



The State of Early Childhood Assessment: Practices and Professional Development in Minnesota

A report prepared for the Minnesota Department of Education

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Executive Summary

Authentic assessment is widely recognized as a necessary component of high quality early childhood practices (Bagnato, Neisworth, & Pretti-Frontczak, 2010; Grisham-Brown, Hallam & Brookshire, 2006). As part of its Race to the Top: Early Learning Challenge Great Workforce Plan, Minnesota set a goal of developing an effective professional development infrastructure to promote the use of authentic assessment by early educators. The purposes of this study were to: 1) identify the gaps in knowledge and skills experienced by early educators across the early care and education field; 2) identify gaps in knowledge and skills of professional development (PD) providers who train on authentic assessment; 3) use the findings to develop authentic assessment-specific training modules that meet the needs of various types of early educators at different levels of knowledge and practice; and 4) at a larger level, use the findings to guide the development of a sustainable, cross-sector state infrastructure for assessment training and competence.

A comprehensive cross-sector of early educators and PD providers were surveyed to determine their knowledge, perceptions, and practices related to authentic assessment. Both surveys were based on the Landscape Survey, originally developed by Buysse, Hollingsworth, and West (2008) and on the current literature on the use of authentic assessment. Surveys were distributed via e-mail through a multitude of early childhood listservs; 702 early educators and 68 professional development providers responded to the survey and provided complete demographic information. Interviews were also conducted with 18 early educators and 11 professional development providers to ascertain more in-depth information than was provided by the survey data.

Eight (8) major themes were identified through the surveys and interviews:

1. Early educators typically accessed assessment training at workshops and institutes and received the most training on social-emotional development, assessment related to instruction, and curricula.
2. The training on and use of the MN Early Childhood Indicators of Progress (ECIPs) and K-12 Common Core State Standards are not consistent within the state. Only 35% of educators reported using the ECIPs and 16% report using the K-12 Common Core State Standards to guide their assessment practices, while 37% of PD providers reported training on the ECIPs and 4% train on the K-12 Common Core State standards.
3. The most commonly reported assessment tools being used in the field are Creative Curriculum, Teaching Strategies Gold (TS-Gold), and Work Sampling.
4. More than half of the early educators reported spending at least 1-2 hours per week on each assessment-related topic, such as observation, data collection, data analysis, and using data to inform practice.
5. Eighty-one percent (81%) of the early educators rated themselves as competent at conducting authentic assessment and 83% reported implementing assessment into daily practice; however, they felt less competent completing assessments for children with disabilities (61%) or for children who are culturally and linguistically diverse (60%).
6. PD providers also felt less competent in their ability to train on assessment for children with disabilities (76%), children who are culturally diverse (71%), and children who are English language learners (63%).

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7. A majority of both early educators and professional development providers reported finding the time to observe (74%/78%), time to complete assessment documentation (63%/74%), and competing priorities (53%/62%) as the most challenging aspects of implementing authentic assessment. Both early educators and PD providers also identified the need for onsite consultation/coaching/mentoring as a method to support early educators in implementing authentic assessment.
 8. There were employer type differences in perceptions of assessment competency, incorporating assessment into daily routines, the extent to which the challenges of assessment prevent its implementation, and requests for support. There was also a difference in perceptions of assessment competency by levels of education. As education levels increase, perceptions of competency decrease.

Overall, the results obtained from early educators and PD providers are a reflection of what exists within the early childhood assessment literature related to early educator assessment knowledge and use. Early educators still report struggling with the fundamental requirements of ongoing assessment, including embedding assessment into daily practice, data collection and analysis and how to use those data to influence classroom practices and learning. Early educators also report using assessment practices in unsystematic ways (Banerjee & Luckner, 2013; McNair, Bhargava, Adams, Edgerton & Kypros, 2003, National Research Council (NRC), 2008; Pretti-Frontzack, Kowalski, & Brown, 2002). The data presented here demonstrate more similarities between the early educator and PD provider groups than differences. Early educators and PD providers identified the same challenges as well as the same support needs related to implementing authentic assessment. The findings are evidence that there is an opportunity to eliminate the consistently-identified barriers and to develop a well-defined support system in order to implement assessment within the early care and education community. These findings also point to the need to more thoroughly examine how best to provide access to support and if there is a model of support best suited for implementing authentic assessment.

Identifying the access early educators have to quality assessment training, as well as identifying the support that PD providers receive, if any, to offer comprehensive assessment training can guide the development of a more comprehensive authentic assessment system. A brief scan of current training offered within Minnesota during 2013-2014 showed that there is limited scope and access to coursework and professional development related specifically to authentic assessment. There are clear gaps in both content and access. There is also a potential lack of clarity in the description of coursework/PD in distinguishing the sophistication of the content, and in who the intended audiences are (Susman-Stillman, Bailey, & Webb, 2014). Greater access to quality information and ongoing training is fundamental to early educators building their own capacity to implement authentic assessment.

The data support providing basic, fundamental assessment training with concrete implementation examples in order to support early educators with bridging their assessment knowledge into embedded, daily practices. Identified group differences give credence to providing a diversity of training opportunities and available assessment supports, such as additional coaching, consultation, or mentoring after authentic assessment trainings.

The recommendations are focused on training and support needs within the field. Specifically, determining what assessment training exists (Susman-Stillman, Bailey, & Webb, 2014), the

quality of the training, who has access to what training, providing a hybrid of training options on both fundamental and more intensive topics with concrete examples, and explicit training on the Early Childhood Indicators of Progress and K-12 Common Core State Standards are imperative for increasing the capacity of early educators to implement authentic assessment. Providing direct mentoring/coaching as well as video examples on how to embed assessment into daily routines and how to use data to inform practice were identified as the best methods for supporting early educators with authentic assessment.

Introduction

Background to Race to the Top (RTT) Great Workforce:

As part of the American Reinvestment and Recovery Act (2009), the U.S. Departments of Health and Human Services and Education funded multi-million dollar grants to states referred to as “Race to the Top: Early Learning Challenge.” The purpose of these grants was to “build bold, comprehensive early learning programs and services around a tiered quality rating and improvement system” (Wat, Bruner, Hanus, Scott-Little, C., & Schultz, 2011). States who applied for these grants were expected to demonstrate the need for building a quality early childhood educational system that includes the development of a cross-sector/agency infrastructure; the use of a quality rating and improvement system which would both help to define quality and act as a framework from which to monitor the system; the development of a quality, coordinated, longitudinal data system which would be used to inform decision-making; and the creation of a high-quality workforce with supports for retention, also known as the Great Workforce (U.S. Department of Education & U.S. Department of Health and Human Services, 2013).

The state of Minnesota was chosen in the first round of RTT funding. As part of its Great Workforce Plan, Minnesota set a goal of developing an effective professional development infrastructure to promote the use of authentic assessment by early educators. Accomplishing this goal included examining the current gaps in practitioner and trainer knowledge of authentic assessment and barriers to the use of authentic assessment in the field. Using this evidence can inform the development and implementation of training modules and a broader professional development infrastructure. The Center for Early Education and Development (CEED) at the University of Minnesota was contracted to conduct the research on gaps and barriers, develop six modules to address the gaps in knowledge and practice, conduct trainings using these modules across the regions, and evaluate the success of the implementation of the trainings. In the current report, we present the findings from two surveys; one completed by Minnesota early educators and the other by Minnesota professional development providers. Both surveys examined gaps in knowledge and practice and barriers to proper implementation of authentic assessment practices in early care and education settings.

Background

Authentic assessment is widely recognized as a necessary component of high quality early childhood practices (Bagnato, Neisworth, & Pretti-Frontczak, 2010; Grisham-Brown, Hallam & Brookshire, 2006). However, while there have been efforts at the federal level (e.g., Head Start and Early Childhood Special Education programs) and in Minnesota to incorporate authentic assessment into everyday practices in order to report child outcomes, authentic assessment has not yet enjoyed thorough and consistent implementation in early childhood settings (Individuals with Disabilities Education Act, 2004; Mitchell, 2005; Schultz, 2010). A review of the literature conducted for the purposes of this project revealed important barriers to implementation of authentic assessment by early childhood educators, including challenges in incorporating authentic assessment practices into everyday routines (Bagnato et al., 2010; Keilty, LaRocco, & Casell, 2009), questions about how to gather and interpret data (Allen, 2007; Notari-Syverson, Losardo, & Lim, 2003), concerns about sharing findings with families (Brink, 2002; Division for

Early Childhood, 2007; Grisham-Brown, Hallam, & Brookshire, 2006), and a lack of clarity about which assessment tools are acceptable, approved, and evidence-based (Allen, 2007; Keilty et al., 2009). This literature, however, was limited mainly to early childhood teachers and did not represent the perspectives of other key groups of early childhood educators, such as child care providers, who are increasingly being required to incorporate authentic assessment into their practice. While they may share some of the same challenges as teachers, it is also possible that they experience different and additional challenges with incorporating authentic assessment into their regular practice.

Furthermore, there is little information available regarding strategies for bridging the knowledge and practice gaps and providing more effective professional development on authentic assessment. The authors did not locate any studies examining the perspectives of professional development providers who train early educators on authentic assessment techniques and tools (save the Landscape survey discussed below), nor studies documenting effective practices for teaching authentic assessment to early educators.

Using the information we gleaned from the literature, we then began to build on work to-date in Minnesota via the Landscape Survey (Buisse, Hollingsworth, and West, 2008). The Landscape Survey, developed and conducted by the National Professional Development Center on Inclusion at the Frank Porter Graham Center at the University of North Carolina at Chapel Hill, was aimed at learning about the kinds of professional development opportunities, strategies, and participants in Minnesota as reported by professional development (PD) providers in Minnesota. Survey results, based on the voluntary responses of 217 PD providers representing mainly early childhood education/early intervention or education/special education, described content and methods of delivery, as well as main audiences for PD. While the Landscape Survey was not intended to explore in-depth specific issues related to knowledge and practices related to authentic assessment, it yielded helpful information that guided us as we developed two surveys, one for the cross-sector of early education practitioners, and the other for a cross-sector of early childhood PD providers. Each of this study's surveys, as well as interview protocols, included questions targeted at identifying gaps in content and practice related to authentic assessment. With these two surveys and two interview protocols, we aimed to conduct a comprehensive examination of the knowledge, practices, and training related to authentic assessment in Minnesota.

Study Purposes

The purposes of this study were to: 1) identify the gaps in knowledge and skills experienced by early educators across the early care and education field; 2) identify gaps in knowledge and skills of professional development providers who train on authentic assessment; 3) use the findings to develop authentic assessment-specific training modules that meet the needs of various types of early educators at different levels of knowledge and practice; and 4) at a larger level, use the findings to guide the development of a sustainable, cross-sector state infrastructure for assessment training and competence.

Key Definitions

Key terms for the surveys and interviews have been defined as follows:

Authentic assessment (as cited in Bagnato, Neisworth, & Pretti-Frontzak, 2010): “The systematic recording of developmental observations over time about the naturally occurring behaviors and functional competencies of young children in daily routines by familiar and knowledgeable caregivers in the child’s life” (Bagnato & Yeh Ho, 2006, p. 16).

Professional development: Both formal and informal delivery of quality adult learning experiences that equips practitioners with the knowledge, competencies, skills, tools, and confidence needed to effectively work with children and families in early childcare and early education settings (Minnesota Center for Professional Development, 2013).

Early educators: Practitioners who work with infants, toddlers, and preschoolers, including those who work in home-based, center-based, or school-based care and education facilities.

Employer type: The early care and education settings in which practitioners work (e.g., home-based, center-based, school-based, etc.).

Research Questions

Early Educator Research Questions:

1. What authentic assessment practices are used by early educators in Minnesota? Which are most and least prominent? Do they vary by employer sector?
2. How confident do early educators feel about their knowledge and use of assessment practices?
3. What is the diversity of early educator training experiences related to authentic assessment in Minnesota? Do they vary across sectors? Do they vary by characteristics of the respondents, namely by education level, age, and/or years of experience?
4. What gaps in assessment knowledge and practices exist within the early care and education field in Minnesota? Do those vary across sectors? Do they vary by characteristics of the respondents, namely by education level, age, and/or years of experience?
5. What challenges and barriers affect implementation of authentic assessment?
6. What kind(s) of assessment support do early educators desire?

PD Provider Research Questions

1. On what authentic assessment related topics do PD providers offer training? In what format are these trainings offered?

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2. How competent do PD providers feel in their own assessment knowledge and skills? How competent do they believe they are to train on assessment topics? What are their perceptions of implementing authentic assessment?
 3. What challenges and barriers do PD providers believe affect implementation of authentic assessment?
 4. What kinds of support do they recommend for early educators?

Methods

Survey Development

Researchers developed two surveys, one for the early educators and one for the professional development providers (See Appendices A1 and A2). Both surveys were based on the Landscape Survey, originally developed by Buysse, Hollingsworth, and West (2008). Survey questions were further developed based on a review of the current literature on the use of authentic assessment in early child care and education settings, as well as literature identifying potential gaps in knowledge about and challenges to full implementation of authentic assessment in quality programming.

The surveys consisted of nine sections, with a total of 40 questions for the early educators and a total of 14 questions for the PD providers. There was a mix of multiple choice, rank ordering, and open-ended questions. The first section described the purpose of the study and provided a definition of authentic assessment based on Bagnato and Yeh Ho's (2006) definition and a definition of professional development based on the Minnesota Center for Professional Development's (MNCPD) criteria. The other eight sections sought to capture information regarding: (1) respondents' experiences with professional development and authentic assessment; (2) the current implementation of authentic assessment in early care and education programming; (3) knowledge of and alignment between Minnesota's Early Childhood Indicators of Progress (ECIPs) and the Common Core State Standards; (4) the inclusion of cultural sensitivity and diversity in professional development opportunities; (5) challenges to implementing authentic assessment into programming; (6) the support and training needs of early educators to facilitate the implementation of authentic assessment into programming; and (7) the perceptions regarding authentic assessment. The final section captured the respondents' demographic information, educational background, and professional information. While the section topics in each survey were similar, some questions were different based on what was appropriate for early educators or PD providers.

After completing the full survey, respondents were redirected to another page that requested their contact information. Respondents were informed that follow-up interviews would be conducted in the future to gain more in-depth knowledge about the potential gaps in authentic assessment training content in order to develop quality assessment modules. Respondents were informed that by providing their contact information they were signifying they were willing to be interviewed in the future.

Surveys were reviewed by a stakeholder group comprised of representatives from training institutions and from across the various sectors of early education, including the Department of Education (MDE), the Department of Human Services (DHS), the Minnesota Association of Colleges for Teacher Education (MACTE), Metro State University, CEED, Head Start, Child Care Aware (CCA), the Center for Inclusive Child Care (CICC), the MN Licensed Family Child Care Association (MFLCCA), the MN Association for the Education of Young Children, and MN School-Aged Care Alliance (MNAEYC-MNSACA). Surveys were also reviewed by an internal review committee at CEED in order to refine questions and obtain additional perspectives on the clarity and precision of each question.

Surveys were created within Qualtrics (2002), an online data collection software used for many professional and academic research purposes. In an effort to obtain a more representative sample, both the early educator and professional development provider surveys were translated by staff at the UMN's College of Continuing Education: Translation and Interpreting Program into both Somali and Spanish.

Early educator survey elements

Experience. Participants were asked nine questions related to their experience with professional development and authentic assessment (e.g., most often used PD, frequency of attendance, etc.).

Current implementation. Four questions were included to investigate the current implementation of authentic assessment in early educators' practice and included questions on the number of hours spent using authentic assessment per week and the competence level of early educators using authentic assessment.

ECIPs and K-12 Common Core State Standards. This section sought information about how familiar early educators are with the Early Childhood Indicators of Progress (ECIPs) and the K-12 Common Core State Standards as well as how important they are for planning instruction and how they guide assessment practices.

Cultural sensitivity and diversity. Participants were asked to respond to questions and statements regarding the inclusion of and their competency with assessing children with special needs, children who speak English as a second language, and children from culturally diverse backgrounds.

Challenges to implementation. Participants were asked three questions about the challenges they face in implementing authentic assessment into programming, including ranking the top five challenges and the extent to which challenges prevent educators from conducting ongoing authentic assessment.

Support needs. The four questions included in this section covered the support or assistance early educators need, what they have already received, and what would be most beneficial. Participants were also asked how often they seek support for authentic assessment.

Perceptions. Participants were asked about the importance of specific training topics and were asked to rank the top five most important training topics. Participants were also asked to provide their perceptions on authentic assessment in regards to developing quality instruction, integrating into daily routines, ease in which it is implemented with fidelity, and the support system(s) in place for implementation into programming.

Demographics. Nine demographic questions included information on participants' sex/gender, age, race, and ethnicity. Information was also collected on participants' highest level of education, years of service, primary employer, and type of community in which they work.

Professional development provider survey elements

Experience. Three questions inquired about professional development information in general, including questions about the frequency of professional development opportunities, the approach to professional development used most often, and the topics covered in professional development events. Five more questions focused specifically on authentic assessment, including hours spent covering authentic assessment, tools covered, and strategies taught.

ECIPs and K-12 Common Core State Standards. This section sought information about how familiar professional development providers are with the Early Childhood Indicators of Progress (ECIPs) and the K-12 Common Core State Standards and how often they include them in their professional development events.

Cultural sensitivity and diversity. Participants were asked to respond to three statements about their competence in providing professional development on authentic assessment related to children with special needs or from culturally and/or linguistically diverse backgrounds.

