CLASS

December 2009

Classroom Assessment Scoring System (CLASS) **Implementation Guide**

Measuring and Improving Classroom Interactions in Early Childhood Settings

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Acknowledgements

**For further information on the CLASS, visit www.class.teachstone.org
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Executive Summary

In this report we discuss the ways in which the Classroom Assessment Scoring System© (CLASS: Pianta, La Paro, & Hamre, 2008) can help states, counties, districts, and programs take steps toward improving the quality of early childhood education (ECE) teachers' interactions with children. First, an *overview of the CLASS* is presented. Then, a *conceptual framework* is introduced that can guide states and others in systematically using the CLASS and creating a coordinated approach for improving teacher-child interactions. The report also provides *answers to practical questions* about how best to implement and coordinate use of the CLASS as part of program quality improvement and evaluation and monitoring systems. The report concludes with a brief discussion of *other important issues*, such as use of the CLASS in settings with diverse populations of children.

What does the CLASS Measure?

The CLASS focuses on the quality of classroom interactional *processes*. This differs from other measurement tools that focus on the *content* of the physical environment, available materials, or a specific curriculum. For CLASS, the physical environment (including materials) and curriculum matter in the context of *how* teachers put them to use in their interactions with children.

The CLASS is organized to assess three broad **domains** of interactions among teachers and children: Emotional Support, Classroom Organization, and Instructional Support. Each domain includes several **dimensions.** Collectively**,** these eleven dimensions assess the extent to which teachers are effectively supporting children's development, both social and academic.

Emotional Support	Classroom Organization	Instructional Support
Positive Climate	Behavior Management	Concept Development
Negative Climate	Productivity	Quality of Feedback
Teacher Sensitivity	Instructional Learning Formats	Language Modeling
Regard for Student Perspectives		Literacy Focus

What does research using the CLASS tell us about ECE program quality?

Research using the CLASS provides compelling evidence about the nature of teacher-child interactions in ECE settings and the ways in which these interactions promote children's social and academic development. Four overarching conclusions have emerged from the research:

- Effective teacher-child interactions are an active and crucial ingredient for children's social and academic development.
- Children in ECE settings are not consistently exposed to effective teacher-child interactions.
- To maximize the impact for children, quality improvement efforts need to focus explicitly on teacher-child interactions.
- Carefully designed and implemented professional development support can improve the quality of teacher-child interactions.

How can the CLASS be used to improve early childhood education programs?

Increasingly, teachers and programs are being held accountable for the quality of interactions they provide to young children. The fairness and effectiveness of accountability policies depends on ensuring that demands are aligned with systems that prepare teachers and programs to meet these expectations. Teacher professional preparation and development is essential in this effort. This alignment is not commonly observed in states, however. In particular, ECE teachers typically are not provided with the training and support needed, either pre-service or in-service, to provide effective social and instructional interactions.

The CLASS provides one possible tool to address this need. The CLASS provides both an assessment of effective teacher-child interactions and a set of resources for enhancing the quality of these interactions. As a result, it provides a common language and stable thread that can be woven among efforts to assess teacher effectiveness (monitoring and evaluation) and ensure teachers have the knowledge and skills to promote children's social development and academic learning (professional development).

Four steps should be followed to guide use of the CLASS in these efforts, each of which is considered in detail throughout this report:
1. Planning and Decision Making
2. Infrastructure Development
3. Implementation
4. Assessment and Knowledge Utilization

When working to coordinate monitoring and evaluation with professional development, the same four steps are used in a recursive model. The first step (Planning and Decision Making)

provides the critical link for coordinating these two efforts to ensure that they are intertwined and strengthen their individual and collective impact.

Steps in Creating a Coordinated Approach to Integrating the CLASS into Evaluation/Monitoring and Professional Development Systems

EVALUATION & MONITORING

- Develop Infrastructure
- Implementation – Data Collection
- Assessment and Knowledge Utilization

Planning and Decision Making

PROFESSIONAL DEVELOPMENT (PD)

- Develop Infrastructure
- Implementation – Delivery of PD
- Assessment and Knowledge Utilization

Planning and Decision Making

For both Evaluation and Monitoring (typically focused on ensuring that the goals associated with program funding or administrative or legislative mandates are being achieved) and for Professional Development (typically tied to raising program quality by enhancing teacher performance), the initial step involves planning and decision making.

Planning and decision making requires review of all the component elements that require consideration if an initiative is to be successfully implemented. Purpose and goals should be clearly articulated and used to guide the decision-making process. Careful determination of how data will be collected and managed is essential to ensure that initial decisions are tracked and evaluated in ways that can inform later planning, implementation, and coordination decisions.

Sections of this report that focus on planning and decision making include information about:
- Creating cut-scores on CLASS for QRIS and other quality rating or monitoring systems;
- Ways in which CLASS compares to other observation systems such as the Early

Childhood Environmental Rating Scale (ECERS) and the Early Language and Literacy Classroom Observation tool (ELLCO); and

- Resources for creating buy-in among programs, teachers, and policymakers.

Infrastructure Development

Once key decisions have been made, capacity has to be built so that program goals can be reached. Infrastructure development includes: building a workforce with the training and experience required to perform CLASS observations and to deliver effective professional development focused on teacher-child interactions; obtaining or creating resources and tools to facilitate professional development; building data collection and management systems; and creating systems for coordinating and overseeing the implementation of these various elements.

Sections of the report focused on infrastructure development include information about:

- Hiring, training, and supporting staff to conduct CLASS observations and professional development programs;
- How to effectively and efficiently train large numbers of CLASS observers; and
- How to select or develop professional development supports that will be effective in improving the quality of teachers' interactions with children.

Implementation

Once an infrastructure is built, implementation can begin. For Monitoring and Evaluation, this means collecting CLASS data from programs; for Professional Development, it means delivery of CLASS-focused learning opportunities.

Sections of the report focused on implementation include information about:

- Designing an observational protocol, giving consideration to factors such as how many observers are needed as well as how long and when classrooms should be observed.
- Collecting data in a way that will inform evaluation and professional development efforts, as well as ongoing decision making.
- The levels of support needed to ensure that CLASS-based, teacher professional development experiences are effective.

Assessment and Knowledge Utilization

There are various uses of knowledge gained through these efforts including: reporting back to individual teachers and programs; compiling and reporting data at a state/local level either for accountability purposes or to inform future policy and administrative decisions; and using the information and insights gained to modify and calibrate future work.

Sections of the report focused on assessment and knowledge utilization include information about:

- The types of CLASS data that are most appropriate for reporting to teachers and programs.
- How to evaluate the success of CLASS-based professional develop opportunities.

Other Important Considerations

The CLASS has been used in classrooms with diverse populations: Dual Language Learners (DLL), children from migrant families, tribal populations, and children with special needs and diverse cultural backgrounds. The data from the National Center for Early Development and Learning (NCEDL) studies suggest that the CLASS can reliably assess the quality of teacher-child interaction in a wide variety of classrooms serving diverse populations of children. We discuss ways in which this tool can be used most appropriately in settings with dual language learners, children with disabilities, and high levels of cultural diversity.

Important Principles for Effective Implementation of the CLASS

Throughout this report we offer practical suggestions for how best to implement the CLASS as a tool for improving program quality in early childhood settings. In summary, we offer five principles that should guide your use of the CLASS.

1. **Take time for thoughtful planning; stakeholder involvement is crucial to the development of effective systems of evaluation and teacher support that incorporate the CLASS.**

2. **Invest time and resources in using the tool well.**

3. **Invest in evaluation(s) that can inform future program development. Document results that can be used to leverage support and resources from policymakers.**

4. **There is no magic bullet – be thoughtful about how the CLASS fits into the larger picture of quality improvement efforts.**

5. **Continually work toward building an aligned system of evaluation and professional development.**

01 Investing in Effective Teacher-Child Interactions in Early Care and Education Programs

"Even as we invest in early childhood education, let's raise the bar for early learning programs that are falling short. Now, today, some children are enrolled in excellent programs. Some children are enrolled in mediocre programs. And some are wasting away their most formative years in bad programs....That's why I'm issuing a challenge to our states: Develop a cutting-edge plan to raise the quality of your early learning programs; show us how you'll work to ensure that children are better prepared for success by the time they enter kindergarten… We will reward quality and incentivize excellence, and make a down payment on the success of the next generation."

-Remarks by President Barack Obama at the Hispanic Chamber of Commerce on a Complete and Competitive American Education, March 10, 2009

With these words President Obama challenged the early care and education (ECE) community to develop new policies and systems designed explicitly to improve the quality of children's experiences in ECE programs. Quality ECE programs provide children with a warm, caring, and safe environment that stimulates their learning and development. We now know that ensuring children have access to programs with these attributes requires more than providing adequate furnishing and materials or placing a degreed ECE teacher in each room. While these elements can lay a foundation for effective programs, recent research highlights the importance of going beyond them to ensure that children's daily interactions in classrooms with teachers and peers promote their learning and development.

> *"Dozens of studies, from all across the country, converge on the findings that it is the qualities and nature of interactions between adults and children that are responsible for children's learning and development."*
>
> *-Robert. C. Pianta, Dean of the University of Virginia Curry School of Education*

In this report we discuss the ways in which one tool, the Classroom Assessment Scoring System © (CLASS: Pianta, La Paro, & Hamre, 2008) can help states, counties, districts, and programs take steps toward improving the quality of ECE teachers' interactions with children.

The CLASS provides a reliable, valid assessment of three broad domains of effective interactions – *Emotional Support, Classroom Organization, and Instructional Support* – that characterize children's experiences in ECE programs. Research findings from over 3,000 classrooms demonstrate that children in classrooms with higher CLASS ratings realize greater gains in social skill, language, early literacy, and math development.

Unfortunately, too few children are exposed to these types of effective interactions during their

early years of formal education. As policymakers and program administrators strive to maximize children's learning and developmental outcomes, even while streamlining budgets, evidence-based monitoring, evaluation, and teacher professional development strategies are gaining attention.

This document describes the ways the CLASS can be used to facilitate improvements in teacher-child interactions through: 1) program evaluation and monitoring; and 2) professional development. It provides an overview of the CLASS as well as practical information to guide policy and implementation efforts at the federal, state, and local levels.

First, an **overview of the CLASS** is presented. Then, a **conceptual framework** is introduced that can guide states and others in systematically implementing the use of the CLASS and creating a coordinated approach for improving teacher-child interactions. The report also provides **answers to practical questions** about how best to implement and coordinate use of the CLASS as part of program quality improvement and evaluation and monitoring systems. The report concludes with a brief discussion of **other important issues**, such as use of the CLASS in settings with diverse populations of children.

But first, a few important caveats. No one tool or system can assume sole responsibility for improving the quality of ECE programs, or even the quality of one component of these programs, such as teacher-child interactions. The CLASS is an evidenced-based tool that can effectively be used as one approach, but successful, systemic improvement in the quality of ECE programs also requires a broader, more comprehensive approach that considers the many different facets of high-quality programs, such as teacher preparation, ongoing training, supervision, curriculum and working conditions (including teacher compensation), as well as the capacity and cohesion of the state's ECE infrastructure, policies, and regulations.

> *"With an assessment tool like the CLASS, we've found a missing piece of the puzzle that we've been looking for for a very long time. A tool that helps assess the quality of teacher-child interactions can help strengthen the qualities of our programs by focusing on something that we know is so important to a young child's life – supportive relationships built on quality interactions.*
>
> *-Amanda Bryans, Director, Educational Development and Partnerships Division, Office of Head Start – November 2008*

Second, although this report relies heavily on research to inform important policy and implementation questions, much remains to be learned about how to most effectively conduct and use classroom observations as a part of evaluation, monitoring, and program improvement efforts. It is critical that those of you implementing programs that rely on the CLASS partner with evaluation and research teams to continue building our knowledge about effective practices. Furthermore, in our increasingly data-driven world, sustained improvements in policy and programs require that these data are collected, interpreted, and shared in ways that will inform policymakers, teachers and administrators.

02 The Classroom Assessment Scoring System (CLASS): An Overview

The Classroom Assessment Scoring System (CLASS) is a tool for observing and assessing the qualities of interactions among teachers and children in classrooms. It measures the emotional, organizational, and instructional supports provided by teachers that are known from research to contribute to children's social development and academic achievement. The tool is used to assess interactions between teachers and children for a variety of purposes, including teacher professional development, monitoring and evaluation, and research.

The CLASS focuses on the quality of classroom interactional *processes*, rather than on the *content* of the physical environment, available materials, or the specific curriculum. The physical environment (including materials) and curriculum matter in the context of *how* teachers put them to use in their interactions with children. Widely employed in research and evaluation studies, the CLASS has been affirmed as a reliable and valid measure through use in over 3,000 classrooms in Head Start, child care, and pre-K settings (both center- and school-based).

Development of the CLASS as an Assessment Tool

The CLASS is based on developmental and educational theory. It evolved from instruments developed and used in the large-scale National Institute of Child Health and Human Development Study of Early Child Care, including the Observational Record of the Caregiving Environment (ORCE) and the Classroom Observation System (COS).

The CLASS has been validated by over ten years of research in educational settings, directly connecting teacher-child interactions with growth in children's academic and social skills. An early version of the CLASS was used in the National Center for Early Development and Learning (NCEDL) Multi-State Pre-K Study and Study of Statewide Education Programs (SWEEP). These two studies evaluated over 700 state-funded prekindergarten (pre-K) classrooms in 11 states, and included classroom observations, child assessments, and surveys of teachers, parents, and administrators (e.g. Pianta et al., 2005). The extensive use of the CLASS in these studies and others has led to further refinements in the tool's development and construction.

The CLASS initially was developed for use in pre-K classrooms and has since been expanded for use in classrooms for both older and younger-aged children. CLASS pre-K and K-3 manuals were published by Brookes Publishing beginning in 2008. Upper-Elementary, Secondary, and Toddler versions are available in pilot form, with final publication expected by August 2010. An Infant version is under development, completing the family of CLASS tools as follows:

- **Infant (CLASS-I)**
- **Toddler (CLASS-T)**
- **Pre-Kindergarten (CLASS-Pre-K)**
- **Elementary (CLASS-K-3)**
- **Upper-Elementary (CLASS-4 to 6)**
- **Secondary (CLASS-S)**

The levels of the CLASS presently available extend the instrument's usability beyond assessment of teacher-child interactions in classrooms. Now, the tool can also be used to measure the presence of consistent types of effective interactions *across* levels and grades, accompanied by descriptions and examples specifically tailored to each age group. By providing a common metric and language for discussion of classroom quality across the early childhood years and into K-12, the CLASS addresses concerns with grade-to-grade transition and the need for coherence, while still providing a context-specific and developmentally-sensitive metric for each age group.

Development of CLASS-Aligned Professional Development Supports

If programs and teachers will be assessed on the quality of their interactions with children, adequate supports need to be in place to help them improve these practices. The CLASS, in its current form, is intentionally designed as a tool that can help bridge the gap between the assessment of program quality (through research, evaluation, and monitoring) and quality improvement efforts. To aid in the alignment of these efforts, CASTL has designed and tested a set of professional development tools that use the CLASS to provide a common framework, focus, and language among teachers and those working with teachers to improve practice (coaches, administrators, course instructors, mentors, etc.). The supports were developed to provide a variety of options for teachers and programs – including more intensive programs such as the MyTeachingPartner coaching program or a 14-week course, as well as less intensive supports such as the CLASS video library. All of these professional development tools have shown effectiveness in improving the quality of teachers' interactions with children. More details on these professional development supports are provided in a later section.

