review and Case Studies

The cases affirm that competencies are assessed at many points, using different methods, and by numerous stakeholders throughout the ECE professional development process. Prior to entering a college program of study or pre-employment training program, a prospective ECE professional may undergo a screening test for basic skills in the form of a college placement test or another standardized basic skills assessment such as a TABE test (Test for Adult Basic Education). During an ECE college program of studies that has been aligned with competencies, college faculty conduct student assessments using a variety of methods that include knowledge-based tests, papers, projects and demonstrations. ECE employers assess competencies continuously, often beginning during the job interview process and continuing with observation-based performance assessments throughout employment using a variety of assessment methods, such as peer and parent feedback, document reviews, etc.

Regional or state professional ECE development programs for incumbent ECE professionals also use a variety of assessment methods, including self-assessments, portfolios and observations. Since these various competency assessment methods may be only loosely coordinated, it would be more accurate to describe them as multiple overlapping systems of competency assessments. However, some states and regions reviewed for this report have made progress in developing a more coordinated system of competency assessment involving multiple stakeholder organizations.

States have been cautious in implementing competency assessment systems. None of the three statewide case studies included in this report has fully implemented a multi-modal competency assessment system that includes systematic use of direct observation as one mode. One (Minnesota) has not yet attempted to develop a statewide system of competency assessments, despite being an early adopter of ECE competencies in the early 2000s. The other two (Colorado and California) have focused initially on statewide scaling of an online self-assessment tool that links professionals to the state's professional development system. A primary rationale for caution heard in interviews is the cost to develop, train and manage a statewide network of trained and experienced observers who use a field-validated observation rubric.

In the cases studied, there appears to be a trade-off between developing a scalable online system of self-evaluation vs. a smaller-scale system of observation-based observers and coaches. Both Colorado and California have developed an online competency-based self-assessment and professional development system that have quickly reached tens of thousands of ECE professionals. Vermont and Philadelphia, both using apprenticeship-based programs featuring trained observers/coaches in the workplace, are poised to serve hundreds with their personalized direct observation methods of competency assessment.

Scaled, technology-based competency assessment and professional development systems are beginning to yield increasingly valuable data about the ECE workforce competencies that can be used by many stakeholders. Colorado in particular has begun to mine its online competency assessment tool and online professional development courses to provide data on competency achievements, gaps and professional development interests that can be used at a regional or state level for multiple purposes. For example, employers can pull up data on their ECE staff's competencies for state Quality Ratings and Improvement Systems (QRIS) reporting and/or organizational development. Regional professional development organizations can use the data to plan in-person workshops focused on competencies in high demand. State officials can use the data to measure progress and plan statewide initiatives. In California, college and university ECE program directors can use the online course mapping profiles of their institutions to identify gaps and exert greater control over their course delivery systems to ensure academic integrity. However, such data is only valuable to the degree to which self-assessments and other user-generated data are accurate, which is uncertain at this point.

Coaching-based competency-based professional development systems are gathering momentum and introducing video-based methods to increase availability and reduce cost. Several leaders interviewed for this report cited an increasing level of interest in coaching or mentoring to strengthen ECE professionals' competencies. For example, the organization leading the mentoring effort for the Philadelphia apprenticeship program, First Up, reported receiving many inquiries from around the country about its mentoring and coaching model. Program leaders there are currently exploring the use of video-based observations to increase access and reduce costs of coaching. Other state leaders interviewed, especially California, also noted an interest in video-based methods of classroom performance observations and coaching.

Summary of Promising Practices from Case Studies

Initial interviews with several of the case study subjects identified specific elements of their competency assessment processes that appeared to be particularly effective practices. For these "promising practices," the Strumpf Associates' researcher gathered additional information to document how these practices worked and results generated by these practices. Four promising practices are highlighted below, which are each described in greater detail within the case studies in Part II of this report.

Colorado's Rapidly-Scaled Online Professional Development System: Colorado used a federal Race to the Top grant to develop a comprehensive, competency-based self-assessment tool that guides ECE professionals to an online system of professional development courses and videos to further develop their competencies. In the first two years of the system's implementation, 60,000 ECE professionals in Colorado have used the system. The state has recently begun using aggregate data from individual records within the system to plan ongoing state and regional competency-based professional development efforts.

California's Competency-Based Course Mapping Tool: To assist faculty and trainers within ECE higher education programs and professional development organizations in aligning their courses to the state's competency framework, California developed an online course mapping tool. As of July 2018, over 900 higher education courses and nearly 200 professional development programs have been aligned with competencies using this tool. These courses and training programs are included within the state's online professional development system, which is searchable by specific competency areas and by region, so that ECE professionals can quickly identify a program that matches their professional development interests.

Philadelphia's Training and Support of Worksite Coaches: Philadelphia's ECE apprenticeship program focused on the training and management of a network of ECE performance coaches of apprentices who are experienced early childhood educators working at ECE centers and schools. Coaches are trained on a specific coaching methodology by certified ECE coaching mentors, and further supported in these as a cohort by regular regional Master Coaching workshops and individualized mentoring.

Vermont’s Competency Assessment Toolkit: Vermont developed and trained mentors to use a toolkit of 20 competency-specific assessment tools to use after observing their apprentices in action. Each tool provides detailed guidance on how to assess a specific ECE competency, based on direct observations of ECE apprentices within the workplace, and to record a summary of the assessment and resulting professional development plans to further sharpen competencies of apprentices.

Part II: Five Case Studies of Competency Assessment Methods

Colorado’s Competency-Based Assessment Approach for ECE Professionals

SECTION I: Program Overview

Colorado used a federal Race to the Top grant from 2013-2017 to overhaul its ECE competency framework and to develop and rapidly scale an extensive online competency-based self-assessment and professional development system. Colorado’s ECE competencies were finalized in 2016 by Oldham Innovative Research, in consultation with a large committee representing a variety of stakeholders, and draws upon similar work completed by several other states. The overall architecture of Colorado’s ECE educator and administrator competencies has eight domains, and each individual competency within a domain can be assessed at four levels.

Colorado’s voluntary “honor” system of competency assessment relies on ECE professionals to fairly assess their own competencies, with the primary goal being to create individualized professional development plans to further master ECE competencies. New ECE professionals begin by completing an extensive (68-page) [self-assessment tool](#) to evaluate their own competencies. ECE professionals are encouraged to use the self-assessment tool to develop an individualized professional development plan within the state’s [Professional Development Information System](#) (PDIS). Underpinning the system’s design is a corporate learning management software platform (from a company called [Vector Solutions](#)) that the state customized for its use for ECE professional development. In addition to online learning courseware modules linked to competencies, the PDIS also incorporates local competency-based professional development training programs for ongoing professional development. ECE professionals can accumulate points within the PDIS for completing online or local training, with extra points awarded for in-class observations of specific competencies by the state’s network of ECE coaches. ECE professionals can earn six levels of professional credentials within the state’s ECE professional development system.

From the beginning of the Race to the Top grant, the Early Childhood Professional Development (ECPD) team within the state Department of Education charged with execution of the grant envisioned a highly coordinated systems change approach. They engaged multiple other agencies and organizations across the state in aligning their work with the updated ECE competencies and to participate in developing the PDIS jointly. Jennifer O’Brien, the Director of

ECE Professional Development within the Colorado Department of Education framed this process as “bringing everyone to the competency table”. For example college and university ECE faculty went through a process to align their ECE degree programs, courses and student learning assessments with the competencies. The Department of Human Services aligned their professional development offerings with the competencies, and the state’s QRIS system began considering new professional development credits and credentials earned within the PDIS in its assessment process.