Challenges to implementation. Participants were asked two questions about the specific challenges early educators face in implementing authentic assessment into programming and to what extent these challenges prevent full implementation.

Support needs. Two questions included in this section covered the support or assistance participants currently provide to early educators and what kinds of support or assistance would be most beneficial for early educators. Participants were also asked how often early educators seek support for authentic assessment.

Perceptions. Participants were asked to rank the top five most important training topics and also to provide their perceptions on authentic assessment in regards to developing quality instruction, integrating into daily routines, ease in which it is implemented with fidelity, and the support system(s) in place for implementation into programming.

Demographics. Thirteen demographic questions included information on participants' sex/gender, age, race, and ethnicity. Information was also collected on participants' highest level of education, years of working in the early childhood field and as a professional development provider, primary employer, and type of community in which they work. Participants were also asked which age group they most often referenced in their trainings (infants, toddlers, preschoolers) and who their primary audience was (e.g., home-based childcare, center-based childcare, Head Start).

Interview Development

Researchers developed two different interview protocols; one for the early educators and the other for the professional development providers. Both interview protocols ask more in-depth questions on many of the same topics (e.g., experience, support needs, perceptions, etc.) covered in the surveys. The interview protocols were sent to the stakeholder group for feedback and were pilot tested, prior to being used with educators and PD providers. The interview protocols can be seen in Appendices B1 and B2.

Participant Recruitment and Data Collection

Early care and education professionals and professional development providers across early care and education sectors were recruited for the study, including:

- Professional development providers who work with early care and education professionals (e.g., 2- and 4-year college instructors, Head Start trainers, trainers from Child Care Aware and Think Small, MNCPD-certified trainers, specific assessment tool-certified trainers, etc.)
- Family childcare providers who provide care and education for children in their home
- Center-based childcare providers who care for groups of children from birth to five-years of age “in their own building, community centers, places of worship, or other facilities,” (Think Small, 2014)
- School-based teachers and paraprofessionals
- Head Start and Early Head Start teachers and paraprofessionals
- Early Childhood Special Education (ECSE) teachers and paraprofessionals
- Early Childhood Family Education (ECFE) teachers and paraprofessionals
- School Readiness instructors
- School district early childhood and kindergarten staff

For the surveys, participants were recruited electronically via emails distributed by stakeholder representatives as well as by the principal investigators. Links to the surveys were embedded in routine emails to constituents of the various stakeholder groups or as the primary subject of the email with a brief description of the survey content in the body of the email. Emails were sent to 8000+ early educators and PD providers within the state. It is difficult to ascertain the actual response rate because both early educators and PD providers were often represented multiple times on the numerous listservs used to disseminate the survey. The greatest response to the survey came from family childcare providers (n = 226), then center-based childcare providers (n = 169), school-based providers (n = 146), and Head Start providers (n = 58). School-based providers include: early childhood family education, early childhood special education, school readiness personnel, kindergarten teachers, and any other self-identified school district employees.

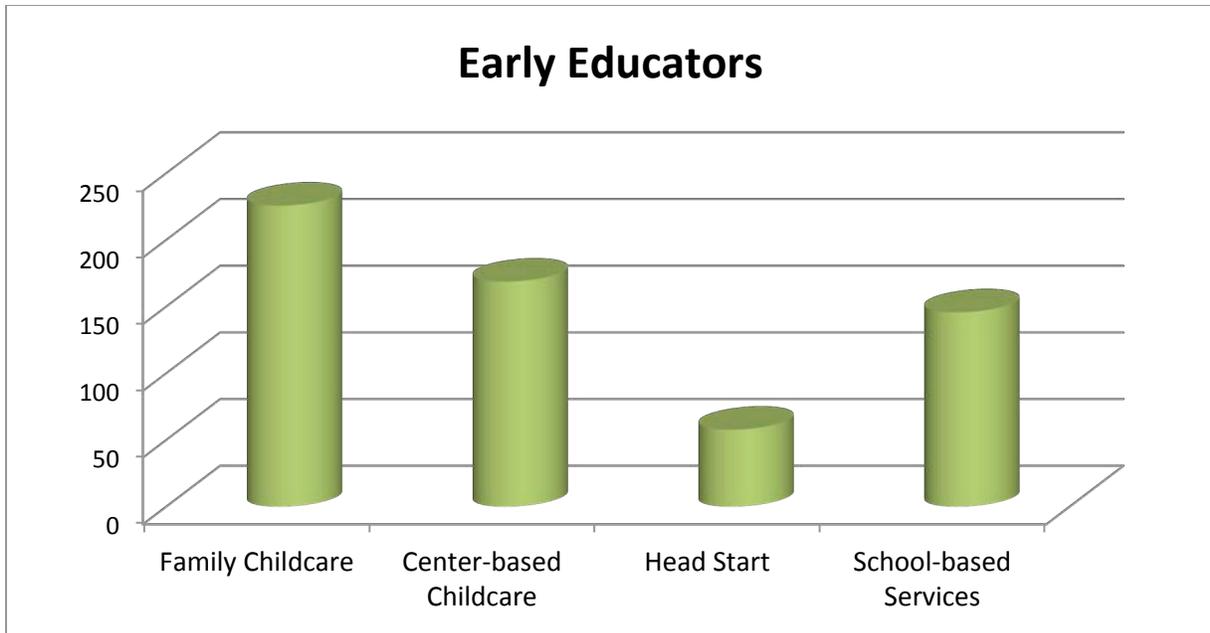


Figure 1: Number of early educator respondents by employer type.

More than 800 early educators completed the survey, with 702 educators completing the demographic portion. Similarly, 114 professional development providers completed the survey, with 68 respondents completing the demographic portion of the survey. The greatest response to the survey from PD Providers came from University/College/Community College staff (n=18), then from those who work for a federal agency (n=14), and those who identified themselves as working for a local or regional agency (e.g., public school, social services, mental health, etc.; n=11).

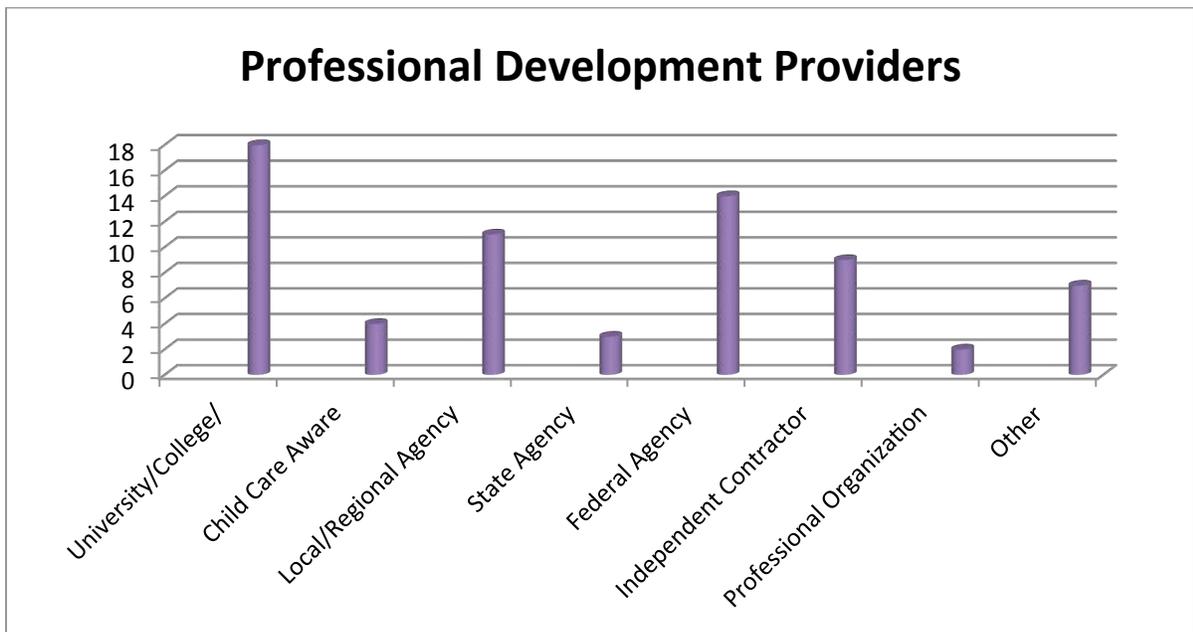


Figure 2: Number of professional development respondents by employer type.

Because the majority of data analyses completed is dependent on complete demographic information, the authors chose to only include those responses that include complete demographic information. This decision was aided by the fact that another recent study of assessment practices and training needs of early childhood professionals also chose to only include data from those participants who completed demographic data (Banerjee & Luckner, 2013).

The survey represented phase one of the plan to obtain in-depth information about authentic assessment practices. Phase two included interviewing both early educators and PD providers, who were asked to volunteer for a follow-up interview by leaving their contact information at the end of the survey. Participants were also recruited during a presentation of the survey data at an early childhood conference within Minnesota.

Data Analysis

Descriptive statistics based on the total number of responses were generated by Qualtrics. Additional analyses were completed using the Statistical Package for Social Sciences (SPSS Inc.; version 22). Data were analyzed for group differences using the chi-square statistic, analysis of variance (ANOVA) and regression analysis, when possible. All qualitative data (i.e., open-ended survey responses and interview data) were analyzed for themes using NVivo qualitative data analysis software (QSR International Pty Ltd. Version 10, 2012).

Results

Demographics: Early Educators (n = 702)

The majority of early educators who responded were female (99%) and white (94%). Only 3% identified themselves as Black or African American, 1% as American Indian or Alaska Native, 1% as Asian, and 1% as multiracial. The ages of respondents ranged from 20- to 76-years old, with the majority (58%) falling between 30 and 50 years old and another 32% over 50 years old. The majority of the respondents indicated their highest level of education completed was a Bachelor of Arts or Science degree (45%), followed by those with a post graduate degree (23%).

The largest groups of respondents work in family childcare (38%), followed by center-based childcare (28%), school-based services (24%), and Head Start (10%). Respondents reported a wide range of years working as an early childhood practitioner. The majority indicated working in the field for 20 years or more (42%), while another 35% have been working in the field for 10 years or less. The majority of respondents reported working primarily in suburban areas (45%), whereas 35% reported working in rural areas and 20% in urban areas.

Demographics: Professional Development (PD) Providers (n = 68)

The majority of PD providers who responded were also female (99%) and White (94%). Only 1% identified themselves as Black or African American while the other 4% self-identified as multiracial. The ages of respondents ranged from 29- to 67-years old, with the majority (56%) being 50-years or older. The majority of respondents indicated their highest level of education

completed was a post graduate degree (60%), followed by those with a Bachelor of Arts or Science degree (35%).

The majority of respondents indicated their primary employer was a university, college, or community college (26%). For the other respondents, 21% indicated they were employed by federal agencies (e.g., Head Start, military, etc.), 16% reported being employed by local or regional agencies (e.g., public schools, social services, mental health, etc.), 13% reported being self-employed, 6% reported working for Child Care Aware, 4% are employed by state agencies (e.g., MDE, DHS), and 3% work for professional organizations (e.g., MNAEYC, DEC, etc.). Respondents reported working in the early childhood field for an average of 22 years. The majority have been working in the field for 20 years or less (37%), while 34% have been working in the field for more than 30 years. In contrast, the majority of respondents have been working as professional development providers for 20 years or less (73%), and most report working as a professional development provider for five years or less (22%).

Half of the respondents reported working primarily in rural areas, whereas 25% indicated working in suburban areas and 25% indicated working in urban areas. The majority indicated their primary audience was home-based childcare practitioners (25%), followed closely by center-based childcare practitioners (24%) and then Head Start (20%). Another 16% responded with “Other,” most of which reported working in both home- and center-based childcare settings. Although 28% of respondents indicated referencing preschoolers most often in their trainings, 69% reported including infants, toddlers, and preschoolers in their trainings. Only 3% focused specifically on infants and toddlers.

Experience: Early Educators

Professional Development on Assessment Tools:

Educators were asked on which assessment tools they had received professional development. The survey provided a list of 10 widely-used assessment tools within MN as well as the option to list other tools. Participants listed attending professional development on Creative Curriculum (n = 271), Work Sampling System (n = 208), and Teaching Strategies Gold (n = 206) most often.

There was a large response to the “other” category, where participants had a chance to list assessment PD received that were different from the list of ten provided within the survey. Many respondents listed other assessment tools, such as the Indicators of Individual Growth and Development (IGDIs) and the Hawaii Early Learning Profile (HELP). A large number of tools listed within the “other” category were self-developed or center-developed, were screening tools rather than assessment tools (e.g., Ages and Stages Questionnaire), or were not assessment tools (e.g., Response to Intervention (RTI), Early Childhood Indicators of Progress (ECIPs), Technical Assistance Center for Social Emotional Intervention (TACSEI), etc.).

Assessment Tools Used in Practice:

Educators were asked to report the assessment tool currently being used within their worksite. The graph below shows the different tools being used by each of the different employment groups.

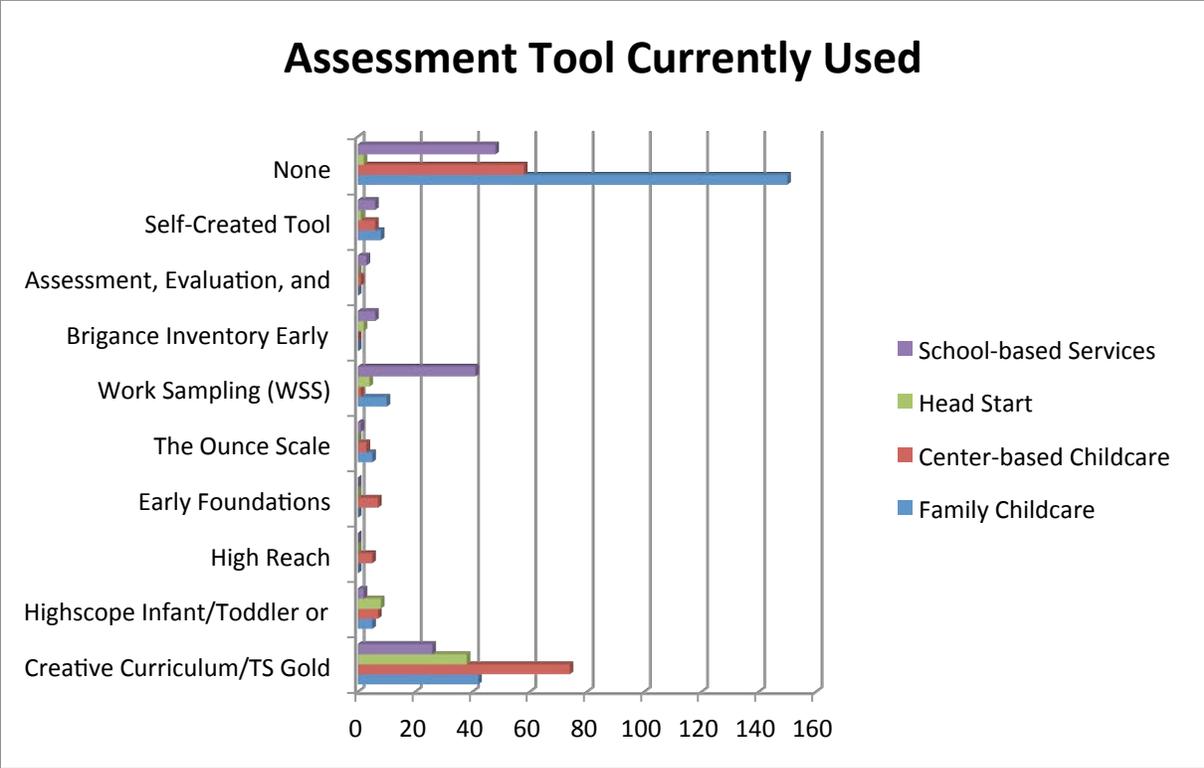


Figure 3: Assessment tools currently being used in the field by employer type.

Of the 598 participants who responded to the question, 30% (n=180) reported using Creative Curriculum/Teaching Strategies Gold, 9% (n=56) reported using Work Sampling, 5% (n=28) reported using other tools (e.g., HELP, Brigance, Montessori or Waldorf tools), and 4% (n=22) reported using Highscope. Work Sampling was chosen most often by providers in school-based settings; TS-Gold and Creative Curriculum was chosen most often by center-based childcare providers, Head Start staff, and family childcare providers.

Overall, 43% (n = 258) reported that they were not using an assessment tool at this time. The majority (58%; n = 150) of those reporting not using assessment tools were family childcare providers. Of the 222 family childcare providers who responded, 77% (n = 171) stated that they are not required to conduct authentic assessment. Of the 166 center-based childcare providers who responded, 87% (n=145) reported being required to conduct ongoing authentic assessment. Ninety-three percent (93%; n=54) of Head Start employees reported being required to conduct authentic assessment and 65% (n=93) of school-based providers reported being required to conduct authentic assessment.

For the rest of the respondents, 4% reported using “observation and children’s work samples,” 4% reported using self- or center-developed tools, and 3% reported using assessment tools that were actually screening tools or curricula without associated assessment tools.

Time Spent on Assessment:

Educators were asked to report the amount of time spent each week conducting the following activities related to authentic assessment: 1) gathering data/observation; 2)

documenting/inputting data; 3) data analysis; 4) using assessment data in programming (e.g., lesson plans, daily routines, etc.); 5) involving parents in the assessment process; 6) assessing children who are culturally/linguistically diverse; 7) assessing children with disabilities; 8) communicating assessment results with parents; 9) determining the functions of a child’s behavior; and 10) observing children in the natural environment for the purposes of assessment. For each principle of authentic assessment listed, the most common answers given were either “zero hours” or “1-2 hours per day.”