Organization of the CLASS

The CLASS is organized to assess three broad **domains** of interactions among teachers and children:

- Emotional Support
- Classroom Organization
- Instructional Support

ADVANTAGES OF THE CLASS

- Focuses on teacher-child interactions, the aspects of classrooms shown to promote children's social and academic development
- Validated in thousands of classrooms nationwide
- Facilitates alignment between teacher evaluation and professional development.
- Training available for schools, early childhood programs, teachers, and administrators

Each domain includes several **dimensions.** The dimensions collectively assess the extent to which teachers effectively support children's social and academic development. The table on the next page provides an overview of the CLASS dimensions from Toddler, Pre-K, and K-3 versions of CLASS. More information on Upper-Elementary and Secondary versions is available at www.class.teachstone.org. Each dimension is defined by specific observable **indicators**. For example, *Teacher Sensitivity*, a dimension within the domain of *Emotional Support,* consists of several indicators including *Awareness, Responsiveness,* and *Student Comfort*.

In all versions, scoring is completed at the dimension level using a 7-point scale, with the low range being a score of 1-2, the middle range 3-5, and the high range 6-7. Each dimension description in the CLASS manuals provides a detailed explanation to help determine the specific score**.**

CLASS Framework for Early Childhood and Elementary Classroom Quality

Domain	Dimension	Description	Levels Available
Emotional Support	Classroom Climate (Positive and Negative)	Reflects the overall emotional tone of the classroom and the connection between teachers and students. Considers the warmth and respect displayed in teachers and students interactions with one another as well as the degree to which they display enjoyment and enthusiasm during learning activities.	Toddler; Pre-K; K-3
	Teacher Sensitivity	Encompasses teachers' responsivity to students' needs and awareness of students' level of academic and emotional functioning. The highly sensitive teacher helps students see adults as a resource and creates an environment in which students feel safe and free to explore and learn.	Toddler; Pre-K; K-3
	Regard for Student/ Child Perspectives	The degree to which the teacher's interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view, rather than being very teacher-driven. This may be demonstrated by teachers' flexibility within activities and respect for students' autonomy to participate in and initiate activities.	Toddler; Pre-K; K-3
Classroom Organization	Behavior Management/ Behavior Guidance	Encompasses teachers' ability to use effective methods to prevent and redirect misbehavior, by presenting clear behavioral expectations and minimizing time spent on behavioral issues.	Toddler; Pre-K; K-3
	Productivity	Considers how well teachers manage instructional time and routines so that students have the maximum number of opportunities to learn. Not related to the quality of instruction, but rather teachers efficiency.	Pre-K; K-3
	Instructional Learning Formats/Facilitation of Learning and Development	The degree to which teachers maximize students' engagement and ability to learn by providing interesting activities, instruction, centers, and materials. Considers the manner in which the teacher facilitates activities so that students have opportunities to experience, perceive, explore, and utilize materials.	Toddler; Pre-K; K-3
Instructional Support	Concept Development	The degree to which instructional discussions and activities promote students' higher order thinking skills versus focus on rote and fact-based learning.	Pre-K; K-3
	Quality of Feedback	Considers teachers' provision of feedback focused on expanding learning and understanding (formative evaluation), not correctness or the end product (summative evaluation).	Toddler; Pre-K; K-3
	Language Modeling	The quality and amount of teachers' use of language-stimulation and language-facilitation techniques during individual, small-group, and large-group interactions with children. Components of high-quality language modeling include self and parallel talk, open-ended questions, repetition, expansion/extension, and use of advanced language.	Toddler; Pre-K; K-3
	Literacy Focus	Reflects the quality with which teachers deliver activities focusing children on "code units" of early literacy (e.g., letters, words, phonemes).	Pre-K

Research Findings on the CLASS

Research using the CLASS provides compelling evidence about the nature of teacher-child interactions in ECE settings and the ways in which these interactions promote children's social and academic development. Four overarching conclusions have emerged from the research:
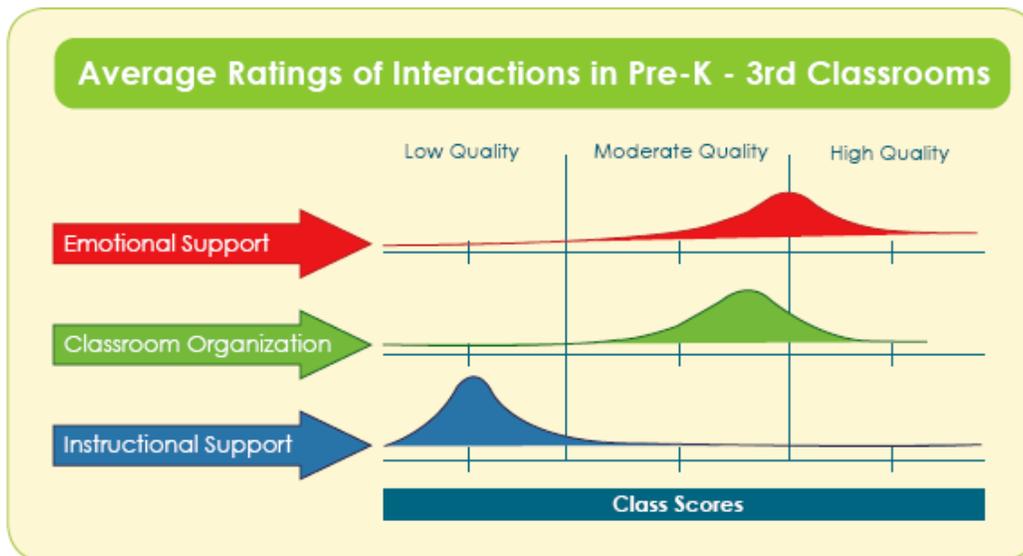
1. **Effective teacher-child interactions are an active and crucial ingredient for children's social and academic development.**

Children in classrooms with higher CLASS ratings experience greater gains in academic achievement and social skill development during the school year (Howes et al., 2008; Mashburn et al., 2008). Classrooms in which teachers develop positive relationships with children and are sensitive to children's needs (as measured by the CLASS domain Emotional Support) foster children's social development. Classrooms in which teachers effectively manage behavior and take an active role in creating learning opportunities enhance children's self-regulatory skills and help them get the most out of each day they spend in the classroom. Children in classrooms in which teachers offer higher quality feedback and more consistently support the development of thinking skills (as measured by the CLASS domain Instructional Support) show more academic progress in both pre-K and kindergarten than do their peers who receive lower levels of these supports. Clearly, when ECE programs provide effective emotional, organizational, and instructional supports, children are more successful as learners and more likely to meet expectations regarding what they should know and be able to do.

2. **Children in ECE settings are not consistently exposed to effective teacher-child interactions.**

The domains of Emotional Support and Classroom Organization typically are at moderate to high levels of quality in ECE classrooms. Instructional Support, however, is typically at a low level of quality (see Figure below). These findings have been replicated in several large national studies of ECE settings, including state pre-K, Head Start, and community-based child care centers (Pianta et al., 2005).

Additionally, very little consistency exists in children's exposure to effective interactions from year to year. Children have inconsistent access to supportive classroom interactions that facilitate their social and academic learning as they move from one grade level to the next. Of 725 children followed from pre-K to kindergarten in a recent study, only 33% were placed in classrooms offering high levels of Emotional Support both years; the vast majority of children (60%) were in classrooms offering low levels of Instructional Support in both pre-K and kindergarten (LaParo et al., 2009).

Average Ratings of Interactions in Pre-K – 3rd Classrooms

Of even greater concern is the fact that children from low income families, those who are most in need of exposure to high-quality early learning environments, are less likely to experience effective teacher-child interactions relative to their middle-income peers (LoCasale-Crouch et al, 2008). For example, among a group of 676 state pre-K programs, 98 (14%) were identified as providing high-quality emotional and instructional interactions, whereas 127 classrooms (19%) were identified as providing very low levels of emotional and instructional interactions. The low-quality classrooms were much more likely to have high concentrations of poor children. The average low-quality classroom had 65% percent of children categorized as poor, compared to only 49% of poor children in the high quality classrooms.

These findings are of concern because we know that *consistent* exposure to effective interactions is most likely to lead to positive outcomes for children, especially for children from poor families. Inequities in classroom experiences contribute to a furthering of gaps in social and academic performance observed among children at kindergarten entry.

3. **To maximize the impacts for children, quality improvement efforts need to focus explicitly on teacher-child interactions.**

While basic elements of program quality such as teacher education, class size, and classroom materials are important, their significance is measured in part by the extent to which they facilitate and support effective teacher-child interactions. Research shows that the classroom interactional components measured by the CLASS are more powerful predictors of children's development and learning than are structural elements of program quality. Factors such as teacher qualifications and class size, though important, are not sufficient in and of themselves to ensure children's positive development.

A study conducted by Andrew Mashburn and colleagues (2008) examined the extent to which three indices of quality predicted gains in 4-year-olds' academic performance and social behavior across the pre-K year: infrastructure and design quality (e.g. teacher education, class size, ratios, provision of meals, comprehensive curricula, etc); overall environmental quality (as measured by the Early Childhood Environmental Rating Scales-Revised, ECERS-R); and teacher-child interactions (as measured by CLASS). Findings suggest that there are no systematic associations between infrastructure and design aspects of quality and gains in children's academic or social development in pre-K. Children in classrooms with higher scores on the ECERS-R made significantly more gains in expressive language over the course of the pre-K year than did their peers in classrooms with lower environmental quality. Children in classrooms in which teachers displayed more emotional support (as measured by the CLASS) showed gains in social competence and reductions in behavior problems throughout the year, while children in classrooms in which teachers provided rich instructional teacher-child interactions showed greater gains across multiple measures of early academic performance.

Summary of Associations between Indicators of Quality and Gains in Children's Development during the Pre-K Year (Mashburn et al., 2008)

Gains in Children's Development During the Pre-K Year in…	Quality Indicators			
	Infrastructure and Design Quality	ECERS-R Total	Emotional Support	Instructional Support
Receptive Language	No association	No association	No association	✓
Expressive Language	No association	✓	No association	✓
Rhyming	No association	No association	No association	✓
Letter Naming	No association	No association	No association	✓
Math Skills	No association	No association	No association	✓
Social Competence	No association	No association	✓	No association
Behavior Problems	No association	No association	✓	No association

Note: This study used a previous version of CLASS. Emotional Support was measured by Positive and Negative Climate, Teacher Sensitivity, Overcontrol (similar to Regard for Student Perspectives), and Behavior Management. Instructional Support was measured by Concept Development and Quality of Feedback.

These and other studies provide compelling evidence that quality improvement efforts focused only on increasing early childhood teachers' degree acquisition or lowering class sizes are unlikely to have strong effects on child outcomes. Improvement efforts need to focus directly on the quality of teachers' interactions with children if we want to positively affect children's learning gains. These findings highlight the need for teacher education programs to consider the ways in which their curriculum and practicum experiences for future early educators may be enhanced by a more explicit focus on knowledge about and use of effective teacher-child interactions.

> Quality improvement efforts that focus only on increasing the level of early childhood teachers' education or lowering class sizes are unlikely to have strong effects on child outcomes unless they are coupled with more direct efforts to improve the quality of teachers' interactions with children.

4. Carefully designed and implemented professional development support can effectively improve the quality of teacher-child interactions.

As noted earlier, CASTL has designed tools to help teachers improve the quality of their interactions with children. These professional development supports have been rigorously evaluated and demonstrate that teachers can make sustained improvements in their practice. As one example, teachers who participated in a CLASS-based coaching program, MyTeachingPartner (MTP), showed significant increases in their sensitivity to children, became more effective at engaging children in learning, and used more effective language facilitation strategies, compared to teachers who were not provided with a coach (Pianta et al., 2008). More details on MTP are provided later. This and other studies demonstrate that teachers can change the way they interact with children. However, professional development supports intended to improve the quality of teachers interactions with children must be developed and chosen carefully to ensure efficacy.

03 Improving Teacher-Child Interactions: Designing a Coordinated Approach

Improving the quality of teacher-child interactions in ECE settings requires states, state departments, and other ECE administrative structures such as school districts to design a coordinated approach in which the use of the CLASS for evaluation and monitoring and for professional development is integrated with the systems of which they are a part.

Increasingly, teachers and programs are being held accountable for the quality of interactions they provide to young children. The fairness and effectiveness of accountability policies depends on ensuring that demands are aligned with systems that prepare teachers and programs to meet these expectations. Teacher professional development is essential in this effort.

This alignment is not commonly observed in states, however. In particular, ECE teachers typically are not provided with the training and support needed, either pre-service or in-service, to provide effective social and instructional interactions.

Steps for the Effective Use of the CLASS

The CLASS provides one possible tool to address this need. Because the CLASS offers an assessment of effective teacher-child interactions, as well as a set of resources for enhancing the quality of these interactions, it provides a common language and stable thread that can be woven among efforts to assess teacher effectiveness (monitoring and evaluation) and ensure that teachers have the knowledge and skills to promote children's social development and academic learning (professional development).

Four steps should be followed to guide use of the CLASS in these efforts:
1. Planning and Decision-Making
2. Infrastructure Development
3. Implementation
4. Assessment and Knowledge Utilization

Steps to Integrate CLASS into Existing Systems for Evaluation/Monitoring and Professional Development

STEP 1

Planning and Decision Making

STEP 2

Infrastructure Development

STEP 3

Implementation

STEP 4

Assessment and Knowledge Utilization
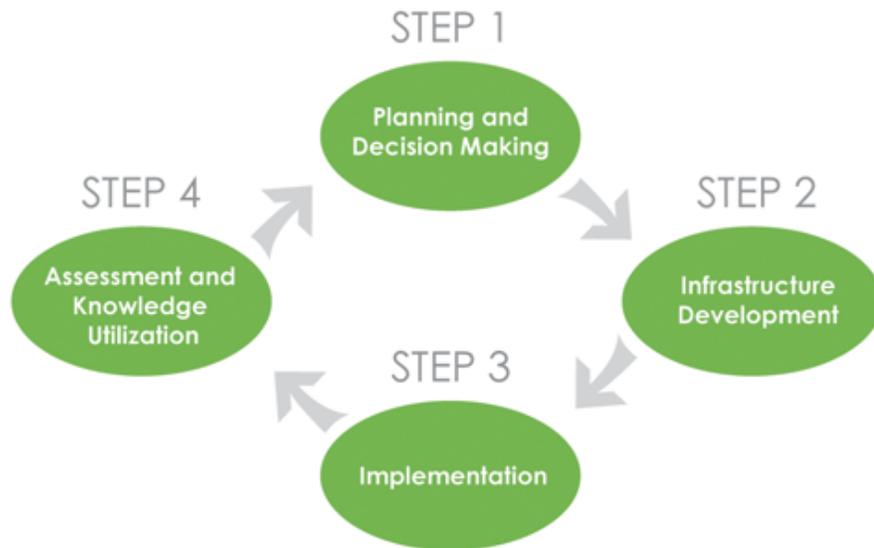
Below we provide an overview of each step and then discuss how these four steps can and should come together to promote coordination.

Step 1: Planning and Decision Making

For both evaluation and monitoring (typically focused on ensuring that the goals associated with program funding or administrative or legislative mandates are being achieved) and for professional development (typically tied to raising program quality by enhancing teacher performance), the initial step involves planning and decision making.

Planning and decision making require review of all the component elements that must be considered if the initiative is to be successfully implemented. Purpose and goals should be clearly articulated and used to guide the decision-making process. Careful determination of how data will be collected and managed is essential to ensuring that initial decisions are tracked and evaluated in ways that will effectively inform later planning, implementation, and coordination decisions.

Step 2: Infrastructure Development

Once key decisions have been made, capacity needs to be built to reach program goals. Infrastructure development includes: building a workforce with the training and experience required to perform CLASS classroom observations and to deliver effective teacher-child interaction-focused professional development; obtaining or creating resources and tools to facilitate teacher-child interaction-focused professional development; building data collection and management systems; and creating systems for coordinating and overseeing the implementation of these various elements.

Step 3: Implementation – Data Collection and Delivery of Professional Development

Once the infrastructure is in place, implementation can begin. For Monitoring and Evaluation, this means collecting CLASS data from programs; for Professional Development, it means delivery of learning opportunities to teachers that focus on improving the quality of their interactions with children.

