Understanding and Using CLASS for Program Improvement



Head Start directors, education managers, coaches, teachers, and others are using Classroom Assessment Scoring System (CLASS) observation results obtained from OHS monitoring and program/grantee-level evaluation to help improve program quality and outcomes. CLASS is a benchmark for quality. Staff need to understand how to use CLASS results in their programs and classrooms. Questions from the Head Start community include, "Now that we have our CLASS scores, how do we use these data for program and classroom improvement?" and "How do we help teachers improve their interactions with children?"

THIS DOCUMENT ADDRESSES THREE MAIN QUESTIONS:

- 1. What do the CLASS results mean?
- 2. What are the different ways CLASS results can be used?
- 3. How should CLASS results be reported and shared?

WHAT DO THE CLASS RESULTS MEAN?

Understanding the scores generated from CLASS observations is key to making these observations useful in creating professional development plans. *CLASS Pre-K* is an observational tool based on extensive research on teacher-child interactions in more than 10,000 classrooms across a wide range of communities and programs.

What does CLASS assess? CLASS focuses on teacher-child interactions. CLASS assesses processes rather than structure. This means that CLASS is not looking at the content of the physical environment, materials, or specific curricula. At the broadest level, CLASS describes three domains of teacher-child interactions that support children's learning and development: Emotional Support, Classroom Organization, and Instructional Support.

- **Emotional Support** captures how teachers help children develop positive relationships, enjoyment in learning, comfort in the classroom, and appropriate levels of independence.
- Classroom Organization focuses on how teachers manage the classroom to maximize learning and keep children engaged.
- **Instructional Support** involves how teachers promote children's thinking and problem solving, use feedback to deepen understanding, and help children develop more complex language skills.

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These domains are the major categories that CLASS uses to describe and understand teacher-child interactions. Within each domain CLASS describes more specific **dimensions** of teacher-child interaction.

These dimensions, such as Positive Climate and Quality of Feedback, capture aspects of teachers' interactions with children along a continuum from low to high. The dimensions are more specific ways of describing features of teachers' behavior than the broader domains, and provide teachers, program leaders, and policy-makers with more specific, and actionable, information for deciding how to focus professional development or understand program progress.

Research consistently demonstrates that children in classrooms with higher CLASS scores demonstrate more positive social and early academic development. Although CLASS was not designed to measure specific practices in multilingual classrooms, the tool also has been used in classrooms with diverse populations. For example, findings from the National Center for Early Development and Learning which took place in nearly 700 Pre-K classrooms and 700 kindergarten classrooms, including linguistically diverse classrooms, showed that CLASS was effective as an assessment of the quality of teacher-child interactions in classrooms with language diversity, and that CLASS predicted gains in the school readiness skills of children who are dual language learners (Downer, et al., 2012).

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		

How is the CLASS scored and what do those scores mean? Every CLASS observation is conducted in cycles of observing and note-taking that last about 15-20 minutes. At the end of each cycle, the certified observer reviews their notes and assigns a rating for each CLASS dimension. Each dimension is rated on a 7-point scale, which considers both frequency and quality of teacher-child interactions. Scores of 1-2 mean that the quality of teacher-child interactions is low. These may be classrooms in which children are receiving ineffective interactions, such as reactive behavior management or rote instruction. Or, they may be classrooms in which teachers simply rarely interact with children at all. Scores of 3-5 are given when classrooms show a mix of effective interactions and periods when interactions are either ineffective or just not occurring. Scores of 6-7 mean that the effective teacher-child interactions are consistently observed throughout the observation period.

For example, for the dimension of Concept Development, a classroom scoring in the 1-2 range may provide children only with very rote instruction, such as having children do flashcards and worksheets focused on "getting the right answer," or may not provide any instructional interactions at all, such as when children spend long periods simply waiting in line or sitting on the rug waiting for the teacher. Classrooms in the 3-5 range have occasional evidence of instructional interactions and activities that foster children's thinking and understanding, such as the teacher asking why and how questions and calling children's attention to broader concepts rather than only focusing on isolated facts. However, these interactions are not consistently observed, or may be isolated questions rather than a sustained pattern of teacher behaviors that lead to a deeper understanding. In classrooms in the 6-7 range, the interactions and activities occur frequently and teachers build on initial interactions to truly foster children's understanding, connections, and integration of learning.

