



Trust for
Learning

Measuring the Quality of Early Learning Environments

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A guide to evaluating ideal
learning environments for
young children

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Introduction

Families, educators, and policymakers recognize that quality is essential to facilitate child development in early care and education (ECE). High-quality early learning experiences support rapid brain growth during the earliest years of life and can happen in any setting.¹ These experiences unleash children's natural curiosity, nurture their minds and bodies, build positive relationships, and lay the foundation for success in school and in life. Yet despite consensus about the importance of these experiences, there is often a lack of agreement about what constitutes quality and how to measure it.²

The **Principles of Ideal Learning** framework (figure 1) developed by early childhood experts and supported by child development research, is one way of thinking about quality. These principles outline fundamental elements of early childhood environments that promote children's development, including: a commitment to play, relationship-based interactions, a child-centered perspective, equity, and a strengths-based and inquiry-based approach with children, educators, and families. These principles can come to life in any early learning environment, regardless of model, approach, or setting.

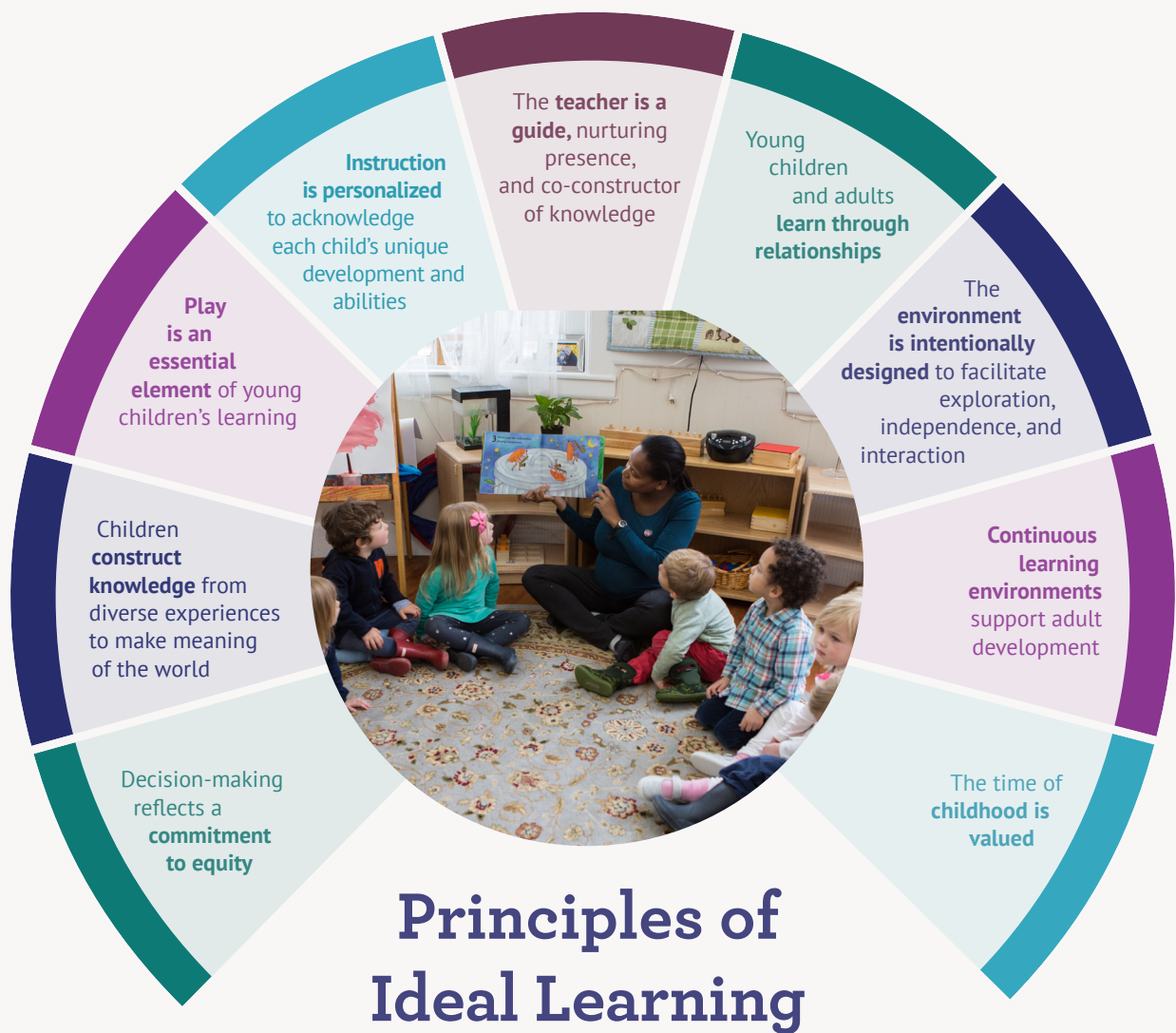
The Principles of Ideal Learning are one of many different frameworks commonly used in early childhood that attempt to define and/or assess quality within or among programs. Other frameworks such as accreditation by the National Association for the Education of Young Children (NAEYC), the Head Start Early Learning Outcomes Framework, and state Quality Rating and Improvement Systems offer other paradigms for assessing quality. As a result, measuring the quality of ECE programs is not always straightforward. Nonetheless, it is an important tool to help inform the use of public resources and guide program improvement. Quality measurement can also be an important lever for monitoring and addressing inequities within early childhood systems.

To help bring greater clarity to this issue, Trust for Learning gathered a group of early childhood experts (see [Quality Measures Expert Workgroup](#) on p.2) to reflect on the current state of quality measurement and envision a new approach for measuring the quality of ECE programs serving young children. This two-part guide is representative of the consensus thinking among the group based on multiple discussions over several months.

The first part of the guide summarizes the expert workgroup's thoughts about the purposes, use, and implications of quality measurement, and highlights important equity issues for educators and policymakers to consider when making decisions about measurement. It is also a firm reminder that true quality cannot exist without a commitment to equity. The second part looks specifically at the Principles of Ideal Learning framework and examines how each principle aligns with existing quality measures. The second section and the attached appendix provides useful information about the current state of measurement and available tools.

Taken together, we hope that these resources will bring fresh perspective and new ideas to policymakers and practitioners in their decision-making about quality measurement.

Figure 1. Principles of Ideal Learning Framework



The Principles of Ideal Learning were created by early childhood expert practitioners who serve as members of the Ideal Learning Roundtable. This unifying framework draws from multiple pedagogical models and approaches, and takes into account the varied contexts within which early educators and care providers serve children from birth - eight. For information on the research base underlying these principles, please see [Evidence Brief - Ideal Learning Environments for Young Children](#).