Step 4: Assessment and Knowledge Utilization

There are various uses of the knowledge gained through these efforts including: reporting back to individual teachers and programs; compiling and reporting data at a state/local level either for accountability purposes, targeting professional development opportunities, or to inform future policy and administrative decisions; and using the information and insights gained to modify and calibrate future work.

Coordinating Evaluation/Monitoring and Professional Development Efforts

When working to coordinate monitoring and evaluation with professional development, the same four steps are used in a recursive model. The first step (Planning and Decision Making) provides the critical link for coordinating these two efforts to ensure that they are intertwined and strengthen their individual and collective impact. Below we briefly discuss key issues related to coordinating these systems in ways that create the most effective and efficient use of CLASS.

Steps in Creating a Coordinated Approach to Integrating the CLASS into Evaluation/Monitoring and Professional Development Systems

EVALUATION & MONITORING

PROFESSIONAL DEVELOPMENT (PD)

Develop Infrastructure

Develop Infrastructure

Implementation – Data Collection

Implementation – Delivery of PD

Planning and Decision Making

Assessment and Knowledge Utilization

Assessment and Knowledge Utilization

Step 1: Coordinated Planning and Decision Making

Coordination between Evaluation and Monitoring and Professional Development begins at this initial stage and requires bringing together representatives from different constituencies. Any attempts at a coordinated approach will fail without sufficient buy-in across the many agencies, departments, and stakeholders involved in the ECE community. This is likely to include Departments of Social Services (such as facilities licensing staff), Departments of Education, representatives from Head Start, pre-K, and community child care programs, research teams, and 2- and 4- year colleges and other organizations that provide professional development, such as resource and referral agencies.

Note that the oval labeled Planning and Decision Making is at the center of the figure. It is the conduit for bringing evaluation and monitoring together with professional development and vice versa. Aligned planning and decision making is the critical first step for ensuring that coordination is embedded in this work from its very beginning and continues throughout the life of the effort.

As just one example of the ways in which a coordinated approach can assist in raising the quality of ECE programs, ample evidence exists that even when high-quality, evidence-based professional development experiences are available, many teachers fail to take advantage of them. A monitoring and evaluation process, such as Quality Rating and Improvement Systems (QRIS), that provides teachers and program administrators with feedback about their interactions with children can motivate participation in professional development experiences that demonstrate how to promote positive interactions. This type of coordination – i.e., coordination between data gathered as part of an evaluation and monitoring process and the provision of professional development to enhance teacher effectiveness – may also encourage program administrators to support their staff with options like paid time-off or the provision of substitutes.

QRIS is becoming an increasingly popular way to drive program improvement. This innovation highlights the inter-relationship that can and should exist between monitoring and evaluation and attempts to elevate program improvement through professional development.

Because of the steep learning curve involved with implementing a QRIS, we strongly recommend allocating a planning year for: 1) developing the necessary infrastructure and 2) collecting initial data. This planning time will allow local and/or state data to inform important decisions such as how to sample classrooms, how to set CLASS cut-off scores aligned with the rating system levels, and the

> A critical piece of early work is designing systems that will allow initial decisions to be tracked and evaluated in a way that can inform later decisions about program design and implementation.

processes by which teachers and programs will be given feedback to support continuing growth. Ideally, from the very beginning of the planning process states or localities will partner with research faculty from an institution of higher education or an evaluation team to help design the most effective system.

Step 2: Coordinated Infrastructure Development

Here again, coordination is essential. A coordinated approach to infrastructure development will help ensure that professional development opportunities are aligned with the evaluation/monitoring aspects of programs, as well as allow for greater efficiency. For example, at the state level one of the key issues is building CLASS knowledge and training capacity among a core group of staff. When coordination is in place, CLASS trainers can provide training and support both to observers who are collecting data for monitoring and evaluation purposes and to CLASS professional development staff.

A coordinated approach to data collection and evaluation can allow for the most useful and compelling data to be brought to bear on the sustainability of efforts. Over time, evaluation and monitoring data should be available to help show that investments in professional development were successful in improving the quality of teacher-child interactions and child outcomes. It is also essential that teachers and program administrators are well informed about the CLASS and intentions for its use. This is another, often overlooked, piece of the coordination puzzle.

Step 3: Coordinated Implementation

A coordinated approach between the data collection process and professional development opportunities facilitates teachers and programs receiving feedback from the CLASS while learning how to engage in more effective interactions with children. Simply receiving a report about the quality of one's interactions is unlikely to lead to improvements without further information and support. Similarly, using the CLASS as a professional development tool will be most effective if participants are informed by data from monitoring and evaluation efforts, which help target attention and resources to practices of greatest concern. These data may indicate, for example, that there are needs across the state or locality in instructional aspects of teacher-child interactions. State-wide programs may be developed to target Instructional Support, while more site- or program-specific professional development efforts could target other CLASS domains.

Step 4: Coordinated Assessment and Knowledge Utilization

This step involves examining and evaluating how the process of coordination is working and using the findings to inform next steps for further linking efforts to achieve desired outcomes. If, for example, a state makes a significant investment in CLASS-based professional development over a 5-year period, but fails to see evidence of significant improvement in the quality of teacher-child interactions or child outcomes, there is clearly a need to consider different

professional development approaches. For most effective knowledge utilization, data systems should also be linked to information on children's school readiness scores and other child outcome data. This allows states and localities to examine the extent to which investments in improving the use of effective interactions are associated with improvements in children's development of early academic and social competencies.

CASE STUDY

The Head Start Professional Development and CLASS Initiative: Ensuring Strong Linkages between Program Monitoring and Professional Development

Head Start is the federal government's premiere child development and early education program. When reauthorized in 2007 (The Improving Head Start for School Readiness Act), Congress directed the Office of Head Start to include as part of its program monitoring process a reliable and valid research tool that assesses teacher-child interactions. To fulfill this mandate, the Office of Head Start (OHS) chose the CLASS, although grantees may choose to use a different assessment tool for their purposes. The OHS intends to use findings from the CLASS to guide national program improvement efforts, determine individual and program technical assistance needs, and ensure programs are focusing on effective teacher-child interactions that lead to improving young children's school readiness. The Head Start Professional Development and CLASS Initiative offers insights into planning for large scale use of the CLASS and creating linkages between data and program improvement efforts focused on teacher-child interactions.

Implementation – Thoughtful Investment in Aligned Systems for Accountability and Improvement

Driven by an overarching focus on teacher professional development, the Head Start Professional Development and CLASS Initiative consists of three carefully sequenced and interconnected components. Rather than focusing exclusively on monitoring, OHS took the time and dedicated resources to make sure that the inclusion of CLASS would be accepted by programs and would ultimately produce improvements in the quality of Head Start programs nationwide.

Many Head Start grantees initially expressed reservations about another new assessment tool to which they would be held accountable. OHS addressed these concerns by investing in creating buy-in and awareness, conducting a pilot of the monitoring system through which they gathered important information with regard to how to best integrate CLASS, and dedicating significant resources to helping grantees make improvements in the types of classroom interactions measured by CLASS.

CLASS Training at Scale – Creating Buy-in and Awareness Nationwide

Given the use of the CLASS in its monitoring system, it is important to OHS that every Head Start grantee is familiar with the CLASS, understands its purpose, and connects this purpose with Head Start's mission to prepare children for school and life success. According to Colleen Rathgeb, Acting Director of the Policy and Budget Division in the Office of Head Start, "The use of the CLASS signals how critical we believe the CLASS dimensions are in teaching young children and how important it is for all of our programs to focus on productive teacher-child interactions."

During the 2008-2009 program year, OHS sponsored 150 CLASS Observation trainings, with the goal of providing the Head Start community with an introduction to the CLASS. Over 2000 Head Start education coordinators – at least one from every program - were trained on the CLASS and given strategies for using assessment findings to improve teachers' effective interactions with children. Among the results: a renewed appreciation by Head Start grantees and education coordinators of the importance of intentional observations and feedback to teachers.

Approximately 20 staff attended the 5-day CLASS Train-the-Trainer workshop; it was these staff who led all CLASS observation trainings. They were supported by a CASTL staff member, who provided feedback and support to new trainers and co-led trainings in instances in which trainers requested more support. During the pilot phase for these trainings, 19 CLASS observation trainings occurred.

They yielded an average reliability pass rate of 60%. Trainings logistics were finalized in January 2009, with 103 additional trainings occurring between January and September 2009. These trainings yielded an overall pass rate of 70%. This effort demonstrates the feasibility of using a Train-the-Trainer approach to conduct successful CLASS observation trainings on a large scale.

Finding a Balance between Accountability and Improvement

By directing attention to the caliber of teacher-child interactions and shining a spotlight on the importance of the three CLASS domains, the OHS is striving to elevate program quality and improve child outcomes. It is well recognized by OHS that the CLASS does not measure all aspects of children's experiences in classrooms that contribute to their social and academic development; they believe, however, that the CLASS provides an important tool for focusing attention on teacher-child interactions in Head Start classrooms.

Despite many grantees expressing a desire to have the CLASS be used only as a professional development tool, OHS thought it was important for the CLASS to be a part of the monitoring system. The old adage, "What gets measured gets done" resonates with OHS staff involved in this process. By providing grantees with data on the quality of teacher-child interactions observed in their classrooms, they hope to incentivize grantees to make improvements in these areas.

The OHS began by piloting the CLASS with 50 grantees to learn how including the CLASS as part of the monitoring review process would work. OHS staff initially discussed ways in which CLASS scores might be used to determine grantee deficiencies with regard to program standards. During the pilot, however, OHS determined that the challenges associated with establishing cut-off scores outweighed the benefits.

For the 2009-2010 program year, a CLASS reviewer will be part of every program monitoring visit. During the process of CLASS observations, notation of areas in which a classroom is not in compliance with program standards may be made but will be reported separately. Head Start programs will not be required to meet a pre-established score on the CLASS, however. Aggregate CLASS scores will be shared with grantees, but the main purpose of sharing these scores is promoting program improvement. Scores also will be shared with the relevant Head Start Training and Technical Assistance Network provider so that aggregate program scores can be analyzed and used to design teacher development opportunities for improving teacher-child interactions.

Building Capacity of the Existing Systems to Support CLASS-based Professional Development

Going forward, a substantial investment will be made in building the knowledge and skills of Head Start Technical Assistance providers. These individuals are seen as key to the Office's efforts to improve teaching in Head Start classrooms. OHS has partnered with Teachstone to provide a variety of CLASS-based professional development opportunities. Starting in October 2009, at least two training and technical assistance providers in each state participated in the CLASS Trainer of Trainers program. In turn, these staff will train other providers and grantee staff, expanding the number of individuals able to help education coordinators work with classroom teachers and mentor them. OHS is making other CLASS resources, such as the video library, available to Head Start teachers nationwide.

Lessons Learned

It's important to think systematically. With the overarching goal of improving teaching and learning in classrooms, the Office of Head Start systematically changed its focus from (1) information sharing and focusing teacher and staff attention on what happens between children and teachers in classrooms to

(2) building capacity to assess teacher-child interactions so teachers and programs could have feedback on their performance, and most recently to (3) expanding capacity to help programs and teachers become more effective based on what their CLASS scores reveal. Each of the three components is intended to build from what preceded it, creating a strong foundation for advancing teachers' and children's learning.

Programs should be allowed to choose the assessment tool of their choice for on-site efforts. Most Head Start programs receive multiple funding streams, many of which mandate some form of assessment. In light of the multiple and often contradictory demands placed on programs, the focus should be on improving teacher-child interactions, rather than on requiring programs to use a particular tool.

The functions of monitoring and technical assistance should be kept separate yet connected. It is important to maintain the integrity of monitoring and technical assistance by keeping them separate from one another in terms of personnel and oversight. Yet, information gathered through monitoring is key to providing meaningful feedback to programs and individual teachers. The two functions need to inform each other in order to ensure that professional development addresses performance data and can influence teachers' classroom practices.

04 Evaluation and Monitoring: Measuring the Quality of Teacher-Child Interactions

The early childhood research community has taken steps to evaluate and monitor the quality of ECE programs for decades. Unlike in the K-12 arena, ECE has included observations of classrooms as an important evaluation component. The focus of these observations, however, has typically been primarily on environmental aspects of settings. Only recently have states and localities considered adding measures which focus exclusively on teacher-child interactions to evaluation and monitoring efforts. In some cases, initial efforts to include such measures relied on non-standardized instruments because tools were not available to provide reliable and valid assessment of teacher-child, interaction-focused observations.

The demand for observational tools focusing on teacher-child interactions has increased with the expansion of ECE quality improvement efforts, most notably Quality Rating and Improvement Systems (QRIS). Given the Obama administration's focus on quality improvement and child outcomes, plus emerging evidence about the importance of effective teacher-child interactions to children's development, it is expected that the demand for systematic evaluation and monitoring will grow in coming years.

The CLASS offers one tool for standardizing the measurement of teacher-child interactions as a part of evaluation and monitoring systems. Several states and localities, as well as the Office of Head Start, are using the CLASS in this way. There are many steps, however, between deciding to use the CLASS and full implementation of an evaluation and monitoring system. In this section we answer some of the most frequently asked questions about this process. These questions and their answers come from several years of collaboration with states and localities using the CLASS for this purpose and rely on the latest research to provide best-practice recommendations. The questions are organized around the four major steps discussed in the previous section: Planning and Decision Making, Infrastructure Development, Implementation – Data Collection, and Assessment and Knowledge Utilization.

Steps to Integrate CLASS into Existing Systems for Evaluation/Monitoring and Professional Development

STEP 1
Planning and Decision Making

STEP 2
Infrastructure Development

STEP 3
Implementation

STEP 4
Assessment and Knowledge Utilization
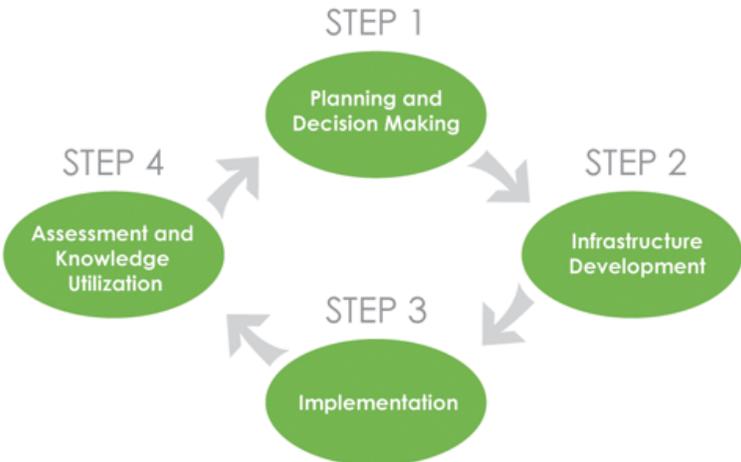
Step I: Planning and Decision Making

Once a decision has been made to use the CLASS as part of a monitoring or evaluation system, many smaller decisions need to be made to set the stage for effective implementation. While it is beyond the scope of this document to detail the full planning and decision making process necessary to support this decision, answers to the most frequently asked questions should help you get started.

How can a pilot best inform the development of monitoring and evaluation systems? We highly recommend that states and other localities engage in piloting work to inform the development of a coordinated relationship between monitoring and evaluation and the use(s) that will be made of the data. Although, for example, some information is presented below about important decisions related to creating cut-off scores on the CLASS and sharing results, these decisions and others should be informed by local data that indicate the status of the community's or state's ECE programs relative to teacher-child interactions. An experienced program evaluator can help design a pilot to address the most pressing program development questions.

Does the CLASS measure an individual teacher's performance or classroom interactions? The CLASS measures classroom-level interactions, not an individual teacher's performance. The intention is to derive an estimate of the average types of interactions that children are exposed to on a daily basis. Thus, if there are multiple adults in the classroom, the CLASS scores will reflect the average types of interactions provided by those adults.