As of fall 2018, the system has accumulated a total of 60,000 individual professional development records. The self-assessment tool has been completed by 14,000 users (with 7,000 more in process), and 11,000 have used the individual professional development planning tool. The PDIS has automatically awarded 13,000 ECE professionals with an Early Childhood Professional Development credential.

Now that statewide use of the PDIS has been rapidly scaled, the system is becoming an increasingly important source of data about the ECE workforce. Officials at a state or regional level can use the system’s reporting features to learn about the ECE workforce and use report data to shape their plans.

In 2017, at the conclusion of the Race to the Top grant, the state’s Early Childhood Leadership Commission published a new blueprint to use its new systems to build “a comprehensive professional development system designed to recruit, retain, compensate, develop, and support a high-quality early childhood workforce,” called [Colorado’s Early Childhood Workforce 2020 Plan](#). The goal of the three-year plan is to continue building a competency-based professional development system, with individual objectives that include building a clear career pathway, ensuring portability across settings, and alternative credentialing such as competency-based evaluation and apprenticeships.

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SECTION II: Development of Colorado’s ECE Competency Assessment Methods

The state opted to develop a larger-scale, individually-driven professional development system accessible online that relied on educators’ honest self-assessment of their own competencies. Since there are no immediate benefits to individuals from inflating their self-assessments, but an immediate negative effect of losing valuable professional development guidance from an inflated self-assessment, state officials believe that the self-assessment system represents a roughly accurate portrait of competencies.

Colorado adapted a points-based credentialing system from a model developed by Ohio. The system recognized different modes of acquiring competencies (formal education, work experience, professional development), different job roles (teacher, administrator, family child care provider, trainer, etc.) and six levels of mastery. The points-based system was developed via an iterative process that incorporated both expert and field reviews of the point allocations and thresholds for credential attainment. Once achieved, credentials are valid for three years, and professionals can renew their credential by maintaining points at that level, or choose to earn additional points towards a higher level credential. The system calculates points automatically to award some credentials, with a review by system managers for other credentials.

In a parallel track, the state's Race to the Top initiative also developed a similar credentialing system for ECE coaches, in an attempt to develop a network of trained coaches who could provide individualized professional development guidance to early childhood educators based on direct observation of classroom practice. Coaches were most often connected to a specific initiative, such as the state's QRIS program, and a special initiative related to care for infants and toddlers. While over 200 coaches were trained during the grant period, ongoing training of coaches has diminished due to resource constraints following the conclusion of the federal grant in 2017.

In 2019, the state aims to begin a new study with Regional Education Laboratories to assess the validity of the system's self-evaluation methodology. The proposed study will work with a regional partner to compare self-assessments of a sample of ECE professionals with direct observation of competencies by trained assessment experts. The proposed project was currently under review at the time this report was written.

SECTION III: The Current Competency Assessment Process

For individual ECE professionals, the PDIS process begins with a competency-based online self-assessment, which is linked to self-paced courses through which an early childhood educator can learn more about specific competencies that they want to improve. The initial self-assessment is based on a competency framework with eight domains/subject areas, four levels from beginner to advanced, with 128 total questions. It yields a competency profile that an ECE professional can use to develop a personalized professional development plan, with targeted instruction available online. There is no cost to individual who use the system.

More information about the PDIS competency assessment process is described in the following "promising practice" section of this report.

Promising Practice: Rapid Development and Scaling of an Online Competency- Based System of Self- Assessment and Professional Development

Colorado's Professional Development Information System (PDIS) "is a web-based system supporting career and professional development for Colorado's early childhood workforce" that has quickly attracted 60,000 users.

Promising Practice: Rapid Development and Scaling of an Online Competency-Based System of Self-Assessment and Professional Development

Colorado's Professional Development Information System (PDIS) "is a web-based system supporting career and professional development for Colorado's early childhood workforce" that has quickly attracted 60,000 users. The state allocated \$1.6 million of its overall \$45 million Race to the Top grant to develop the online components of the PDIS. They purchased Red Vector's off-the-shelf Simply Digi corporate professional development system, and adapted it for the state's ECE professional development system. The initial development of the online system from the time the vendor was selected to the initial system launch in April 2015 took about 15 months. The state hired a writer/consultant with expertise in early childhood education to develop the self-assessment tool. With an in-house team of four instructional designers, the state has developed 61 online learning modules that are each tied to various competencies. The course material includes narrated texts, demonstration videos and photos, all used within self-guided learning activities. The courses' design focuses on transfer of learning to one's own work environment and ECE job role. ECE educators can select the competency areas that they want to learn and complete the related online coursework. Since the system launch, new features and courses have been continually added as the system was further built out.

The state leveraged the federal grant in multiple ways to introduce this system to its ECE workforce, and rapidly build the state's network of users. Recognizing that some prospective educators in the ECE field had limited digital skills, the Race to the Top grant funded a statewide help desk (including Spanish-speaking advisors) to respond to users' phone calls and emails to help them navigate the system. The grant also supported initial regional initiatives by engaging the state's 34 regional Early Childhood Development councils in introducing the system. These councils serve as regional intermediaries to support the local ECE infrastructure, connecting local partners, employees, employers and parents, and offering ongoing regional professional development opportunities. Councils invited local ECE employer representatives and individual professionals to meetings to introduce and discuss the new professional development system, and gathered initial user feedback via informal focus groups. The grant also provided resources to orient regional ECE trainers to the system fund the re-alignment of their courses to the competency framework and to include their regional professional development course offerings as recommended options within the PDIS system. "We had to use technology to scale the system up" to quickly reach and engage more ECE employees, according to Jennifer O'Brien, "but the PDIS couldn't have gotten off the ground without the engagement of our local councils".

In addition to the PDIS' primary role as a comprehensive professional development and credentialing system, it also yields valuable data to help guide policy and resource decisions by state and regional policy-makers, including regional councils. The system's data and growing user network can be tapped to profile the demographics of the ECE workforce and their education and professional development achievements. It can yield information about wages and benefits for the ECE workforce, and also about employment retention and career

advancement rates. For example, in response to an ongoing concern about ECE employment retention, the state ran a system-generated report showing that 75% (approximately 45,000) of over 60,000 registered users to date have actively engaged in the online system in a recent 12-month timeframe, an indicator suggesting that use of the professional development system may be tied to employment retention.

SECTION IV: Stakeholder Benefits and Challenges with Colorado's Competency Assessment Model

Benefits for Various Stakeholders:

ECE Professionals and Employers: The high number of users in the state confirms that the PDIS has made competency-based professional development more accessible to nearly all ECE professionals who are interested, benefiting employees and employers alike. Feedback from rural areas has been especially strong, since these ECE professionals previously had very limited access to professional development. Users like the interactive features of online instruction, and being able to build and view in real-time their own professional development accomplishments.

State and Regional Policy-Makers and System Stakeholders: Joint development of the PDIS strengthened relationships among system stakeholders in the state. The PDIS interacts with and incorporates the interests of various ECE system stakeholders at the regional and state level, such as local councils, the QRIS evaluation, and licensing processes. In this way, the PDIS serves as a hub to increase system connectivity and alignment. State and local policy-makers are just beginning to explore how to mine the PDIS data for valuable information to inform policies and ongoing professional development planning. For example, the state is currently assessing how to use system data to show which ECE competencies have the greatest gaps, so that the state or regions can use this information to develop targeted professional development plans. As use of the system grows over time, the value of system-generated data will continue to increase.