What kinds of teacher-child interactions do we typically see in classrooms? Office of Head Start Monitoring data collected in FY2016 reveals the average grantee received scores of 6.00 on Emotional Support, 5.73 on Classroom Organization, and 2.83 on Instructional Support. These scores are the average of the scores for all observed classrooms with each grantee, and thus reflect the overall quality for the grantee. The distribution of scores is displayed in the figure below.

OHS CLASS™ DESCRIPTIVE STATISTICS, FY 2016 NATIONAL DISTRIBUTION OF GRANTEE-LEVEL DOMAIN SCORES

Domain	Lowest 10%	Median (50%)	Highest 10%
Emotional Support	5.5952	6.04	6.35
Classroom Organization	5.2500	5.76	6.15
Instructional Support	2.2222	2.74	3.53

What levels of interactions are needed to support children's development? Recent research suggests that classrooms need to have fairly high levels of Emotional and Classroom Organizational Support, at about a 5 on CLASS, to promote positive social development and reduce problem behaviors. As you can see in the figure above, the majority of Head Start grantees are meeting this goal. However, the "threshold" for quality in Instructional Support appears to be a bit lower. This means that when classroom interactions are characterized by CLASS Instructional Support scores of 3 or above, children demonstrate greater gains in early academic and language skills. Over 50% of Head Start grantees are currently below this threshold, based on 2015-2016 monitoring results. However, this also means that relatively small differences in the quality of teachers' instructional interactions with children (promoting concept development, providing good feedback, stimulating language and conversations) may be really important for helping children learn more. This is not to say that programs should strive just for a score of 3 on Instructional Support. Rather, it is recommended to aim high for increasingly effective instructional interactions.

Can teachers improve their interactions? Yes. And this is probably the most important question for grantee staff. Many studies now show that professional development that focuses teachers on the quality of their interactions with children, for example through targeted analysis and viewing of video examples of effective interaction with coaches, can improve CLASS scores—in all three domains. This is not one-hour or even one-day workshops, but rather intentionally designed and intensive professional development that focuses on their daily interactions with children. Some models of this form of coaching have been tested in experimental studies and have led to increases in CLASS scores that are quite substantial.

WHAT ARE THE DIFFERENT WAYS CLASS RESULTS CAN BE USED?

It is really important to understand the levels of observations conducted in Head Start programs and the appropriate use of data to draw conclusions at any level.

CLASS observations can be focused on at least three different levels:

- 1. for **monitoring purposes**, such as the review process conducted by the Office of Head Start;
- 2. for **program planning and evaluation**, such as when a grantee conducts their own classroom observations to evaluate quality or plan professional development; and
- 3. for assessment of individual classrooms, as part of individualized professional development planning.

For each of these levels of focus, CLASS results mean different things, serve different purposes, and lead to different next steps.

Monitoring. When monitoring is the focus, as is the case with the use of CLASS in OHS reviews, remember that classrooms are sampled from each grantee, not all classrooms in a grantee are observed, and the actual observations involve only a few CLASS cycles. The purpose of these monitoring observations is to "take the temperature" of a grantee, a region, or even the country. These CLASS observations are a small slice or window, and this limits the conclusions that can be drawn about individual classrooms or centers. These monitoring observations help answer the question, "How are we doing?" at the grantee, regional, or national level and can provide a focus for resources or decisions at those levels.

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Program planning and evaluation. At the grantee or program level, Head Start professionals may decide to use monitoring data to focus attention on aspects of classroom interaction as they develop grantee or program plans for improvement. However, monitoring data do not provide any information about quality at the centers or classroom level. Thus, grantees or programs may decide to conduct additional observations to obtain data on a larger sample of classrooms. If your program uses CLASS Pre-K for Professional development we recommend observing each classroom for at least 2 hours if there is a desire to report on data at the classroom level. Programs may also want to conduct repeat observations to gauge improvement over time.