A New Vision for Quality Measurement

Leading with Equity

This is a pivotal moment in the history, and for the future, of the United States. The combination of COVID-19 and increased recognition of racial injustices have spotlighted inequities and raised awareness of systemic racism that have long existed in our society. This new social context presents an opportunity to look with fresh eyes at the purpose, means, and impact of quality measurement in our early childhood education system. Current practices in assessing program quality, particularly in public systems, must be examined to ensure that all children are able to experience ideal learning environments in any setting from birth through age eight.

Equity is an essential component of quality—namely, true quality for all children cannot exist without it. According to the Children’s Equity Project, “Equitable learning systems provide access to resources, opportunities, and experiences to children and families that result in positive outcomes that are not associated with children’s demographic characteristics. They actively and continuously identify and intentionally eliminate manifestations of systemic racism and other forms of oppression.”³

Thus, for an early childhood program to be considered high-quality, there must be equity of access, experiences and opportunities within it, resulting in equitable outcomes for all children and families. Measuring quality requires equity considerations in decisions about **what is measured, how it is measured, and how the information is used.**

Incorporating Equity in What is Measured

An equity-focused approach measures quality holistically. It captures multiple elements that promote children’s development across all levels of the system, recognizing the different types of skills and strengths that children and families can bring to their experience. An equitable approach also incorporates the degree to which race, culture, language, and biases associated with these factors play out in the elements that are measured. For instance:

Are all children given opportunities to engage with each other, with educators, and with the materials and content in the organization?

Are resources allocated such that services and supports are prioritized for children and families according to their needs and strengths?

Are all children given choices around how they prefer to engage?

Are there discrepancies in how children are treated, or microaggressions against children or adults from certain racial or ethnic backgrounds?

Finally, quality measurement systems should be sensitive to who has access to programs and whether families are segregated in their early childhood experiences due to program eligibility, program location or financing. Unfortunately, measurement systems have not traditionally captured dimensions of equity across groups of children.

Incorporating Equity in How Quality is Measured

It is important to consider the methods and processes for how measurement data is collected. Many early childhood quality measures require observers to monitor and record the presence or absence of certain activities and behaviors with children over a set period of time. These tools are portrayed as objective, because observers are trained to look for a specific set of behaviors or materials and those observers typically have no relationship to the teacher or program being observed. However, these tools are not without potential bias. Unless explicitly trained not to, observers will interpret teacher behavior and children's behavior in the context of their own experiences, expectations, biases, and culture. Moreover, if an educator or child speaks a different language than the observer, it can be especially difficult for the observer to assess whether certain types of interactions have taken place.

An over-reliance on observational measures also can minimize the value of family and community voice in evaluating the quality of a program. This is important as families, children, educators, and staff have the most direct experience with the program. For example, do families feel like they are respected? Are children educated in a manner that is consistent with their culture and expectations? Without asking families directly about their experiences, it is impossible to know whether and how well a program meets these needs.

Other measurement approaches can be used in combination with observational measures to help balance these perspectives. For instance, surveys and focus groups with families or educators, "secret shopper" audits, program self-assessments, and recordings of practice can provide valuable information.

Incorporating Equity in How Information is Used

Bringing an equity perspective to decision-making about the use of measurement is important to ensure that teachers and programs are well supported, and that systems do not unintentionally favor certain populations. For example, public early childhood programs are not always funded at a level necessary to ensure quality. Yet, quality measurement systems rarely consider how well organizations meet quality benchmarks in relation to the resources available to them.

Although it is important to have accountability in public early childhood systems, the tendency to link quality measurement to incentives or sanctions can bring its own set of challenges. Importantly, no existing measures were explicitly designed for the purpose of holding early childhood organizations accountable for providing high-quality services. Instead, public agencies have been limited to selecting from among measures of quality developed for other purposes for their accountability systems; measures that may not have the properties needed for accountability. Most quality measurement systems are based on a discrete set of quality measures, yet there are many factors that can affect a program's quality. Regulations, funding decisions, monitoring systems, and technical assistance can all influence the quality of a program.

As an example, the disinvestment and underinvestment in many communities of color may mean that providers have a harder time getting loans to improve their settings or support teacher training and education. In lower-income communities, there may be both an increased need for highly-educated teachers and a shortage of those teachers. If programs in those communities experience sanctions for quality levels that reflect a lack of capital improvements or labor shortages, they may have even fewer resources to attract effective teachers to their organizations, thereby exacerbating the inequities between children in that program and children in other programs.

Fundamentals of Quality Measurement

In addition to leading with an equity mindset, several foundational concepts should guide the purpose and use of quality measurement in early care and education. These “fundamentals of quality measurement” are central tenets to help guide educators and policymakers in their decision-making.

1. Quality measurement should fully incorporate equity considerations. As discussed, quality cannot be achieved without consideration of all children’s experiences. Historic and present inequities require that quality measurement systems incorporate equity considerations at all levels, from the design and validation of a measurement tool, to how it is used in early learning settings, to how data are interpreted, communicated and incentivized.