Overall Challenges:

Limited Results on Including Competency Observations: While the state attempted to build a network of trained observers and coaches and incentivize the use of observations to complement self-assessments (by awarding extra points for observations), the take-up rate on engaging observers as part of the PDIS system has been limited. Difficulties in incorporating field observations of competencies has also hampered the colleges' efforts to more fully align their ECE degree programs and coursework with competencies.

Ongoing Cost of System Maintenance: The original PDIS plans called for heavy investment during the grant period, with diminishing system management costs following the initial development. However, Jennifer O'Brien observed that the state has encountered "far more maintenance work than we anticipated" in operating the PDIS following the initial development of the system. Ongoing costs include a four-person instructional design team to update and

manage the online learning modules, and a statewide call center to assist new ECE professionals, who often have modest digital skills or who speak and read English at less-than-fluent levels.

California's Competency-Based Assessment Approach for ECE Professionals

SECTION I: Program Overview

California's ECE competency assessment system features a self-assessment by individual early childhood education professionals that links results to a comprehensive online instructional system to strengthen one's competencies. [California's ECE competency framework](#) identifies 12 areas/domains and four levels (which they refer to as "contexts"). ECE professionals begin the process by accessing the state's online self-assessment tool, called [CompSat, which](#) "guides early educators through a process of self-reflection and authentic assessment in the 12 competency areas". The self-assessment tool's results lead to an interactive online professional development instructional system through which an educator can examine, learn and practice competency-based practices that they want to strengthen. The professional development system does not lead to any specific credential or professional designation that is conferred upon ECE professionals. The system also includes a tool to build a portfolio of materials that demonstrate and document one's competencies.

In designing the system, California officials chose to use a voluntary self-assessment approach, rather than assessing competencies by formal tests or by expert observations that are linked to employment or advancement in the ECE profession. Their voluntary approach attempts to balance the benefits to all stakeholders of having an ECE workforce with stronger competencies with concerns that stricter or mandatory requirements could create barriers to many otherwise promising new entrants into the field and exacerbate the sector's difficulties in attracting and retaining early childhood educators.

After developing its competency framework in 2011, the state worked to align the competencies within its college and university ECE degree programs, as well as professional development offerings for incumbent ECE professionals. An additional goal of this initiative was to ensure easy transferability of coursework and degree programs among community college and four-year ECE degree programs in the state. To accomplish these goals with a large statewide network of educational provider organizations, the state created an online [ECE Competencies Mapping Tool](#) to assist instructional teams of ECE educators in incorporating competencies into their programs of study, and populating its online instructional system with information about regional courses that students and entry-level ECE educators can identify using the online professional development system. The state's website for the mapping tool reports that over 900 courses and nearly 200 professional development trainings have been aligned with the competencies, as of July 31, 2018.

In a new phase, state officials are investigating how to combine a video-based competency observation rubric and assessment process with training and certification of coaches and observers to further strengthen ECE professionals' workplace competencies. The state is currently working with University of Florida and University of Washington on an ECE coach and trainer certification process.

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SECTION II: Development of California's ECE Competency Assessment Methods

A predecessor to the current online CompSat system was first developed as a series of print-based practitioner tools by The California Department of Education's Child Development Division in the early 1990s. Following the development of the state's ECE competencies framework, California used Recovery Act (Stimulus) funding to develop the CompSat professional development system. To do this, the state formed an advisory group of stakeholders, and contracted with Cal State Fresno to develop the system. CompSat was completed and launched publicly in 2013.

SECTION III: The Current Competency Assessment Process

An early childhood educator begins the self-assessment process by accessing the online [CompSat](#) tool. CompSat is introduced to "guide early educators through a process of self-reflection and authentic assessment in the 12 competency areas detailed in the ECE Competencies". The CompSat system enables ECE professionals to assess their strengths and challenges and to explore their professional development goals. From the self-assessment, an early childhood educator is guided to online instruction to master targeted competencies and to build a personal portfolio of materials that documents their thinking about and grasp of the competencies. Portfolios can be used as an ongoing personal reference and to document competency attainment.

New system users are first introduced to the system's core learning process of reflection and inquiry "as a protocol for self-assessment and reflection in each competency". They are asked to choose one of the 12 competency domains for an initial focus for their professional development efforts. Each of these competency areas are introduced with videos, such as [this 16-minute video introducing child development and learning](#). As an indicator of the level of the system's usage, the viewer numbers reported for these YouTube videos as of January 2019 range from about 5,000 to 50,000 for various modules. Additional material outlines framing questions for exploring the competency, and explains the benefits to an ECE professional of knowing the competency and how this knowledge will benefit children. Users are guided to more deeply explore the competency area by reviewing a series of video and print-based online

modules for that competency called “Keys to Reflection and Inquiry”. Examples of these modules include a self-reflection guide called *Knowing Yourself* and what the competency looks like to children with *The Child’s Point of View*. The concluding module for a specific competency module assists educators in compiling the results of their observations and thoughts about the competency, turning their explorations and reflections into an action plan that includes an example of portfolio material for the competency.

The portfolio development process as presented within California’s CompSat system reflects a similar philosophy of self-assessment, in that ECE professionals are encouraged to follow a “continuum of observation, inquiry, action, reflection, revision, then back again to observation”. Portfolio development can encompass a variety of methods and materials along the continuum, such as “journaling, blogs, newsletters, photo essays, and electronic presentations”. The CompSat system’s [Portfolio Protocol](#) guides users to choose a focus for professional growth from within the competency framework, engage in a self-reflection process to identify the workplace context in which you want to apply the competency, investigate the competency focus area, tell the story of your learning journey, and document what you know and can do by choosing from over 20 options for documentation. As the protocol concludes, “portfolios are all about *sharing your stories* in compelling ways”.

Promising Practice: California’s Competency Mapping Tool for ECE Educators

California developed an online [ECE Mapping Tool](#) to assist teams of faculty from college and university ECE degree programs and professional development trainers in aligning their program offerings to the state’s ECE competency framework.

These offerings are included within the state’s online professional development system. Development of this tool was initially funded by a federal Recovery Act (stimulus) grant in 2012. ECE faculty leaders from several institutions helped to develop the tool, together with trainers from professional development system providers in the state.

For ECE educators at colleges, universities, and training organizations, the mapping process begins with online access to a 40-page Users Guide for the Mapping Tool. The tool is introduced by an 8-minute orientation video for new users, which reviews the state’s ECE competency framework. The introduction explains the structure of the competency framework by giving a specific example of one competency. As of December 2018, the video has been viewed over 6,000 times, affirming the widespread use of the mapping tool by educators within the state.

The initial user for the mapping tool is called the “tool administrator” within an educational institution or training provider organization. The tool system administrator can sign up multiple editors/instructors within their institution who develop and/or deliver training programs or courses that are registered

Promising Practice: California’s Competency Mapping Tool for ECE Educators

California developed an online ECE Mapping Tool to assist teams of faculty from college and university ECE degree programs and professional development trainers in aligning their program offerings to the state’s ECE competency framework.

within the system. Each tool administrator has a tracking log of their organization's activity within the system and which training modules have been developed within it, ensuring that each institution has control and oversight for its program offerings as described within the system.