For program rating and reporting purposes, should we use a CLASS dimension (e.g. concept development), domain (e.g. Instructional Support), or total scores? We recommend providing *reports to programs and teachers* at the dimension level, as this will be most helpful for professional development purposes. For the *purpose of creating scores* that will be used to derive decisions or ratings (e.g. the number of stars in a QRIS system) we suggest using domain scores (Emotional Support, Classroom Organization, and Instructional Support). This is because the total score [average across all domains] does not sufficiently reflect the level of quality demonstrated across each of the three domains. In addition, as discussed further below, the three domains have significantly different national average scores; thus, creating a composite score may not be very meaningful from a comparative perspective.
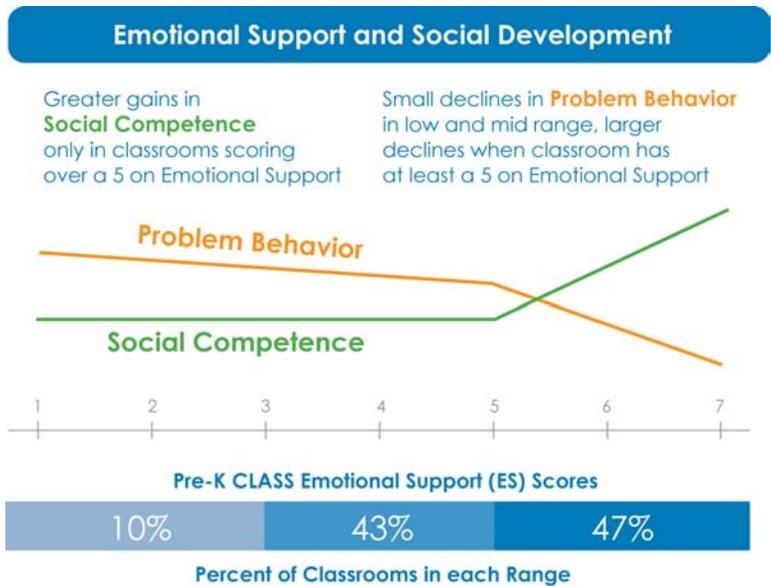
What cut-off scores should be used on the CLASS to demarcate classroom quality? Cut-off scores are points along the 7-point CLASS scale that can be used in monitoring and evaluation efforts to determine levels of quality. For example, it might be decided that an ECE program qualifies as "high quality" if it receives CLASS scores above a 5. There are two important pieces of information for determining cut-off scores.
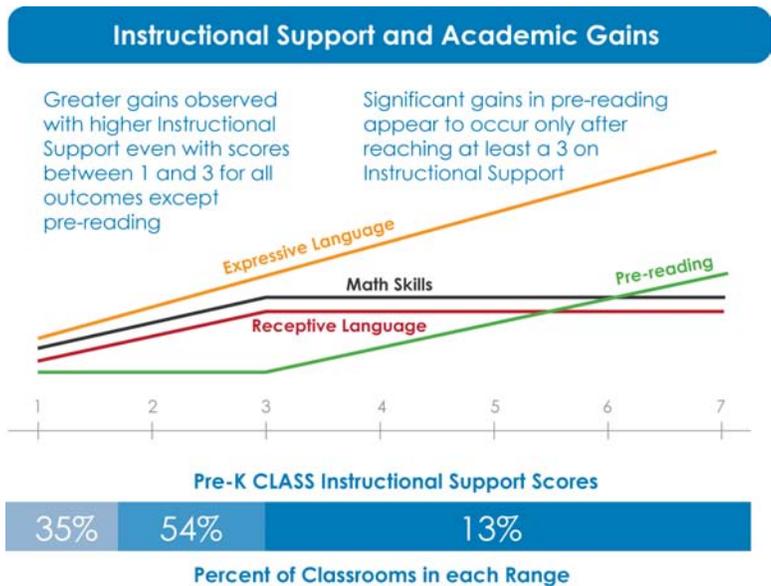- The first concerns the levels of quality that are sufficient to promote positive child outcomes.
- The second concerns how data on CLASS scores are distributed across a normative sample of programs in a given state or locality. By normative, we mean a sample which fairly represents the different types of ECE programs, geographic locales, etc.

To the first point, CASTL does not yet have sufficient data to make a strong statement about the levels of quality on the CLASS that are sufficient to foster positive child outcomes. In general, the research suggests that children in classrooms with higher CLASS scores have better outcomes. Only recently have we started to examine the extent to which there may be threshold effects or points on the scale at which significant effects on child outcomes are observed. We share results from an initial study (Burchinal et al., in press) because we know that this is an important question for those using the CLASS as an evaluation and monitoring tool. However, we must be very careful not to overstate or overgeneralize the results until other studies are available.

In terms of children's social development, not much difference is seen in children's classroom performance until they are in classrooms scoring at least a 5 on Emotional Support (see figure below). Children in classrooms receiving a 4 on Emotional Support have similar levels of social development to children in classrooms receiving much lower scores. According to the national data on which this study is based, approximately 47% of ECE classrooms score above a 5 on Emotional Support.

Emotional Support and Social Development

Greater gains in **Social Competence** only in classrooms scoring over a 5 on Emotional Support

Small declines in **Problem Behavior** in low and mid range, larger declines when classroom has at least a 5 on Emotional Support

Problem Behavior

Social Competence

Pre-K CLASS Emotional Support (ES) Scores

| 10% | 43% | 47% |

Percent of Classrooms in each Range

In terms of academic growth, preliminary evidence from this one study suggests that children experience academic advantages in classrooms that score even slightly higher in the low to mid range of the CLASS Instructional Support domain (see figure). Children in classrooms that scored a 3 on Instructional Support were performing better on assessments of expressive and receptive language and math skills than were peers in classrooms scoring a 1 or 2. Classrooms that score a 3 on Instructional Support show some evidence of teachers' use of effective feedback and a focus on developing children's language and thinking skills, although these are not observed consistently enough across the observation to warrant a higher score. These data suggest that providing children with even occasional high-quality instructional interactions may lead to improved academic outcomes. In contrast, there were not significant associations between CLASS scores and children's pre-reading

Instructional Support and Academic Gains

Greater gains observed with higher Instructional Support even with scores between 1 and 3 for all outcomes except pre-reading

Significant gains in pre-reading appear to occur only after reaching at least a 3 on Instructional Support

Expressive Language

Math Skills

Pre-reading

Receptive Language

Pre-K CLASS Instructional Support Scores

| 35% | 54% | 13% |

Percent of Classrooms in each Range

skills until they were in classrooms scoring in the mid to high range. National data suggest that only 13% of programs have Instructional Support scores at the mid to high range or higher.

These findings are the first of their kind. They also are derived from an older version of the CLASS that did not include the Classroom Organization domain or Language Modeling as a part of Instructional Support. As stated earlier, more data is needed before providing definitive recommendations around cut-points.

Is it possible to use the CLASS as part of a program evaluation and monitoring system without using cut-off scores? Yes. For example, the Office of Head Start has decided to use CLASS as a part of its triennial monitoring system of Head Start grantees. However, they will not tie a program's specific CLASS scores to "findings." Instead, an overall summary of results will be provided to grantees to help guide professional development efforts. Refer to the Office of Head Start case study for further details.

How does the CLASS compare to other observational measures such as the ECERS-R and ELLCO? The CLASS, the Early Childhood Environment Rating Scale-Revised (ECERS-R), and the Early Language and Literacy Classroom Observation tool (ELLCO), are all validated and reliable measures of classroom quality. Although some overlap exists, each assessment tool was designed to measure different aspects of program quality.

- CLASS is a measure of the *quality of teacher-child interactions* in the classroom. Teacher-child interactions fall into three categories: those that provide emotional support, instructional support, and organizational support.
- ECERS-R is a rating system that includes many *program features in a broad definition of program quality*. These program features include physical space, provisions for indoor and outdoor activities, scheduling, hygiene, opportunities for professional development, and teacher-child interactions.
- ELLCO is a measure of the *quality of language and literacy instruction* that takes into account the physical classroom environment and teacher-child interactions that facilitate language and literacy development.

On the next pages we provide crosswalks between the CLASS and the ECERS-R and the ELLCO. There is more overlap between the CLASS and ELLCO than between CLASS and ECERS-R. Both the CLASS and the ELLCO focus on classroom interactions. However, the ELLCO focuses primarily on the language and literacy interactions, while CLASS focuses on more global classroom interactions. There is significant overlap between the Language Environment rating on the ELLCO and the Language Modeling rating on the CLASS.

Can the CLASS and ECERS-R scales be used together? Yes. Many states and localities are deciding to use both the ECERS-R and the CLASS as part of evaluation and monitoring efforts, in order to provide a comprehensive assessment of observed quality. Although there is some overlap between the measures, each captures unique components of the classroom setting (see crosswalk on the next page). The ECERS-R focuses on available materials and health and safety

issues in ways that are distinct from CLASS. While the ECERS-R has some items related to teacher-child interactions, the CLASS focuses exclusively on these aspects of the classroom. Rather than attending to the presence of materials, the CLASS focuses on the ways in which the teacher facilitates use of these materials to enhance engagement and learning. Specifically, the CLASS focuses on instructional aspects of classroom interactions that are not covered by the ECERS-R.

How should the CLASS be combined with ECERS-R as part of a program quality rating and improvement system? Some states are only using the CLASS in classrooms that obtain a pre-determined cut-off score on the ECERS-R. We recommend using the CLASS with all teachers, not just those who reach a specific level on the ECERS-R. We feel strongly that all teachers and classrooms, regardless of ECERS-R scores, can use feedback and support to strengthen their interactions with children. In fact, for some classrooms and programs, the CLASS might help capture strengths that are not reflected on the ECERS-R and would not be noticed or addressed if CLASS scores were given only to programs scoring sufficiently high on the ECERS-R.

Crosswalk between the CLASS & ECERS-R at the Dimension level

ECERS-R

CLASS – Pre-K	Space & Furnishings	Personal Care Routines	Language-Reasoning	Activities	Interaction	Program Structure	Parents & Staff
Positive Climate		Some Overlap			Some Overlap		
Negative Climate					Some Overlap		
Teacher Sensitivity					Some Overlap	Some Overlap	
Regard for Student Perspectives		Some Overlap					
Behavior Management		Some Overlap			Some Overlap		
Productivity							
Instructional Learning Formats							
Concept Development			Significant Overlap				
Quality of Feedback			Significant Overlap				
Language Modeling			Significant Overlap				

= Minimal/No Overlap   = Some Overlap   = Significant Overlap

Crosswalk between the CLASS & ELLCO at the Dimension level

ELLCO

CLASS – Pre-K	Classroom Structure	Curriculum	Language Environment	Books & Book Reading	Print & Early Writing
Positive Climate	Some Overlap				
Negative Climate	Some Overlap				
Teacher Sensitivity			Some Overlap		Some Overlap
Regard for Student Perspectives		Some Overlap			
Behavior Management	Some Overlap				
Productivity				Some Overlap	
Instructional Learning Formats		Some Overlap		Some Overlap	
Concept Development		Some Overlap	Some Overlap		
Quality of Feedback					
Language Modeling			Significant Overlap		

☐ = Minimal/No Overlap   ☐ = Some Overlap   ■ = Significant Overlap

How can I create buy-in for the use of the CLASS? We generally find that the CLASS resonates with teachers. They often say things such as, "I'm so glad someone is paying attention to the way I spend time with children every day."

Still, a clear need exists for providing information about and creating buy-in for any new measurement tool. Several resources are available that may help in this task.

For policymakers and state administrators, we have created a policy brief summarizing the research on the CLASS. This three-page policy brief, entitled, "Measuring and Improving Teacher-Child Interactions in Pre-K-3rd Settings to Enhance Children's Learning and Development", provides an overview of the ways in which the CLASS can facilitate improvements in the quality of teacher-child interactions. It is focused on pre-K to third grade. (Available at www.class.teachstone.org)

For teachers and program directors, a more helpful tool may be a video developed by Teachstone that argues for the importance of investing in improving the quality of teacher-child interactions. It includes interviews with Robert Pianta, CLASS author and Dean of the University of Virginia Curry School of Education, and Kathy Glazer, former Director, Office of Early Childhood Development in the Commonwealth of Virginia, as well as classroom video footage from high-quality toddler and pre-K classrooms highlighting effective practices. (Available at www.class.teachstone.org)

Additionally, it is ideal if at least one resident expert on the CLASS is available. Having access to an on-site resource person who can respond to questions and concerns that arise as the CLASS is being used is very helpful to participants regardless of their roles (e.g., teachers, evaluation personnel, mentors, directors, principals, etc.). The resident expert should be someone who has extensive knowledge of CLASS, has attended a CLASS Train-the-Trainers Program, and can serve as the point person for coordination and assist with standardization and assurance of high-quality implementation.

> *"The CLASS scoring system has been very beneficial to me as the head teacher and to my staff as I guide and facilitate them to be more purposeful and self-evaluative in their approaches to teaching young children."*
>
> -Head Start Teacher

Step 2: Developing Infrastructure

The most frequently asked questions with regard to developing infrastructure for using the CLASS in evaluation and monitoring are organized by three topics:

- Selection
- Training
- Certification

Selection of CLASS Observers

How should CLASS observers be chosen? We generally recommend that observers have some classroom experience. However, we sometimes find that individuals with the most classroom experience have the greatest difficulty becoming certified CLASS observers. Experienced teachers or administrators often have strong opinions about effective teaching practice. The CLASS requires putting those opinions aside, at least while using the CLASS, to attend to and score specific, observable teacher-child interactions. Putting aside their opinions can be quite hard for some people. This caution notwithstanding, CASTL has had great success training large numbers of people with diverse backgrounds and experiences. As described in greater detail below, the majority of people who complete CLASS training go on to pass the reliability test.

How many observers do we need? This question is not easily answered because the response depends on factors such as the length of the observation period, the number of classrooms

within each participating center or school setting, the times of day being observed, plus other logistical decisions. A program should typically train about 10 to 15% more observers than will be needed, to allow for attrition and the fact that not everyone will pass the reliability test (see below).

If an organization wished to observe 2000 classrooms on one occasion with time of day standardized across classrooms, and this needed to be accomplished within a four-month window, it would need to staff observers to complete approximately 500 observations per month. Assuming 20 working days per month (which during many months is an overly high estimate), this would require conducting 25 observations per working day. Building in scheduling constraints, school closings, staff work days etc., it would be reasonable to have a staff of approximately 40 observers who would be available to observe 4-5 days per week. Training 45-50 potential observers should result in a reasonable number of trainees who are eligible to become observers at the end of the training period. If observers will be available to be in classrooms fewer than 4-5 days per week, staff numbers would need to be adjusted upwards accordingly. If it was decided to have observation conducted in mornings and afternoons, the number of observers required would decrease. Most states currently using the CLASS as a part of QRIS assume that an observer will complete one classroom observation per day (often done simultaneously with the ECERS-R), which includes travel time and writing up detailed reports.

Training of CLASS Observers

What type of training is required for CLASS observers? The basic CLASS observation training consists of two days in which participants are introduced to each of the CLASS dimensions and then practice scoring videotaped segments. They receive detailed feedback about their performance throughout the training and participate in lively discussions with other trainees and a trainer assigned to help hone their observational skills. These trainings should be conducted by certified CLASS Trainers who have undergone extensive training on how best to support new observers.

What is the most effective way to train a large number of observers? There are two options for training large numbers of CLASS observers. The first option is to contact Teachstone and schedule several trainings at your locations. The second option is to send a staff member to a CLASS Train-the-Trainers Program and then have this individual lead local trainings.

We recommend that programs start with the first option and evolve to using the Train-the-Trainers approach over time. This allows the initial cadre of observers to be trained by experienced CLASS trainers and builds knowledge and expertise of staff members who may later attend a Train-the-Trainer session. More information on all of these options, including availability and cost, is available on the CLASS website at www.class.teachstone.org.

Beginning in January 2010, Teachstone will be offering regional CLASS trainings in locations including San Francisco, Orlando, Chicago, Philadelphia, Denver, and New Orleans. These regional trainings should make it easier for programs to meet their CLASS training needs.