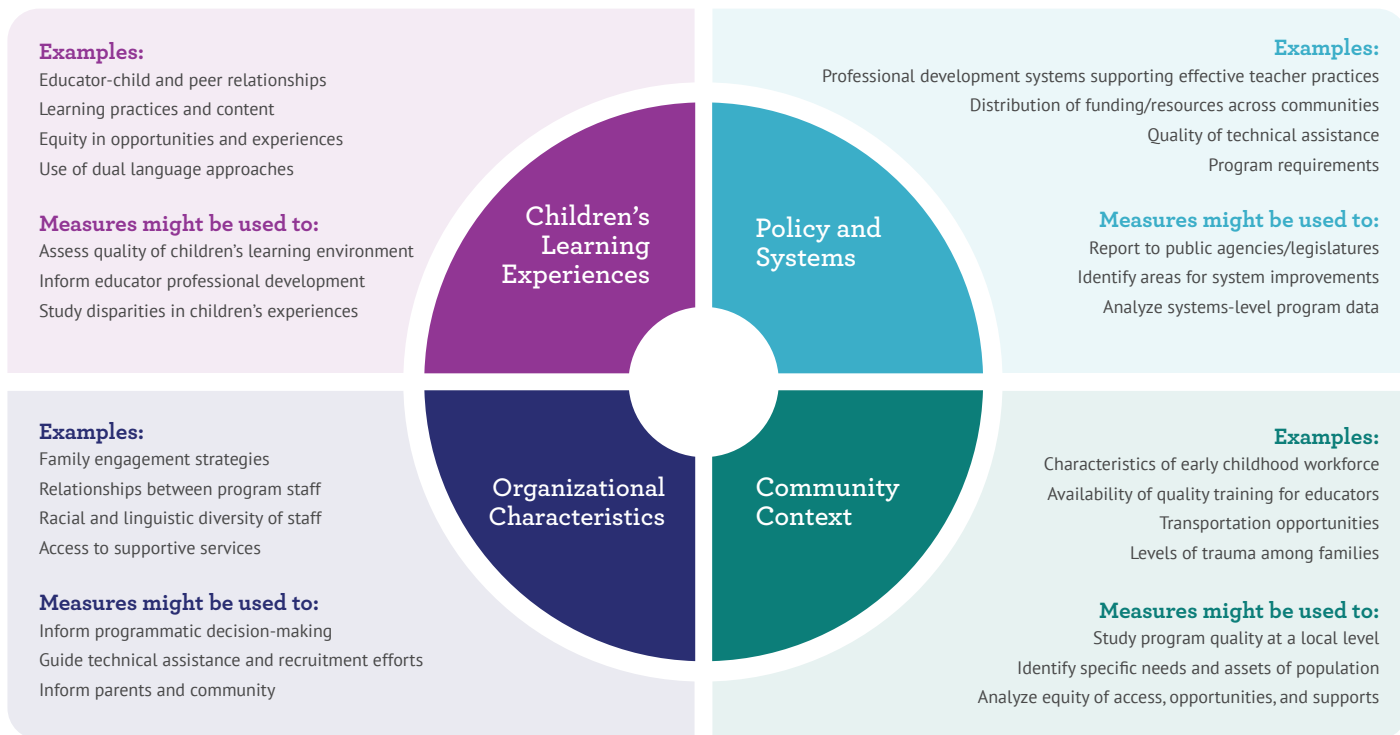
2. Quality measurement should reflect what children need to thrive emotionally, socially, physically, and academically. The ECE field should use quality measurement to ensure that children have what they need in all domains of their development, no matter who they are, where they come from, or what their cultural background. This includes ensuring that learning expectations and program design are appropriate for young children, whose needs differ from children in older grades. Quality measurement should capture the range of experiences important for children and families. Rating systems that prioritize only a few elements of quality are not sufficient to capture all of these quality features.

3. To fully capture quality, measurement must include factors from all levels of the early childhood system. As represented in **Figure 2. Levels of Quality for Early Childhood Measurement** quality can be reflected throughout early childhood programs and systems across many different levels. Measures

should provide a comprehensive picture of the quality of a particular program and the context in which it sits. This includes data that address everything from teaching staff who work directly with children, to directors that make decisions about curriculum and supervise teachers, to the regulatory and funding structures that put limits on program design, to the community contexts that affect families. Local programs do not operate in a vacuum, and their quality cannot be judged separately from the conditions that influence their work.

4. Measures should be used in the context of an overall measurement strategy. No one measure can adequately capture all aspects of quality. It is essential that program leaders and policymakers articulate a rationale and overall strategy for quality measurement that accounts for the use of particular measures and their unique purpose. There should be regular channels of communication across and between different levels of an early childhood system regarding how different quality measurement efforts relate to one another. Moreover, information from multiple levels of the system should be used to better understand quality data. For instance, information about community demographics can be used to understand how well an early childhood organization’s staff demographics match the racial and linguistic make-up of the community they serve.

Figure 2. Levels of Quality for Early Childhood Measurement



5. Quality measurement tools are designed for different purposes, and it is important to use the right tool for the right purpose. Some tools are designed to be used for professional development, such as supporting early childhood teachers in their teaching. They can identify specific techniques and practices that teachers use with children and reflect changes in those techniques over time. Other measures cover a broad number of elements in less depth and are useful for helping administrators to identify areas for program improvement. Finally, many quality measures are developed for research purposes. These measures tend to be detailed and complicated to administer but provide reliable and valid information about the elements of quality that they address. No existing measures in use today were designed for the explicit purpose of holding programs accountable for delivering high-quality ECE. Thus, policymakers and educators should ensure that tools used for accountability purposes can provide reliable, valid, and fair information about the quality of an organization. The tool must be culturally relevant

for the communities in which it will be used, and provide information that offers a comprehensive assessment of the organization. Measures used for high-stakes purposes, in particular, must be held to higher standards of reliability, validity, and cultural relevance given the consequences attached to the data.

6. If intended to inform program improvement, measurement tools need to produce information that is usable. To drive change at the organizational or program level or in classrooms or home-based settings, quality data must be integrated into daily work to provide actionable guidance for staff including teachers, coaches, and leaders. Measures should not be too costly or overly complicated. Nor should they require a great deal of time to administer or use for classroom and program improvement. In addition, measurement must be accompanied by sufficient information about next steps for improving program quality, along with the resources, time and intentional support necessary to implement that improvement.

Tools for Educators and Policymakers

The fundamentals of measurement are applicable to both educators and policymakers, although the implications differ for the two audiences. The following sets of questions can help educators and policymakers in building strong measurement approaches.



Questions that educators can ask themselves

What is our vision for quality?

- What does quality look like in our community? Who gets a say in that vision?
- Do we hold high standards for quality for all populations of children and families?
- How does our program reflect the Principles of Ideal Learning?
- Do children experience quality equitably?

How does quality measurement help us to achieve this vision?

- Are there measures designed to help inform and achieve our vision?
- Are we looking to identify areas for improvement, understand the needs of teaching staff, and/or increase communication with families?
- Are there any conflicts associated with using specific tools for various purposes?

Have we proactively centered equity in our approach?

- How have staff and families been engaged in determining how quality will be assessed?
- Do measures capture not only levels of quality but variability across populations defined by race, language, culture, or disabilities?
- Have we considered what data may be needed to contextualize quality information (e.g. characteristics of children, funding, staff)?
- What tools are appropriate for the diversity of staff and families in our program?

Do staff understand exactly how measurement data will be used?

- Have we been transparent about how data will be used and sensitive to concerns about whether it will be used in a high-stakes manner?
- Will staff be engaged in the process of understanding and interpreting data and reflecting on their meaning?
- Do supervisors, coaches, and teachers in our program understand how the data generated relate to our curriculum, child assessments, or other measurement tools?

What resources need to be put in place to ensure the data collected are actionable?

- Do staff need support understanding how to make changes in practice in response to the information that is gathered?
- Have we allocated sufficient financial and human resources for collecting, analyzing and acting on the data?

Are these measures burdensome to administer and/or take away from staff's work with children?

- Will service to children and families suffer because the measures present too many demands on staff time?
- If teachers will be administering the tool, will they need to have additional training or specific skills?



Questions that policymakers can ask themselves

What is our vision for quality and how does quality measurement help us to achieve this vision?