Each assigned trainer/editor creates a course profile for a course or training program, which includes where in the state it is delivered, the delivery mode (in-person live workshop, online, etc.), course length, etc., so that end users can search for programs of interest using a variety of search criteria. The tool then assists the trainer/editor in aligning the training or course with specific ECE competency areas by assigning how much learning time is devoted to each competency area that is covered in the course. This task is made easier by a drop-down box with a full description of each competency that is covered within a course. The trainer/editor then uses a similar process to assign which competency contexts (levels) are covered in the course and how much time is devoted to each context. Then the course mapping tool dives into further detail by determining the degree to which individual competencies within a competency area is covered by the course. The instructor reviews each discrete competency, and rates "competency coverage" for each by giving it a rating on a 0-5 scale. On this scale, 0 = not covered, 1 = minimally covered, and 5 = thoroughly covered. All of this information is viewable on the course profile screen and easy to edit prior to confirming it and entering it into the system.

The next section of the Guide covers how to use the system to create reports. Reports can be used to provide a snapshot of competencies covered by one institution's programs and courses, gaps in competencies to address with new courses or trainings, geographic coverage of course delivery and potential geographic gaps, reports by different types of organizations/institutions, etc. The Guide gives specific instructions on how to generate each type of report. Reports can be generated at an institution level by an individual institutional leader, a geographic area by regional or county ECE leaders, or at a state level by California state leaders.

"The mapping tool created a common competency-based language for higher education and professional development providers," observed Cecelia Fisher-Dahms, Administrator of the Quality Improvement Office in Early Learning and Care Division of California's Department of Education. "That's very beneficial. These systems now more coordinated."

SECTION IV: Stakeholder Benefits and Challenges with California's Competency Assessment Model

Benefits for Various Stakeholders: As described in the previous section on the course mapping tool, this system has worked to align the state's extensive network of ECE higher education institutions and professional development trainers with the competency framework. These offerings populate a user-friendly and searchable online database of course and training programs that ECE professionals can more easily access and match with their professional development goals and interests.

Overall Challenges: One ongoing challenge is to complement the online self-assessment and professional development system with a robust network of regional coaches to provide personalized, observation-based competency assessments and professional development guidance for ECE professionals. The state used a Race to the Top Early Learning Challenge grant to fund initial training of coaches, and many counties are continuing to develop regional coaching networks. As noted in the introduction, the state is developing video-based observation technology and an ongoing coaching certification program, which is currently under development.

Another challenge for such a state with a highly diverse ECE workforce is translating the online system into other languages that can be more easily accessed by ECE professionals who speak languages other than English more fluently. To date, the videos have been translated into Spanish. However, while the state aspires to have the full CompSat system translated into Spanish and Mandarin, the costs to fully-develop and maintain the system in multiple languages is prohibitive.

Minnesota’s Competency-Based Assessment Approach for ECE Professionals

SECTION I: Program Overview

The state of Minnesota was an early leader in moving towards competency-based systems of early childhood educators’ professional development, with its initial framework completed in 2004, and updated in 2014. Over the past 15 years, the state’s Department of Education has worked across its ECE systems to encourage utilization of and alignment with its competency framework.

However, due to the cost of implementing a high-quality competency assessment system, the state has chosen **not** to move forward with a statewide competency assessment process. “Our knowledge and competency framework is not intended as an assessment tool,” said Debbie Hewitt, Early Learning Supervisor with the Minnesota Department of Education. “We have thought about using it as a foundation for an assessment, but need additional funds to create the instrument”.

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SECTION II: Development of Minnesota’s ECE Competency Framework and System Alignment Initiatives

[Minnesota’s ECE competencies framework](#) lists competencies for three different components of the ECE system: one for those caring for and educating infants and toddlers, one for those caring for preschool age children, and one for family child care providers. Minnesota’s [ECE competency framework for Preschool Centers and Schools](#) has eight subject areas/domains and three levels of assessment of individual competencies within each subject area.

The state used federal Race to the Top grant funding to update its competency framework in 2014. The project leaders began with the state’s board of teaching standards as starter, and aligned competencies to those standards. The state’s original competencies were used primarily by center-based early childhood programs, and these employers wanted to broaden and strengthen use of the competencies. Specific feedback from employers suggested that new hires from four-year university programs lacked the classroom skills needed to work successfully with children in center and school-based environments, while new entry-level educators with some experience and non-credit professional training often lacked theoretical knowledge of child care development. For incumbent workers, employers also wanted to show progression of skill standards/competencies at increasing levels of mastery to facilitate ECE career pathway advancement within their organizations. With each level of mastery, an educator can work more independently. At the beginning level, professionals “explore” competencies, then “implement” at the next level, and “design/lead” at greater levels of mastery. In their competency framework updating process, the state engaged stakeholders in a variety of systems.

Three cross-sector advisory groups worked on the ECE competency updates in a sequence, refining them over time, a process that encouraged buy-in and ownership of many groups, including employers, college/university ECE programs, licensing agencies, and the Department of Human Services. The updating process fostered stronger relationship-building so that different agencies were prepared to work in closer alignment. For example, the Department of Human Services (DHS) mandated that all professional development training for incumbent ECE professionals use competency framework, but DHS doesn’t control ECE higher education programs that train prospective new workers. To build towards stronger career pathway articulations built around the revised competencies, the state relied on statewide ECE faculty groups for four-year and two-year institutions. After the competency updating process was completed, the state awarded grants to embed the competencies in coursework and student learning assessments at both levels. In order to create seamless career pathways, the state required two-year and four-year institutions to partner together to align coursework to the competencies and to help ensure articulation of coursework from the Associates Degree to Bachelor’s Degree levels. In 2016, the state went further by passing legislation that required ECE higher education programs (and other sectors) to formally articulate two-year and four-year programs into clear career pathways.

The competencies were taken up voluntarily by school-based and center-based workplace environments, but not as much by home-based providers, mainly because these providers didn't see themselves as "teachers". However, the state has attempted to include home-based providers in other ways. They added business competencies such as marketing and finance, and changed language from "teacher" to "provider" in materials describing the competencies.

The response by family providers has not been strong, however. Licensing of home-based providers doesn't emphasize competencies, because these small businesses are viewed as fairly fragile. Instead, the state promoted the take-up of competencies by using the competency framework for training offerings by DHS that were developed explicitly for home-based providers.

SECTION III: Lessons Learned from Minnesota's Competency Development Model

Minnesota's case highlights the need for caution in deciding whether or not to move from encouraging development of ECE workforce competencies in a voluntary system towards formally assessing competencies and using results of these assessments within state and local systems of workforce development and institutional regulations. Despite being an early adopter of ECE workforce competencies, the state has not yet chosen to develop formal competency assessment processes, due primarily to the ongoing expense involved in developing and administering assessment systems.

In developing or updating competencies, involving more stakeholders in the process paves the way for a smoother transition and implementation phase. For example, it took time to have three sequential advisory groups work on updating the competencies, but "it was really worth it," observed Debbie Hewitt.

Minnesota is a state with a rapidly-diversifying population, including children and families served in the ECE system, as well as its ECE workforce. Competency-based professional development needs to address cultural and linguistic diversity in multiple ways. An ECE professional development system built around competencies can better accommodate diverse groups of new ECE workforce entrants, such as immigrants with overseas education, recent high school graduates who can't afford to front the tuition costs for universities and need to start working in a profession, and career-changers. State officials acknowledge that they have an ongoing challenge around how best to support dual language acquisition of multi-cultural children and the acquisition of cultural competencies by early childhood educators.