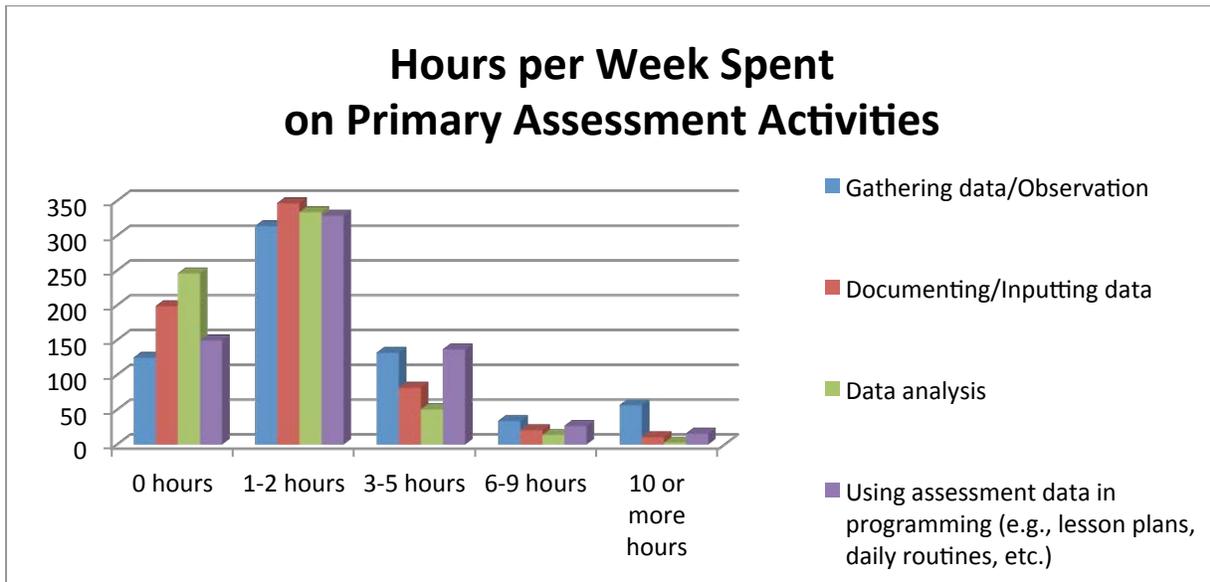


Figure 4: Early educator hours spent per week on primary assessment topics.

Knowledge of ECIPs and K-12 Common Core State Standards:

Forty-eight percent (48%) of early educators reported being familiar or very familiar with the ECIPs; however, 73% of the educators reported that it was important or very important to use the ECIPs when planning instruction. Only 32% of educators reported that they often use the ECIPs to guide their assessment practice.

Twenty-five percent (25%) of educators reported being familiar or very familiar with the K-12 Common Core State Standards; however 57% believed that it is important or very important to use the Common Core State Standards when planning instruction. Sixteen percent (16%) of educators reported that they often use the Common Core State Standards to guide their assessment practice.

Belief Statements:

Early educators were asked to report how strongly they agreed or disagreed with five different belief statements: 1) I believe I am competent conducting authentic assessment; 2) I believe I incorporate assessment into daily practice; 3) I believe I am competent conducting authentic assessment for children from culturally diverse backgrounds; 4) I believe I am competent conducting authentic assessment for children with disabilities; and 5) I believe I am competent conducting authentic assessment for children who are English language learners.

Eighty percent (80%; n=679) of respondents reported feeling competent to conduct authentic assessments and 81% (n=682) of respondents felt that they incorporate assessment into their daily practices. Educators felt less competent about conducting assessments for children within “specialty groups” (i.e., children who are culturally and linguistically diverse and children with disabilities). Sixty percent (60%; n=671) reported feeling competent to assess children from culturally-diverse backgrounds, 61% (n =671) reported feeling competent to assess children with disabilities, and 60% (n=665) reported feeling competent to assess children who are English language learners. For a complete breakdown of belief statements by primary employer, please see Appendix C.



Figure 5: Early educator responses to competency belief statement (n=585).



Figure 6: Early educator responses to belief statement on incorporating assessment into daily practice (n=584).

Training Needs/Wants:

Educators were provided a list of 16 different authentic assessment-related training topics (e.g., general assessment principles, choosing developmentally appropriate tools, collecting assessment data, using assessment data in practice, early literacy, social-emotional development, etc.) and were asked to report if they: a) had training on these topics within the last year; b) used this information in practice; and c) wanted training on the topics. Each statement has a different number of total responses, based on the training experience, practice use and training desires of the individual educator. See Appendix D for a complete list of principles and the accompanying training response data.

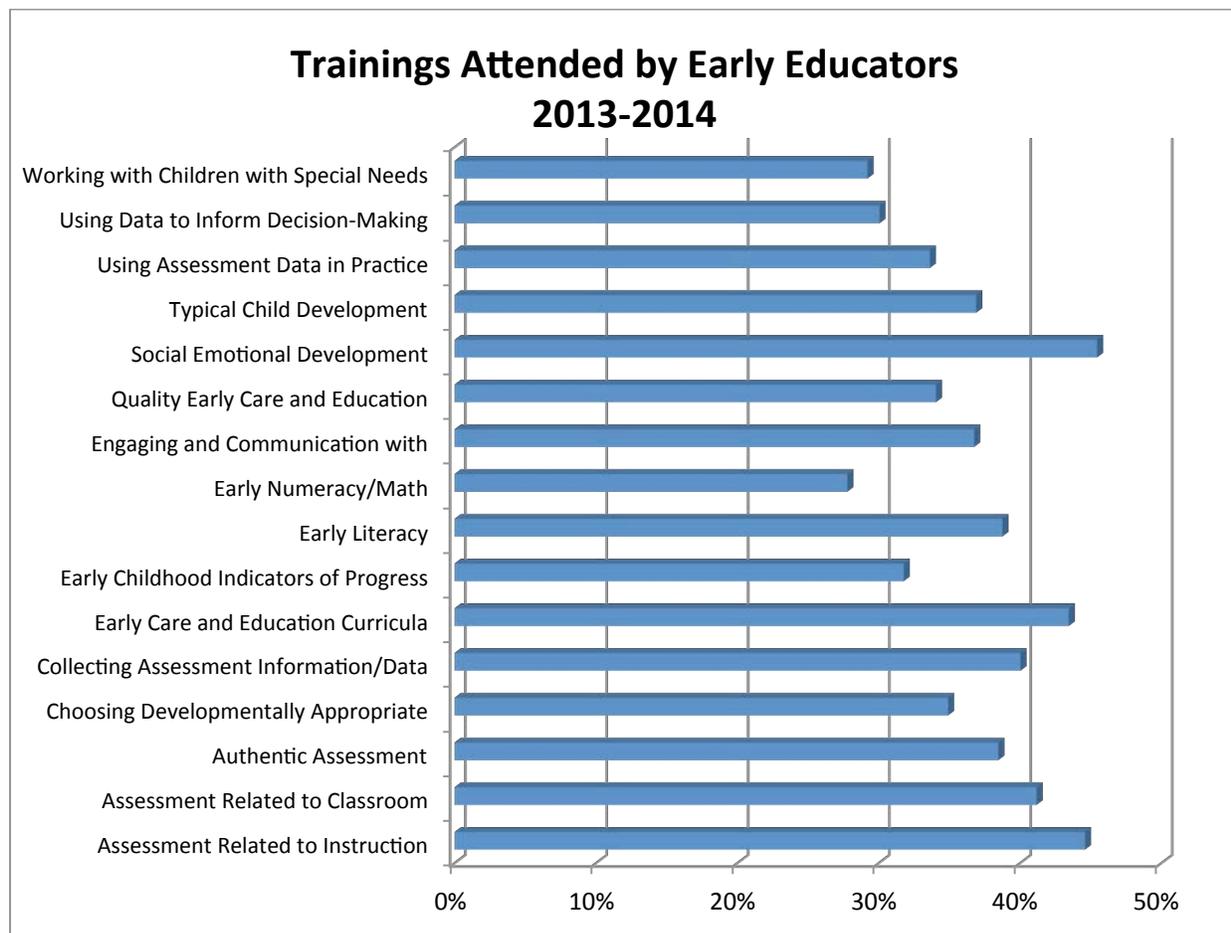


Figure 7: Early educator trainings attended within the last year (n=702).

Within the past year, educators reported attending training on social-emotional development and assessment related to instruction (45%), followed closely by training on early education curricula (43%) and assessment related to the classroom environment (41%). Attending training on early numeracy (28%), working with children with special needs (29%), and using data to inform decision making (30%) had the lowest response rates.

Educators responded consistently when it came to their use of each educational/assessment topic within their own practice. “Use in Practice” responses fell between 55% and 65% for 14 of the

16 educational topics. For the two items that did not fall within this range, educators reported working with children with special needs (48%) and using the ECIPs (47%) less often than any of the other principles.

Educators reported the greatest desire for more training on the following topics: working with children with special needs (31%), the ECIPs (27%), and using data to inform decision making (25%). Training on typical infant/toddler/child development received the lowest number of responses from educators in terms of training needs (14%).

Early educators were asked how important (i.e., very important, important, somewhat important, and not at all important) different assessment training topics are and then were asked to rank order the top five most important topics. The following topics received the highest number of rankings (1-5) from the early educators: authentic assessment, quality early care and education programming, social-emotional development, typical child and/or infant development, and the ECIPs.

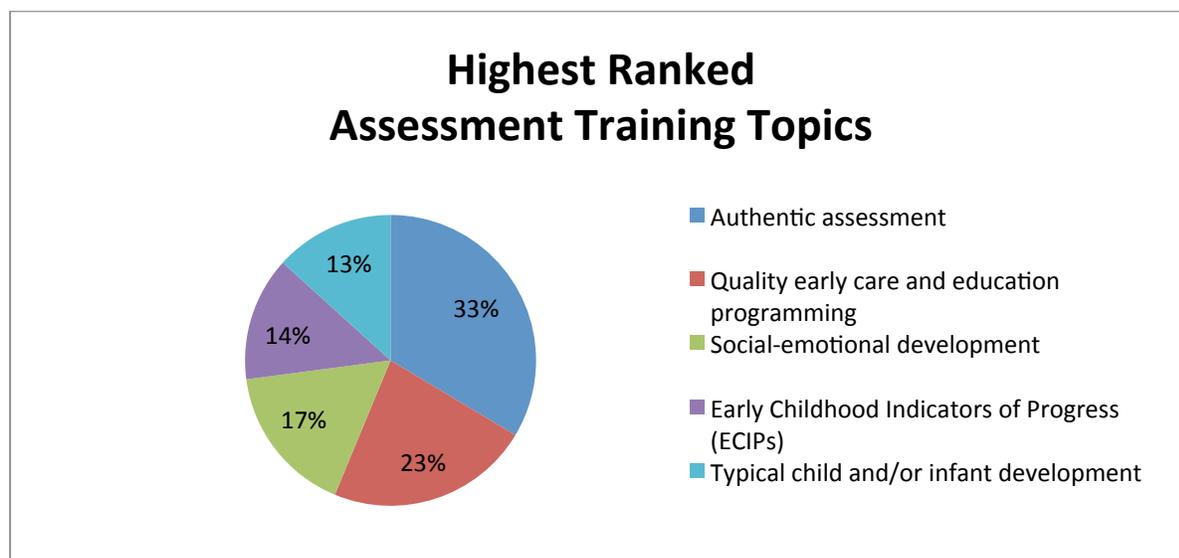


Figure 8: Early educator rankings of most important assessment training topic.

Challenges to Implementation:

Fifty-nine percent (59%) of early educators reported that the challenges related to authentic assessment either “somewhat” or “very much” prevented them from implementation. Only 8% of the educators said that the challenges did not prevent them from implementation, with the majority of those responses coming from childcare providers who are often not required to conduct assessments.

Educators were given a list of 12 challenges to implementation, which were taken directly from the authentic assessment research literature. The list included: 1) familiarity with authentic assessment; 2) competing priorities; 3) support from management/agency; 4) appropriate professional development opportunities; 5) cost; 6) time to complete observations; 7) time to complete documentation; 8) effective staff who support your practice; 9) knowledge of typical infant/toddler/preschool development; 10) integrating assessment into already established

routines and activities; 11) familiarity with developmentally appropriate tools; and 12) sharing assessment information with parents. Educators were also given the option of listing their own challenges to implementation. Of the 12 challenges listed, the three that were most often chosen by early educators were: *time to complete documentation* (71%), *time to complete observations* (61%), and *competing priorities* (50%). Educators identified *familiarity with developmentally appropriate tools* (18%), *support from management/agency* (15%), and *knowledge of typical infant/toddler/child development* (11%) as the challenges least likely to impede implementation of authentic assessment.

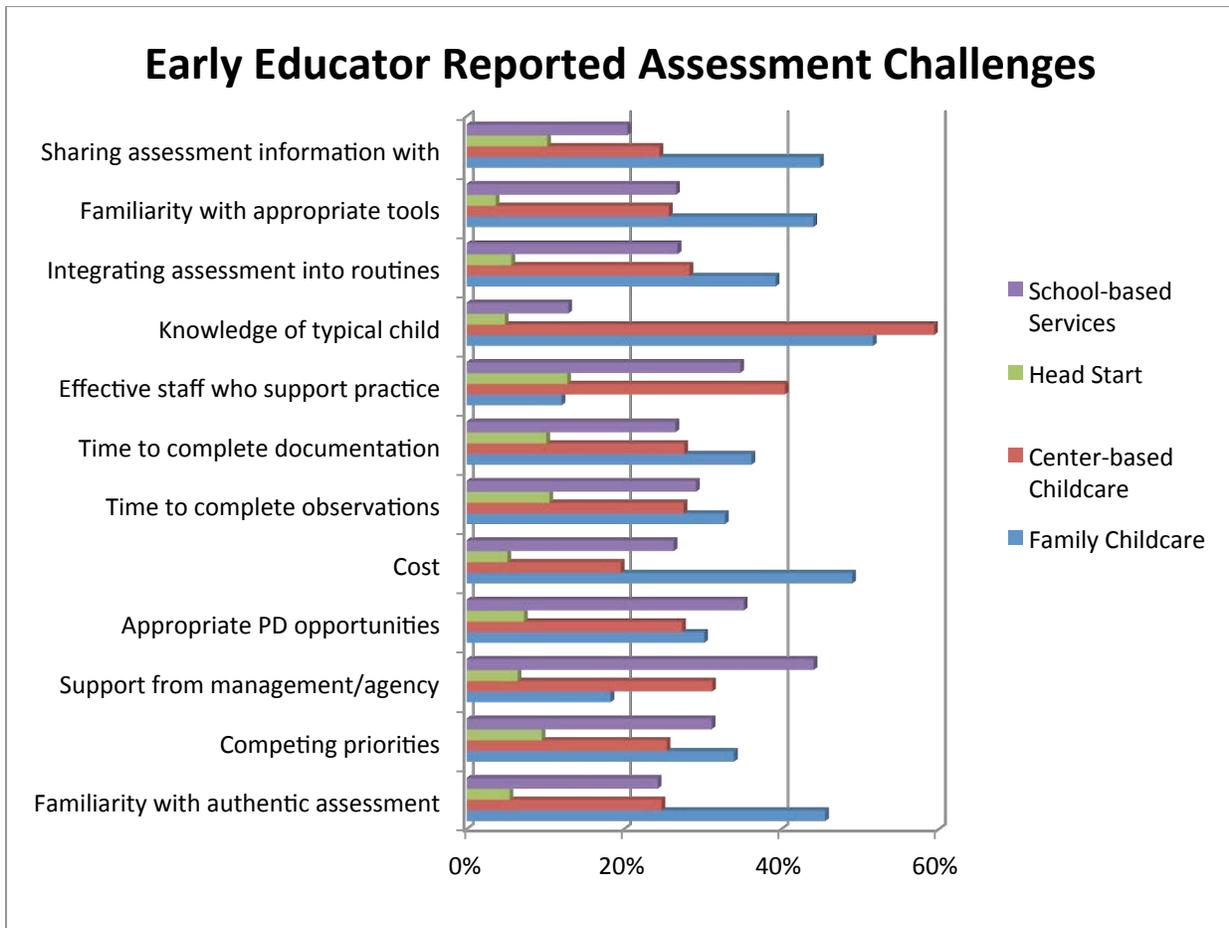


Figure 9: Early educator reports of challenges to implementation by employer type.

There were no significant differences between the type of employer and the perceptions of challenges related to implementation $F(1, 585) = 3.157, p > .05$, so those required to conduct assessment were no more or less likely to report challenges impeding their ability to conduct authentic assessment than those who are not required to complete assessments.

Support Needs:

When given a list of nine different support options (i.e., onsite support in the form of mentoring/coaching, online materials, video demonstrations, how to share assessment information with parents, leadership support, general principles of assessment, assessment

scoring, using assessment data to inform practice, and embedding assessment into daily routines), the early educators identified *embedding assessment into daily routines* as their primary support need (24%). *Using data to inform practice* (19%) and *onsite support in the form of mentoring/coaching* (18%) were the next two most preferred methods of support requested by early educators. *Support for general principles of assessment* received the lowest number of responses (11%).