- What does quality look like in our communities?
- Do we hold high standards of quality for all populations of children and families?
- How is quality reflected in statutory language or program design and management?
- Do we need information to monitor programs, guide technical assistance efforts, or determine which organizations should receive funding?
- What measures are designed for these purposes?
- If we intend to use the data for accountability purposes – such as for program evaluation or funding decisions – will that affect our ability to use it for other purposes– such as technical assistance?

Have we proactively centered equity in our approach?

- Do our quality measures capture the degree to which providers are working with families from different racial, cultural, or linguistic backgrounds?
- How are resources distributed across providers, populations, and communities to meet the needs of racial or linguistic minorities, children with special needs, and families experiencing higher levels of trauma?
- Do we use information about the community context and systemic racism when making decisions based on measures of quality?

How does quality measurement address the diversity of children and families in our state, community, or program?

- Are specific measures more effective or appropriate for some groups of children and families than others?
- Can these tools be used with key subpopulations (e.g. dual language learners, children with disabilities, children from specific cultural backgrounds, etc.)
- Is there a possibility for programs to create local adaptations without sacrificing the commonality of the data?

Is the training and data collection process adequately funded?

- Have we allocated sufficient funding to hire and train data collectors and monitor the effectiveness and implementation of the measures?
- If data will be used for accountability, are we confident that it will be sufficiently reliable, valid, and fair for this purpose?

Do providers understand how the measures relate to other quality elements of the system?

- If our agency uses more than one measure of quality, do agency staff, grantees, and providers understand the relationship between them?
- Do they understand how the quality tools relate to program standards, early learning standards, and other system elements?

Are systems adequately resourced to enable program improvement?

- Do educators need training, technical assistance or other support to make sense of the data and use it to improve?
- Have resources been allocated and are technical assistance activities properly staffed?

Measuring Quality Using the Ideal Learning Framework

The Principles of Ideal Learning offer a framework that enables multiple audiences (e.g. families, educators, and policymakers) to unite around a common vision of program quality. Together these principles reflect the ideal learning environments for young children, providing a north star for educators to reflect on their work and a resource to help inform policy. Educators and policymakers can utilize measurement tools to dig deeper into each of these principles and evaluate how they come to life in early care and education programs, and to help guide program improvement.

This section of the guide shows how the ideal learning framework can be used to guide quality measurement. It provides an overview of the current state of measurement for each of the nine principles, and gives examples of tools that may be used to capture elements of each. For each of the ideal learning principles, it addresses three questions:

1. What indicators would show the principle being implemented in practice?
2. What is the current state of the measurement field in capturing these indicators?
3. What are some examples of how existing measures address elements of this principle?

While the first part of this guide emphasizes the importance of holistic measurement across multiple levels of the early childhood system (see Figure 2), this section focuses primarily on program level measures, including elements of children's learning experiences and organizational characteristics. This emphasis is due in part to the nature of the principles themselves but it also reflects the current state of the field, where measurement has emphasized classrooms and individual programs. Given the significant role that systems play in ensuring equity of access and opportunity to quality environments, however, this is an important level of quality that we hope can be addressed in future work.

Overall Findings

While there are no measures that were designed with the express purpose of measuring the Principles of Ideal Learning, there are multiple measures that align with one or more of them. Overall, the workgroup's analysis revealed that four principles (relationships, teachers as a learning guide, personalization of instruction, and how children construct knowledge) were most aligned with existing measurement tools. However, no measure aligned perfectly with any one principle. Rather, in most cases, particular instruments (or subscales) addressed components of one or more of the principles. This is indicative of the broad vision encompassed by the principles, which together reflect a holistic view of program quality that single instruments are unable to capture.

Overall, the expert panel identified 29 measurement instruments that align with one or more indicators of the principles. These include commonly used classroom assessments such as the Classroom Assessment Scoring System® (CLASS), and the Early Childhood Environment Rating Scale (ECERS). They also include more targeted tools such as measures of language and literacy instruction or of the experiences of particular populations, including the ELCO-DLL or the Assessing Classroom Sociocultural Equity Scale (ACSES). None of the measures included in this guide are specific to certain curricula or program models. While these measures exist, this guide is intended to support programs utilizing any approach.

The measures included in this guide range in terms of pervasiveness of use, demonstrated reliability and validity, cultural and linguistic appropriateness, and other measurement principles. Reference to a given measure in this guide is not an endorsement of that tool.

Cautionary Considerations

Using an equity mindset as described in part one, there are several cautionary considerations to acknowledge about the information obtained through this exercise. First, the inclusion of tools for each principle should not be interpreted as recommendations for which measures to use to fully capture each principle. Rather, the guide aims to share a sampling of some of the most commonly identified measures, and how they relate to the principles. Furthermore, this guide does not aim to present an exhaustive review of early childhood measures that address ideal learning principles. Educators and policymakers may want to prioritize specific principles to measure and select tools that best represent their needs. To aid in this process, the **Appendix** provides detailed information on each of the measures identified. Readers can use this resource to identify tools that address their priorities and fit their intended purpose.

What is Measured

The first principle of ideal learning – Decision-making reflects a commitment to equity - pertains to how equity is addressed within multiple aspects of a program, including but not limited to classroom environments. As shown in the **Appendix**, however, the current state of measurement outside of the classroom or for particular populations of children is not robust. Modifications are needed to better represent the quality of children’s and families’ experiences across race, culture, language and disability status. In particular, there is a shortage of tools that are appropriate for home-based settings and infants and toddlers, or tools that incorporate organizational or contextual information. Each of these limitations poses unique challenges for understanding the experiences of children of color, children with disabilities, and multilingual children.

How Quality is Measured

Consistent with the state of quality measurement in the ECE field, most of the measures identified rely on trained observers to assess the presence of key indicators of quality. These tools are limited to what is observable (e.g., the way teachers relate to different children, the types of teaching strategies they use, the materials in the classroom). As a result, it can be challenging to capture the internal aspects of teachers’ thought processes regarding children’s unique developmental characteristics and cultural or linguistic backgrounds, which are key components of the principles.

Observational tools are also subject to the biases of the observers, which can be problematic if the pool of observers is not trained to reduce bias and is not representative of the communities being observed.

Equitable measurement should assess not only what is observable in the settings, but also the perspectives of teachers, families, and staff. In fact, programmatic self-assessment can serve as an important process for not only measuring program quality from the perspective of many different stakeholders, but also for generating shared focus and goals for program improvement. There are a few measures that use self-assessment, surveys, or interviews to gather information from key stakeholders, but most existing tools do not.

How Information is Used

As noted, it is important to understand how the data from quality measurement will be used within the context of other information about early childhood organizations, including information about the communities in which they operate and the populations they serve. Yet, there is little guidance in the early childhood field about how to interpret these data within the context of other information to support fair data interpretation. This lack of guidance is particularly problematic when quality tools are used for high-stakes purposes.