Is online training available? Teachstone and CASTL are exploring ways to train observers remotely. Among the challenges is that most of the learning about the CLASS happens in the context of discussions that follow watching and scoring video segments. This dynamic interplay is difficult to replicate online, and most trainees tell us they cannot imagine receiving the same level of training online. But stay tuned: we are working to develop new technologies to address these concerns.

Certification of CLASS Observers

How are CLASS observers certified? Becoming a certified CLASS observer requires attending a two-day Observation Training provided by a certified CLASS trainer and passing a reliability test. The reliability test consists of watching and coding five 15-minute classroom video segments online. To pass, trainees need to score within 1 point of the master code on 80% of all codes given and demonstrate the ability to code reliably across all ten CLASS dimensions. When trainees are not reliable after the first try, they are provided with feedback and additional testing opportunities.

What percentage of trainees passes the CLASS reliability test? Trainings with a CLASS certified trainer result in 60-80% of trainees passing the first reliability test. An additional number pass on one of their secondary attempts. A small percentage of trainees (5-10%) do not pass even after several attempts. It is recommended that these trainees not be used to score classrooms with the CLASS. Also, new trainers sometimes have lower pass rates as CLASS observers until they become more familiar with the material.

RELIABILITY

Reliability is really just another word for consistency. Having CLASS observers pass the reliability test is very important because it is one of the ways to you help ensure that a monitoring or evaluation system is fair. Observers who have passed the reliability test show that they are able to make objective ratings using the CLASS tool and that any two certified observers in the same classroom at the same time would make very similar ratings.

How do we maintain high levels of reliability among our observers? Even after observers are trained to use the CLASS and pass a reliability test, it is important that processes are in place to help ensure that they maintain their knowledge over time. There is a tendency for observers to "drift" away from the criteria established by the CLASS and back into scoring their observations based on their own notions of quality. We suggest having regular meetings of observers (at least once a month) throughout the data collection period. Ideally, observers will have access to video segments to help check for consistent coding. This also provides an avenue through which to give the whole observation team, as well as individual observers, feedback about their work. Some video segments are available for this purpose online, through www.class.teachstone.org, and Teachstone will be adding to these in coming months.

How long are observers certified to use the CLASS? How do they get re-certified? Observers who successfully complete the CLASS observation training and pass the reliability test are certified for one year. It is recommended that certified observers complete 10-20 CLASS observations per year. CLASS Observation recertification requirements include annually taking and passing a reliability test.

Step 3. Implementation - Data Collection

Entering Data

What data should be collected? Obviously data collection should include a recording of the CLASS scores obtained for each classroom observed. In addition, CLASS scoring sheets include places for recording some information about the context for the observations (e.g., number of teachers). In many cases CLASS observers will also want to record some notes about each classroom, at the CLASS dimension level, to be shared later with teachers and administrators. Several localities have decided to have observers write brief summary statements about what they observed for each dimension across the observation period. When coaches share results with teachers, they give them the observers' statements.

What options are available for computerized or handheld data entry?
Teachstone is partnering with the Branagh Information Group, developer of the well-regarded ERS Data System for the Environment Rating Scales (ECERS-R, ITERS-R, FCCERS-R, and SACERS) as well as the Program Administration Scale (PAS) and Business Administration Scale for Family Child Care (BAS), in developing a comprehensive system for electronic data collection and reporting of the CLASS. As of winter 2010, this system will include web-based, post-observation data entry and storage as well as capacity for analytic reporting at various levels of aggregation (i.e., site, school, program, district, etc.). There is also the capacity to provide automatically generated reports at the individual classroom level to help teachers understand the CLASS as a tool, as well as what was observed in their classrooms. In the near future, this system may also include a mobile Tablet PC data collection component and more advanced reporting options at the individual classroom level.

What copyright issues are involved in developing our own data system? All copyright issues should be addressed with the publisher of the CLASS, Brookes Publishing.

Designing an Observational Protocol

When it comes to designing a plan around data collection, there are many important questions to consider, such as: How many classrooms should be observed? When should observations be conducted? How long should observations be?

These questions are not easily answered because they often are dependent upon the unique needs of a state or program. Regardless of the specific needs of your organization, one of the first steps is to clearly articulate the goals of the data collection. Are you interesting in getting an assessment of the

quality of every classroom or a global estimate of the quality of a given program or locality? Are there high stakes for CLASS scores? How will you use your data to improve teacher-child interactions on a classroom-by-classroom basis? Answers to these questions should guide your ultimate data collection plan.

Do we need to send more than one observer to each classroom? One of the best ways to improve the reliability of CLASS scores is to have multiple observers make ratings of the same classroom. Although the associated expense of "double coding" often is prohibitive, we still recommend that at least a portion (between 5 to 15%) of classroom observations be double coded to assess reliability. Having this data will help you communicate to stakeholders about the fairness of the tool in practice. For example, Virginia has reported obtaining approximately 90% reliability (scores within one point) in the field.

How do we decide how many classrooms to observe and how long each should be observed? The answer to this question depends greatly on the goals you have for data collection. For example, just as survey researchers figure out how best to collect a random sampling of data on which to base judgments on election polling numbers, complex analyses exist that can help you develop a sampling plan to match your goals. While it is beyond the scope of this overview document to provide a detailed answer, general guidance and a few examples are provided below. They highlight trade-offs that have to be considered when making decisions about the number of classrooms to be observed and for what length of time.

General Principles to Consider:
1. The more ratings you are able to obtain and aggregate, the more stable your estimates of typical classroom interactions will be.
2. In most cases, we find that a two-hour observation (4 CLASS cycles) provides a reliable estimate of the overall status of teacher-child interactions in a classroom.
3. There typically is more variance in CLASS scores within an organization (program, school, grantee, etc) than there is between organizations. This means you have to assess a fair number of classrooms within any one organization to get a reliable estimate of that organization.
4. Even if all observers are CLASS certified, there will be small, systematic differences between their scoring. Some observers may tend to give slightly higher scores, while others may tend to be slightly more critical. Although slight differences fall within our threshold for "reliability," collectively, they can produce skewed results. The best way to minimize any potential "observer effects" is to randomly assign observers to classrooms within any organization (program, school, grantee, etc.).

As an example of the trade-offs embedded in these decisions, consider two examples – the Office of Head Start (OHS) and the City of Chicago.

OHS conducts triennial reviews of all Head Start grantees. Each grantee typically oversees multiple Head Start programs. Monitoring visits are designed to provide feedback at the grantee level. OHS was interested in including the CLASS as part of this review process. OHS did not intend to share or analyze data at the program or classroom level.

Because we knew that CLASS scores for individual classrooms within a single grantee organization were likely to differ from one another as much or more than they differed from classrooms that were part of other grantee organizations, we suggested that OHS visit as many classrooms as possible during monitoring. OHS has a limited budget for conducting monitoring visits, however. So, the trade-off we suggested was to give priority to visiting as many classrooms as possible and reducing the time spent in individual classrooms from the typically recommended two hours. We saw this as a viable trade-off – and one that did not undermine the reliability of the findings – because it recognized that variability within programs tend to exceed variability across settings. OHS decided to observe each classroom for two cycles, or one hour, and thus be capable of observing more classrooms overseen by each grantee.

Now consider the case of the city of Chicago. They are interested in sharing data at multiple levels – classroom, program, city, etc. The trade-off for them was cost versus the reliability of decision making based on data drawn from only a sample of the city's ECE programs. Because they want to share data at the classroom level, adhering to the full two-hour observation is important. So the trade-off chosen by OHS was not an option for Chicago. Fortunately, resources were available to observe all of the city's ECE programs. With data on all classrooms in all ECE programs across the city, Chicagoans will have a more reliable estimate of the level of quality within their city than they would have if program sampling had been used.

> **RECOMMENDATION**
> **Scheduling observations:**
> It is better to send out teams of observers for a morning to rate multiple classrooms within a program at the same time of day than to have one person visit all classrooms within a center. This allows center-level data to be based on multiple observers (who, despite meeting the reliability threshold, may have small but systematic differences in scoring) and standardizes the time of day across classrooms.

How do factors such as time of day and year impact CLASS scores?

Available evidence suggests that observations completed during the first 30 minutes of the day may yield lower ratings on some aspects of teaching, such as instructional practices, than observations conducted during the rest of the day. This finding isn't surprising given that the initial period of a program day typically is used to complete transition activities such as having breakfast and unpacking bags, especially in child care settings.

There also is some evidence that more social aspects of the classroom environment, such as classroom climate, may decrease slightly over the course of the day. This may reflect teachers and children getting tired as the end of the day approaches. These variations tend to be quite small, however.

Other aspects of teaching practice (e.g., instruction) seem to be more consistent after the first 30 minutes. There may be good reasons to observe during the beginning of the day (e.g. to observe the way a teacher handles transition routines); if scores on observations will be used to compare teacher-child interactions across classrooms, however, we recommend standardizing the observational protocol to either include or exclude these first 30 minutes.

Our findings from observations throughout the year in publicly funded pre-K programs indicate that by and large there is consistency in classroom interactions across the year. There are some indications that scores are lower at the very beginning of the year, around the winter holidays, and at the very end of the year. For these reasons, if possible, it is advisable to avoid the first and last months of programs and days leading up to the winter holidays if your objective is to obtain scores that accurately represent typical practice. We do not yet have data on year round programs to know if fluctuations in CLASS scores appear over the summer.

> **RECOMMENDATION**
> **Obtaining the most reliable estimates of normative classroom practices:**
> - Be consistent in either including or avoiding the first 15 to 30 minutes of the day in each classroom since this first part of the day tends to score a bit lower on Instructional Support
> - Avoid observing during the first and last month of the year (in school year programs) and right around holidays, as CLASS scores are slightly lower at this time.

Step 4. Assessment and Knowledge Utilization

What type of data should be reported, and to whom? One of the most important principles to remember is that CLASS scores have limited meaning unless the recipient knows the tool. What does a score of 3 on Concept Development mean? Is a 3 good or bad, and what is Concept Development? For these reasons, we recommend not sharing scores with teachers. In our own professional development work, we find it much more helpful to share information with teachers about their strengths and areas of challenge and to focus on providing feedback on only a few CLASS dimensions at a time.

There will be times when sharing scores with teachers is required or desired. In these instances, it is important to contextualize findings in terms of providing a good description about what was observed as well as ways to interpret their scores. To invite more careful listening and openness, consider using individual meetings with teachers to share information about their strengths and areas of challenge, especially if the results are viewed as high stakes.

Providing a context is also important when sharing results with programs and policymakers. It may be useful to provide information on national averages or averages obtained from your own data. For example, when generating reports for specific programs, it may be helpful for recipients to compare their scores to those of the average program scores within the state.

We typically recommend sharing results at the dimension level (e.g. Teacher Sensitivity) as opposed to the domain level (e.g. Emotional Support). The dimension level results provide a more nuanced account of classroom interactions that can more easily lead to systematic improvement efforts than do the results at the broader level of domains.

If we sample classrooms within programs, can we give all teachers within the program feedback based on the observations made within only a few classrooms? No. Sampling classrooms within programs is designed to provide an estimate of the program-level quality, but it may not be an accurate reflection of each individual classroom's quality. Individual teachers should only receive detailed feedback about observations made in their own classrooms. If you are unable to observe all classrooms, then feedback should be given at the program level or only to those teachers whose classrooms were observed.

Should coaches talk to observers? If so, what should be the focus of these interactions? We recommend that when results are shared with programs and teachers, these results include the more nuanced findings and observations obtained by observers during ratings. If someone other than the observer will be sharing results, such as a coach, information sharing between observers and coaches must occur. We recommend that this be a one-way communication process that happens shortly after the observation is completed. Observers should share information with coaches, however to avoid potential conflicts of interest and reduced objectivity, coaches should not talk to observers about their knowledge of the teacher prior to the observation. The communication from the observer may take the form of written notes that are intended to provide the coach with context to couch the results and are not intended for sharing with the program or teacher (e.g., the observer may note that there was marked difference between the main teacher and assistant teacher in terms of the Emotional Support of the classroom). It may be preferable to arrange for in-person or phone meetings between observers and coaches to discuss these kinds of issues.

CASE STUDY
Virginia's Star Quality Initiative: Careful Planning and Infrastructure Development

Now in its third pilot year, the Virginia Star Quality Initiative is a Quality Rating and Improvement System designed to promote improvements in programs serving young preschoolers and provide consumer information to parents. The Star Quality Initiative was initiated in 2006 under the leadership of Governor Tim Kaine's Working Group on Early Childhood Initiatives and its Alignment Project. Beginning in 2007, pilots were underway in 15 communities, encompassing over 300 participating programs supported by local community coalitions. All center-based programs may participate in the voluntary system. Currently focused on center-based programs serving two-, three-, and four-year olds, the Star Quality Initiative intends to include infants in center-based programs and incorporate family child care settings in the near future.

Planning and Decision Making: Designing a System that Highlights the Importance of Interactions

The Alignment Project was tasked with developing a research- and market-based approach to evaluate and encourage quality in early learning settings across a wide range of public and private settings. The Star Quality Initiative assesses programs across five star levels on four standards: teacher qualifications, learning setting and instructional practice (assessed using Environmental Rating Scales (ERS)), structural elements such as group size and teacher-child ratio, and teacher-child interactions (assesses using the CLASS). When deciding how to weight the four standards, the committee chose to recognize the paramount consequence of effective teacher-child interactions to child outcomes by making the CLASS the centerpiece of the Virginia Star Quality Initiative. CLASS scores are weighted more heavily than any of the other three standards, accounting for more than one-third of a program's total quality rating score.

Strategic Partnerships can Produce Buy-In, Infrastructure Support, and Additional Resources

The Star Quality Initiative infrastructure is undergirded by a private-public partnership between the Virginia Department of Social Services and the Virginia Early Childhood Foundation (VECF) and a partnership with the state's multi-university-based Training and Technical Assistance Center Network (T/TAC). Partnership with T/TAC brings additional operational capacity and federal IDEA 619 dollars from the Virginia Department of Education's special-education unit, which was eager to integrate inclusive teaching practices into the new QRIS. Additionally, the 15 communities that are piloting the QRIS bring local dollars that support participating programs in their jurisdiction. Finally, the initiative is advised by a Star Quality Advisory Team of diverse stakeholders who provide guidance on implementation issues.

Collectively, these partnerships promote a broad and diversified base of funding and "buy in" that is helping expand awareness of the CLASS and its potential to elevate the quality of teacher-child interactions experienced by children on a daily basis.

Infrastructure Development

The 2009-2010 academic year represents the new system's third pilot year. During this time, focused attention has been given to building the infrastructure necessary to launch, grow, and sustain the initiative. The importance of careful attention to building a strong implementation infrastructure is underscored by the fact that two of the people central to putting this infrastructure in place recently departed from their positions. Had Virginia not made the effort to involve multiple organizations at multiple levels, these departures might have resulted in greater setbacks in the implementation of the state QRIS.

Effective Partnerships Can Allow Each Agency to Use Strengths and Distribute Workload

The Star Quality Initiative is delivered through the public-private partnership between the Virginia Early Childhood Foundation and the Virginia Department of Social Services. The Virginia Department of Social Services handles operational logistics. It coordinates participation, data entry, assignment of raters to programs, and the recently launched Web site for parents. The VECF is responsible for the system's accountability. It has been anointed the "standard bearer" for guarding the integrity of the QRIS metrics. It oversees the training of trainers and raters (organized by the Virginia Commonwealth University T/TAC) and inter-rater reliability. It assigns star ratings to programs and handles program appeals. The Foundation also assumes responsibility for marketing and promoting the QRIS.

Recognizing the Importance of Investments in Training

Because of the centerpiece status that the CLASS holds in the state's QRIS, intensive training on the CLASS is required of all trainers, raters, and mentors. Individuals in each of these roles are required to have a deep understanding of the CLASS. Raters must be trained to reliability and annually attend drift training. Mentors and trainers are required to attend week-long refresher training annually. Trainings across the state also are being developed for center-based and home-based staff to bolster their understanding of the tool and the contributions it can make to program quality.