Philadelphia's Competency Assessment Approach within an ECE Apprenticeship Program

SECTION I: Program Overview

In 2017 in Philadelphia, [the District 1199C Training and Upgrading Fund](#), a nonprofit labor-management partnership focused primarily on health care and human services career pathway training, launched a new “CDA to Associates Degree Registered Apprenticeship” program. According to [a case study report](#) by The New America Foundation in June 2017, the fall 2017 pilot cohort enrolled 36 apprentices, representing 24 employers. To be eligible for the program, an individual must be working in an early education center, have an employer willing to sponsor them, have already earned the CDA credential, and have no college degree. This new apprenticeship program was one of several ECE Career Pathway programs offered by the Training Fund, which also offers its own CDA Training Program. The Training Fund serves as the apprenticeship program sponsor, handles resource development and contracting with its partners, and coordinates frequent meetings with program partners to coordinate program activities. They also recruit participants into the program and provide ongoing case management support for apprentices. The [comprehensive suite of support services](#) for its apprentices includes career coaching, counseling support, and tutoring.

One of its program partners, a regional ECE training and technical assistance organization known as [First Up](#), trains workplace mentors on how to guide and coach apprentices towards mastery of competencies, and also conducts outreach with ECE employers to ensure that their organizational practices are aligned with the program requirements. First Up changed its name in 2018 to reflect its evolution from an NAEYC-affiliated membership organization to focus more on delivery of training and technical assistance for ECE professionals and organizations throughout the Greater Philadelphia region, along with its traditional advocacy work for the early childhood sector.

Another core partner along with the Training Fund and First Up is the Community College of Philadelphia (CCP), which delivers classroom training and grants credits for prior learning based on the CDA achievement and on-the-job learning, which total 18 credits towards an Associates' Degree. Sponsoring employers sign apprenticeship agreements that commit them to awarding four pay increases resulting in a \$2.00 an hour average wage increase over two years, and to providing paid release time for on-the-job mentoring. In the fall of 2018, the apprenticeship program expanded by enrolling a new cohort of 30 new apprentices in the Philadelphia suburbs, in partnership with Delaware County Community College.

In addition to managing a complex network of partners, the Training Fund manages an equally complex mix of funding streams that sustain the program, including philanthropic grants, local, state and federal government funding, employer contributions, and other resources. Employers commit to paying 5% of an apprentice's tuition at CCP (about \$500 a year), and individual apprentices also pay 5% of tuition. The rest of the tuition, fees, and materials costs are covered by [Pennsylvania T.E.A.C.H. scholarships](#). T.E.A.C.H. scholarships also support funding for students' book and transportation costs.

By the time successful students graduate at the end of the two-year apprenticeship program, they will be making two dollars more an hour on average, have an Associate's Degree that can be articulated into a Bachelor's Degree, possess a journeyman's certificate of completion from the U.S. Department of Labor, and be qualified to serve as lead teacher in some state or city-licensed early childhood centers. For a detailed description of the development and initial design of The Training Fund's ECE apprenticeship program, see [this report](#).

Philadelphia ECE Apprenticeship Program Management Contact

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SECTION II: Development of the Philadelphia ECE Apprenticeship Program's Competency Assessment Methods

The apprenticeship program and all of the partners utilize the NAEYC competency standards for its competencies framework. The program's original college partner, Community College of Philadelphia, had already aligned its courses with NAEYC standards. The same was true with the second college partner, Delaware County Community College. "Having the competencies first is the key to opening the door to a successful program," said Dr. Amy Saia, ECE Program Coordinator at CCP. "It took a lot of time and communication between partners to align our apprenticeship program activities. But we were all speaking the universal language of NAEYC competencies, which made it all fall into place."

In order to be enrolled in the degree program at CCP, apprentices need to demonstrate mastery of basic English writing and reading as well as math skills. Many participants who exhibited lower basic skills on a basic skills test were enrolled in a 4-6 week bridge course to strengthen their academic and basic skills, followed by a four-week college preparation boot camp at CCP, shortly before beginning their first college semester. Students placing below college level skills on the placement test must enroll in a developmental math or English course in order to strengthen these skills. This challenge of students needing to strengthen basic skills and developmental education requirements has been demoralizing for some of them, and an overall challenge for the program.

In aligning the college coursework with on-the-job learning in an apprenticeship, CCP faculty leaders needed to decide which competencies were mostly attained on the job and how these competencies matched up with courses in the ECE degree program. The program administrator used a competency mapping process to document the specific course or on-the-job learning process assessed each competency, in order to ensure the academic integrity of the apprenticeship program as an alternative path to earning an Associates' Degree. The college approved three courses (nine credits) for prior learning credit acquired on the job and validated by coaches. College administrators also waived the customary tuition and fees for these courses, which would have cost approximately \$500 per apprentice, an atypical decision that signaled strong administration support for the program. The other nine credits are taken in

classes at the college, using a cohort model with apprentices all taking the same course sections.

Similar to CCP, the ECE degree programs at Delaware County Community College (DCCC) already utilized competency-based instruction, so their faculty didn't need to go through a process of changing courses towards competency-based instruction and assessment. Most of their learning and assessments are already project-based. Dr. Jean Allison, ECE program coordinator at DCCC, affirmed the value of such assessments: "The more applicable the assessments, the better the students do."

SECTION III: The Current Competency Assessment Process

The Philadelphia ECE apprenticeship program's approach to developing an apprentice's competencies is rooted in the quality of the coach-apprentice relationship. Coaches are recruited by the Training Fund from the sponsoring employer organization where apprentices work. Each coach is considered a master teacher with at least an Associates' Degree. First Up conducted an initial six hour training and orientation course for all coaches, one coach per apprentice. The initial coach training cohort had 36 coaches.

The program's coaching model, coach training and ongoing coaching support is based on Judy Jablon's book, [Coaching with Powerful Interactions: A Guide for Partnering with Early Childhood Teachers](#). The responsibilities of the coach (sometimes also called the "Cooperating Teacher") include being a role model for the student, supervising college credit work-based learning, providing feedback orally and in writing, and familiarizing the student with professional standards/competencies and state regulatory and licensing requirements. Their fading support approach to coaching calls for at least one in-person observation and meeting per month for an hour minimum during the beginning stages when forming the relationship, then alternating observations/meetings and 30-minute calls every other month while maintaining and extending the relationship, followed by quarterly observations/meetings every quarter once a student has demonstrated consistency in executing basic competencies.

Each coach also has his/her own mentor at First Up, each of whom are certified coaches and full-time employees of First Up who perform coaching and professional development training on-site at ECE centers throughout the region. First Up currently has four mentors on staff. Mentors meet with their coach face to face monthly at the beginning to ensure that the coaching relationships are working and to discuss the competency assessment process and tools. Every other month, all of the coaches meet for a "Master Class" to advance their own professional development and coaching competencies.

Program managers with each of the program partners can access a cloud-based GoogleDocs information management system to track and record apprenticeship activities and competency attainment for all apprentices. Each apprentice and coach has an online link to their individual record to track and record their own competencies and hours for apprenticeship. The system used by program administrators is similar to an Excel document that has competencies as defined by NAEYC standards for an individual's competency performance record. The program coordinator at The Training Fund manages the overall system and monitors each partner's use

and data inputs. First Up’s coaches use the system to document their validation of a student’s competencies after completing observations with their assigned apprentices. For each competency, the coach determines whether or not an apprentice met the standard. In general, apprentices perform well in demonstrating competencies on the job; there are few below-standard ratings that are recorded by coaches. Once a student’s competencies have been verified by coaches and accepted by The Training Fund’s coordinator, the record is sent electronically to CCP’s program administrator so that the college can award on the job learning credit. At DCCC, college administrators also review these records to confirm and award academic credits for on-the-job learning.