Principle 1: Decision-Making Reflects a Commitment to Equity

What would indicate that this principle is being used in practice?

All children benefit from a quality early learning environment that enables them to thrive. This means that ECE programs should be designed to address deeply disparate opportunities and outcomes that have existed and persist for children from low-income families, those of color, dual language learners, children in immigrant families, and children with disabilities (including children that fall into multiple historically marginalized groups).⁴ This principle recognizes the unique strengths that children, educators and families possess and seeks to ensure that their contributions are valued through collaborative decision-making structures. It also draws attention to the equitable allocation of resources, so that children and families are provided with the resources they need.

This principle can be reflected at multiple levels of the early care and education system: in the classroom or educational setting itself; in relationships between families, staff and administrators; in the cultural, language and racial backgrounds of the staff; and in the allocation of resources within an organization and across the system as a whole.

Within the early childhood program itself, indicators of this principle might include:

- The use of processes to engage family and staff voices in program decision-making.
- How well the demographics of the program staff reflect those of the children and families in the community in terms of culture, race, and language.
- Whether children and families experiencing unique needs—*toxic stressors, developmental delays, non-dominant language*—are provided resources and support to address those needs.
- Whether the organization examines disparities in enrollment, attendance, quality learning opportunities and developmental progress.
- Whether the organization has policies to support teachers that are struggling with children's behavior and to provide mental health consultation (or referrals for it) for children experiencing social or emotional challenges.

Current State of Measurement

Despite some recent advances in measuring the presence of equity in early childhood programs for some populations or under some scenarios, the state of measurement for this principle is fairly limited. There are a few measures that capture educators' practices in supporting dual language learners' development, how early childhood settings and practices are modified to support children with disabilities, or the degree to which classroom structures support culturally affirming engagement and learning.

Individual elements of this principle can be captured by several measures available for use in programs. There are measures that address the degree to which educators discipline children or provide opportunities to children in an equitable manner, how well the unique needs of children with disabilities are addressed in the classroom, inequity in the use of disciplinary practices, and whether instruction and conversation in African American children's classrooms is culturally relevant and focused on social justice.

However, most measures of early childhood quality do not have an explicit focus on equity, and few measures examine how organizational policies, practices, or routines are designed to identify and address inequities in the program.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Assessing Classroom Sociocultural Equity Scale⁵ (ACES)** has subscales that examine whether children of color have equitable learning opportunities, whether educators are disciplining children equitably, the social-emotional experiences of children of color and their interactions with peers, and whether classroom instruction and conversations is culturally affirming and focused on social justice.

The **Early Language and Literacy Classroom Observation - Dual Language Learners⁶ (ELLCO-DLL)** assesses the degree to which learning environments support dual language learners' language and literacy skills through the use of several research-based strategies for promoting young dual language learners' development. For instance, the tool examines how often and in which ways teachers use the child's home language in classroom instruction, how many books are available in the child's home language, and the use of multiple strategies to ensure comprehension of children who are dual language learners during storybook reading time. The tool includes a teacher interview to gather information about how teachers plan instruction to address diversity in the classroom, communication with families of DLLs, and how assessment is conducted with DLLs.

The **Inclusive Classroom Profile⁷ (ICP)** is an observational tool that focuses on the equitable treatment of children with disabilities in everything from the space and materials in the classroom to teacher-child relationships and family-professional partnerships.

Principle 2: Children Construct Knowledge From Diverse Experience to Make Meaning of the World

What would indicate that this principle is being used in practice?

Children learn through observation, experimentation, and participation with the materials, resources, and people around them. In ideal learning programs, the environment and the teacher support children's sense of curiosity and agency to promote children's active exploration and learning. This principle reflects the extent to which children's interests drive their learning experiences.⁸ The principle also reflects the importance of children's understanding of themselves as individuals and members of a community. Finally, this principle reflects the incorporation of enriching content for children to experiment and problem-solve, supporting multiple domains of children's development.

Indicators of this principle in practice might include:

- Children actively engaging in sensory activities.
- Children interacting with one another to problem-solve a situation or puzzle.
- Children having opportunities to explore their own interests throughout the day.
- Teachers making active connections between the children's community, language and culture to what and how they are learning in the early childhood setting.
- Resources in the environment (books, artwork, music) and activities in the program that draw from and incorporate a diversity of cultures and languages.

Current State of Measurement

Several measures capture elements of this principle. Most commonly, these tools address the nature of the dialogue between children and teachers and how that dialogue nurtures children's exploration of and expansion upon ideas. Some measures also explore the use of different modalities to support learning.

Yet, there are still gaps in the measurement of this principle. For instance, few measures take a holistic view of child development and explicitly assess the degree to which children are actively engaged in constructing their learning experiences across multiple domains of development. For example, the field does not have a good measure of children's agency. Measures often rely on easily observable proxies for educators' behaviors that support children's active knowledge construction, such as educators' use of open-ended questions. Measures often give minimal attention to peer interactions and peer collaboration, which are critical to children's knowledge construction.⁹ In addition, most measures do not consider the degree to which learning experiences and opportunities match children's interests or cultural backgrounds.

Importantly, available measures related to this principle tend to focus on preschool-age children in classroom-based models. Few measures can be used outside of classroom settings or with infant and toddler caregiving environments. Only a handful of tools capture educators' use of techniques to support knowledge construction for children with disabilities.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Brief Early Childhood Quality Inventory¹⁰ (BEQI)** is a tool that combines observation with a teacher survey. The tool is designed to be short and easy to use and can be used for research or for continuous improvement purposes. The tool includes several key elements of quality, including the use of dialogue between teachers and children to promote deeper exploration of concepts and across subject domains.

The **Sustained Shared Thinking and Emotional Well-Being¹¹ (SSTEW)** Scale assesses how educators support children's learning across subject areas, prosocial behavior, self-regulation and critical thinking, with a focus on enhancing children's exploration of ideas and child-chosen activities.

Principle 3: Play is an Essential Element of Young Children's Learning

What would indicate that this principle is being used in practice?

Play is essential to children's physical, intellectual, and social development. Overly didactic instruction is both developmentally inappropriate and ineffective for young children. Instead, play is a primary mode of learning – about themselves, the world, and relationships – for young children.

Ideal learning environments recognize, support, and encourage children's playful learning by providing resources and opportunities for children to engage in deep, interactive, and creative play. Teachers facilitate the use of different forms of play, encouraging children to cooperate and communicate as they engage in shared tasks and providing scaffolding as children learn how to resolve conflict. Teachers allow children the time and space to engage in play, capitalizing on opportunities to support concept development, language development, and social skills without interrupting children's activities.