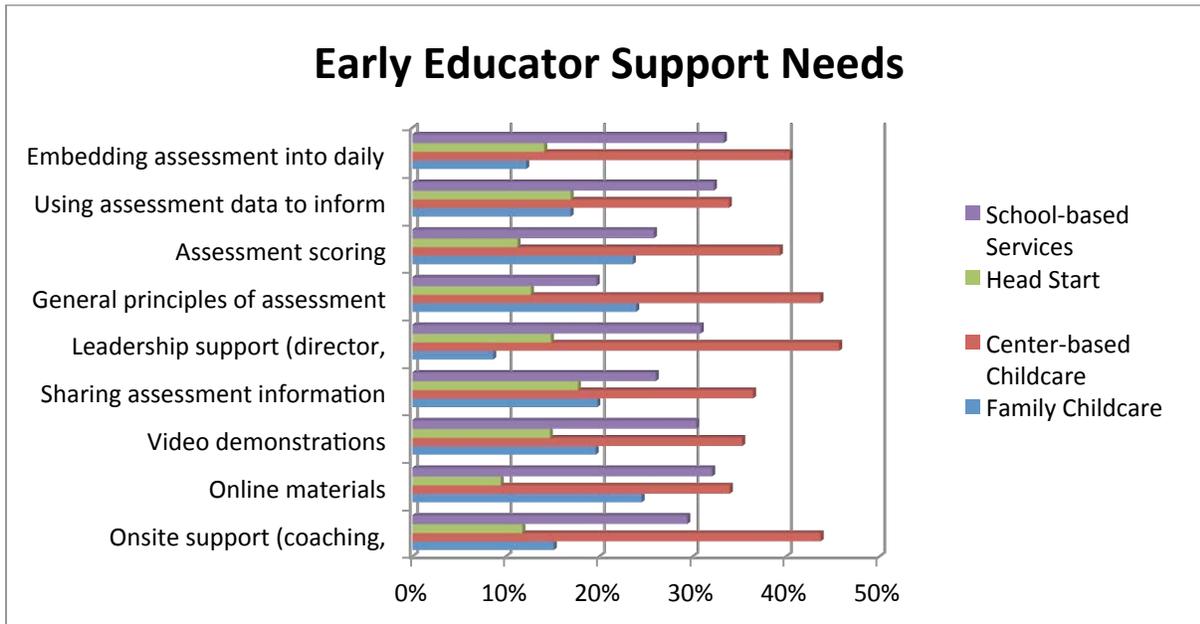


Figure 10: Early educator support needs by employer type.

When asked how often they sought support on authentic assessment, 55% of the 370 early educators who responded said they never or rarely seek help with authentic assessment. Only 6% of early educators reported that they often seek support for authentic assessment. See Appendix E for a complete list of support needs, requests for support, and corresponding data by primary employer.

Group Differences:

The data were analyzed to determine if there were any group differences in responses to authentic assessment questions. Specifically, the data were analyzed to determine if there were differences among employer types, years of experience in early childhood education, age, and education level.

To determine if there were any within group differences, ANOVA, regression, and chi-square analyses were conducted. There was a significant effect between education levels and primary employer, $F(3, 595) = 33.296, p < .001$. Post-hoc analysis revealed that school-based providers reported higher levels of education than their early education colleagues (i.e., family childcare providers, center-based childcare, and Head Start providers). Both Head Start providers and center-based providers also reported higher levels of education than family childcare providers (See Appendix E).

There were several significant differences between early educators' perceptions and their primary employer type. First, there was a significant effect between the perception of assessment competency and primary employer type, $F(3, 581) = 18.492, p < .001$. Post-hoc analysis revealed that family childcare providers were more likely to report feeling competent to conduct assessment than all of their educator counterparts (i.e., center-based childcare, Head Start, and school-based providers).

There were also significant differences between early educators' perceptions about their competency in conducting authentic assessments for children from culturally diverse backgrounds, $F(3, 586) = 12.893, p < .01$, their competency in conducting authentic assessments for children with disabilities, $F(3, 586) = 13.127, p < .01$, and their competency in conducting authentic assessments for children who are English language learners (ELL), $F(3, 580) = 7.108, p < .01$. Post-hoc analysis revealed that family child care providers feel more competent conducting authentic assessment for children from culturally diverse families than both their center-based child care and Head Start colleagues. School-based staff reported feeling greater competency with assessing children who are culturally diverse than do Head Start staff. Family child care providers also reported feeling more competent at assessing children with disabilities than all of their early education counterparts. Center-based child care providers reported feeling more competent assessing children with disabilities than the Head Start staff. Finally, family child care providers reported feeling more competent at assessing children who are ELL than both center-based child care and Head Start providers. School-based providers reported feeling more competent at assessing children who are ELL than their center-based child care colleagues.

There was also a significant difference when comparing assessment competency and education levels. As education levels increased, early educators were less likely to report feeling competent to conduct authentic assessment, $\chi^2(9, N = 585) = 58.415, p < .01$. Similarly, as education levels increased, early educators were less likely to report that they incorporate assessment into their daily practice, $\chi^2(9, N = 584) = 47.107, p < .01$. There were also differences between the level of education of the early educators and their feelings about whether the challenges of authentic assessment inhibit them from implementation. As education levels increased, early educators were more likely to report that the challenges of authentic assessment prohibited them from implementation, $F(1, 585) = 6.849, p < .01$. These same three statements/questions (i.e., competency, integration into daily practice, and challenges inhibiting implementation) were analyzed comparing age, years of service, and type of community (e.g., urban, suburban, rural). None of these tests was significant.

There was a significant effect between the early educators' reports of incorporating assessment into daily routines and primary employer type, $F(3, 580) = 6.643, p < .001$. Post-hoc analysis revealed that family childcare providers were more likely to report incorporating assessment into their daily practice than all of their educator counterparts (i.e., center-based childcare, Head Start, and school-based providers).

There was a significant effect between the perception of assessment challenges impeding implementation and primary employer type, $F(3, 583) = 7.594, p < .001$. Post-hoc analysis revealed that family childcare providers were more likely to believe that the challenges of assessment prevent its implementation than both Head Start and center-based childcare providers. There was no significant difference between family childcare providers and the school-based providers on whether the challenges of assessment prevent its implementation.

There was also a significant effect between the educators' requests for support and their primary employer type, $F(3, 342) = 4.571, p = .004$. Post-hoc analysis revealed that Head Start employees were more likely to request support than both family and center-based childcare providers but not more than school-based providers. Please see Appendix F for all reported mean differences related to the ANOVAs conducted between groups.

Summary of Themes: Early Educators

Overall, early educators felt competent in their ability to implement authentic assessment and incorporate assessment into their daily practice. More than half of the educators reported conducting assessment-related activities (i.e., observation, data analysis, using data to inform practice) at least 1-2 hours per day. Not all early educators, however, fully understand what authentic assessment is, as is evident by the list of screening tools and the educational initiatives reported as assessment tools (e.g., RTI, TACSEI, etc.).

Throughout the state, the most commonly reported assessment tools being used in the field are Creative Curriculum, Teaching Strategies Gold (TS-Gold), and Work Sampling. Early educators typically access assessment training at workshops and institutes and receive the most training on social-emotional development, assessment related to instruction, and curricula. More than half of the early educators reported spending at least 1-2 hours on each of the different assessment-related topics, such as observation, data collection, data analysis, and using data to inform practice. The use of the MN Early Childhood Indicators of Progress and K-12 Common Core State Standards within the field did not appear to be consistent throughout the state.

Early educators identified authentic assessment, quality early care and education programming, social-emotional development, typical child and/or infant development, and the ECIPs as the most important topics on which they need training. Educators also identified time to complete documentation, time to complete observations, competing priorities, and integrating assessment into established routines as the greatest challenges to implementing assessment. Early educators with lower education levels were more likely to feel competent implementing assessment practices than early educators with greater levels of education.

Mentoring/coaching, embedding assessment into daily routines, video demonstrations of specific assessment practices, and using assessment data to inform practice were rated by the early educators as the most needed forms of support in order to implement authentic assessment.

There are employer type differences in perceptions of assessment competency, incorporating assessment into daily routines, the extent to which the challenges of assessment prevent its implementation, and requests for support. There is also a difference in perceptions of assessment competency by levels of education. The greatest differences emerged between family child care providers and the other early educators; family child care providers tended to report the most confidence implementing, the most likely to report incorporating authentic assessment into their practice, and the most likely to believe that challenges inhibit the implementation of authentic assessment. Education differences were also noteworthy; as education levels rose, so did concerns about competency, implementation and challenges to implementation.

Experience: Professional Development (PD) Providers

Providing Professional Development on Assessment:

Within a typical year, PD providers reported offering training an average of 17 days, with 13 days being the most common response. Providers also reported spending an average of 20 hours per year providing training directly on authentic assessment, with 9 hours/year being the most common response. PD providers identified “Workshops/Institutes on specific topics” as the most common method for providing assessment information (75%), with “onsite support—including coaching, mentoring, consultation, and technical assistance” as the second most common method for providing this topical information (59%). “Communities of Practice or practitioner study groups” was the training method least often reported by the PD professionals (31%).

Following the list of professional development activities from the original Landscape Survey (Buisse, Hollingsworth, & West, 2011), the Minnesota PD providers were asked if they provided professional development on the following topics: assessment related to classroom environment, assessment related to instruction, authentic assessment, choosing developmentally-appropriate assessment tools, collecting assessment information/data, early care and education curricula, early childhood indicators of progress (ECIPs), early literacy, early numeracy/math, engaging and communicating with families, quality care and education programming, social-emotional development, typical infant and/or child development, using assessment data in practice, using data to inform decision-making, and working with children with special needs.

Social-emotional development training received the greatest response, with 76% of respondents reporting that they offer this type of professional development. Sixty-six percent (66%) reported providing PD on early care and education curricula and 63% reported providing PD on early literacy. For all other topics, responses ranged between 62% and 47% of respondents providing PD on those assessment-related topics. Providers reported training on choosing developmentally appropriate assessment tools the least often (44%).

PD providers were also asked if they shared specific training information and strategies with early educators on the following topics: a) purpose and use of assessment; b) strategies for gathering, documenting, and using assessment data; c) using assessment data in programming (e.g., lesson plans, daily routines, etc.); d) observation; e) involving parents in the assessment process; f) using assessment with children who are culturally/linguistically diverse; g) using assessment with children who have disabilities; h) communicating results of assessment with parents; i) determining the function of a child’s behavior; j) child development; and k) early childhood indicators of progress/developmental milestones. Providers were most likely to report that they provided specific training on observation (84%), strategies for gathering, documenting, and using assessment data (78%), and using assessment data in programming (e.g., lesson plans, daily routines, etc.;74%). Providers were least likely to report providing specific training on using assessment data with children who are culturally/linguistically diverse (49%) and using assessment data with children who have disabilities (47%).

PD providers were asked to rank the top five most important assessment training topics. Authentic assessment, quality early care and education, social-emotional development, typical child and/or infant development, and the Early Childhood Indicators of Progress (ECIPs) were ranked highest in importance by the PD providers.

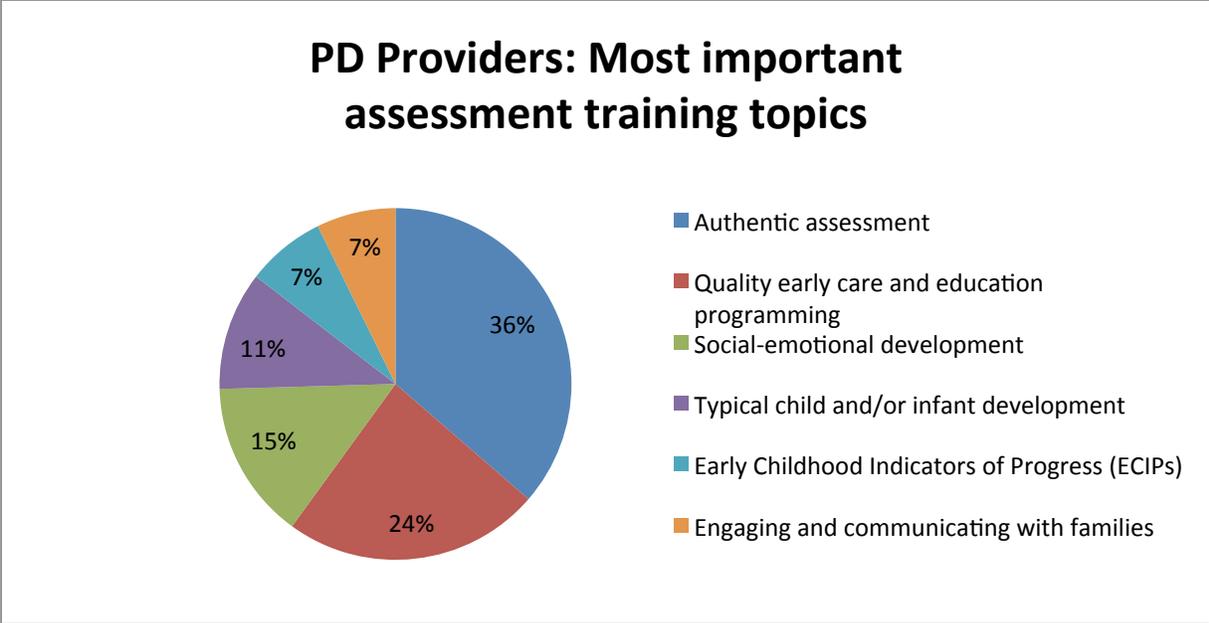


Figure 11: PD provider reports of the most important assessment training topics.

Knowledge of ECIPs and K-12 Common Core State Standards:

Eighty-one percent (81%) of PD providers reported being familiar or very familiar with the MN ECIPs. Four percent (4%) said they were not at all familiar with the ECIPs. Only 37% of the PD providers reported that they often train on the ECIPs and 12% reported never providing training on the ECIPs.

Forty percent (40%) of PD providers were familiar or very familiar with the K-12 Common Core State Standards. Twenty-two percent (22%) reported that they were not at all familiar with the Common Core State Standards. Four percent (4%) said they often train on the Common Core State Standards and 44% said they never train on the Common Core State Standards.

Perceptions Regarding Authentic Assessment:

PD providers were asked to report how strongly they agreed or disagreed with six different perceptions about authentic assessment: 1) authentic assessment is embedded in quality early care and education instruction; 2) authentic assessment can be easily integrated into daily routines; 3) authentic assessment is imperative for designing instruction for each child; 4) implementing authentic assessment with fidelity is impossible; 5) early care and education service providers struggle with implementing authentic assessment; and 6) providers get the support they need from their director/manager/coach to implement authentic assessment.

Eighty-eight percent (88%) of PD respondents reported that authentic assessment is embedded in quality early care and education instruction, 96% of respondents felt that authentic assessment can be easily integrated into daily routines, and 95% believed authentic assessment is imperative for designing instruction for each child.

Eighty-seven percent (87%) of PD providers believed that early care and education service providers struggle with implementing authentic assessment. Fifty-two percent (52%) of PD providers agreed that early educators get the support they need from their director/manager/coach to implement authentic assessment. Twenty-eight percent (28%) of PD providers agreed with the statement “Implementing authentic assessment with fidelity is impossible.”

PD providers were also asked to respond to statements about their own capacity to provide PD on authentic assessment for children from culturally diverse backgrounds, for children who have disabilities, and for children who are English language learners. Seventy-six percent (76%) of providers agreed that they were competent to provide PD on assessment for children with disabilities, 71% for children from culturally diverse backgrounds, and 63% for children who are English language learners.

Challenges to Implementation:

Seventy-nine percent (79%) of PD providers reported that the challenges related to authentic assessment either “somewhat” or “very much” prevented early educators from implementing authentic assessment. Only one of the 68 PD providers said that the challenges did not prevent early educators from implementation.

PD providers were given the same list of 12 challenges to implementation that was given to early educators. The list included: 1) familiarity with authentic assessment; 2) competing priorities; 3) support from management/agency; 4) appropriate professional development opportunities; 5) cost; 6) time to complete observations; 7) time to complete documentation; 8) effective staff who support your practice; 9) knowledge of typical infant/toddler/preschool development; 10) integrating assessment into already established routines and activities; 11) familiarity with developmentally appropriate tools; and 12) sharing assessment information with parents. PD providers were also given the option of listing their own challenges to implementation. Of the 12 challenges listed, the three that were most often chosen by PD providers were: *time to complete documentation* (78%), *time to complete observations* (74%), and *competing priorities* (62%). PD providers were least likely to identify *support from management/agency* (36%) and *knowledge of typical infant/toddler/child development* (28%) as challenges to implementing authentic assessment.