Promising Practice: Advancing Competencies via Professional Coaching

The Philadelphia apprenticeship program features two parallel levels of ongoing professional mentoring and coaching services: mentoring for ECE professionals who begin their careers as apprentices, and also coaching and a peer support network for the mentors themselves. Each apprentice has a professionally-trained coach within the workplace, and each coach has a certified First Up ECE coach as a mentor with whom to model the coaching relationship and advance his/her own professional development as an educational leader. Both levels also leverage the additional benefit of a peer-to-peer learning and support community, with apprentices taking college coursework together as a cohort and coaches attending monthly regional master coaching workshops led by First Up’s mentors.

There was limited special preparation with mentors for their new roles in the apprenticeship program, since the mentors were already serving in similar roles at First Up. However, as Caroline Campana, First Up’s Director of Workforce and Professional Development reported, the team did need to develop new processes for the apprenticeship program. They recommended benchmarks on how much time coaches spend with teachers/apprentices and break down the NAEYC competencies into a sequential process for coaches to observe and assess. Once the GoogleDocs documentation system was created, they worked as a team to develop consistent methods to document apprentices’ competency assessments into the online document.

Campana and the mentor team also developed the initial six-hour training that focused significantly on Judy Jablon’s strengths-based coaching model. The initial coach training also reviewed the competencies and college coursework syllabi so that coaches can help bridge the apprentices’ on-the-job learning and college coursework in their discussions. Every other month, the mentor team also holds a “Master Class” with all of the coaches, with topics that have included assessment and observation practices and social and emotional learning.

Promising Practice: Advancing Competencies via Professional Coaching

The Philadelphia apprenticeship program features two parallel levels of ongoing professional mentoring and coaching services: mentoring for ECE professionals who begin their careers as apprentices, and also coaching and a peer support network for the mentors themselves.

Coaches meet with mentors for approximately one hour per month. Mentors quickly determined that a few coaches needed guidance on working with leaders of their organizations to accommodate time for apprenticeship activities, so additional mentoring time was allocated to these coaches. Each mentor is assigned approximately 10 coaches. In the first year, the mentor role for the apprenticeship program averaged approximately 15 hours per month. Now in the second year, mentors are shifting to 30 minute support calls with coaches rather than 1 hour face to face meetings like they had in the first year, since less support is needed. First Up is currently introducing a pilot of video-based observation using an online platform from a company called [Torsch](#), so that mentors can have access to videotaped observations of apprentices in the classroom and provide additional support and guidance for both coaches and apprentices.

After the first year of the program, Campana reports that coaches are becoming stronger teachers themselves and leaders within their ECE centers. After reviewing the coaches' first-year program evaluation reports, Campana said that they "really blew me away how much they are learning" from this role. Based largely on their new capabilities to perform strengths-based coaching with apprentices, several have been asked by peers to teach them about coaching other new teachers. Peer leadership teams are emerging and being strengthened within participating centers. Coaches reported that they feel valued by just being selected for this role. She adds that the coaching role may also show improved employment retention of experienced ECE professionals based on the new energy and job satisfaction associated with this role over time.

SECTION IV: Stakeholder Benefits and Challenges with the Philadelphia ECE Apprenticeship Program Competency Assessment Model

Benefits for Various Stakeholders:

Participants/Apprentices: Apprentices have enjoyed strong employment retention and program success rates in the first year. The program retention rate for the first year was over 80%. Five apprentices who had completed prior coursework at CCP graduated with an Associate's Degree, including one who had taken courses for 13 years, but had many pauses due to financial difficulties. She graduated with a 3.8 GPA and now plans to start working on her B.A. Apprentices have reported that they really value having the support of an on-site coach, which has helped them feel more connected and engaged at their centers. Caroline Campana of First Up reported about "seeing the pride and confidence of apprentices as they grew. It's been a life-changing experience" for many of them, she observed. Jean Allison of DCCC added that "apprenticeship is more of a natural fit for this audience. They know more about educating children, and can dig deeper in their coursework to focus more on in-depth competencies".

ECE Employers: Some participating centers became eligible for additional local funding after apprentices employed at the center accumulate significant educational credits. The high retention rates of apprentices greatly benefits employers as well as apprentices. The ongoing

professional development of the apprenticeship program and access to degree programs strengthens an organizational culture of learning, provides more robust internal career pathways within participating employer organizations, and can contribute to developing more diverse program leaders. Having trained coaches also grows staff leaders and can contribute to leadership succession planning at participating centers.

Coaches: Campagna observed that many coaches became more intentional about their own work in their own classrooms after going through training and becoming a coach for an apprentice. Some have been inspired to further advance their own professional education at the B.A. and even Masters levels.

Overall Challenges:

- **Low Starting Wages for New Apprentices:** Some apprentices who start at an hourly wage of \$9.50 reported difficulties making ends meet with such low starting pay. On the other hand, apprentices receive regular pay increases totaling at least \$2 per hour over two years. Some apprentices also earned promotions and additional pay increases that were moved forward based on their rapid achievement of new credentials.
- **Adjusting Employer Practices:** Managing the expectations and consistent engagement of participating employers have been a challenge. Some have had difficulties with adjusting schedules to accommodate release time for apprentices and coaches, and there have been a couple of cases when it was difficult to replace coaches who left their jobs. As a result, First Up began a significant new and ongoing outreach initiative with ECE employers to help ensure that expectations and adjustments with employer practices to accommodate apprenticeships is consistent. Also, the program partners attempted to recruit family child care providers, but several challenges presented difficulties preventing their participation. For example, since family child care providers do not often have full-time employees, they are not in a position to have apprentices or meet other employer requirements for apprenticeships.
- **College Basic Skills Coursework and Faculty Time:** Within the participating colleges, there has been an ongoing challenge regarding basic math skills for some low-testing apprentices who continued to struggle with developmental math coursework. College program administrators note that apprentices are strong as teachers, but some have difficulty re-learning how to learn and boosting their academic and basic skills. Some students have expressed frustration at their limited success in developmental courses, even with additional tutoring support. Additionally, the time needed to coordinate the apprenticeship program can be taxing on college ECE program staff, even with faculty release time for program administrative duties. One college administrator also reported that articulating work-based learning credits into university programs has been difficult with some university transfer institutions.
- **Sole Reliance on Coaches' Observations:** Having a competency assessment process that relies solely on the observations of busy coaches worries some program

administrators. As a result, the program is aiming to pilot a supplemental video-based observation method that mentors can access, so that mentors can provide coaches with more concrete guidance on competency assessments and performance coaching.

Vermont's Competency Assessment Approach within an ECE Apprenticeship Program

SECTION I: Program Overview

The [Vermont Child Care Apprenticeship Program](#) is a training program through which a new child care worker can complete six to seven ECE courses at the Community College of Vermont and work 4,000 hours (two years full-time) with a sponsoring employer under the guidance of a trained mentor from their workplace to master ECE competencies. The apprenticeship program is administered by the Vermont Child Care Industry and Careers Council (VCCICC), in coordination with the Vermont Department of Labor, and in close partnership with the Community College of Vermont. Apprentices are guided to document hours and achieve workplace competencies in eight domains, as described in [this chart](#).