Indicators of this principle in practice might include:

- Learning experiences incorporate play.
- Evidence that children are encouraged to develop and articulate their plans for activities before beginning to play in support of executive function skills.
- Access to outdoor spaces where children have room to incorporate large motor activities, like running and jumping, into their play.
- The availability of diverse toys and resources that children can engage with during and incorporate into their play.
- Educators engage in play with children and facilitate and support play among groups of children.
- Lack of adult interruption of children's play time.
- Promotion of peer communication during play and support for conflict resolution where needed.
- Educators who understand different types of children's play that support growth and learning.
- Playful learning activities and materials are culturally inclusive and support children's play equitably.

Current State of Measurement

Some early childhood measures include items related to play as a part of a more general set of questions about the organization's schedule and routines. For instance, some measures assess whether there are time and resources for outdoor play. There is at least one measure of the degree of maturity in children's play, but this is a measure of children's development aimed at identifying children that may need extra support to develop their play styles more fully (particularly in terms of cooperating with other children).

Some measures include a more detailed analysis of how teachers engage with children and scaffold their learning through play, but these items are less common than measures that simply look at how play factors into routines. Moreover, few measures exist that assess how teachers encourage and promote learning through play in environments other than classrooms, or in mixed-age or infant and toddler programs. Finally, existing measures do not adequately reflect how children's culture, language, or learning differences are addressed in how organizations support or scaffold play.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Classroom Coach**¹⁵ has items that examine the availability of resources to facilitate play both indoors and outdoors, including appropriate outdoor play equipment. It also measures the degree to which those resources are organized and made accessible to children to ensure exploration and to build seamless connections between areas of the classroom. Other items related to play include ways to address conflicts that encourage children to solve relationship problems during their play. Finally, the measure has items that capture the availability of time allowed for children to make their own choices and follow their own intentions with minimal adult interference.

The **Sustained Shared Thinking and Emotional Well-Being**¹⁶ (SSTEWE) Scale assesses the teacher's role both in supporting independent play and also engaging in play with children when asked. This tool also considers how educators monitor children's play activities and notice whether concepts presented throughout the day or week are appearing in children's play activities. Items related to social development also consider whether children are encouraged to reach out to adults if peer-to-peer play or sharing begins to break down. Items related to communication assess how well teachers scaffold children to help them extend cooperative play and learning and enhance peer communication.

Principle 4: Instruction is Personalized to Acknowledge Each Child’s Development and Abilities

What would indicate that this principle is being used in practice?

This principle reflects the goal that each child is known and appreciated for their uniqueness. This principle is related to Principle 2, but whereas Principle 2 emphasizes children’s agency in the learning process, Principle 4 emphasizes the role educators play in tailoring learning opportunities to individual children.

Significant theory suggests that children will learn best when adults tailor children’s learning experiences to meet their individual interests and needs.¹⁷ Learning opportunities and experiences are designed to build on what children know, support their home language, affirm their cultural backgrounds, and accommodate any physical or learning disabilities. To create personalized learning environments, educators should be aware of children’s unique characteristics and experiences – including everything from their interests and passions to their experience with traumatic stress – and incorporate that knowledge into their engagements with children and families.

Indicators of this principle in practice might include:

- The classroom or home-care environment is inclusive of children with differing abilities and skills.
- Children engage in a diverse set of activities that align with their interests and needs.
- Teachers have documentation of children’s development and use that information to personalize learning activities with small groups of children or individual children.
- Educators speak with dual language learners in their home language and promote learning in both home languages and in English.
- Teachers and families work together to identify opportunities to connect what children are learning in their program to their experiences at home.
- Teachers are trained to recognize symptoms of trauma and can provide trauma-informed daily routines and practices.

Current State of Measurement

It is difficult to assess the use of personalized instruction, since this practice can only be identified with knowledge of both the instructional approach and the characteristics of the child to whom that instruction is personalized. Still, there are tools that address related constructs or that assess the use of instructional strategies for particular populations. Tools that examine how educators engage with children, as discussed in Principle 2, may also address individualization. For instance, measures that address how educators respond to children’s questions typically assess the degree to which teachers’ responses build upon the child’s existing knowledge. There is also a growing set of tools that examine the degree to which educators work with dual language learners to promote development of their home language.

As in several other instances, the measures that address this principle tend to be designed for use in classroom settings and for preschool-aged children. Few measures of this principle address the use of personalization as it relates to culture or race.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Classroom Assessment Scoring System¹⁸ (CLASS)** attends to how educators individualize their work with children, in terms of teachers' sensitivity for children's social and emotional skills, the respect they show in engaging with children around their own interests, and the degree to which educators provide individualized scaffolding to expand children's understanding or participation.

The **Language Interaction Snapshot¹⁹ (LISN)** uses a time-sampling methodology to assess the language environment in early childhood classrooms with dual language learners. The measure includes information on the amount of language spoken to Spanish-speaking dual language learners in Spanish and in English, the level of complexity of the language, and the degree to which language is used to communicate and engage children around complex ideas as opposed to providing basic instructions or information.

The **Assessing Classroom Sociocultural Equity Scale (ACES)** attends to how educators individualized instruction with children, especially children of color, particularly in relation to the quality of language feedback and responses. The scale also can provide information about how interactions are tailored to individual children as it relates to discipline and opportunities for children to share cultural and family knowledge about their home lives.

Principle 5: The Teacher is a Guide, Nurturing Presence, and Co-Constructor of Knowledge

What would indicate that this principle is being used in practice?

This principle relates to the role that educators play in supporting children's learning. In ideal early learning environments, teachers facilitate learning experiences and provide warm and safe spaces for children to engage and explore. Teachers do not impose specific outcomes or provide highly didactic instruction, but rather model behavior and engagement for children. Teachers view children and families from a strengths-based lens and seek to understand and promote their learning and development.

Indicators of this principle in practice might include:

- Teachers encourage children to explore topics and ideas that are of interest to them.
- Children and teachers interact in a warm, positive, and encouraging manner.
- Teachers guide children as they conduct their own exploration and investigation of ideas and concepts, rather than solely providing didactic instruction to them.
- Teachers have deep knowledge and training in child development and regularly interpret, adjust, refine and redirect their approach based on observation, documentation, and interpretation of children's behaviors and learning processes.

Current State of Measurement

Existing quality measures often capture the presence of warm and positive relationships between children and educators, although they rarely examine inequity in those relationships across children. Several existing measures further assess the role of teachers in supporting children to more deeply engage with ideas and content. Few of these measures, however, were designed for use with infants and toddlers, for whom the role of a guide might look quite different, or for use in home-based settings.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Classroom Coach**²⁰ includes several items that relate to this principle. For instance, the tool assesses the degree to which adults scaffold children during child-initiated activities to support children's ideas, actions and learning. This tool also measures the sensitivity and responsiveness in the learning environment, as well as how adults support children to make plans for and reflect upon their work. The Classroom Coach also specifically assesses adults' support for children's language, literacy, and math development.