Lessons Learned

- Implementation efforts in terms of going to scale advanced more slowly than anticipated. We've come to see our pilot approach as a strength of our process. It permitted QRIS implementation leaders to be more thoughtful and methodical in their planning and implementation. Specifically, it allowed us to learn from our initial implementation efforts and make changes to strengthen the QRIS structure and process. A strong private-public partnership brings a level of accountability to the effort that is politically useful and increases the initiative's viability.
- Understanding and support for the QRIS and CLASS has to be built systematically. We traveled across the state talking about the initiative and responding to questions, and this exhaustive effort of going to others' communities and inviting them into the discussion is paying dividends in terms of buy-in from programs and communities. We also realize that building support in state government and with policy makers, communities, and practitioners needs to be an on-going effort.
- Be flexible about exploring new partners; states should be open to innovative and creative ways to make QRIS and use of the CLASS work.
- It is important to formalize the relationship between and among partners and to carefully articulate the roles and responsibilities of each. This process facilitates shared understanding, increases efficiencies, and assists with sustainability.

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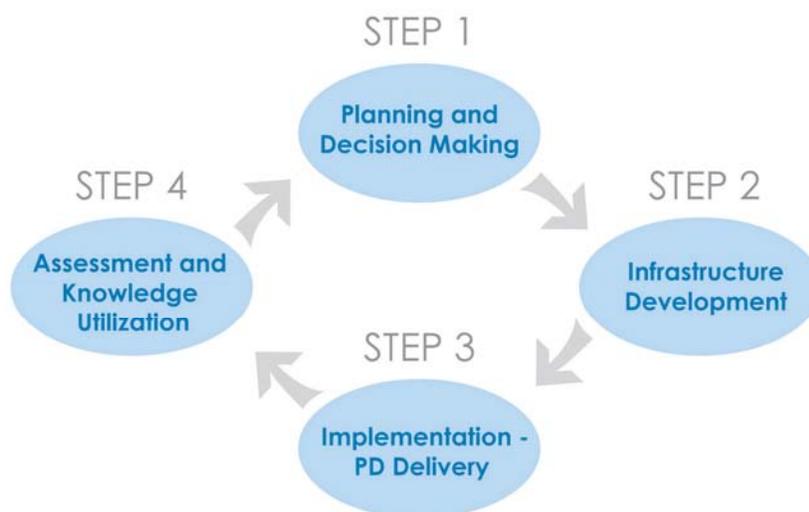
05 Professional Development: Helping Teachers and Programs Use More Effective Interactions with Children

Programs and teachers are in need of support regarding ways to most effectively interact with children. Professional development for teachers has a history of incoherence and ineffectiveness; in-service teachers pursue learning opportunities on their own (e.g., weekend workshops), pick up advice within informal settings at school (e.g., in the lunchroom), attend district-mandated workshops, and learn from daily experiences with children in the classroom, without attention to how these experiences are systematically and progressively linked to their overall performance in the classroom.

Short-term training, often knowledge- or technique-based, is the most common form of in-service training with substantial variation in nature and quality and virtually no evidence of effectiveness. Workshops fall short in a multitude of ways: teachers are in a passive learner role; content is vague, irrelevant, or disconnected from classroom context; and there is limited follow-up. Yet contemporary estimates of annual spending on professional development range from $2,000-$7,900 per teacher, which in a city such as Chicago totaled $193 million in 2002. There is virtually no evidence of positive effects for any of the approaches paid for by these funds.

The CLASS offers a valuable tool for focusing improvement efforts on interactions that are known to make a difference to children's social and cognitive development. Careful attention to the quality of CLASS-based professional development supports is essential. The types of interactions assessed by the CLASS are complex and not likely to change dramatically based on a single, brief workshop. In the section that follows we answer the most frequently asked questions regarding CLASS-based professional development and provide recommendations for building professional development tools that are effective in changing ECE teachers' practice.

Steps in Integrating CLASS into Existing Professional Development Systems

STEP 1
Planning and Decision Making

STEP 2
Infrastructure Development

STEP 3
Implementation - PD Delivery

STEP 4
Assessment and Knowledge Utilization

Step 1. Planning and Decision Making

What are the major questions that organizations need to address to plan PD opportunities that will promote effective teacher-child interactions?
Effective planning and decision making will require bringing together stakeholders from the multiple organizations that are engaged in offering PD supports to teachers in the community. When this group gets together, there are many important questions to consider. Rather than providing answers to these questions, which will vary greatly from organization to organization, we provide a list of potential questions to help spark conversation.

- How will PD offerings be linked to evaluation or monitoring systems? How will teachers and programs find out about possible PD supports?
- How is PD currently delivered – on-site trainings, off-site trainings, coursework, mentoring/ coaching? In what ways might these approaches be modified and/or enhanced to include a focus on effective teacher-child interactions in ways that align with CLASS?
- What new resources are needed to support more intensive CLASS-based PD opportunities? Are there ways to leverage existing resources for this effort?
- Who are the personnel who currently provide support to teachers, and how might they be trained to provide CLASS-based PD? What level of support do they currently provide (e.g., number of classrooms in caseload, time in classrooms, other non-PD responsibilities)? Do they presently provide a level of support sufficient to promote changes in teachers' practice?
- What types of support and certification exist for those providing PD supports to teachers? How can you best ensure that they deliver high-quality PD experiences for teachers?
- What is a reasonable timetable for implementation?

Step 2. Developing Infrastructure

Two major infrastructure tasks need to be addressed in order to effectively use CLASS as a part of teacher PD:
1. Selecting, training, and maintaining a pool of CLASS-certified PD staff
2. Creating PD materials

Selecting, Training, and Maintaining Professional Development (PD) Staff

How should CLASS PD staff be chosen? What types of education and experience should they have? In contrast to the selection of CLASS observers, we find it important for those delivering CLASS-based PD to have extensive experience in ECE settings. This experience fosters relationships between them and the teachers with whom they are working; it also provides PD staff with a wealth of experiences from which to draw as they do their work.

For CLASS-based PD programs that CASTL has developed, we typically hire staff with at least a master's degree in child development or early childhood education. As with CLASS observers, it is

important that PD staff be open-minded about taking a new approach to their work. Sometimes the CLASS is well-aligned with experienced staff's ideas about effective practice; other times it is not. We often use the initial CLASS observation training to help potential PD staff decide if CLASS-related work is a good fit for them. This may be challenging in situations where programs need to use existing staff to provide CLASS-based PD, rather than hiring new staff. We generally find that most staff are able to learn the CLASS with sufficient training; however if this training is very challenging for some staff and they are resistant to using CLASS in their work, it is best to try to reallocate these personnel so they do not have CLASS-related responsibilities.

> **RECOMMENDATION**
> **CLASS-based PD staff qualifications:**
> - Master's degree in child development, ECE or related field
> - Beliefs consistent with CLASS as evidenced by attending CLASS observation training and passing CLASS reliability test
> - Experience working with teachers in mentoring/coaching or instructor role

What type of training is required for CLASS PD staff? Since in many cases PD staff will not be using the CLASS to score classrooms, potential PD staff often ask whether they need to be trained to reliability on the tool. Our answer is "yes." PD staff should take the two-day observation training and reliability test for two reasons.

First, PD staff need deep knowledge of the CLASS. We find that in shorter trainings that do not include a reliability test, many people nod their heads in agreement during discussions rather than investing the mental energy to understand the

> **RECOMMENDATION**
> Staff providing CLASS-based PD should be trained to reliability on the CLASS.

tool's complexities. For example, the CLASS has a fairly circumscribed definition of Behavior Management, and much of what people typically consider Behavior Management is found under other dimensions. A coach or mentor could give erroneous feedback based on this more generalized view of behavior management (e.g. providing guidance on how to prevent misbehavior by engaging with children under the Behavior Management dimension when this was not an issue for the teacher as indicated by her score on Instructional Learning Formats, where this item is addressed).

A second reason to have PD staff complete reliability training comes from our finding that it offers the best way to select effective coaches/mentors. Those who find the training challenging typically select themselves out of the work.

For how long is PD staff certified to use CLASS? How do they obtain recertification? Teachstone certifies staff for MyTeachingPartner and the CLASS-based course modules, described below. Although the details of this certification process vary, all require in-depth training on CLASS, ongoing professional supports, and annual recertification. For those offering other CLASS-based PD supports than the two identified above, we recommend annual recertification as reliable CLASS observers.

Developing Professional Development Supports and Materials

What types of coursework and other PD experiences are effective in improving the quality of teacher-child interactions? A substantial body of evidence demonstrates that effective PD offers teachers intensive, sustained opportunities to improve their practice. Effective PD is sufficiently sustained over time to give teachers meaningful opportunities to learn and integrate new techniques and skills into their practice – criteria not met by one- or two-hour workshops. CLASS-based-PD should be classroom focused and job-embedded so teachers can make mental and practical connections between the content being presented and their own work.

> **RECOMMENDATION**
> **Professional development should be:**
> - Sustained
> - Intensive
> - Classroom focused and job-embedded
> - Evidence-based.

The vast majority of PD currently offered to ECE teachers has very little empirical data to suggest that it is effective. The ECE field should look toward the implementation of evidence-based PD in the same way that the field is focusing on using evidence-based curricula with young children. Towards this end, we have begun assessing changes in teacher performance after participating in CLASS-focused PD and developing materials based on what we've learned.

> **RECOMMENDATION**
> **CLASS-focused Professional Development should guide teachers to:**
> - Become better OBSERVERS of their interactions with children using the CLASS lens,
> - Increase their abilities to REFLECT on teaching practices using CLASS, and
> - Become more INTENTIONAL in their interactions and more effective in their work with children.

What factors should be considered in the selection or development of CLASS-focused PD? In our PD work with teachers, we seek to (1) help them become better observers, (2) reflect on their practice using the CLASS as a consistent and validated lens through which to view interactions with children, and (3) become more intentional in their interactions with children. These three goals should be the focus of any CLASS-focused PD.

It follows that we do not ask teachers to participate in an observation training to learn how to score the CLASS or take a reliability test. Rather, we spend time helping them learn how the CLASS can assist them to self-critique and strengthen their interactions with young children.

Should we use live or videotaped observation sessions when providing CLASS-focused feedback to teachers? We highly recommend the use of video to provide feedback and support to teachers. Our work suggests that providing teachers with the

opportunity to watch and reflect on their interactions with children is an invaluable resource. It is much easier to provide teachers with objective feedback, both positive and constructive, when they can actually see the interactions in question. Teachers tell us that this is a very different and much preferred form of feedback compared to receiving observer comments or handwritten notes.

Getting programs and teachers to agree to using videotape can be challenging at first. However, in our experience, as long as it is clearly communicated that these videotapes will be used only for supportive, and not evaluative, purposes, most teachers will agree. Even those who have been most hesitant at first have quickly seen the benefit of video over other forms of observation.

CLASS-Focused Materials

Anyone developing PD materials based on the CLASS needs to have a deep understanding of the tool. To achieve this, it is necessary to have completed the CLASS Train-the-Trainer program and to have used the tool with individual teachers and programs.

What type of training is available to help provide teachers with an overview of the CLASS? Teachstone offers a 1-day session called "Introduction to the CLASS" at all of its regional trainings. This training provides teachers with an introduction to each of the CLASS dimensions, using video and discussion to help them understand the basic elements of effective teaching practice. This introduction is not intended or expected to promote significant change in teachers' practice, but rather to be the first step in more long-term professional development supports. There will also be a 3-day CLASS Professional Development training in which trainers will first learn to use the CLASS reliably and then be given instruction and materials so that they can deliver the "Introduction to CLASS" training to others.

What programs and materials are available to support sustained and effective PD on the CLASS? Teachstone is disseminating several research-based options for CLASS PD. Each of these options has been validated by research and shown to be effective in improving teachers' interactions with children.

One option is to provide teachers with access to the **CLASS video library**. Videos demonstrating exemplars for each of the CLASS dimensions are housed in a video library on the www.class.teachstone.org website. The videos provide opportunities to "slow down the action" and observe specific interactions and behaviors that define each of the CLASS dimensions. The videos are based on real teachers in real classrooms and include a diverse group of teachers and children. They can be made available to teachers and program administrators to familiarize them with the CLASS.

In one study we found that preschool teachers who spent more time viewing this video library showed greater gains in their CLASS scores over the course of the year than did teachers who used this resource infrequently (Pianta et al., 2008). Teachstone is developing materials that will help teachers effectively engage with these materials.

A more intensive option is based on a **14-week course** studied by the National Center for Research in Early Childhood Education (ncrece.org). Teachers participating in this course showed significant improvements in the quality of their interactions with children (Hamre et al., 2009). Teachstone plans to disseminate the full 14-week course in the near future. Course instructors will need to attend a week-long training to access it and then will receive ongoing implementation support from experienced course instructors. This course may be offered through institutes of higher education or by individual programs.

> *This course has changed the way I teach by giving me <u>awareness</u> in how I interact with the children. I am more aware also of how I speak to them and ask questions that will be more open-ended so that the children will want to speak more.*
>
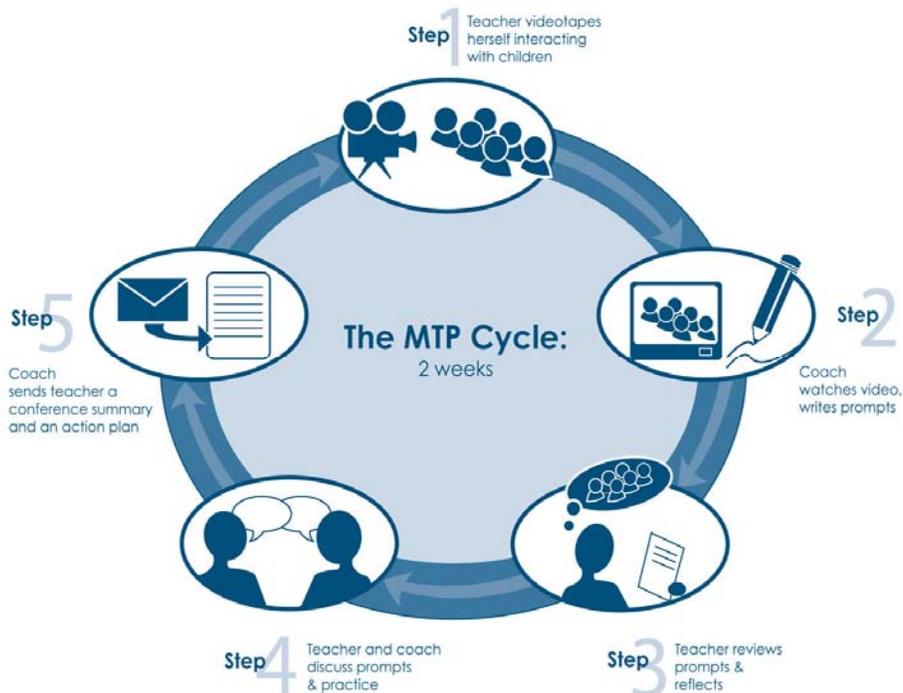> *-Teacher participant in NCRECE course*

Training and materials will also soon be available to deliver the course content as a series of course modules. The **CLASS Course Modules** allow pre-service and in-service teachers to hone their observation skills and explore the link between teacher behavior and children's learning and development. The Course Modules will be taught by certified instructors and give teachers the opportunity for in-depth study of the CLASS dimensions. Using the CLASS as a benchmark tool, instructors help teachers focus on the importance of having clear and explicit intentions for their interactions with children.

Following the introductory module, subsequent dimension-based modules may be used flexibly; however, they are designed to build upon one another and intended to be offered in sequence, rather than as stand-alone workshops. Each of the modules features authentic classroom videos and opportunities for teachers to identify and describe the associations between the behaviors and interactions being observed and a CLASS dimension. Assignments at the end of each module give teachers a chance to further strengthen their observation skills.