VCCICC began offering the apprenticeship program in December 2000. Since the first graduation in 2003, 151 ECE apprentices have completed the Child Care Apprenticeship program. Currently, 47 apprentices are paired with 47 trained mentors from their organizations to develop and master ECE competencies. Approximately 40 early childhood education employers currently participate in the program. All employers are either licensed child care centers or school-based programs, since very few home-based providers have full-time employees eligible for apprenticeships. Employers agree to provide three hours of release time for college coursework and mentoring, and also a 1.5% wage increase at the end of each completed contract year.

During the training period, apprentices are given the opportunity to complete six to seven ECE courses at the Community College of Vermont, which are delivered at 12 regional locations throughout the state. The majority of an apprentice's tuition and book costs at The Community College of Vermont are funded by a [Vermont T.E.A.C.H](#) scholarship. The T.E.A.C.H. program also partially funds the release time for apprentices to complete the coursework. During their apprenticeship, students also have the option to complete their CDA credential. At the conclusion of the apprenticeship program, apprentices will have accrued 18-21 hours of credit towards an Associate's Degree, and earn a Certificate of Completion as a Child Development Specialist from the U.S. Department of Labor.

Vermont Child Care Apprenticeship Program Management Contact Information

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SECTION II: Development of Vermont’s Competency Assessment Methods

As with most traditional apprenticeship programs, competencies are primarily assessed in the workplace through direct observations by an experienced and trained mentor, who also coaches the apprentice in competency areas needing further development. In the late 1990s, Vermont used a U.S. Department of Labor grants to launch the Child Care Apprenticeship program, including the development of its competency framework and assessment processes and methods. They began this work by focusing on the functional areas for the national CDA certification, and worked with a committee of practitioners and subject matter experts in the state to further develop these broad functional areas into specific, observable competencies so that apprentices and mentors have a clear understanding of effective ECE practices within each competency area. Over a period of four to seven years, VCCICC used an organic, field-based testing process to validate and refine these competencies and the accompanying assessment processes with actual mentors and apprentices. They also compared their work with other states during this timeframe.

Competency Assessment within College Coursework

Apprentices also enroll in formal classroom training that is designed to complement the structured on-the-job learning process. In earlier years of the program, VCCICC purchased entire class sections of these courses for apprentices, which gave the program a significant voice in shaping these courses to align with the Apprenticeship Program. However, in 2018, funding constraints prompted a shift to a scholarship program for apprentices. In an example of the ongoing effort to align college coursework with apprenticeships, VCCICC is supporting a proposal within the college to waive the three-credit course requirement for field experiences in its ECE degree programs for apprentices, since apprentices typically work 2,000 hours per year full-time, and have access to a formal competency-based mentor review and mastery process. The waiver request is currently undergoing an academic review process, but is not yet approved. There is a need for continual coordination to ensure that the knowledge and competencies covered and assessed in an apprentice’s college coursework and the workplace experiences and competency framework that apprentices cover with their mentors are synchronized in some ways and mutually-reinforcing.

SECTION III: The Current Workplace Competency Assessment Process

Overview of Process: VCCICC identifies and trains experienced early childhood educators as mentors. Mentors work in the same organization as apprentices in order to make observations and feedback convenient. Employers are asked to provide 30 minutes of paid release time per week for mentoring. As new mentors come into the program, the organization delivers a one-day orientation and training program for cohorts of four to 15 new mentors in order to prepare them for this role. Mentors are equipped with a binder that has 20 assessment tools, and a flash drive with electronic versions of these tools and other information/documentation that is useful to their mentoring.

Mentors meet with apprentices bi-weekly, and conduct regular observations of the apprentice's performance teaching children in the classroom. Each month, VCCICC collects and reviews reports from mentors of specific competencies documented within one or more of the 20 competency assessment tools. Program management staff at VCCICC review each report and provide ongoing feedback and guidance to mentors in order to ensure quality and consistency of assessments. Mentors update these reports until their apprentices demonstrate mastery of each competency, and continue their assessments throughout the apprenticeship. The competency reports are entered into individual apprentice records by VCCICC. Once all training, assessment and work hours are confirmed, the Vermont Department of Labor awards the certificate of completion credential at the conclusion of the apprenticeship period. (For a compendium of resources used in the apprenticeship program, see [here](#).)

Promising Practice: The Vermont Child Care Industry and Career Council's Competency Assessment Toolkit for Mentors

Vermont developed and trained mentors to use a toolkit of 20 detailed competency-specific assessment tools to use in guiding apprenticeships towards stronger competencies after observing them in action. These tools are included as part of the VCCICC's one-day mentor training program that has three overall learning objectives:

1. Describe the various expectations of mentors and apprentices
2. Observe and accurately record actions of adults who are working with children
3. Practice using one or two actual assessment tools

The mentor training agenda lists 20 distinct learning activities. It includes several modules on being an effective mentor, such as role description/expectations, confidentiality discussion, giving effective feedback (which includes a role play activity about giving and receiving feedback), and ways to be supportive of mentees. The training introduces two specific review tools within the overall package (hand washing and circle time), which each have accompanying videos, and new mentors practice using the tools and giving feedback. The training workshop also covers how to maintain a boundary between professional and personal relationships with apprentices, who may be close colleagues and friends. The conclusion of the workshop discusses administrative activities, such as reporting/recording assessments. The four page leaders guide for the mentor training program lists materials needed, timeframes for each of the day's activities, describes questions and other facilitation tips, and references the materials and handouts needed for the mentor training.

Sue Ryan, Director of Programs at VCCICC, reports that mentors "really appreciate coming together as a cohort with peers for the training. They can test and challenge opinions about

Promising Practice: The Vermont Child Care Industry and Career Council's Competency Assessment Toolkit for Mentors

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what's good practice. They like the modeling of the tools and videos, and actual practice using the tools. They can also ask 'what if' questions in a safe environment."

The mentor's toolkit has 20 total assessment tools, divided into three levels, which are generally done sequentially. The most basic level where apprentices generally begin, Level I, has six tools, with specific tools covering different kinds of learning activities with children (outdoor play, dramatic play, conversations with children), as well as basic behaviors such as hand-washing, diapering and dental health. Level II has nine tools, divided between educational activities in different domains (music, art, movement, choice/free time), other daily activities (nap time, and key transitions during the day), and safety (fire drills). Level III has five tools, divided between communication skills (circle/meeting time, sharing concerns, and family conferences), additional educational activities (cooking, field trips). There is also a reference section at the end of toolkit with information and links to competency standards, such as NAEYC. In order to determine the sequencing of competencies into the three levels, VCCICC used committees of mentors to review and recommend which assessments belonged in which levels. "Partly it was common sense," according to Sue Ryan. "For example, Level I assessments are things a teacher must do early on in their work with children."

The detailed competency statements within the assessment tools provide a very granular assessment of an apprentice's specific performance with observations of multiple behaviors that comprise the overall competency. A typical assessment tool is five pages in length. Each individual competency assessment tool begins with a section in which the mentor notes the date, length of observation, setting, etc. Assessments for each competency has four rating levels, from novice to expert, and includes a rating on both proficiency and consistency. As an example, the competency assessment tool for observing "Meeting or Circle Time" activities has 32 individual behaviors to rate, within five overall domains (e.g, preparation, transitions before and after, cognitive and physical, social/emotional). Each of these 32 behaviors is a concrete one-sentence statement, and the assessment tool also has space for the mentor to enter notes from observations and the discussion with the apprentice. The final two pages of the tool has space to record overall ratings of the apprentice's demonstration of the competency and overall effectiveness, along with notes to record strengths and areas of improvement, and an improvement plan, along with signatures of both the mentor and apprentice. (See a sample assessment tool [here](#).)