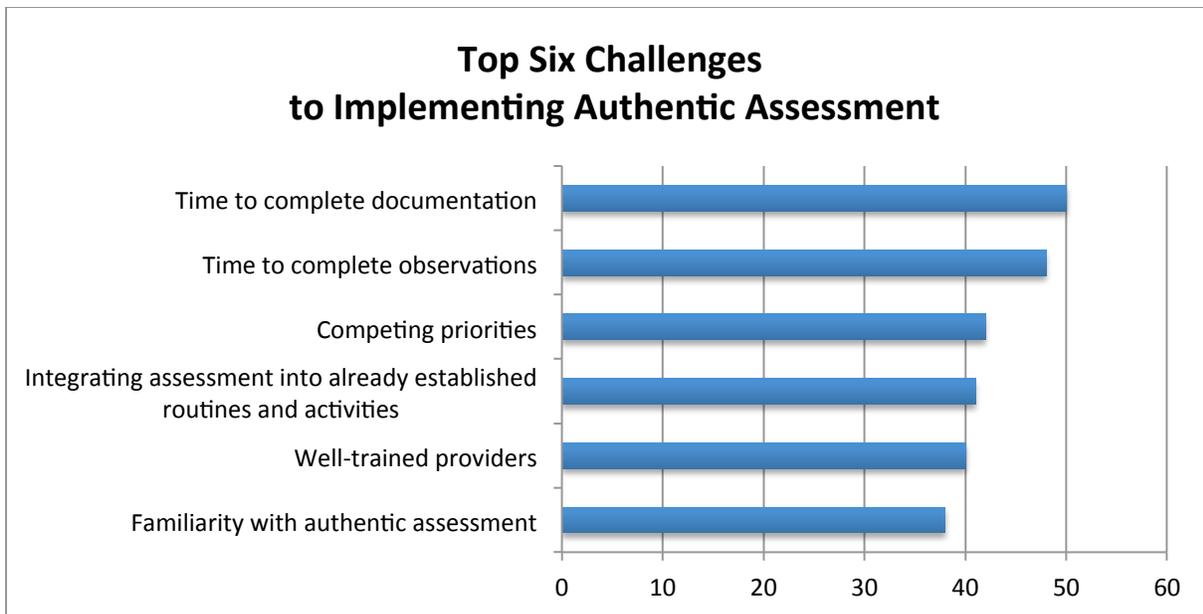


Figure 12: PD provider reports of the challenges to implementation of assessment.

Support Needs:

PD providers were provided a list of eight different methods of support (i.e., onsite support in the form of mentoring/coaching, co-teaching, online materials, video demonstration of specific practices, general principles of assessment, assessment scoring, using assessment data to inform practice, and embedding assessment into daily routines). This list was very similar to the list that was provided on the early educators’ survey. PD providers were initially asked to report the types of support that they provide to early educators. PD providers were then asked what types of support they believed would be most beneficial to early educators.

PD providers stated that they most often provide support in the form of providing specific assessment content on using data to inform practice (62%), onsite support (60%), embedding data into daily routines (57%), and general principles of assessment (56%). Support in the form of co-teaching received the lowest number of responses (19%).

PD providers thought early educators would most benefit from support in the form of onsite support (84%), embedding assessment into daily routines (72%), video demonstrations of specific assessment practices (69%), and using assessment data to inform practice (69%). Online materials (35%) and information on co-teaching (25%) received the lowest number of responses from PD providers. See Appendix G for a complete list of support provided, most beneficial methods of support, and corresponding data.

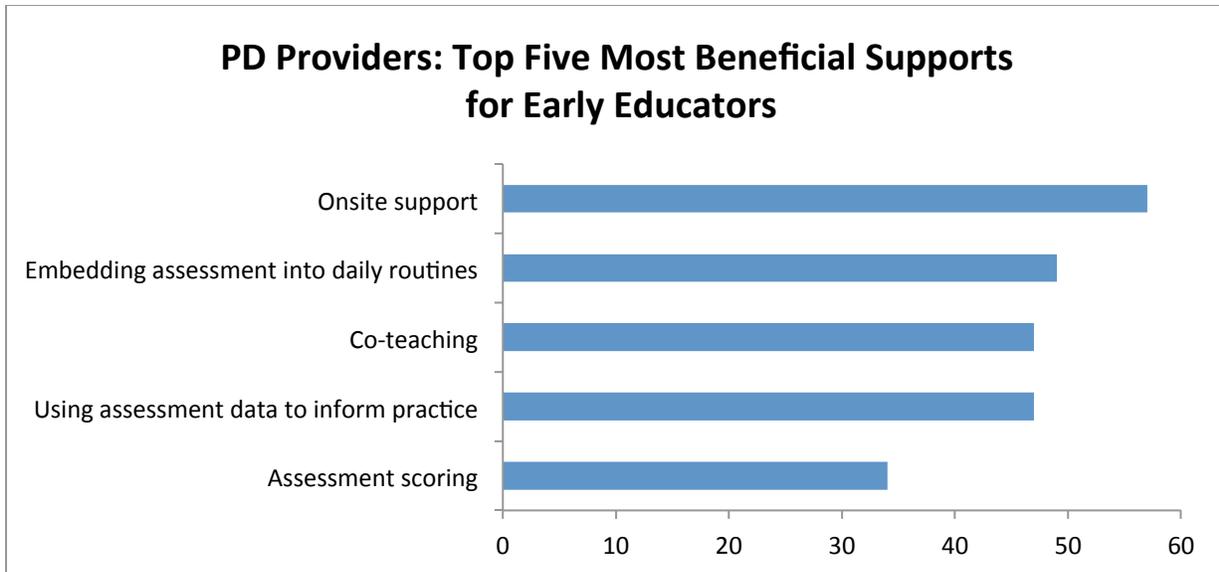


Figure 13: PD provider reports of the most beneficial supports for implementing assessment.

Summary of Themes: Professional Development Providers

Overall, professional development (PD) providers felt competent in their ability to provide training on assessment and assessment-related topics. Providers reported spending an average of 20 hours per year providing training directly on authentic assessment, with nine hours/year being the most common response. Fewer than half indicated that they provide training on the ECIPs and K-12 Common Core State Standards. PD providers identified authentic assessment, developmental assessment, and choosing developmentally appropriate tools as the most important topics on which to train. PD providers also identified time to complete documentation, time to complete observations, competing priorities, and integrating assessment into established routines as the greatest challenges to implementing assessment. Mentoring/coaching, embedding assessment into daily routines, video demonstrations of specific assessment practices, and using assessment data to inform practice were rated by the PD providers as the most needed forms of support for early educators trying to implement authentic assessment. Group comparisons were unable to be analyzed because of the small sample sizes within certain groups.

Group Comparisons: Early Educators and PD Providers

There were clear commonalities among the early educators and the PD providers in their responses to identical questions asked of each group. Both groups were asked to identify the most important assessment training topic and both groups identified the same top three topics: authentic assessment, developmental assessment, and choosing developmentally appropriate tools. Both groups also identified the same four challenges to implementation—time to complete documentation, time to complete observations, competing priorities, and integrating assessment into established routines—in the same order.

Early educators and PD providers acknowledged that the most beneficial assessment support for early educators would be onsite support that includes a mentoring/coaching component, followed by support in the forms of embedding assessment into daily routines, video demonstrations of specific assessment practices, and using assessment data to inform practice.

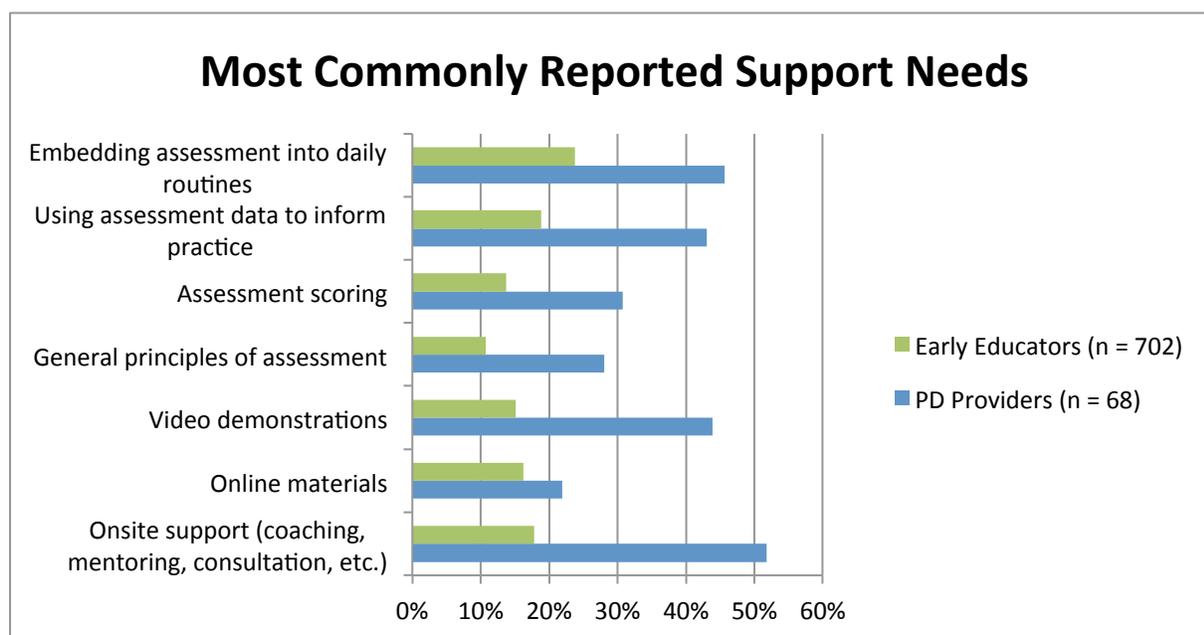


Figure 15: Early educator and PD provider combined report of the support needs for implementing assessment.

There were also similar data reported when the two groups were asked about training received and training offered on the Early Childhood Indicators of Progress and the K-12 Common Core State Standards. Less than half of the PD providers said they often train on the ECIPs and even fewer on the K-12 Common Core State Standards, while less than half the early educators reported using those two documents to inform their assessment practices.

Although more than 80% of the early educators reported feeling competent to conduct assessment and use it in their daily practice, almost 90% of the PD providers felt that educators

struggled with implementing authentic assessment. Both PD providers and early educators reported feeling less competent with training on and conducting assessment with children who are culturally and linguistically diverse and children with disabilities.

Interview Themes

Interviews were conducted with 18 early educators and 11 professional development providers over the period of six weeks. The data were analyzed for major themes. Both early educators as well as PD providers named time as the main source of need and the main challenge to the implementation of authentic assessment. One early educator stated, “When we started doing it [authentic assessment] a lot more regularly, when we were doing the ECIPs and stuff, they all said, boy, this is easier than I thought it was going to be once I figured out a routine to be able to do it and be able to mark it down. But still, it takes a lot of time.”

Both early educators and PD providers identified multiple benefits of implementing authentic assessment, including benefits to the child (e.g., individualized teaching), to the parents (e.g., greater understanding of child’s skills, abilities, and educational needs), and even to themselves (e.g., makes it easier to determine the focus of training and teaching, aids in supporting children in a developmentally appropriate manner, etc.).

Additional themes common among both groups of interviewees was the lack of available training for and the lack of knowledge and skills by early educators on authentic assessment. Both PD providers and early educators cited these two issues as major reasons why authentic assessment is not implemented with fidelity. An early educator stated, “I just don’t think they’ve [supervisors] always done the best job in defining it ([authentic assessment]) and making it user-friendly and understandable to staff and why we’re doing what we’re doing instead of, I think staff just felt like, oh, this is what you have to do, but we don’t know why we’re doing it.”

Early educators and PD providers both gave specific examples of how the combination of training and follow-up mentoring/coaching was the most influential in their ability to implement authentic assessment with fidelity. That combination was also instrumental in creating the “buy-in” necessary for educators to see how authentic assessment can benefit the child, the family, and their own educational practices. They also offered specific strategies for embedding authentic assessment into daily practice, such as using post-it notes during the day, assigning specific times for conducting observations, using the ECIPs as a guide, and collaborating with others to find more efficient, effective assessment practices.

Overall, the interview data served to enhance and support the findings from the surveys. These data gave specific examples of what training and support needs early educators have around authentic assessment, detailed strategies for implementation, and more precise descriptions of the challenges to implementation.

Discussion

Overall, the results obtained from early educators and PD providers are a reflection of what exists within the early childhood assessment literature related to early educator assessment

knowledge and use. Early educators still report struggling with the fundamental requirements of ongoing assessment, including embedding assessment into daily practice, data collection and analysis and how to use those data to influence classroom practices and learning. Early educators also report using assessment practices in unsystematic ways (Banerjee & Luckner, 2013; McNair, Bhargava, Adams, Edgerton & Kypros, 2003, NRC, 2008; Pretti-Frontzak, Kowalski, & Brown, 2002). There were also more similarities between the early educator and PD provider groups than there were differences. Due to the rapid development that occurs in early childhood, assessments should be repeated often and documented systematically in order to better inform curricular and instructional decisions. Yet a majority of both early educators and professional development providers reported finding time to observe and document assessment as two of the most challenging aspects of implementing authentic assessment. The data also demonstrate that both early educators and PD providers felt similarly about what training and supports are the most important in order to implement assessment, no matter what the early care environment may be. Specifically, they identified the need for onsite consultation/coaching/mentoring. These findings are evidence that there is an opportunity to eliminate the consistently-identified barriers and to develop a well-defined, ongoing support system in order to implement assessment within the early care and education community. These findings also point toward a need to delve more deeply into how best to provide access to support and if there is a model of support best suited for implementing authentic assessment.

It is apparent that different early educators have different training experiences, requirements, and available supports when it comes to implementing authentic assessment. The comparisons within the early educators, primarily by employer type, showed significant differences among those who completed the survey. Specifically, there were employer type differences in perceptions of assessment competency, incorporating assessment into daily routines, the extent to which the challenges of assessment prevent its implementation, and requests for support. Family childcare providers reported greater feelings of assessment competency than their early education counterparts. Family childcare providers were also much less likely to be required to complete assessment and therefore may not have had as much training on or experience with the topic. They also may not completely understand the complexity and comprehensiveness of implementing authentic assessment on a daily basis. Head Start providers were more likely to ask for support than other educators, which may attest to the support Head Start has onsite as well as via their federally-funded training and technical assistance centers. There was also a difference in perceptions of assessment competency by levels of education. As educators gain more insight into implementing authentic assessment with fidelity and the number of daily practices required of them, it is likely that they feel less competent to complete assessments on each and every child within their care. These group differences give credence to providing a diversity of training opportunities and available assessment supports.

Training information provided by both early educators and PD providers brings up questions about early educators' access to quality authentic assessment information. The PD providers reported that, on average, they provide training on assessment-related topics 20 hours per year. These same providers identified the assessment-related topics on which they train, with social-emotional development identified as the topic most often shared in training. Approximately half of the PD providers reported offering training on topics most directly related to assessment such as data collection, using assessment data in practice, and authentic assessment. It is difficult to

ascertain whether PD providers offer sufficient amounts of authentic assessment training, the quality of the trainings offered, and if they tend to train on the same assessment-related topics (e.g., observation, typical child development) or give equal time to more complex assessment practices (e.g., embedding assessment into daily routines, using data to make decisions). Identifying the access early educators have to quality and advanced assessment training, as well as the support that PD providers receive to offer comprehensive assessment training can guide the development of a more comprehensive authentic assessment system. Greater access to quality information and training is fundamental to early educators building their own capacity to implement authentic assessment. The issue of access will be further explored by conducting interviews with PD providers throughout the state.

Although PD providers listed training on the ECIPs as one of the most important assessment training topics, only 37% of the PD providers reported that they often train on the ECIPs and 12% reported never providing training on the ECIPs. As the ECIPs are meant to support early educators in conducting authentic assessments, there is a need to support both early educators and PD providers in the content of the ECIPs as well as how the document can be used within practice.

For one of the first times, the perspectives of family childcare providers were included within an assessment study. Interestingly, the greatest response to the survey came from family childcare providers. The majority of family childcare providers reported not being required to conduct assessment, and yet, almost 40% of the providers reported that assessment is part of their practice.

Three specific occurrences within the data may point to larger issues in the field of early care and education when attempting to implement authentic assessment. One concern was that several educators listed screening tools or educational initiatives (e.g., RTI, TACSEI, etc.) as the assessment tools they use in practices. Although PD providers reported that they train on developmentally-appropriate tools, there is still a need to distinguish the difference between screening tools, educational initiatives, and actual assessment tools. Without this distinction, early educators may think that they are conducting assessment and feel competent about their assessment practices, when they are actually screening children rather than assessing them to inform practice. Another concern was that more than 80% of the early educators reported feeling competent with authentic assessment, while at the same time 60% of the same group of educators reported that the challenges related to authentic assessment either “somewhat” or “very much” prevented them from implementation. It may be that educators feel competent and yet believe that the challenges make full implementation extremely difficult or it also could be that educators feel competent with implementing parts of authentic assessment (e.g., observation) and yet do not implement the parts they feel make it difficult to implement (e.g., embedding assessment into daily routines or using data to inform practice). It also may be that if and when programs change from one assessment tool to another, the staff feel confident in their assessment abilities, but want more training on the specific tool being implemented. Also of concern is how to support early educators in putting their knowledge of authentic assessment into practice. Early educators reported that they had received training within the last year on fundamental assessment topics and yet fewer educators reported using that knowledge in practice. Having concrete examples of how to conduct authentic assessment within the child’s natural environment, no matter the assessment tool being used, may be one of the best ways to build educators’ assessment capacity.

The results of this study generate even more questions regarding authentic assessment training and practices within Minnesota. For instance, what constitutes “basic use” of authentic assessment? Does basic use mean that the educator is conducting comprehensive authentic assessment on one child? Or does it mean that the educator is able to embed parts of authentic assessment for all children? Also, what can be categorized as “higher order” or more sophisticated authentic assessment training and who makes that determination? It will be important to know exactly what training currently exists within the state and for whom it was originally developed. Is it basic/fundamental information or is it more sophisticated? How often are trainings offered and through what training method (e.g., in-person, online, etc.)? What training follow-up is provided to early educators?