The **ICP**²¹ addresses the degree to which there are positive social interactions between adults and children, the degree to which adults are responsive to children's interests and needs, as well as how adults use classroom resources to support children's emotional needs and development.

Principle 6: Young Children and Adults Learn Through Relationships

What would indicate that this principle is being used in practice?

Fundamentally, humans are social beings, and this is especially true for young children, who depend upon adults to care for them. Children connect to the world around them through their relationships with others.²² Infants and toddlers look to their caregivers as a secure base as they explore their environments.²³ Preschool-age children learn most effectively through active engagement and connection with the adults in their lives and with their peers.²⁴

In ideal learning environments, children and adults are engaged in positive dialogue, exploring ideas, listening to one another and sharing viewpoints. Teachers model effective social skills and behavior and promote peer learning between children. Adults speak to one another respectfully and work together to solve problems. Teachers and other adults are aware of their biases and work to address those biases. They also understand children's family experiences and respond accordingly.

Indicators of this principle in practice might include:

- Educators encourage trust, empathy, and collaboration in peer to peer relationships.
- Educators are trained to recognize the effects of adverse experiences (ACEs) on young children of different ages and to respond in meaningful ways.
- Educators greet children and families at the beginning of the day.

- Children engage with peers to resolve conflicts and find solutions.
- Teachers and staff work together to coordinate activities and observe children.
- Families are respected and included as key members of the learning community.
- Organizational policies are designed to limit disruptions to children's relationships with adults, such as by reducing staff turnover or minimizing staff reassignment.

Current State of Measurement

Child development theory has long emphasized the importance of attachment between children and their caregivers. Thus many measures assess the quality of relationships between children and educators. These tools are typically observational, assessing the use of positive and encouraging language by educators, the degree to which children seek out educators as a “safe base” when feeling sad, and the degree of warmth displayed in interactions between the children and the educators.

More recent measures have aimed to assess the quality of the “language environment” as represented through back-and-forth dialogue. Some measures explicitly address teacher turnover as a proxy for disrupted relationships. Measures less commonly address relationships between children or relationships between adults. For instance, few measures examine how adults support peer relationships in children. There is also little measurement of the relationship between staff, such as the relationship between teachers and assistant teachers, or between families and staff.

Illustrative Examples of Existing Measures That Reflect This Principle

The **CLASS**²⁵ Positive Climate subscale, emphasizes the importance of a warm and supportive classroom relationship where children feel safe and comfortable and enjoy their time with teachers and each other. The Teacher Sensitivity subscale taps whether children feel safe enough to take academic risks in the classroom, including whether they see their teacher as a base of support and a source of comfort.

The **Q-CIT**²⁶ (**Quality of Caregiver-Child Interaction for Infants and Toddlers**) is a measure of the quality of caregiver-child interactions in early care and education settings that serve infants and toddlers. It can be used in multiple types of settings, including center-based and home-based care. The tool is flexible to support use in culturally and linguistically diverse settings. One aspect of the QCIT focuses on how responsive and nurturing caregivers are and their creation of a warm and responsive emotional environment for children. Ratings include caregiver's contingent responsiveness to social cues, responsiveness to children's emotional cues, building a positive relationship with children in a variety of ways, and supporting peer interaction and play.

Throughout **ACSES** the emphasis on relationships is paramount, and it especially takes into consideration whether or not those relationships are biased or whether all children have opportunities to engage in the same nurturing relationships with the teachers and peers. The Equitable Learning Opportunities Dimension measures the emotional connectedness of the relationship to the students, reflected in such behaviors as joint attention and shared affect. The Peer Engagement Dimension specifically measures children's interactions with their peers and their general affect within the classroom. Another critical aspect of the relationship that is measured is how discipline is used and whether some children are unfairly disciplined.

Principle 7: The Environment is Intentionally Designed to Facilitate Children’s Exploration, Independence, and Interaction

What would indicate that this principle is being used in practice?

This principle addresses how the physical learning environment, both indoors and outdoors, is structured to maximize children’s engagement and learning. To do so, environments should be attractive, inviting, and intentionally prepared with materials and spaces to ensure that children can find activities that relate to their interests. There are a variety of hands-on materials and manipulatives including those that facilitate sensory experiences, musical and artistic expression. Ideal learning environments also intentionally incorporate nature into spaces with children including plants, animals, and outdoor elements.

Indicators of this principle in practice might include:

- Spaces are uncluttered, well-organized, and visually appealing.
- There is sufficient space for collaboration and exploration.
- Children have access to a range of intentionally curated materials (sensory, expressive, musical, working tools, open-ended, recycled, natural, etc.).
- Children are able to go outside during the day.
- Materials are well-organized, accessible, and engaging to children.
- The environment changes throughout the year to reflect different themes and children’s progress.
- Materials are inclusive of children’s cultures, families, and communities.

Current State of Measurement

As with other principles, existing measures of the early childhood environment are best at capturing what is readily observable. Thus, they tend to address the availability of resources, such as math manipulatives or books, and whether the setting is organized for children to have easy access. They also often address whether there is outdoor play in the daily schedule and equipment to support that play. Existing measures are less adept at capturing the degree to which the environment is leveraged as a learning tool. For instance, only a few measures capture the role of educators in supporting children’s use of resources for exploration and learning. Measures are also less likely to capture how resources and environments are intentionally structured and adapted over the year to support learning. Finally, as with other principles, the majority of measures of the early learning environment are designed for use in classroom-based settings. There are very few tools designed for home-based environments.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Developmental Environment Rating Scale²⁷ (DERS)** incorporates items about how the learning environment is prepared to support the development of executive functions, language, and social-emotional skills through child-led interactions with hands-on materials. It also includes items that capture how adults support children in engaging with the prepared environment. The tool includes versions for early childhood environments (ages 3-6) as well as elementary (ages 6-12).

The **Early Childhood Environment Rating Scale²⁸ (ECERS-3)** is among the most commonly used measures of the environment in early childhood programs. The tool has subdomains that assess the materials and resources in learning environments and how educators use those materials and resources to support children in developing skills. The ECERS-3 also addresses how well the setting is organized and furnished to support children's learning. The ECERS has corollary scales for infants and toddlers (the Infant Toddler Environment Rating Scale²⁹) and home-based care (the Family Child Care Environment Rating Scale³⁰), as well as school-based settings (School-Age Care Environment Rating Scale).