Teachstone is also disseminating **MyTeachingPartner (MTP)**. Developed and tested at CASTL, MTP focuses on improving the quality of teachers' interaction with children. Through this year-long program, coaches and teachers work together to (1) observe, (2) reflect upon, and (3) improve effective classroom interactions as defined by the CLASS. Teachstone is offering a small number of trainings in the MTP model in late 2009, with plans to more fully disseminate this model of support in the 2010-11 school year.

Coaches will be trained on CLASS and the MTP model and receive ongoing support and feedback from Teachstone staff to ensure effective implementation by teachers in their classrooms. Specifically, following each two-week cycle of MTP (see figure below), coaches view teachers' classroom videos, attend to specific interactions, and respond with detailed prompts designed to help teachers observe

their classrooms objectively and become more intentional in their interactions with children.

The MTP Cycle: 2 weeks

Step 1 — Teacher videotapes herself interacting with children

Step 2 — Coach watches video, writes prompts

Step 3 — Teacher reviews prompts & reflects

Step 4 — Teacher and coach discuss prompts & practice

Step 5 — Coach sends teacher a conference summary and an action plan

After the teacher reflects on and responds to the coach's written prompts, the two of them meet to discuss and deepen understanding of the CLASS and its application in the teacher's classroom. Together, they develop an action plan to support high-quality teacher-child interactions. Teachers, whether novice or experienced, benefit from this sustained, individualized support. Research demonstrates that teachers participating in MTP improve the quality of their interactions with children, and children demonstrate academic and social gains as a result (Mashburn et al., 2009; Pianta et al, 2008).

> *"My consultant is a second pair of eyes, able to look beyond the surface to see things that make me think about my class."*
>
> *-Teacher participant in MyTeachingPartner*

Are there other PD options shown to improve teachers' practice as measured by the CLASS? Yes. Several recent intervention studies have documented effects

on CLASS scores in preschool and/or Head Start classrooms. For example, Head Start teachers who participated in a modified version of the *Incredible Years* teacher training module (Webster-Stratton, Reid, & Hammond, 2004), in conjunction with coaching, showed positive changes in their Emotional Support and Behavior Management scores, relative to those in a control group (Raver et al., 2008). In a project called Head Start REDI, which provided several literacy and language activities and the preschool *PATHS* (Promoting Alternative Thinking Strategies) curriculum (Domitrovich, Greenberg, Kusche, & Cortes, 2005), as well as regular coaching sessions focused on using this content to improve teacher-child interactions, Head Start teachers receiving the intervention showed higher levels of Positive Climate and Instructional Support than did those who did not receive the intervention. As with the NCRECE course and MTP approaches, these two approaches are intensive, ongoing PD efforts focused explicitly on providing teachers with feedback and support related to their interactions with children.

Case Study
Minnesota's Center for Early Education and Development (CEED): Building Statewide Capacity for CLASS-Related Professional Development

The use of the CLASS in Minnesota was prompted by a heightened interest in the role of teacher-child interactions and several new state and local policy initiatives focused on measuring and/or improving these interactions. The catalyst was inclusion by the Departments of Human Services (DHS) and Education (MDE) of the CLASS as a measure for the state's Quality Rating and Improvement System pilot (Parent Aware). Additionally, the MDE intended to build professional development capacity around CLASS dimensions. Finally, researchers at the University of Minnesota's Center for Early Education and Development (CEED) discussed using the CLASS as a tool to identify and address gaps in teacher knowledge and practice in early care and education settings. Along the way, unexpected events, such as the Office of Head Start's decision to use the CLASS in federal program reviews, ramped up momentum.

The state did not designate a single entity with authority to orchestrate how early care and education programs participating in the state's QRIS pilot used the CLASS. However, CEED, whose mission is to promote children's developmental outcomes in part through applied research, training, and outreach, provided leadership by communicating ongoing research and strategically facilitating partnerships that could lead to a systematic approach to measuring and improving teacher-child interactions. As a result, funds from DHS, MDE, CEED and others, including the McKnight Foundation, are now supporting training, consultations, and shared learning about the use of CLASS in Minnesota child care, school-based preschool, and Head Start programs. CEED's focus on facilitating a coordinated approach to professional development in the context of supporting program improvement and an emerging QRIS was - and is - crucial to the success of CLASS-based work in Minnesota.

Planning and Decision Making - Building Constituency Awareness and Buy-In

As part of early planning sessions with other Minnesota agencies, CEED recognized the need for building greater awareness and understanding of CLASS among those who would be engaged in some fashion with CLASS. To increase capacity for this work, several CEED staff attended CLASS Train-the-Trainers program. CEED staff also stayed in regular contact with CASTL to ensure that their work aligned with CLASS-related work at the University of Virginia. According to CEED's Vicki Hawley (Early Literacy Coordinator and CLASS trainer), while teachers often view research and related tools with a combination of intrigue and hesitancy, the CLASS connects with Minnesota early educators' practical experience and fills a void in their preparation.

Below are examples of ways CEED raised awareness for various levels of staff.
Program administrators gained more understanding of the CLASS by meeting CLASS experts at Minnesota events and webinars; by hearing from CLASS users at leadership conferences; and by being part of informal meetings hosted by foundations and facilitated meetings such as the Head Start Assessment User Group.
Professional development specialists deepened their knowledge by having CLASS-related information and concepts incorporated into statewide training on assessment/curriculum and trainer meetings and by sharing crosswalks between the CLASS and existing PD curricula.
Teachers and caregivers became familiar with the CLASS through training materials and tools that offered strategies for use in staff meetings and tips for using CLASS video library subscriptions; and awareness training as a segue to more intensive, sustained professional development.

Infrastructure Development - Building PD Implementation Capacity

CEED implemented several steps to build an approach to CLASS-related professional development (PD) that supports sustainable and on-going teacher change that can help programs maintain a higher level of performance and move up the state's QRIS. This was accomplished by:

Supplementing federal and local efforts to build capacity to conduct CLASS observations. To date, CEED's CLASS-certified trainers who have provided the CLASS Observation Training to 105 observers from 13 school districts, 14 Head Start programs, and several child-care programs. To qualify for these trainings and additional support, programs must provide detailed responses to a questionnaire asking about issues such as their timeline and resources for providing their teaching staff with intensive, ongoing support focused on teacher-child interactions. This helps ensure that programs will put the additional training to good use.

Delivering intensive, research-based training to support CLASS's use as a professional development tool. CEED developed a two-day session targeting people who were already reliable CLASS observers but who were in need of further support to deliver ongoing CLASS-based PD as coaches and consultants. This training identifies research-based recommendations for on-going PD known to promote teacher change. It includes practice in communicating CLASS concepts in teacher-friendly language, observation, goal-setting, and teacher feedback. Participants gain strategies to use in large and small groups (*e.g.,* training, staff meetings, professional learning communities), as well as 1:1 coach-teacher interactions

Providing ongoing support for program planning and implementation. Once programs include reliable observers and attend the CLASS PD training, they become part of an online learning community (CEED facilitated three learning community cohorts in 2009-2010). Key areas of focus are:

Sharing successes and problem-solving challenges. Monthly online cohort meetings include topics such as: introducing CLASS to teachers, observation snafus and questions, maintaining reliability, processes for teacher feedback, balancing the roles of colleague and observer.

Integrating CLASS with existing initiatives. Statewide early literacy, math, and science initiatives, local mandates, and Parent Aware program improvements add up to a complicated state PD scene. Each initiative has its own knowledge base, vocabulary, training/coaching process, and assessment(s). Teachers can be overwhelmed by the prospect of adding another tool. CEED has worked diligently to facilitate integration of vocabulary and concepts across initiatives.

Supporting observers who deliver ongoing PD. The practicalities of observer reliability (gaining and maintaining) are commonplace for researchers but much less so for program administrators and other staff who serve as on-site coaches. Work is underway to maximize relationships developed through the learning communities to identify opportunities to maintain reliability (*e.g.,* setting up dual visits, group reliability checks/debriefs).

Setting specific goals. After learning that program-based observers trained to reliability often did not return to their programs and conduct CLASS observations, CEED began facilitating goal-setting for observers and using the online learning community as a means of "check-in" for the purpose of informal accountability.

Lessons Learned

Use local expertise, relationships, and contexts to inform the development of effective CLASS-based trainings and supports. While CASTL and Teachstone continue to develop and disseminate evidenced-based products and tools to support the use of the CLASS at the state and local level, CEED has an intimate knowledge of the early childhood community in Minnesota, and this has allowed them to customize these offerings for their community. These customizations work best if done in partnership with CASTL and Teachstone to ensure their consistency with the CLASS tool. It is also important to monitor the effectiveness of these newly designed training approaches.

Minimize fragmentation and program "overload" by helping programs integrate the CLASS into existing initiatives. Strategies include:

Mapping content and instructional strategies from other initiatives onto CLASS dimensions (and vice versa). Meeting with project trainers/coaches to build awareness of the CLASS and explicitly identify how to connect and integrate vocabulary and concepts from different initiatives.

Continuing discussion at the program level about reasonable adaptations to avoid overwhelming teachers. For instance, if a program is using Work Sampling, Creative Curriculum, ELLCO, ERS, CLASS and child-specific assessment, try to identify efficiencies to avoid "assessment fatigue."

Go slowly and set specific goals: who, where, when. Programs are more likely to actually implement CLASS observations for PD when a plan includes provisions for who will observe which classrooms, a calendar with scheduled observations, and administrative support that prioritizes CLASS observations over other unexpected events (like observers being pulled aside as substitutes).

Work to include pre-service educators at institutions of higher education. This is just beginning to happen in a systematic way in MN.

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Step 3. Implementation of Professional Development Opportunities

What level of support do we need to provide to the PD staff implementing CLASS-based interventions? We generally find that even experienced CLASS trained coaches/instructors have a tendency to drift away from the CLASS framework over time. Many of these individuals have strong ideas about how to coach or instruct teachers, and sometimes it is difficult for them to adhere consistently to a new approach. For example, those who are trained as literacy coaches go back to focusing only on literacy; those with a special education background may place more focus on helping teachers respond to children with special needs. Although these other foci may help strengthen teachers' practices, they may stray away from the types of interactions measured by the CLASS.

Ongoing feedback and support should be provided to those delivering CLASS-focused interventions, especially intensive, targeted interventions such as MTP and the CLASS course. Creating a support network among those delivering CLASS-based PD offers coaches/instructors a way to compare notes on their successes and challenges, generate new ideas for PD, and refine their CLASS knowledge and expertise. Teachstone supports MTP Coaches and CLASS Course Instructors through intensive training programs, online communication tools, conference calls, and webinars.

How long does it take for teachers to improve their CLASS scores?
Remember: the CLASS measures complex teacher-child interactions and sustained changes in these interactions will likely take time. Significant changes in teachers' CLASS scores following participation in MTP (1 year) and the NCRECE course (14 weeks) have been documented. However, significant and focused investments in teachers' PD that explicitly target classroom interactions are essential to these gains.

Step 4. Assessment and Knowledge Utilization

How should we evaluate the success of CLASS-based PD? To determine the impact of CLASS-based PD, or any PD programs for that matter, one of the most important considerations is data – what data to collect, how to collect it, and how to analyze it to obtain the most useful information on how well the program worked to accomplish the goals it was designed to accomplish. Developing a longitudinal data system in which performance on desired outcome measures can be reliably linked with specific classrooms/teachers as well as data on teacher participation in PD offerings is key to outcome-oriented evaluation efforts. Estimates of impact should not be based simply on post-experience evaluations or surveys; it should involve pre- and post-testing of classrooms, teachers, or child attributes that are expected to change as a result of the PD experience (see below).

Consideration also should be given here to what constitutes reasonable expectations for change. For example, it may be unreasonable to expect early childhood teachers' participation in PD offerings to be linked with improved student test scores in grade 3 in the absence of any ongoing work with early

elementary teachers, or to expect a PD program focused exclusively on the provision of instructional support to change students' social competence. It *is* important, however, to be clear about what *is* expected to change as a result of participation in PD programs and to evaluate the extent to which participation can be associated with those changes.

We suggest looking for changes in those areas most directly targeted by PD offerings. In the case of CLASS-based PD, this would mean assessing changes in teacher-child interactive quality, most specifically behaviors measured by the CLASS dimensions. Other changes of interest might include indices of child growth and development or teacher retention/job satisfaction/feelings of efficacy in the classroom.

To evaluate this kind of change, desired outcomes should be evaluated both before participation in PD and afterwards, and preferably both immediately afterwards and after some period of time has passed to evaluate the "staying power" of any immediate impacts. If teachers have various PD options (including opting out of participation), all teachers, or a sufficient random sample including representatives from all PD possibilities, should be evaluated before the PD offering (this is likely the monitoring/evaluation data) and after participation in the PD offering. The kind of PD experience teachers participated in should be tracked as well.

To further advance the capacity to accurately evaluate the impact of PD, obtaining an estimate of "dose" of PD to teachers would be useful. For example, it would be relevant to know not only that teacher A was enrolled in the CLASS course, but also to know how many sessions teacher A attended, the percentage of assignments completed, and overall grade or other instructor evaluation of knowledge gained. We encourage organizations to partner with experienced program evaluators to plan the data collection process in order to make the most well-informed decisions about the data to collect and how best to make use of that data. It is often possible and mutually beneficial for states and localities to partner with research institutions to obtain grant money for conducting these evaluations.

CASE STUDY
The San Diego County PFA Demonstration Project:
Supporting Teacher Growth through
Systematic Professional Development and Coaching

A five-year demonstration of an effective universal preschool system is underway in San Diego. The city's vision for universal access to high-quality preschool, written with community support, was formally introduced as part of the San Diego County Preschool for All Master Plan in 2005. Developed under the leadership of the San Diego County Office of Education, the San Diego County Preschool for All (SDCPFA) Demonstration Project was launched in 2006 with $30 million from First 5 San Diego. First Five San Diego recently renewed its support for another five years and will be providing sufficient funds to double the number of participating preschool programs for three- and four-year olds. The RFP for the second term will soon be issued.

In support of the city's vision, a three-tiered quality improvement system has been developed. Participating programs are first assessed on the Early Childhood Environmental Rating Scale (ECERS) to determine a baseline score. Once the program has achieved a score of 5.5 on each ECERS subscale, it is moved to the third tier, at which point it will be assessed with the CLASS. Programs will be assessed every two years to measure growth.

Once a baseline score has been secured, SDCPFA wants to focus on helping teachers improve the quality of their interactions with children. Below we briefly describe the way SDCPFA has developed and implemented CLASS-based professional development supports to meet this goal.

Implementation of Professional Development Supports

The San Diego County Preschool for All (SDCPFA) Demonstration has five key features:
- Quality preschool experiences
- A variety of preschool settings
- Socially, culturally, and linguistically appropriate early childhood education
- Professional growth of teachers
- Settings that are Inclusive of children with special needs

The professional development component focuses on increasing the level of quality in preschool classrooms. An external review utilizing the CLASS will be conducted bi-annually in participating classrooms. Between reviews, preschool teachers will receive professional development supports, including:
- Written documentation of findings from the review, including narrative feedback on each CLASS domain,
- Personalized assistance in developing an improvement plan with goals and action items for each CLASS domain
- Up to 20 hours of individualized coaching assistance in the classroom during the instructional day for those who choose to participate in the coaching component of the initiative
- Small group and large group workshops featuring skills and strategies measured on the CLASS review.
- Video tape reviews of actual SDCPFA classrooms with small group discussions following viewing.
- The SDCPFA is beginning its fourth program year as a demonstration project, and during this time several changes have been made to the professional development process. Here we provide a brief description of their implementation process and also highlight changes they have made along the way based on early experiences.

Building CLASS Knowledge
Indicating the priority given to professional development and improving teacher-child interactions, time and attention is given to helping program administrators and teachers understand the CLASS, what it measures, and how the information being provided can be used to improve teacher-child interactions. Beyond providing two-hour training sessions on the CLASS to program and teaching staff, all participating programs and their teachers are now required to attend four workshops annually if they are recipients of a newly available and voluntary stipend for interested teachers and center directors. At least two of the workshops being provided will target what is being learned from aggregated scores on the CLASS when this information becomes available.