Recommendations

There are many different recommendations that can be made, based on the survey and interview data. While most of the have been sorted into two categories: training and supports, two additional points deserve mention. One is the opportunity to gather information regarding training and use related to authentic assessment once the infrastructure is in place. We recommend exploring how the MN Center for Professional Development Registry could be used to track the scope and frequency of trainings offered and taken. We also recommend linking the trainings to the Parent Aware indicators and other markers to gauge the extent to which the opportunities for using authentic assessment are or are not being used, and adjust accordingly. A second recommendation is to consider recruitment for the trainings. While there is a sense that early educators would like to learn more about authentic assessment, it is also the case that a substantial portion are not required to conduct authentic assessment or did not understand clearly the purpose and use. This may affect the uptake of trainings on authentic assessment.

Training

1. Early educators reported receiving the majority of their training through onsite workshops/institutes. Data support providing a hybrid of training options (e.g., onsite, online, video, etc.).
2. There is a need to identify what assessment training currently exists within the state, the quality of that training, how and how often that training can be accessed, and by whom. Trainings covering all key aspects of authentic assessment need to be accessible and marketed to all early educators, especially to those who may not have the resources or access to typical training methods (e.g., colleges/universities, workshops and institutes).
3. Although many of the survey respondents reported receiving training on the foundations of authentic assessment (i.e., observations, use of data, etc.), there were equally as many who reported wanting even more training on those same topics.
4. Respondents clearly identified having knowledge and experience with observation and wanting more, higher-order training on embedding assessment within daily practice, analyzing assessment data, and then using those data to make decisions about programming for the children they serve.

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5. Regardless of the employment type, all early educators indicated wanting specific, concrete examples of what authentic assessment looks like and how to build it into the daily routines within their individual work environments. A majority reported wanting video examples on how to conduct assessment within the natural environment.
 6. There is a need to deliver content to both early educators and PD providers on the Early Childhood Indicators of Progress and the K-12 Common Core State Standards. Content is also needed on how those documents can support early educators in conducting authentic assessments.

Supports

1. A majority of educators said they rarely or never seek out support for authentic assessment. We are unable to ascertain the reason why they are not accessing support; whether it is unavailable to them or because they choose not to access the supports available is unclear. That being said, they (particularly center-and-school-based providers) also said that they want support, especially in the form of onsite consultation/coaching/mentoring, using assessment data to inform practice, and embedding data into daily routines.
2. PD providers and early educators did agree on the supports that they believed would be most beneficial for early educators: onsite support with a mentoring/coaching component, support for embedding assessment into daily routines, video demonstrations of specific assessment practices, and how to use assessment data to inform practice. The developed trainings either need to include this information and/or include the requested support (i.e., video examples).

Strengths and Limitations of the Study

Many efforts were taken to develop surveys and interview protocols that were clear and concise and included the necessary items to answer the research questions outlined above. For example, item development was guided by previous surveys with similar content and goals, as well as from a review of the current literature on authentic assessment. Prior to dissemination, both surveys and both interviews were reviewed multiple times by an internal review board at the Center for Early Education and Development (CEED), and after revisions were made, the surveys and interview protocols were sent to representatives from the identified stakeholder groups for additional feedback and revisions.

Representatives from the various stakeholder groups were also involved in the dissemination process in order to reach as many of their constituents as possible. For the surveys, multiple emails were sent to constituents in phases throughout the summer in order to increase the likelihood that respondents would participate. The surveys were originally sent out in early May, with a reminder to complete the survey going out two weeks later. The surveys were again sent out to the constituents in September because of lower than expected responses. It may have been that responses were lower than expected because survey dissemination coincided closely with

both the end and the beginning of the school years. The government sequestration also forced many Head Start programs within the state to close earlier than usual. It is possible that the dissemination timing contributed to the limited response from this constituency group in particular.

Although response rates for the surveys were lower than expected, the fact that this study includes providers from family childcare, center-based childcare, and Head Start along with those providers who are based in school settings provides a much clearer picture of the state of assessment practices within Minnesota. The follow-up interviews included educators from each of these employers, as well as PD providers, and provided an even more detailed, complete picture of assessment practices within the state.

Despite efforts to minimize the time and effort needed to complete the survey, fewer than half the respondents completed the survey and provided their demographic information, which limited some of the analyses conducted. The authors are unsure of why respondents did not complete the demographic portion of the survey; however it can be noted that this also happened in another recent study of early childhood assessment practices (see Banerjee & Luckner, 2013). Evidence of survey fatigue is also apparent as the number of responses per question systematically decreased as the survey progressed. Because many of the key research questions involve comparing groups, lack of demographic information for such a large number of respondents limits many of the analyses to only those surveys with complete demographic information. Because the survey links were sent en masse, we were unable to ascertain any trends or specific commonalities among those educators and PD providers who only partially completed the surveys.

Efforts to ensure a representative sample of both early educators and professional development providers did not yield the desired sample. Although it may appear that white females are overrepresented within the sample, these data are almost identical to those found in the Wilder report on the Childcare Workforce within Minnesota (Valorose & Chase, 2012). Even though surveys were translated into Spanish and Somali, only six Spanish early educator surveys were completed and none of the Somali surveys were completed. Additional attempts to reach providers of color (e.g., attending trainings that targeted providers of color, providing the translated surveys on paper and online, reaching out to leaders in communities of color, etc.) were unsuccessful. Although it is possible that the lack of responses from practitioners of color were due to the complexity of the survey or because they are not conducting authentic assessment in their settings, it is also possible that this form of information gathering does not take into consideration cultural differences in preferred methods of information sharing. As a result, we will be conducting interviews with early educators and trainers of color prior to developing the modules.

References

- Allen, S. F. (2007). Assessing the development of young children in child care: A survey of formal assessment practices in one State. *Early Childhood Education Journal*, 34, 455-465.
- Bagnato, S. J., Neisworth, J. T., & Pretti-Frontczak, K. (2010). *LINKing authentic assessment and early childhood intervention: Best measures for best practices*. Paul H. Brookes Publishing Company.
- Bagnato, S. J., & Yeh-Ho, H. (2006). High-stakes testing with preschool children: Violation of professional standards for evidence-based practice in early childhood intervention. *KEDI International Journal of Educational Policy*, 3(1), 23-43.
- Banerjee, R., & Luckner, J. L. (2013). Assessment Practices and Training Needs of Early Childhood Professionals. *Journal of Early Childhood Teacher Education*, 34(3), 231-248.
- Brink, M. (2002). Involving parents in early childhood assessment: Perspectives from an early intervention instructor. *Early Childhood Education Journal*, 29, 251-257.
- Buysse, V., Hollingsworth, H., & West, T. (2011). *The Landscape: A statewide survey for providers of professional development in early childhood*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, NPDCI.
- Division for Early Childhood. (2007). *Promoting positive outcomes for children with disabilities: Recommendations for curriculum, assessment, and program evaluation*. Missoula, MT.

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- Grisham-Brown, J. L., Hallam, R., & Brookshire, R. (2006). Using authentic assessment to evidence children's progress towards early learning standards. *Early Childhood Education Journal*, 34, 47–53.
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).
- Keilty, B., LaRocco, D. J., & Cassell, F. B. (2009). Early interventionists' reports of authentic assessment methods through focus group research. *Topics in Early Childhood Special Education*, 28, 244-256.
- McNair, S., Bhargava, A., Adams, L., Edgerton, S., & Kypros, B. (2003). Teachers speak out on assessment practices. *Early Childhood Education Journal*, 31(1), 23-31.
- Mitchell A. W. (2005). Success Stories: State Investment in Early Care and Education in Illinois, North Carolina and Rhode Island. Raleigh, NC: Smart Start's National Technical Assistance Center. Retrieved on July 18, 2013 from http://www.earlychildhoodfinance.org/downloads/2005/MitchStairSteps_2005.pdf
- National Research Council. (2008). *Early childhood assessment: Why, what and how*. Committee on Developmental Outcomes and Assessments for Young Children. C.E. Snow and S.B. Van Hemel (Eds.). Board on Children, Youth, and Families, Board on Testing and Assessment, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Notari-Syverson, A., Losardo, A., & Lim, Y. S. (2003). Assessment of young children from culturally diverse backgrounds: A journey in progress. *Assessment for Effective Intervention*, 29, 39-51.

Schultz, T. Screening and assessment in Head Start. (2000). Retrieved on June 11, 2013 from

<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/assessment/screening/screeningandass.htm#scr>

Susman-Stillman, A., Bailey, A. E., & Webb, C. (2014). *Brief scan of authentic assessment coursework and professional development offerings in Minnesota during 2013*. St. Paul, MN: University of Minnesota.

Think Small. Types of care. (2014) Retrieved on April 18, 2013 from

http://www.thinksmall.org/for_parents_and_guardians/types_of_care

U.S. Department of Education & U.S. Department of Health and Human Services. (2013, August). *Race to the top—Early Learning Challenge Executive Summary* (pp. 1-30). Washington, DC.

Wat, A., Bruner, C., Hanus, A., Scott-Little, C., & Schultz, T. (2011). *Kindergarten Entry Assessment: Race to the Top – Early Learning Challenge Fund Information* (pp. 1–16). Boston.

Appendix A1

Early Educator Survey

Early Educator Survey

Thank you for taking the time to complete this survey on early care and education training on assessment related to instruction. The survey is part of the MN Race to the Top: Early Learning Challenge research. We are interested in your knowledge and experience as an early care and education provider within Minnesota. The survey takes approximately 10 minutes to complete. Even if you do not work on assessment, we would appreciate you taking the time to complete the survey.¹

This survey is being distributed by multiple agencies and programs. **Please complete the survey one time only.**

Authentic assessment (Bagnato & Yeh Ho, 2006) includes:

- a. systematic recording of developmental observations;
- b. data collected over time;
- c. naturally occurring behaviors and functional competencies of young children;
- d. focusing on children in their natural environments and during daily routines; and
- e. observations that are made by familiar and knowledgeable caregivers in the child's life.

Professional development can be defined as: Both formal and informal delivery of quality adult learning experiences that equips practitioners with the knowledge, competencies, skills, tools, and confidence needed to effectively work with children and families in early childcare and early education settings (Minnesota Center for Professional Development, 2013).

Experience/Opportunities:

1. Within the last year, how many professional development events (e.g., onsite training, online training, workshops, etc.) did you attend?
2. Within the past year, how many times have you participated in each of the following approaches to professional development?
(Responses: 0 1-2 3-5 6-9 10 or more)
 - a. ___ Onsite classes for credit
 - b. ___ Online classes for credit

¹ Some questions within this survey were modeled on questions developed for the Landscape Survey. Buysse, V., Hollingsworth, H., & West, T. (2011). *The Landscape: A statewide survey for providers of professional development in early childhood*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, NPDCI.

- c. ___ Workshops/Institutes on specific topics
- d. ___ Onsite staff training
- e. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- f. ___ Communities of practice or practitioner study groups
- g. ___ Other: Please specify.

3. Which professional development method do you use most often?

4. Please indicate whether you 1) attended PD on that topic *within the last year*, 2) are using that information in practice and/or 3) want/need more information on that topic. (check all that apply)

	Attended	Use in Practice	Need/Want
a. Assessment related to instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Assessment related to the classroom environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Authentic assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Choosing developmentally-appropriate assessment tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Collecting assessment information/data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Early care and education curricula	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Early Childhood Indicators of Progress (ECIPs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Early-literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Early-numeracy/math	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Engaging and communicating with families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Quality early care and education programming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Social-emotional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- m. Typical child and/or infant development
- n. Using assessment data in practice
- o. Using data to inform decision-making
- p. Working with children with special needs
- q. Other: Please specify.

5. Within the last year, how many times have you attended professional development opportunities specifically on authentic assessment?
6. Please list any advanced training topics that would continue to support your skills in authentic assessment.
7. Please list all of the authentic assessment tools on which you have received professional development: Creative Curriculum Assessment Tool Kit, HighScope Infant/Toddler COR, High/Scope Preschool COR, The InvestiGator Club, Open the World of Learning (OWL), The Ounce Scale, Teaching Strategies Gold (TS-Gold), Work Sampling (WSS), Brigance Inventory of Early Development II, Assessment Evaluation and Programming System (AEPS), Other). Other: Please specify. None of the above
8. Which authentic assessment tool(s) are you currently using within your program? If you are not using any at this time, please write “None” in the text box.

Current Implementation:

9. During professional development on assessment, were the following topics covered? (yes/no)
 - a. Purpose and use of assessment
 - b. Strategies for gathering, documenting, and using assessment data
 - c. Using assessment data in programming (e.g., lesson plans, daily routines, etc.)
 - d. Observation
 - e. Involving parents in the assessment process
 - f. Assessing children who are culturally/linguistically diverse
 - g. Assessing children with disabilities

- h. Communicating results of assessment with parents
- i. Determining the functions of a child's behavior
- j. Developmental milestones

10. How many hours do you currently spend on the following authentic assessments topics per week? (Responses 0, 1-2, 3-5, 6-9, 10 or more)

- a. Gathering data/Observation
- b. Documenting/Inputting data
- c. Data analyses
- d. Using assessment data in programming (e.g., lesson plans, daily routines, etc.)
- e. Involving parents in the assessment process
- f. Assessing children who are culturally/linguistically diverse
- g. Assessing children with disabilities
- h. Communicating results of assessment with parents
- i. Determining the functions of a child's behavior

11. How often do you observe children in the natural environment for the purposes of assessment?

- a. ___ Never
- b. ___ 1-2 times per day
- c. ___ 3-5 times per day
- d. ___ 6+ times per day

12. Please respond to each of the following: Strongly Agree, Agree, Disagree, Strongly Disagree

- a. I believe I am competent conducting authentic assessment.

- b. I believe I incorporate assessment into daily practice.

Alignment:

13. How familiar are you with Minnesota’s Early Childhood Indicators of Progress (ECIPs)? (SKIP to Q4 IF ANSWER IS ‘A’)

- a. ___ Not at all familiar
- b. ___ Somewhat familiar
- c. ___ Familiar
- d. ___ Very familiar

14. How important are the Minnesota’s ECIPs when planning instruction?

- a. ___ Very important
- b. ___ Important
- c. ___ Somewhat important
- d. ___ Not at all important

15. How often do the MN ECIPs guide your assessment practices?

- a. ___ Never
- b. ___ Rarely
- c. ___ Sometimes
- d. ___ Often

16. How familiar are you with the K-12 Core Learning Standards? (SKIP to Q1 Cultural Sensitivity IF ANSWER IS ‘A’)

- a. ___ Not at all familiar
- b. ___ Somewhat familiar
- c. ___ Familiar

d. ___ Very familiar

17. How important are the K-12 Core Learning Standards when planning instruction?

a. ___ Very important

b. ___ Important

c. ___ Somewhat important

d. ___ Not at all important

18. How often do the K-12 Core Learning Standards guide your assessment practices?

a. ___ Never

b. ___ Rarely

c. ___ Some of the time

d. ___ All of the time

Cultural Sensitivity/Diversity:

19. How often has information on cultural sensitivity/diversity been included in the professional development you've received on authentic assessment?

a. ___ Never

b. ___ Rarely

c. ___ Sometimes

d. ___ Often

20. Please respond to each of the following: Strongly Agree, Agree, Disagree, Strongly Disagree

a. I believe I am competent conducting authentic assessments for children from culturally diverse backgrounds.

- b. I believe I am competent conducting authentic assessments for children with disabilities.
- c. I believe I am competent conducting authentic assessments for children who are English Language Learners.

Challenges:

21. Which of the following do you perceive as challenges to implementing authentic assessment into programming? (Check all that apply.)

- a. Familiarity with authentic assessment
- b. Competing priorities
- c. Support from management/agency
- d. Appropriate professional development opportunities
- e. Cost
- f. Time to complete observations
- g. Time to complete documentation
- h. Effective staff who support your practice
- i. Knowledge of typical infant/toddler/preschool development
- j. Integrating assessment into already established routines and activities
- k. Familiarity with developmentally appropriate tools
- l. Sharing assessment information with parents
- m. Other: Please specify.

22. Please rank order the **top five (5)** challenges to implementing assessment by clicking and dragging the most challenging area to the top of the list.