Assessment of individual classrooms. Finally, at the individual classroom level, when periodic observations are conducted by trained observers and include several cycles (as described above) conclusions can be drawn about the quality of teacher-child interactions in that classroom, and can drive plans for individual improvement, professional development, and evaluation.

Importantly, program improvement occurs best when all the efforts across different levels are connected and linked, using similar instruments (such as CLASS), aligned professional development, data systems that provide appropriate and useful feedback for each level, and well-trained observers using procedures appropriate to observation at that level.

HOW SHOULD CLASS DATA BE REPORTED AND SHARED?

There are several general principles to keep in mind when sharing CLASS results:

- 1. People receiving CLASS results need to have at least a basic understanding of the tool, including the dimensions it measures and how scores are derived.
- 2. Sharing actual scores, without an explanation of what these scores mean, is not useful.
- 3. The level of detail provided (e.g., whether to share domain or dimensions scores) will depend on the goals of the data collection.

Beyond these general principles, the ways in which CLASS data are shared will depend on the purpose of the data collection.

Monitoring data. The scores from monitoring observations can only be used to provide information on teacher-child interactions at the grantee level. These scores cannot be used to draw conclusions about a specific center or classroom. These results can be used to inform grantee-level areas of strength and areas for improvement that may become the focus of grantee-wide professional development offerings.

Program-level data. CLASS data collected by individual grantees or programs can be shared with funders, administrators, and other stakeholders to provide an overview of the quality of interactions in the program. For these broad purposes, sharing data at the domain level (e.g. Emotional Support) is likely sufficient.

It is often helpful to compare these program-level data to national averages. Data collected by a program or grantee may also be used to identify individual centers in need of additional support. In these cases, it may be helpful to share dimension level data (e.g., Teacher Sensitivity, see chart below) because these dimensions provide more specific information about the types of interactions that may be in need of improvement.

OHS CLASS® Descriptive Statistics, 2016 National Grantee Level Scores by Dimension							
Domain	Dimension	Mean	Standard Deviation	Minimum	Maximum		
Emotional Support	Positive Climate	5.93	0.36	4.80	6.86		
	Negative Climate	1.06	0.08	1.00	1.47		
	Teacher Sensitivity	5.82	0.42	4.33	6.86		
	Regard for Student Perspectives	5.30	0.50	3.75	6.54		
Classroom Organization	Behavior Management	5.95	0.40	4.73	6.96		
	Productivity	6.05	0.36	4.75	6.93		
	Instructional Learning Formats	5.20	0.48	3.20	6.20		
Instructional Support	Concept Development	2.33	0.54	1.30	4.82		
	Quality of Feedback	2.80	0.60	1.50	5.32		
	Language Modeling	3.35	0.56	1.70	5.36		

Classroom-level data. It's important to remember that CLASS assesses classroom interactions, not a specific teacher. When sharing data at the classroom level, it is important to include all teachers that work in that classroom. It is extremely important that teachers have sufficient knowledge about CLASS prior to receiving feedback from an observation. Feedback on a teacher's interactions with children related to Instructional Learning Formats, for example, will have greater meaning when the teacher has a clear understanding of what specific behaviors are noted in this dimension. The CLASS Manual and CLASS Dimensions Guide provide information that can be helpful to teachers in understanding the specific behaviors they can use to improve their practice.

We generally recommend sharing results with individual teachers at the dimension level with an *emphasis* on describing patterns and examples of teacher-child interactions rather than focusing only specific scores. As much as possible, include notes from the actual observation so that the teachers can really understand what the CLASS assessed in their classroom. For example, it may not be helpful to just tell a teacher that she/he received a score of 3 on Concept Development. She/he might immediately focus on whether a 3 is good or bad, rather than identifying behaviors that can help her move forward in that dimension regardless of the specific score she obtained. Sharing the scores only after a teacher understand the scoring system will help to avoid the potential of getting bogged down in a focus on the number rather than on the specific behaviors which are critical targets for change. For this reason, we recommend sharing scores with teachers after teachers understand the scoring system. When sharing scores with teachers, it is important to provide a good description of what was observed, as well as ways to understand their scores. To promote 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.

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