Principle 8: The Time of Childhood is Valued

What would indicate that this principle is being used in practice?

This principle reflects both the importance of the developmental period of early childhood and the acknowledgement that early childhood is a sensitive period with its own developmental pace. Its presence is evidenced by the investment that we make in programs and services for children. At a more granular level, it is evident by unhurried and uninterrupted pacing that allows children to engage in continuous learning at their own speed. In such environments, children are able to engage in trial and error, and build upon learning over time through longer-term projects and lessons. This principle also reflects the importance of rhythms and routines for children to feel comfortable in their environment and know what to expect. Furthermore, it is present in the interaction between educators and children, with educators able to be present and attentive, responding to children in real time.

Indicators of this principle in practice might include:

- The environment is calm and children are not rushed from one activity to the next.
- There is a “pleasant hum” of children talking to peers and adults without adult voices dominating the environment.
- Staffing allows for different children to be engaged in various activities at the same time.
- Teachers avoid interrupting children's activities and allow them to finish when they choose to.
- Daily routines reflect children's pace of learning, including flexibility when needed to allow children to explore ideas or projects of interest.
- Children have opportunities to work on multi-day and multi-week projects, giving them the opportunity to revisit their work to promote deeper engagement and learning.

Current State of Measurement

Some existing measures address calm in the environment in relation to adults' behavior and tone, as well as how much time is spent shuffling children between activities. Some measures also include information on the daily schedule, including whether there is time for child-initiated activities.

Most existing measures are less adept at tapping the degree to which there is flexibility within or across days to allow children time to deepen their learning. Nor do most measures do a good job of reflecting whether children have agency to drive their learning process. There are virtually no tools that the workgroup was familiar with that are able to assess unhurried time.

Illustrative Examples of Existing Measures That Reflect This Principle

The **DERS**³¹ incorporates items that address the degree to which adults protect concentration, welcome trial and error, and honor child choice. It also assesses the degree to which children engage in purposeful, self-selected learning activities. Finally, this tool also taps the degree to which the environment supports uninterrupted work.

The **SSTEW**,³² with its focus on sustained shared thinking, deeply attends to children's active engagement in learning. For instance, it includes items that assess the degree to which adults provide children the time to reflect on their learning and plan for their learning. It also assesses the degree to which there is flexibility in the schedule and routines to allow children to explore topics and issues of interest to them.

Principle 9: Continuous Learning Environments Support Adult Development

What would indicate that this principle is being used in practice?

This principle reflects the fact that adults need an environment of continuous learning and improvement to be effective educators. Like all professionals, educators must have time to plan for and reflect on their practice on a regular basis.³³ They must have mechanisms to address questions they might have and to learn new skills, such as through peer observation and learning, professional literature and organizations, and effective coaching and supervision. The organization must have funding to support these learning and improvement activities and should reward educators for taking advantage of them.³⁴

Indicators of this principle in practice might include:

- Adults have time away from caring for children to reflect on their work and plan for future activities.
- Groups of educators meet to engage in peer learning and reflection.
- Educators share observations of children and analyze documentation to confer about their practice.
- Staff are members of and participate in professional organizations.
- Resources are provided for professional growth and development, including coaching, and educators are compensated for time spent in professional development activities.

Current State of Measurement

A few early childhood measures examine the context in which educators operate, including organizational structures and culture that can affect educators' engagement in continuous learning activities. Some examine the number of hours of training professional development (typically didactic training) that educators receive or the degrees and qualifications of staff. However, these tools rarely look at the quality of the pre- or in-service training educators have received, nor do they typically address the organizational culture pertaining to continuous improvement.

Measures that aim to assess quality at a program level (as opposed to classroom level or adult-child interactions) are more likely to incorporate factors such as the availability of peer learning opportunities or human resource development policies or the effectiveness of coaching approaches. However, few measures assess the availability of funding for these supports.

Illustrative Examples of Existing Measures That Reflect This Principle

The **Early Childhood Essential Survey**³⁵ (formerly known as Early Ed Essentials) is a tool developed with the express purpose of supporting organizations on their learning journey. Thus, it not only assesses factors of the organizational environment, including a supportive culture and resources to support teachers' learning and development, but also is itself designed to enhance continuous learning. Start Early provides several associated professional development resources to assist organizations in strengthening their culture to improve practice. A supportive environment for ongoing adult development is measured both through effective instructional leadership and collaboration among staff. Examples provided to illustrate practices in programs with strong instructional leadership include communication of a vision for the program and creation of a warm and professional work environment, with regular communication with staff and time devoted to providing teachers with guidance. Examples provided to illustrate practices in programs with strong collaboration among staff include having protected time for peer collaboration and learning that is structured around goals, and interactions between staff and with leaders that are frequent, warm and involve encouragement around goals.

Like the Essential 0-5 Survey, the **Program Administration Scale**³⁶ was developed to assess the quality of an early childhood organization. The tool was designed to capture the managerial and administrative structures of an early childhood organization and includes areas such as human resources development or program planning and evaluation.

The **Supportive Environmental Quality Underlying Adult Learning**³⁷ (SEQUAL) is a research tool that gathers' early educators' perspectives on workplace conditions. It is designed to support teaching and caregiving practices and educator well-being in both center- and home-based programs. It is available for use by communities, administrators, and researchers interested in understanding early learning work environments.

Conclusion

Quality measurement is a critical component of any early childhood organization, program, or policy. It assesses the degree to which the experiences of children and families reflect what is known about how best to promote children's learning and development.

The Principles of Ideal Learning represent aspirational elements of high-quality learning environments. Some are well-aligned with existing tools, while other principles are not as easy to measure with existing tools. Administrators who wish to assess quality in this way can use the **Appendix** to consider which tools may best meet their program's needs. Long-term, new or evolved measures may be needed to better assess quality in an intentional, comprehensive way. Importantly, future use of existing measures and any future measures should center equity as essential to the measurement of quality.

In that spirit, this guide provides important steps for attending to equity in the measurement of quality early learning experiences. The choice of a measurement tool is one key factor in supporting equity. A tool must be appropriate for the population of children and families being served. Program leaders must be attuned to how a tool – or its use – might perpetuate inequities, and take steps to address any issues identified. Moreover, quality measurement – particularly when measuring only part of an early childhood organization or program – must be understood within its context, including the neighborhood and community it serves, the funding streams it draws from, and the availability of resources to proactively support quality.

As noted at the start of this guide, equity – racial, linguistic, economic, and disability – is itself a central component of quality. An early childhood program cannot be of high quality if it is not attending to the unique needs, strengths, and experiences of every child and family it serves. The field will benefit from the continued evolution of measurement tools that center equity as a core component of quality, as well as resources that support programs in using their data to promote quality learning environments for all children in all settings.

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