23. To what extent do you think the challenges prevent you from conducting ongoing authentic assessment?

- a. Not at all
- b. A Little
- c. Somewhat
- d. Very Much

Support Needs:

24. I am required to conduct ongoing authentic assessment. Yes/No. If no, skip logic to Question 6.

25. What kind(s) of support or assistance do you need related to authentic assessment?

- a. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- b. ___ Online materials
- c. ___ Video demonstrations of specific practices
- d. ___ How to share assessment information with parents
- e. ___ Leadership support (director, manager, agency, etc.)
- f. ___ Specific assessment content: General principles of assessment
- g. ___ Specific assessment content: Assessment scoring
- h. ___ Specific assessment content: Using assessment data to inform practice
- i. ___ Specific assessment content: Embedding assessment into daily routines
- j. ___ Other: Please specify.
- k. ___ None of the above

26. What kind(s) of support or assistance have you received? (Check all that apply.)

- a. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- b. ___ Online materials

- c. ___ Video demonstrations of specific practices
- d. ___ How to share assessment information with parents
- e. ___ Leadership support (director, manager, agency, etc.)
- f. ___ Specific assessment content: General principles of assessment
- g. ___ Specific assessment content: Assessment scoring
- h. ___ Specific assessment content: Using assessment data to inform practice
- i. ___ Specific assessment content: Embedding assessment into daily routines
- j. ___ Other: Please specify.
- k. ___ None of the above

27. What kind(s) of follow-up support or assistance do you think would be most beneficial to you?

- a. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- b. ___ Online materials
- c. ___ Video demonstrations of specific practices
- d. ___ How to share assessment information with parents
- e. ___ Leadership support (director, manager, agency, etc.)
- f. ___ Specific assessment content: General principles of assessment
- g. ___ Specific assessment content: Assessment scoring
- h. ___ Specific assessment content: Using assessment data to inform practice
- i. ___ Specific assessment content: Embedding assessment into daily routines
- j. ___ Other: Please specify.

k. ___ None of the above

28. How often have you sought out support for authentic assessment assistance?

a. ___ Never

b. ___ Rarely

c. ___ Sometimes

d. ___ Often

29. How important is training on the following topics?

V Important

Important

Somewhat

Not at All

a. Authentic assessment

b. Developmental assessment

c. Choosing developmentally-appropriate assessment tools

d. Collecting assessment information/data

e. Early Childhood Indicators of Progress (ECIPs)

f. Early-literacy

g. Early-numeracy/math

h. Engaging and communicating with families

i. Quality early care and education programming

j. Social-emotional development

k. Typical child and/or infant development

l. Working with children with special needs

30. Please rank the five (5) most important training topics by clicking and dragging the most important topic to the top of the list.

Perceptions: Strongly Agree, Agree, Disagree, Strongly Disagree

- a. Authentic assessment is embedded in quality early care and education instruction.
- b. Authentic assessment can be easily integrated into daily routines.
- c. Authentic assessment is imperative to designing instruction for each child.
- d. Implementing authentic assessment with fidelity is impossible.
- e. I get the support I need from my director/manager/coach to implement authentic assessment.
- f. My agency/organization supports practicing authentic assessment.

Demographics:

You only have a few more questions left to complete. The next few questions are about you.

31. I am: Male/Female Button

32. What is your age? (Drop-down box)

33. What is your ethnicity?

- a. ___ Hispanic or Latino (Landscape includes Spanish)
- b. ___ Not Hispanic or Latino

34. What is your race?

- a. ___ American Indian or Alaska Native
- b. ___ Asian
- c. ___ Black or African American

- d. ___ Native Hawaiian or Other Pacific Islander
- e. ___ White
- f. ___ Multiracial:

35. What is your highest level of education completed?

- a. ___ High school
- b. ___ Some college
- c. ___ Associate of Arts degree
- d. ___ Bachelor of Arts or Science
- e. ___ Post graduate degree

36. In what type of community is your program/agency located?

- a. ___ Urban area
- b. ___ Sub-urban area
- c. ___ Rural area

37. How many years have you worked as an early childhood service provider?

38. Who is your primary employer?

- a. ___ Family Childcare
- b. ___ Center-based Childcare
- c. ___ Head Start
- d. ___ Early Childhood Special Education (ECSE)
- e. ___ Early Childhood Family Education (ECFE)

- f. ___ School Readiness
- g. ___ Other: Specify _____

39. To which of the following professional organizations do you belong?

- a. ___ Division of Early Childhood (DEC)
- b. ___ MNAEYC (Minnesota Association for the Education of Young Children)
- c. ___ MLFCCA (Minnesota Licensed Family Child Care Association)
- d. ___ MNAFEE (Minnesota Association for Family and Early Education)
- e. ___ Other: Specify _____

Thank you for completing this survey. As a follow-up to this survey, we will be conducting to interviews to gain further knowledge about training on authentic assessment, including gathering information on potential gaps in assessment training content in order to develop quality assessment training modules. If you would be willing to be interviewed in the future, please click on the following link. Your contact information will not be connected to your survey responses.

40. Contact information

- a. Name: _____
- b. Email: _____
- c. Phone: _____

Appendix A2

Professional Development Provider Survey

Professional Development Provider Survey

Thank you for taking the time to complete this survey on early care and education training on assessment related to instruction. The survey is part of the MN Race to the Top: Early Learning Challenge research. We are interested in your knowledge and experience as an early care and education provider within Minnesota. The survey takes approximately 20 minutes to complete. Even if you do not work on assessment, we would appreciate you taking the time to complete the survey.²

*This survey is being distributed by multiple agencies and programs. **Please complete the survey one time only.***

- a. **Authentic assessment** (Bagnato & Yeh Ho, 2006) includes: systematic recording of developmental observations;
- b. data collected over time;
- c. naturally occurring behaviors and functional competencies of young children;
- d. focusing on children in their natural environments and during daily routines; and
- e. observations that are made by familiar and knowledgeable caregivers in the child's life.

Professional development can be defined as: Both formal and informal delivery of quality adult learning experiences that equips practitioners with the knowledge, competencies, skills, tools, and confidence needed to effectively work with children and families in early childcare and early education settings.

Experience/Opportunities:

1. Within a typical year, how many days do you provide professional development?
2. Which of the following approaches to professional development do you most often use? (check all that apply)
 - a. ___ Onsite classes for credit
 - b. ___ Online classes for credit

² Some questions within this survey were modeled on questions developed for the Landscape Survey. Buysse, V., Hollingsworth, H., & West, T. (2011). *The Landscape: A statewide survey for providers of professional development in early childhood*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, NPDCI.

- c. ___ Workshops/Institutes on specific topics
- d. ___ Onsite support (including coaching, mentoring, consultation, technical assistance, etc.)
- e. ___ Communities of practice or practitioner study groups
- f. ___ Other: Please specify. _____

3. On which of the following topics do you provide professional development? (check all that apply)

- a. Assessment related to classroom environment
- b. Assessment related to instruction
- c. Authentic assessment
- d. Choosing developmentally-appropriate assessment tools
- e. Collecting assessment information/data
- f. Early care and education curricula
- g. Early Childhood Indicators of Progress (ECIPs)
- h. Early-literacy
- i. Early-numeracy/math
- j. Engaging and communicating with families
- k. Quality early care and education programming
- l. Social-emotional development
- m. Typical infant and/or child development
- n. Using assessment data in practice

- o. Using data to inform decision-making
 - p. Working with children with special needs
 - q. Other: Please specify.
4. Within a typical year, how many days do you provide professional development opportunities specifically on authentic assessment?
- a. Less than once per month
 - b. 1-2 times per month
 - c. 3-5 times per month
 - d. More than 5 times per month
5. Within a typical year, how many hours do you spend directly covering authentic assessment in your professional development?
(Reponses: 0-100)
6. Please list any advanced training topics that you believe would benefit the early care and education community.
7. Please list all of the authentic assessment tools on which you provide professional development.

Current Implementation:

8. Specifically related to assessment, on which strategies do you provide professional development? (Check all that apply)
- a. Purpose and use of assessment
 - b. Strategies for gathering, documenting, and using assessment data
 - c. Using assessment data in programming (e.g., lesson plans, daily routines, etc.)
 - d. Observation
 - e. Involving parents in the assessment process
 - f. Using assessment with children who are culturally/linguistically diverse
 - g. Using assessment with children who have disabilities
 - h. Communicating results of assessment with parents

- i. Determining the function of a child's behavior
- j. Child development
- k. Early childhood indicators of progress/Developmental milestones

Alignment:

9. How familiar are you with Minnesota's Early Childhood Indicators of Progress (ECIPs)?

- a. ___ Not familiar at all
- b. ___ Somewhat familiar
- c. ___ Familiar
- d. ___ Very familiar

10. How often do you provide professional development on the MN ECIPs?

- a. ___ Never
- b. ___ Rarely
- c. ___ Sometimes
- d. ___ Often

11. How familiar are you with the K-12 Core Learning Standards?

- a. ___ Not familiar at all
- b. ___ Somewhat familiar
- c. ___ Familiar
- d. ___ Very familiar

12. How often do you provide professional development on the K-12 Core Learning Standards?

- a. ___ Never
- b. ___ Rarely
- c. ___ Sometimes
- d. ___ Often

Cultural Sensitivity/Diversity:

13. Please respond to each of the following: Disagree, Somewhat disagree, Somewhat agree, Agree
- a. I believe I am competent providing professional development on authentic assessments for children from culturally diverse backgrounds.
 - b. I believe I am competent providing professional development on authentic assessments for children with disabilities.
 - c. I believe I am competent providing professional development on authentic assessments for children who are English Language Learners.

Challenges:

14. Which of the following do you perceive as challenges to implementing authentic assessment into programming? (Check all that apply.)
- a. Familiarity with authentic assessment
 - b. Well-trained providers
 - c. Competing priorities
 - d. Support from management/agency
 - e. Appropriate professional development opportunities
 - f. Cost
 - g. Time to complete observations
 - h. Time to complete documentation

- i. Effective staff who support provider practice
- j. Knowledge of typical infant/toddler/preschool development
- k. Integrating assessment into already established routines and activities
- l. Familiarity with developmentally appropriate tools
- m. Sharing assessment information with parents
- n. Other: Please specify.

15. To what extent do you think the challenges prevent practitioners from implementing authentic assessment?

- a. Not at all
- b. A Little
- c. Somewhat
- d. Very Much

Support Needs:

16. As a professional development provider, what kind(s) of support or assistance *do you provide?* (Check all that apply.)

- a. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- b. ___ Co-teaching
- c. ___ Online materials
- d. ___ Video demonstrations of specific practices
- e. ___ Specific assessment content: General principles of assessment
- f. ___ Specific assessment content: Assessment scoring
- g. ___ Specific assessment content: Using assessment data to inform practice
- h. ___ Specific assessment content: Embedding assessment into daily routines
- i. ___ Other: Please specify.

j. ___ None of the above

17. As a professional development provider, what kind(s) of support or assistance do you think would be most beneficial for practitioners?

- a. ___ Onsite support (including coaching, mentoring, consultation, etc.)
- b. ___ Specific assessment content: General principles of assessment
- c. ___ Specific assessment content: Assessment scoring
- d. ___ Specific assessment content: Using assessment data to inform practice
- e. ___ Specific assessment content: Embedding assessment into daily routines
- f. ___ Online materials
- g. ___ Video demonstrations of specific practices
- h. ___ Other: Please specify.
- i. ___ None of the above

18. How often do early care and education service providers seek out your support for assessment assistance?

- a. ___ Never
- b. ___ Rarely
- c. ___ Sometimes
- d. ___ Often

Perceptions:

19. Please respond to each of the following: Disagree, Somewhat disagree, Somewhat agree, Agree

- a. Authentic assessment is embedded in quality early care and education instruction.
- b. Authentic assessment can be easily integrated into daily routines.

- c. Authentic assessment is imperative for designing instruction for each child.
- d. Implementing authentic assessment with fidelity is impossible.
- e. Early care and education service providers struggle with implementing authentic assessment.
- f. Providers get the support they need from their director/manager/coach to implement authentic assessment.

20. Please rank the **five (5)** most important training topics by clicking and dragging the most important training topic to the top of the list.

- a. Authentic assessment
- b. Developmental assessment
- c. Choosing developmentally-appropriate assessment tools
- d. Collecting assessment information/data
- e. Early Childhood Indicators of Progress (ECIPs)
- f. Early-literacy
- g. Early-numeracy/math
- h. Engaging and communicating with families
- i. Quality early care and education programming
- j. Social-emotional development
- k. Typical child and/or infant development
- l. Working with children with special needs

Demographics: Just a few more questions about you

You only have a few more questions left to complete. The next few questions are about you.

- 1. I am: Male/Female

2. What is your age? (Responses: 18-80+)
3. What is your ethnicity?
 - a. ___ Hispanic or Latino (Landscape includes Spanish)
 - b. ___ Not Hispanic or Latino

What is your race?

- a. ___ American Indian or Alaska Native
 - b. ___ Asian
 - c. ___ Black or African American
 - d. ___ Native Hawaiian or Other Pacific Islander
 - e. ___ White
 - f. ___ Multiracial:
4. What is your highest level of education completed?
 - a. ___ High school
 - b. ___ Some college
 - c. ___ Associate of Arts degree
 - d. ___ Bachelor of Arts or Science
 - e. ___ Post graduate degree
 5. Where do you provide the majority of your professional development?
 - a. ___ Urban areas
 - b. ___ Sub-urban areas

- c. ___ Rural areas
6. How many years have you worked in the early childhood field? (Reponses: 1-30+)
 7. How many years have you worked as a professional development provider for early child care practitioners? (Reponses: 1-30+)
 8. What age group do you most often reference in your trainings?
 - a. ___ Infants and toddlers
 - b. ___ Preschoolers
 - c. ___ Infants, toddlers, and preschoolers
 9. Who is your primary professional development audience?
 - a. ___ Home-based childcare
 - b. ___ Center-based childcare
 - c. ___ Head Start
 - d. ___ Early Head Start
 - e. ___ Home Visitors
 - f. ___ Early Intervention
 - g. ___ Early Childhood Special Education
 - h. ___ Early Childhood Family Education
 - i. ___ Public preschool
 - j. ___ Private preschool
 - k. ___ Other: Please specify.

10. Who is your primary employer?

- a. ___ University, college, or community college
- b. ___ Child Care Aware
- c. ___ Local or regional agency (e.g., public school, intermediate education unit, social services, mental health, education service district)
- d. ___ State agency (e.g., Department of Education, Department of Social Services or Human Services, Department of Public Health)
- e. ___ Federal agency (e.g., Head Start, military)
- f. ___ Self-employed/independent contractor
- g. ___ Professional organization (e.g., MNAEYC, DEC)
- h. ___ Other (e.g., family support program): Please specify _____

11. What, if any, training credentials do you currently hold?

12. How familiar are you with the Centers of Excellence? (SKIP IF ANSWER IS 'A')

- a. ___ Not familiar at all
- b. ___ Somewhat familiar
- c. ___ Familiar
- d. ___ Very familiar

Thank you for completing this survey. As a follow-up to this survey, we will be conducting to interviews to gain further knowledge about training on authentic assessment, including gathering information on potential gaps in assessment training content in order to develop quality assessment training modules. If you would be willing to be interviewed in the future, please click on the following link. Your contact information will not be connected to your survey responses.

13. Contact information

a. Name: _____

b. Email: _____

c. Phone: _____

Appendix B1

Early Educator Interview Protocol

Good morning/afternoon. Thank you for agreeing to participate in this interview. My name is [FILL IN YOUR NAME]. I work at the CEED, which is the Center for Early Education and Development at the University of Minnesota. The interview may take up to 60 minutes.

The purpose of this interview is to gather information on the use of authentic assessment within Minnesota and to get feedback on the existing supports and challenges in its use within early care and education settings. This information will be used by CEED and the Minnesota Department of Education to guide the development of professional development modules, as well as determine how else we can support the use of authentic assessment. You were invited to participate in this interview because you provide early care and education services in Minnesota and you shared your contact information with us.

I encourage you to share your points of view. There are no right or wrong answers to the questions I will ask. Your answers to the questions will remain confidential, meaning that your individual answers will not be shared with anyone outside of CEED. The information gathered will be analyzed for themes and then shared with the Minnesota Department of Education in the form of a report. There will be no identifiable information shared, meaning that your name will not be tied to your comments.

There are a few other items I'd like to review. First, I'll be recording this interview today to assist me in accurately capturing the conversation. You have the right to stop participating at any time during the interview with absolutely no penalty. Do you have any questions or concerns before we begin? Feel free to ask questions at any time.

Interview: Early Educator

1. Please tell me about your role(s) in the early care and education field.
 - a. How long have you been in the field?

2. Do you use assessment in your work?
 - a. Yes
 - b. If yes, tell me what it's like to use assessment in your workplace.
 - 1) Can you give some specific examples?
 - 2) How frequently are you using it?
 - 3) What tool(s) are you using?
 - 4) Are you able to use assessment within the natural environment?
 - 5) Are you able to use assessment within daily routines?
 - 6) Are you able use assessment data to inform practice?
 - c. If no, can you please explain why you don't?

3. How competent do you feel conducting authentic assessment?

For the purposes of the interview, we define authentic assessment as a systematic recording of developmental observations; with data being collected over time; looking at naturally occurring behaviors and functional competencies of young children; while focusing on children in their natural environments and during daily routines; and includes observations that are made by familiar and knowledgeable caregivers in the child's life.

4. Of the information you shared, approximately how much of that would meet this definition of authentic assessment?
5. On a scale from 1-5 (where 1 is not at all competent and 5 = extremely competent), how competent do you feel using authentic assessment?
 - a. Do you feel more competent using specific aspects of authentic assessment? If so, what parts?
6. Tell me about where and when you received training on authentic assessment.
7. What do you believe are your strengths as an early educator using authentic assessment? In what areas would you like to improve?
8. Are there strategies for using authentic assessment that you find the most useful? If so, what are they?
9. Do you feel up-to-date with your assessment knowledge?
 - a. How do you keep up-to-date with assessment information?
 - b. If not, what are the barriers to accessing information?
 - c. What would you like to know that you currently don't know?
10. What do you think are the benefits, if any, of using authentic assessment in your early care setting?
 - a. What do early care professionals like you gain by learning about authentic assessment?
 - b. What do you think children gain by the use of authentic assessment?
 - c. What do you think families gain by the use of authentic assessment?
11. Do you find it easy or challenging to use authentic assessment in your work?
 - a. Please describe/give an example.
12. What feedback, if any, do you receive about your use of authentic assessment?
 - a. From your supervisor?
 - b. Parents?
 - c. Peers/colleagues?
 - d. Support providers?