SECTION IV: Stakeholder Benefits and Challenges with Vermont's Competency Assessment Model

Benefits for Various Stakeholders:

Benefits for Apprentices/New ECE Professionals: Because of the highly granular and personalized nature of observations and performance coaching/mentoring, apprentices are ensured that they can apply competencies with children in their specific workplace environment. They learn progressively more advanced competencies from structured observations.

Apprentices receive recognition of their performance by an experienced peer and by earning college credits and an apprenticeship credential. “Someone noticed,” was how Sue Ryan described this frequently-overlooked fundamental need of frontline professionals for affirmation that what they learn and do matters. VCCICC also reports that a number of former apprentices sign up later in their careers on to become mentors themselves.

Benefits for Mentors: As previously noted, new mentors attending training place a high value on building relationships with other mentors within their mentor training cohort. Mentors frequently report that they self-assess and strengthen their own competencies when they are working on observing and evaluating competencies with their apprentices. As a result of this role, mentors report having greater awareness of important behaviors and qualities that comprise effective early childhood education.

Benefits for Sponsoring Employers: For participating ECE employers, the number one benefit they cite is that apprentices who earn a credential are permitted under state licensing requirements to work solo in the classroom. Employers can also earn QRIS points for having ECE teachers who have completed their apprenticeship credentials on staff, and additional credit for the total hours of higher education accumulated by apprentices for their college coursework. The workplace mentor pairings also build and strengthens teams of ECE professionals within their organization, and prepares these professionals for greater leadership roles. These benefits translate into high rates of repeat participation by employers that sign up to sponsor new apprentices when they hire new teaching assistants. Over half of the current participating employers have sponsored previous apprentices.

Overall Challenges:

Challenges Reported by Employers: One of the biggest sets of challenges are the difficulties employers have in accommodating release time for apprentices and mentors, which can affect the quality of the relationship and reports submitted by mentors. In addition to the 30 minutes of mentoring time each week, apprentices must have 3 hours paid release time per week for classwork, which further strains already-tight center budgets and can affect required staffing ratios.

Challenges with College Course Alignment: College alignment with the apprenticeship program has been an ongoing challenge as noted earlier in this report, with lengthy academic processes to follow whenever there are changes in the coursework and degree programs, such as when competencies are updated.

Resource Constraints: Given the significant ongoing expense in operating a high-quality, high-touch and statewide apprenticeship program with limited state budget appropriations of \$200,000 (is the figure to support apprenticeship, the total organizational budget is \$300,000), VCCIC’s team of two full-time staff (plus assistance from one other colleague) feel squeezed, which can affect their supervision of the quality of competency assessments by mentors. It takes time to vet, train and supervise mentors. Each individual competency report undergoes a

personal review by staff to ensure that it meets standards, and requests of mentors to include more specific documentation notes are common. Budget constraints forced VCCICC to eliminate mentor stipend payments for a period of time (recently reinstated), which can further hamper their ability to recruit and incentivize full mentor engagement in performing high-quality observations and detailed reports. Additionally, the program leaders at VCCICC have identified a need for ongoing mentor training following the initial training in order to maintain high quality of competency assessments, but this would require additional staff time and resources beyond their current program budget.

PART III: Introduction to Competency Assessments in the ECE Sector (Originally included in Strumpf Associates' September 2018 literature review report)

Competency based education (CBE) programs are designed to move away from measuring student learning based on time spent in class to awarding credit and/or a credential based on demonstrated mastery of a particular set of competencies. CBE assessment can take a variety of formats: objectively scored assessments (for example, those with multiple-choice or true-false questions), performance-based assessments (for example, those including essays, group projects, or simulated environments), and real-world observations (for example, preservice teachers in the classroom).

Regardless of format, the credibility of inferences drawn from assessment results depends on evidence of their validity. To support portability, CBE programs should gather evidence corresponding to the five validity elements described in ***Standards for Educational and Psychological Testing***. Specifically, CBE programs should:

1. Clearly define the competencies;
2. Provide an explicit link between the skills measured by the assessments and those competencies;
3. Demonstrate that student behaviors or thought processes during testing reflect the competencies;
4. Relate performance on competency assessments with other measures of the same competencies; and
5. Document the empirical relationship between assessment scores and future outcomes (such as success in the workplace or attainment of a more advanced competency).

The examples presented in this paper from the literature review appear to meet these criteria. A more detailed review of selected cases in the next phase of this project may provide greater confidence in the reliability and validity of specific assessment methods.

Competencies are assessed using various direct and indirect methods. Individual professionals are considered competent when they are able to consistently apply their knowledge and skills to the standard of performance required in the workplace. Standards have

been defined by ECE competency frameworks that nearly all states have developed. **Direct methods** of competency assessment include workplace observations by experienced and trained observers, such as in apprenticeship programs, and which are often complemented by a review of portfolio materials. **Indirect methods** include formal tests of knowledge and skills that underpin competencies, simulations, self-assessments, and testimonies of others such as parents or peers. The most valid and reliable methods of competency assessments are hybrid approaches that combine direct observation in the workplace with other supporting evidence using one or more additional methods. The most comprehensive ECE competency assessment process identified in this initial literature review is the Child Development Associate (CDA) certification process that combines a portfolio review and direct observation by a trained expert along with a formal competency-based test.

Competency assessments are used by various independent institutions within a career pathway system. Individual professionals' competencies are assessed within regional or state career pathway systems that include many organizations within the targeted sector that may assess workers' skills or competencies in various ways, or which use the results of an assessment. For ECE state and regional career pathway systems, organizations include various types of **employer organizations** ranging from small home-based providers to larger centers to public school systems; **educational institutions** ranging from nonprofit training programs to community colleges to four-year universities; and **local and state regulatory and licensing agencies**. The 2018 U.S. Department of Labor report, [Career Pathways in Early Care and Education: Career Pathways Design Study](#), "*found few national or state initiatives aimed at creating comprehensive ECE career pathways approaches,*" with the noted exceptions of several known regional apprenticeship initiatives and the national T.E.A.C.H. initiative, which are both included within this report.

Competency frameworks and assessments need widespread acceptance by key institutions and sustained attention over time to change from previous practices. In order to be influential in changing career pathway systems, new ECE competency frameworks and resulting assessments need to be accepted by and aligned with employers' hiring, performance management, and compensation practices; educational institutions' instructional standards and testing; and assessment processes within licensing and regulatory agencies. In adopting competency-based practices based on the frameworks, these organizations must often choose to invest considerable time and resources to change from previous assessment methods. For example, in nearly all of the state and regional projects reviewed, there is a lengthy process to align ECE higher education programs with professional competencies, which may involve scores of individual faculty members across numerous institutions reviewing courses, learning assessments, and degree programs. Typically, faculty-proposed changes in degree programs also require approvals by governing bodies within an institution, followed by a state higher education authority as well. As the cases reviewed in this report suggest, this re-alignment of multiple overlapping systems and organizations takes years to complete.

The current and prospective ECE workforce must also buy in to a competency-based assessment system. With widespread acceptance and use by system stakeholders, individual

workers are more likely invest in mastering competencies at progressively higher levels within a career pathway. Notable characteristics of the current ECE workforce that must be factored into a competency assessment system include its cultural and linguistic diversity – nationwide, 23% speak a primary language other than English and 19% are foreign-born. Workplace settings can also change how knowledge and skills are applied, which translates into potential differences in assessing workplace competencies in centers (50% of the national ECE workforce), registered home-based child care business (six percent) and specialized settings such as infant care.