Linking Assessment and Coaching Staff

The SDCPFA relies on different staff for assessment and coaching. Linkages between the two are facilitated by the project coordinator to ensure that assessment findings inform the content of individual and project-wide professional development opportunities.

Increasing Responsibility of Programs and Teachers

Additionally, teachers whose programs are at Tier 3 and meet specified requirements may choose to receive an annual stipend of $3,000. One of the requirements for receiving the stipend is development of an individual professional development plan. These plans are crafted based on the teacher's knowledge of her CLASS performance level with support from a SDCPFA trainer/coach and frequent reference to the CLASS manual. Teachers are expected to select workshops based on their professional development goals. This recent reformulation of the professional development process shifts greater responsibility to teachers and on-site supervisors, vs. SDCPFA trainers/coaches, for examining and reflecting upon CLASS scores.

Providing Teachers with Written vs. Oral Reports

In support of this new direction, and in contrast to the first two years of the demonstration project, written reports are now provided to teachers. Rather than providing specific CLASS scores, the written reports provided to teachers in Tier 3 classrooms relay their level on the CLASS: high, medium or low. This feedback is grounded in the meaning of each of these levels in the context of what was assessed.

Training and coaching staff are finding that providing written reports (vs. orally delivered information as was the case during the project's first years) that teachers can read, study, and relate to their professional development goals has lessened teacher defensiveness and opened them to reflection on their teaching. While acknowledging the motivating factor provided by the stipends, staff are finding that this new approach, which enmeshes results from the CLASS in the context of its function as an assessment tool— including clear definitions of high, medium, and low, is increasing teachers' attention to their own professional development. Teachers wishing additional support may also choose to participate in a coaching relationship. Presently, 500 teachers and on-site supervisors are participating in the stipend program; of these, 86 lead teachers in Tier 3 have elected to have a coaching relationship.

Lessons Learned

- Focusing teacher attention on reflective practice in the context of data-driven information is challenging.
- Providing a stipend is key to motivating teacher change.
- Shifting the onus of responsibility from staff to teachers in terms of identifying professional development goals, and providing a written report that teachers can study and reflect upon, has increased teacher buy-in.
- Deepening teachers' understanding of the CLASS scoring system relative to the meaning of high, medium, and low performance scores has reduced teacher defensiveness.
- Sharing CLASS scores in terms of level (high, medium, and low) is more conducive to teacher growth than providing actual scores.
- Creating personalized videos as a tool for feedback and reflection is logistically more complicated than anticipated.

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06 OTHER IMPORTANT CONSIDERATIONS

The CLASS has been used in classrooms with diverse populations: Dual Language Learners (DLL), children from migrant families, tribal populations, and children with special needs and diverse cultural backgrounds. The data from the National Center for Early Development and Learning (NCEDL) studies suggest that the CLASS can reliably assess the quality of teacher-child interaction in a wide variety of classrooms serving diverse populations of children.

Dual Language Learners

Findings from these studies, which took place in nearly 700 pre-K and 700 kindergarten classrooms, indicate that children in classrooms with higher CLASS scores make greater academic and social progress, regardless of the child's individual language abilities or the language context of the classroom (e.g. number of DLL children). One recent study provides evidence that the CLASS predicts children's outcomes even within classrooms serving large numbers of DLL students (Downer et al, 2008).

Still, concerns have been raised about using CLASS in classrooms with DLL children, particularly the Instructional Support domain, because many of the behaviors observed during CLASS scoring are language-based. Within the dimension of Language Modeling, for example, there is an indicator labeled "Advanced Language." At issue is how "advanced" should be defined in a classroom setting with DLL children.

The CLASS observer accommodates this circumstance based on the best information available in the classroom and on her observations of teacher-child interactions. For example, a teacher may be using words not typically considered advanced for most 4-year olds, but which would, in fact, be advanced if being used in a new language . If a teacher who is working with a Spanish-speaking child says, "Wow, that is a BIG BLUE ball" while gesturing to indicate big (arms stretched wide) and pointing to other blue things – this would be coded under Advanced Language because the teacher is explicitly connecting [potentially new] language to existing knowledge (i.e., the visual reference).

The CLASS attends to these kinds of nuanced issues in classrooms by placing an emphasis on the context and the teacher-child interaction. This kind of observer accommodation also highlights the importance of well-prepared, certified CLASS observers.

Here are five recommendations for using the CLASS in settings serving large numbers of dual language learners:

1. Use the CLASS consistently across settings: The CLASS should be used in the same way across classroom settings. The dimensions should not be tailored in terms of coding to try to accommodate differences across settings, including the language or special needs of children. *The CLASS is a standardized tool – and this is one of its advantages*. If modifications were made, it would be difficult to make comparisons within and across programs.

2. <u>Note the language of the observer:</u> When possible, observers should speak the language that is predominant among the children in the classroom so they can understand both formal and informal conversations taking place.

3. <u>Consider timing of the observation window:</u> Observations should not be made in the first month of school. This is recommended for <u>all</u> classrooms because the first weeks of school typically are focused on developing relationships with children and developing classroom routines – they may not, therefore, be representative of the rest of the year. This consideration seems particularly important in multilingual classrooms.

4. <u>Establish transparent rules for the tool's use for the purpose of program accountability</u>: State systems or programs using the CLASS as a monitoring or evaluation tool should establish clear rules about how and when the CLASS may be used for the purposes of program accountability. For example, a state agency or program could decide that when more than half of the children in a classroom are Dual Language Learners, the Instructional Support dimension scores should be reported to the program but not used for making monitoring decisions. Because available data suggest that the CLASS is valid across classroom settings with diverse populations of children, we are not suggesting this as a necessary – or even good – strategy. However, this is a better strategy for accommodating concerns than changing the CLASS tool or protocol because of reasons cited earlier.

5. <u>Document classroom languages</u>: Include a place on the observational protocol for observers to record the language spoken by teachers and children. With these data available, states or localities may examine the extent to which there may be systematic differences in CLASS scores based on language issues.

Special Education Settings

The CLASS has not been specifically validated in self-contained special education classrooms. With that said, our data indicate that the majority of classrooms we have studied included children with disabilities. For example, demographic data collected on classrooms that participated in the MyTeachingPartner study reveal that, on average, 11% of the children in each classroom had an individualized education program.

The types of effective teacher-child interactions described in the CLASS hold saliency for all children, regardless of ability level. However, just as the interactions may look somewhat different if a child is a dual language learner, the interactions may also look different based on the nature of a child's special needs. For example, just as we gauge advanced language under Language Modeling differently if a child is learning English, we also gauge advanced language differently if a child has a speech or language delay. Similarly, we would expect a teacher to employ different learning modalities for a student who is deaf or hard of hearing than she might for a hearing child. Scaffolding for a student with cognitive impairments may include physical prompting that is not needed for students who are typically developing.

While all of the dimensions of the CLASS apply to teaching children with disabilities, the following dimensions are particularly salient: Teacher Sensitivity, Behavior Management, and Instructional Learning Formats. The need for teachers to be aware of and responsive to the individualized needs of a student with a disability is probably self-evident. Teachers of students with special needs must constantly evaluate how well students are responding to instruction and adapt accordingly. Behavior Management is of importance, especially at the younger ages, as young children with special needs engage in challenging behaviors at higher rates than do typically developing children. Furthermore, older children with disabilities may engage in challenging behaviors as a manifestation of their disability (e.g., children with emotional and behavioral disorders). Thus, it is critical that teachers be proactive, clearly communicate expectations, redirect misbehavior, and consistently enforce rules.

The dimension of Instructional Learning Formats is key because teachers often need to individualize how they facilitate instruction to meet the diverse needs of their students. As a case in point, children with a physical disability may need the teacher to physically assist them to participate in an activity. Children may respond to a teacher's questions, not through verbal communication, but through the means of assistive technology. Similarly, children with disabilities may require a range of modalities and materials (e.g., assistive technology for students with physical disabilities, a picture communication system for students with autism, large print or Braille for students with visual impairments, or auditory input for students with severe learning disabilities). Observers in these circumstances should be conservative in how they measure pacing under Productivity, as children with disabilities often need additional wait time in order to process and respond to instruction.

Even though we are highlighting the importance of these dimensions when observing children with special needs, it is important to emphasize that observers should not weigh these dimensions more heavily than other dimensions: all CLASS dimensions are weighted equally regardless of classroom composition. Observers should not make exceptions or "allowances" based on the presence of a disabled child exhibiting behavioral challenges because CLASS scores are designed to capture the average child's experience in the classroom.

The extent to which behaviors related to a child's disability should affect CLASS scores depends on several factors. For example, an observer may note that a child cries and screams throughout an observation cycle. The observer may not feel the need to take this into consideration during scoring because the observer knows that the child has autism and that this behavior is a manifestation of the disability. If the child's behavior is not impacting other children's experiences, then the observer is correct that this behavior should not impact the CLASS score. However, this scenario is unlikely. If a child with autism is constantly crying and screaming, the behavior likely is affecting the experiences of other children and taking up a disproportionate amount of the teacher's time, thereby affecting both the emotional climate in the classroom and Productivity.

Observers need to keep in mind that the CLASS is designed to provide an objective measure of what is happening in a classroom during the observation period; it is not intended to "blame" teachers for child behaviors. To the contrary. Observers using the CLASS as a basis for targeting professional development needs can use the type of observation described above as a jumping off point for discussing the types of support needed by classroom staff. In this way, classroom factors such as disability, diversity, and language status can become informants for planning effective teacher support and coordination between evaluation and professional development make this linkage possible.

Issues of Cultural Sensitivity

The CLASS has been validated in classrooms with diverse cultural backgrounds. Findings from multiple studies suggest that children benefit from high quality teacher-child interactions, as defined by CLASS, regardless of race or ethnicity.

Individuals from a variety of cultures have used the CLASS successfully to assess effective classroom interactions. Still, a few behavioral markers may be culturally bound and require observer sensitivity. For instance, evidence of a Positive Climate includes the extent to which a teacher demonstrates respect for children. According to the CLASS manual, one behavioral marker that conveys respect is eye contact. In some cultures, forcing eye contact would be uncomfortable for the child and not demonstrative of respect. In this context, a teacher who forced eye contact would receive a lower rating in teacher sensitivity; eye contact is not required for a teacher to demonstrate respect. The CLASS manual offers several behavioral markers, including warm voice and cooperation, which would allow a teacher to receive a high rating in positive climate if eye contact were not the cultural norm.

This said, the CLASS is not intended as a measure of cultural sensitivity. Other classroom measures developed explicitly for this purpose would be a better choice if assessing cultural sensitivity is the primary reason for conducting classroom observations.

Use of the CLASS in Family Child Care Settings

The CLASS was not designed for use in family child care settings. However, because it describes general adult-child interactions, the observational protocol can be modified for use in these settings. As with a child care center or school-based classroom, all providers or teachers present should be included in the observation process that leads to creating CLASS scores for teacher-child interactions.

The age range of the children determines the manual to be used. If the home-based setting serves children three to five years of age, for example, the pre-K version would be used; the Elementary version would be used for children ages 5+, and the Toddler version (soon to be available) would be applicable for children 18 months to age 3. In mixed age groups, a common characteristic of home-based child care, the CLASS manual that matches the age of the majority of children is recommended. Another option is to alternate between manuals across observation cycles. Several states are piloting the use of the CLASS in family child care settings; so we expect to have more information about this soon.

07 IMPORTANT PRINCIPLES FOR EFFECTIVE IMPLEMENTATION OF THE CLASS

Throughout this report we offered practical suggestions for how best to implement the CLASS as a tool for improving program quality in early childhood settings. In summary, we offer five principles that should guide your use of the CLASS.

1. Take time for thoughtful planning. Stakeholder involvement is crucial to

the development of effective systems of evaluation and teacher support that incorporate the CLASS. Despite the economic downturn, many states and localities are preparing for or experiencing an influx of potential resources that can be used for quality improvement efforts. This funding environment can push for quick action. However, we know from experience that the CLASS is most effective in enhancing program quality when sufficient time is given to planning and coordination among the many involved constituencies. CASTL and Teachstone are dedicated to building capacity for using CLASS in these contexts through the provision of reports, webinars, and online resources that help disseminate lessons learned from those states and localities that were early adopters of CLASS.

2. Invest time and resources in using the tool well. One of our

early state collaborators from Wyoming reminded her staff during the midst of a challenging part of their first CLASS training, "If it was easy, it wouldn't be any good." Teacher-child interactions are complex and CASTL has spent years developing a tool that is able to reliably capture these interactions - when the tool is used appropriately. We also know that skimping on training or ongoing support for those conducting trainings on the CLASS, not investing resources to observe for the amount of time or the number of classroom observations needed to obtain reliable CLASS scores, or providing only brief professional development opportunities for teachers undermines the potential utility of the CLASS to improve program quality. The CLASS requires a significant investment of time and resources to implement. However, we strongly believe - and have research to document - that these investments pay off in the form of improved program quality in ways that less expensive, less intensive, and/or quicker approaches will not.

3. Invest in evaluations that inform program development.

Also document results that can be used to leverage support and resources from policymakers. The strong research base of the CLASS has been critical to its adoption as a monitoring and evaluation tool at local, state, and federal levels. However, the national, peer-reviewed research on the CLASS offers only an entry point for policymakers who are interested in knowing whether these research findings will hold in their local communities. The long-term success of CLASS implementation will require ongoing local evaluation efforts that provide evidence of successes and areas for improvement.

At the most basic level, it is important to collect data on the feasibility of using the CLASS in your context(s) – is training feasible and cost-effective, do programs appear to be buying into the use of CLASS, are trained observers able to collect reliable data at scale?

As initiatives move forward, policymakers will want to see evidence of program improvement, both in terms of the quality of teacher-child interactions and in child outcomes. Providing these types of data requires careful planning and an evaluation conducted by experienced researchers or evaluation teams. Evaluation will not be effective if it is an afterthought. We highly recommend that states and localities implementing the CLASS partner early in their initiative's development with a research or evaluation team to design and implement an evaluation plan that can both enhance program delivery by providing initial data on feasibility and implementation quality and provide outcome data that will foster continued buy-in from policymakers and administrators – and programs.

4. There is no magic bullet. Be thoughtful about how the CLASS fits into the

larger picture of quality improvement efforts. No one tool or system can assume sole responsibility for improving the quality of ECE programs, or even the quality of one component of these programs, such as teacher-child interactions. The CLASS is an evidenced-based tool that can effectively be used as one approach, but successful, systemic improvement in the quality of ECE programs requires a broader, more comprehensive approach that considers the many different facets of high-quality programs, such as teacher preparation, on-going training, supervision, curriculum, working conditions (including teacher compensation), as well as the capacity and cohesion of the state's ECE infrastructure, policies, and regulations.

5. Continually work toward building an aligned system of evaluation and professional development. Given the multitude of

agencies involved in creating and maintaining quality in ECE settings, we recognize that developing the coordinated approach we advocate here between evaluation/monitoring and professional development is challenging. However, as noted throughout this report, both sides of this work are critically important to creating sustained improvement in program quality.

It also is important to mention that within this report we have neglected to focus on the ways in which Institutions of Higher Education (IHEs) need to be engaged in this effort. This is not because we see IHEs as unimportant. Quite the contrary. We see a focus on integrating knowledge and feedback about effective teacher-child interactions into IHE programs of study as critical to the advancement of the ECE field. The issues involved in such an effort simply extended beyond the scope of this report. We encourage implementers of CLASS-based efforts to include IHE faculty and administrators in CLASS-based planning and implementation work. Ultimately, this is a crucial step in changing the caliber of teacher-child interactions in early care and education settings across the country.

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APPENDIX: LIST OF QUESTIONS

Evaluation and Monitoring

Professional Development