13. Describe the supports (e.g., supervisor, peers, mentor/coach, technical assistance) available to you related specifically to authentic assessment, if any.
- a. Do you receive support on using assessment within the natural environment?
Within daily routines?
 - b. How often do you access support?
 - c. Is the amount of time spent receiving support appropriate?
 - d. To what extent do you use email, telephone conversations, and face-to-face conversations to access support?
 - e. Do you believe the available supports meet your expectations?
 - f. Are there additional supports you'd like but currently don't have? What would the ideal training/support look like?

14. Do you believe that authentic assessment is a priority in your place of employment?
- a. If yes, please share an example.
 - b. If not, why?

15. Is there anything else you'd like to share with us about authentic assessment?

This is the end of our interview. We really appreciate you taking the time to talk with us today. If you have any questions, please feel free to contact me at [FILL IN EMAIL]. Thank you.

Appendix B2

Professional Development Provider Interview Protocol

Introduction

Good morning/afternoon. Thank you for agreeing to participate in this interview. My name is [FILL IN YOUR NAME]. I work at the CEED, which is the Center for Early Education and Development at the University of Minnesota. The interview may take up to 60 minutes.

The purpose of this interview is to gather information on the use of authentic assessment within Minnesota and to get feedback on the existing supports and challenges in its use within early care and education settings. This information will be used by CEED and the Minnesota Department of Education to guide the development of professional development modules, as well as determine how else we can support the use of authentic assessment. You were invited to participate in this interview because you provide early care and education professional development in Minnesota and you shared your contact information with us.

I encourage you to share your points of view. There are no right or wrong answers to the questions I will ask. Your answers to the questions will remain confidential, meaning that your individual answers will not be shared with anyone outside of CEED. The information gathered will be analyzed for themes and then shared with the Minnesota Department of Education in the form of a report. There will be no identifiable information shared, meaning that your name will not be tied to your comments.

There are a few other items I'd like to review. First, I'll be recording this interview today to assist me in accurately capturing the conversation. You have the right to stop participating at any time during the interview with absolutely no penalty. If, at any point in time—whether it's later today or even 2 weeks from now, you decide that you'd like information you shared to be removed from your transcript, you only need to contact me and we'll remove it. Do you have any questions or concerns before we begin?

Interview: Professional Development Provider

1. Please tell me about your role(s) in the early care and education field.
 - a. How long have you been in the field?
 - b. Other than your current position, what additional jobs, if any, have you had within the field of early childhood education?

2. How would you describe authentic assessment?
 - a. What do you understand about it/what are some of the principles?

For the purposes of the interview, we define authentic assessment as a systematic recording of developmental observations; with data being collected over time; looking at naturally occurring behaviors and functional competencies of young children; while focusing on children in their natural environments and during daily routines; and includes observations that are made by familiar and knowledgeable caregivers in the child's life.

3. What do you think are the benefits, if any, of using authentic assessment in an early care setting?
 - a. What do early care professionals gain by learning about authentic assessment?
 - b. What do you think children gain by the use of authentic assessment?
 - c. What do you think families gain by the use of authentic assessment?
4. What feedback, if any, do you receive from early educators related to authentic assessment?
5. Tell me about your experience/background in providing professional development on authentic assessment.
 - a. Where and when did you get your training? How do you keep up-to-date with assessment information?
 - b. What, if anything, would you like more information on related to authentic assessment?
 - c. Who are your primary training audiences?
 - d. What modes of training do you most often use? (e.g., onsite/in-person, online, hybrid, etc.)
 - e. How often are you training on authentic assessment?
 - f. Are these trainings stand-alone or are they incorporated into other trainings?
 - g. Do you train on the entire spectrum of assessment activities or do you train on specific aspects (e.g., observation, data collection)?
 - h. On which specific assessment tools do you train?
6. On a scale from 1-5, how competent do you feel training on authentic assessment?
 - a. Do you feel more competent training on specific aspects of authentic assessment? If so, what parts?
7. When you train on assessment, what strategies for implementing authentic assessment do you find the most useful to share with early educators?
8. Are there elements of training on authentic assessment that you find challenging? If so, what are they?
9. To what extent do you believe early care providers are successful using authentic assessment?
 - a. What do you believe they're doing well? (e.g., using observation data to inform classroom programming, use of specific tools, sharing assessment information with parents, etc.)
 - b. In what area(s) do you feel they need more help/support?

10. Describe the supports (e.g., supervisor, peers, mentor/coach, technical assistance) available to service providers related specifically to authentic assessment, if any.
 - a. How often do you think they access these supports?
 - b. Is the amount of time spent giving support appropriate?
 - c. To what extent do you use email, telephone conversations, and face-to-face conversations to provide support?
 - d. Do you believe the available supports meet their expectations?
 - e. Are there supports you believe would help but currently aren't available?
 - f. Describe any additional ways in which you provide support for implementing authentic assessment.

11. What do you believe are the best methods for providing professional development to the early care and education field in Minnesota?
 - a. Would it look differently in different EC settings?

12. Is there anything else you'd like to share with us about authentic assessment?

This is the end of our interview. We really appreciate you taking the time to talk with us today. If you have any questions, please feel free to contact me at [FILL IN EMAIL]. Thank you.

Appendix C

Data on early educator belief statements by primary employer

Early Educators – Belief Statements

I believe I am competent conducting authentic assessment.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
Strongly agree	16% (35/220)	34% (54/163)	36% (21/58)	24% (34/144)
Agree	52% (114/220)	59% (96/163)	60% (35/58)	53% (76/144)
Disagree	22% (49/220)	6% (10/163)	2% (1/58)	15% (21/144)
Strongly disagree	10% (22/220)	2% (3/163)	2% (1/58)	2% (3/144)
<i>Total</i>	38% (220/585)	28% (163/585)	10% (58/585)	25% (144/585)

I believe I incorporate assessment into daily practices.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
Strongly agree	19% (41/220)	31% (50/164)	37% (21/57)	24% (34/143)
Agree	51% (112/220)	59% (96/164)	58% (33/57)	65% (93/143)
Disagree	21% (46/220)	9% (14/164)	2% (1/57)	6% (8/143)
Strongly disagree	10% (21/220)	2% (4/164)	4% (2/57)	6% (8/143)
<i>Total</i>	38% (220/584)	28% (164/584)	10% (57/584)	24% (143/584)

I believe I am competent conducting authentic assessment for children from culturally diverse backgrounds.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
Strongly agree	9% (19/221)	19% (31/166)	21% (12/58)	10% (14/145)
Agree	39% (86/221)	52% (87/166)	57% (33/58)	50% (72/145)
Disagree	38% (85/221)	25% (41/166)	19% (11/58)	34% (50/145)
Strongly disagree	14% (31/221)	4% (7/166)	3% (2/58)	6% (9/145)
<i>Total</i>	37% (221/590)	28% (166/590)	10% (58/590)	25% (145/590)

I believe I am competent conducting authentic assessments for children with disabilities.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
Strongly agree	10% (23/221)	13% (21/166)	28% (16/58)	16% (23/145)
Agree	38% (84/221)	53% (88/166)	53% (31/58)	43% (63/145)
Disagree	38% (83/221)	33% (54/166)	17% (10/58)	21% (31/145)
Strongly disagree	14% (31/221)	5% (8/166)	2% (1/58)	4% (6/145)
<i>Total</i>	37% (219/590)	28% (166/590)	10% (58/590)	25% (145/590)

I believe I am competent conducting authentic assessments for children who are English language learners.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
Strongly agree	11% (25/222)	18% (30/164)	19% (11/58)	9% (13/140)
Agree	42% (93/222)	52% (86/164)	50% (29/58)	48% (67/140)
Disagree	32% (71/222)	26% (42/164)	24% (14/58)	34% (48/140)
Strongly disagree	14% (32/222)	4% (6/164)	7% (4/58)	9% (12/140)
<i>Total</i>	38% (222/584)	28% (164/584)	10% (58/584)	24% (140/584)

I am required to conduct ongoing authentic assessment.				
	Family Childcare	Center-based Childcare	Head Start	School-based Services
True	23% (51/222)	87% (145/166)	93% (54/58)	65% (93/143)
False	77% (171/222)	13% (21/166)	7% (4/58)	35% (50/143)
<i>Total</i>	38% (222/589)	28% (166/589)	10% (58/589)	24% (143/589)

Appendix D

Early educator training information:

Trainings attended, principles used in practice and training needs/wants.

Early Educators: Training Information

	Attended	Use in Practice	Need/Want training
Assessment related to instruction	45% (313/702)	55% (387/702)	19% (132/702)
Assessment related to the classroom environment	41% (289/702)	56% (395/702)	19% (129/702)
Authentic assessment	29% (270/702)	56% (386/702)	21% (148/702)
Choosing developmentally appropriate tools	35% (245/702)	55% (387/702)	21% (148/702)
Collecting assessment information/data	40% (281/702)	60% (418/702)	18% (124/702)
Early care and education curricula	43% (305/702)	58% (406/702)	17% (118/702)
Early Childhood Indicators of Progress (ECIPs)	32% (223/702)	47% (333/702)	25% (178/702)
Early literacy	39% (272/702)	62% (438/702)	17% (116/702)
Early numeracy/math	28% (195/702)	57% (398/702)	22% (154/702)
Engaging and communicating with families	37% (258/702)	64% (453/702)	17% (122/702)
Quality early care and education in programming	34% (239/702)	57% (403/702)	18% (123/702)
Social-emotional development	45% (319/702)	64% (447/702)	17% (121/702)
Typical child and/or infant development	37% (259/702)	62% (435/702)	14% (100/702)
Using assessment data in practice	34% (236/702)	56% (391/702)	21% (150/702)
Using data to inform decision-making	30% (211/702)	56% (391/702)	23% (159/702)
Working with children with special needs	29% (205/702)	48% (337/702)	31% (221/702)

Appendix E

Early educator support needs and requests by primary employer

Early Educators – Support needs

	Family Childcare	Center-based Childcare	Head Start	School-based Services
Onsite support	15% (18/119)	44% (52/119)	12% (14/119)	29% (35/119)
Online materials	25% (26/106)	34% (36/106)	9% (10/106)	12% (34/106)
Video demonstrations	20% (20/102)	35% (36/102)	15% (15/102)	30% (31/102)
How to share assessment information with parents	20% (19/96)	36% (35/96)	18% (17/96)	26% (25/96)
Leadership support	9% (7/81)	46% (37/81)	15% (12/81)	31% (25/81)
General principles of assessment	24% (17/71)	44% (31/71)	13% (9/71)	20% (14/71)
Assessment scoring	24% (21/89)	39% (35/89)	11% (10/89)	26% (23/89)
Using assessment data to inform practice	17% (21/124)	34% (42/124)	17% (21/124)	32% (40/124)
Embedding assessment into daily routines	12% (19/156)	40% (63/156)	14% (22/156)	33% (52/156)

Early Educators – Seeking support

	Family Childcare	Center-based Childcare	Head Start	School-based Services
Never	35% (18/52)	25% (36/146)	6% (3/54)	24% (23/94)
Rarely	31% (16/52)	37% (54/146)	30% (16/54)	21% (20/94)
Sometimes	23% (12/52)	32% (47/146)	57% (31/54)	52% (49/94)
Often	12% (6/52)	6% (9/146)	7% (4/54)	2% (2/94)
<i>Totals</i>	15% (52/346)	42% (146/346)	16% (54/346)	27% (94/346)

Appendix F

Group differences within early educators

Education level by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	-.619*	.185	.005
	Headstart	-.903*	.267	.004
	Schoolbasedservices	-1.916*	.193	.000
Centerbasedchildcare	Familychildcare	.619*	.185	.005
	Headstart	-.284	.276	.734
	Schoolbasedservices	-1.298*	.205	.000
Headstart	Familychildcare	.903*	.267	.004
	Centerbasedchildcare	.284	.276	.734
	Schoolbasedservices	-1.014*	.282	.002
Schoolbasedservices	Familychildcare	1.916*	.193	.000
	Centerbasedchildcare	1.298*	.205	.000
	Headstart	1.014*	.282	.002

Perceptions of assessment competency by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.497*	.076	.000
	Headstart	.574*	.108	.000
	Schoolbasedservices	.298*	.079	.001
Centerbasedchildcare	Familychildcare	-.497*	.076	.000
	Headstart	.077	.112	.902
	Schoolbasedservices	-.198	.084	.085
Headstart	Familychildcare	-.574*	.108	.000
	Centerbasedchildcare	-.077	.112	.902
	Schoolbasedservices	-.276	.114	.076
Schoolbasedservices	Familychildcare	-.298*	.079	.001
	Centerbasedchildcare	.198	.084	.085
	Headstart	.276	.114	.076

Perceptions regarding incorporating assessment into daily practice by employment type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.384*	.078	.000
	Headstart	.494*	.113	.000
	Schoolbasedservices	.284*	.082	.003
Centerbasedchildcare	Familychildcare	-.384*	.078	.000
	Headstart	.110	.117	.783
	Schoolbasedservices	-.101	.087	.653
Headstart	Familychildcare	-.494*	.113	.000
	Centerbasedchildcare	-.110	.117	.783
	Schoolbasedservices	-.211	.119	.289
Schoolbasedservices	Familychildcare	-.284*	.082	.003
	Centerbasedchildcare	.101	.087	.653
	Headstart	.211	.119	.289

Perception of assessment challenges impeding implementation by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.341*	.088	.001
	Headstart	.473*	.126	.001
	Schoolbasedservices	.135	.091	.450
Centerbasedchildcare	Familychildcare	-.341*	.088	.001
	Headstart	.132	.131	.742
	Schoolbasedservices	-.206	.098	.151
Headstart	Familychildcare	-.473*	.126	.001
	Centerbasedchildcare	-.132	.131	.742
	Schoolbasedservices	-.338	.133	.054
Schoolbasedservices	Familychildcare	-.135	.091	.450
	Centerbasedchildcare	.206	.098	.151
	Headstart	.338	.133	.054

Assessment assistance sought by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	-.083	.142	.936
	Headstart	-.551*	.170	.007
	Schoolbasedservices	-.204	.152	.535
Centerbasedchildcare	Familychildcare	.083	.142	.936
	Headstart	-.468*	.140	.005
	Schoolbasedservices	-.121	.116	.726
Headstart	Familychildcare	.551*	.170	.007
	Centerbasedchildcare	.468*	.140	.005
	Schoolbasedservices	.348	.150	.095
Schoolbasedservices	Familychildcare	.204	.152	.535
	Centerbasedchildcare	.121	.116	.726
	Headstart	-.348	.150	.095

Perceptions of assessment competency with children from culturally-diverse families by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.435*	.081	.000
	Headstart	.527*	.116	.000
	Schoolbasedservices	.207	.084	.067
Centerbasedchildcare	Familychildcare	-.435*	.081	.000
	Headstart	.093	.120	.866
	Schoolbasedservices	-.228	.089	.053
Headstart	Familychildcare	-.527*	.116	.000
	Centerbasedchildcare	-.093	.120	.866
	Schoolbasedservices	-.321*	.122	.043
Schoolbasedservices	Familychildcare	-.207	.084	.067
	Centerbasedchildcare	.228	.089	.053
	Headstart	.321*	.122	.043

Perceptions of assessment competency with children who have disabilities by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.275*	.081	.004
	Headstart	.621*	.116	.000
	Schoolbasedservices	.387*	.084	.000
Centerbasedchildcare	Familychildcare	-.275*	.081	.004
	Headstart	.346*	.120	.021
	Schoolbasedservices	.112	.090	.598
Headstart	Familychildcare	.112	.090	.598
	Centerbasedchildcare	-.346*	.120	.021
	Schoolbasedservices	-.234	.122	.222
Schoolbasedservices	Familychildcare	-.387*	.084	.000
	Centerbasedchildcare	-.387*	.084	.000
	Headstart	.234	.122	.222

Perceptions of assessment competency with children who are English language learners by employer type.

Employer Type	Employer Type	Mean Difference	Std. Error	Sig.
Familychildcare	Centerbasedchildcare	.358*	.084	.000
	Headstart	.315*	.121	.046
	Schoolbasedservices	.083	.088	.783
Centerbasedchildcare	Familychildcare	-.358*	.084	.000
	Headstart	-.043	.125	.986
	Schoolbasedservices	-.275*	.094	.019
Headstart	Familychildcare	-.315*	.121	.046
	Centerbasedchildcare	.043	.125	.986
	Schoolbasedservices	-.232	.128	.269
Schoolbasedservices	Familychildcare	-.083	.088	.783
	Centerbasedchildcare	.275*	.094	.019
	Headstart	.232	.128	.269

Appendix G

PD providers report of support provided and supports identified as most beneficial to early educators

PD Providers: Supports provided

	Totals
Onsite support	60% (41/68)
Co-teaching	19% (13/68)
Online materials	54% (31/68)
Video demonstrations	37% (25/68)
General principles of assessment	56% (38/68)
Assessment scoring	35% (24/68)
Using assessment data to inform practice	62% (42/68)
Embedding assessment into daily routines	57% (39/68)

PD Providers: Most beneficial supports for Early Educators

	Totals
Onsite support	84% (57/68)
Co-teaching	25% (17/68)
Online materials	35% (24/68)
Video demonstrations	69% (47/68)
General principles of assessment	54% (31/68)
Assessment scoring	50% (34/68)
Using assessment data to inform practice	69% (47/68)
Embedding assessment into daily routines	72% (49/68)