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Introduction

CHAPTER ONE

The Classroom Assessment Scoring System (CLASS) is an observation instrument developed to assess classroom quality in preschool through third-grade classrooms. This preschool manual provides information on the theoretical and empirical foundations of the CLASS, an overview of the procedures for using the CLASS, and detailed descriptions and examples for each dimension as observed in preschool classrooms.¹

THEORETICAL AND EMPIRICAL FOUNDATIONS OF THE CLASS

The CLASS dimensions are based on developmental theory and research suggesting that interactions between students and adults are the primary mechanism of student development and learning (Greenberg, Domitrovich, & Bumbarger, 2001; Hamre & Planta, 2007; Morrison & Connor, 2002; Pianta, 2006; Rutter & Maughan, 2002). The CLASS dimensions are based solely on interactions between teachers and students in classrooms; this system does not evaluate the presence of materials, the physical environment or safety, or the adoption of a specific curriculum. This distinction between *observed interactions* and physical materials or reported use of curriculum is important because in most early elementary settings, materials and curriculum are prevalent and fairly wellorganized. The CLASS focuses on interactions between teachers and students and what teachers do with the materials they have

The CLASS was developed based on an extensive literature review as well as on scales used in large-scale classroom observation studies in the National Institute of Child Health and Human Development (NICHD) Study of Early Care (NICHD Early Child Care Research Network (ECCRN), 2002; Planta, La Paro, Payne, Cox, & Bradley, 2002) and the National Center for Early Development and Learning (NCEDL) MultiState Pre-K Study (Early et al., 2005). The dimensions assessed by the CLASS were derived from a review of constructs assessed in classroom observation instruments used in child care and elementary school research, literature on effective teaching practices, focus groups, and extensive piloting.

¹ A K-3 version also is available. The major dimensions remain the same between the preschool and K-3 versions; however the K-3 version provides examples specific to classrooms with older students.

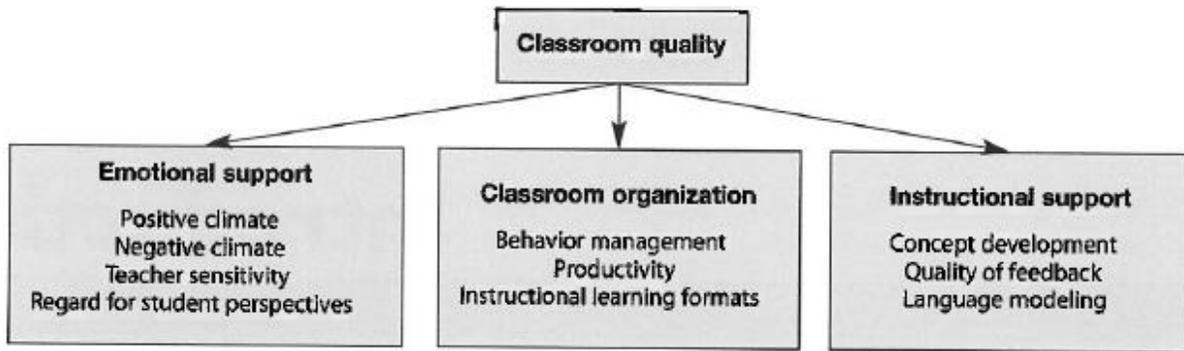


Figure 1.1. Overview of CLASS domains and dimensions.

The CLASS was designed to create a common metric and vocabulary that could be used to describe various aspects of quality across the early childhood and elementary grades.

It is significant to note that the domains and dimensions used by the CLASS to define and assess classroom quality are common across the preschool to third-grade period. However, the ways these dimensions are manifested are specific to particular developmental levels or age groups (i.e., preschool versus grades K-3). In other words, an underlying assumption of the CLASS is that there is heterotypic continuity in quality teaching across grade levels: The same underlying dimensions comprise high-quality classrooms throughout this age range; however, the ways that these dimensions are demonstrated in classroom practice may shift as children mature. By providing a common metric and language for discussion of quality across grades, the CLASS addresses problems with grade-to-grade transition and the need for coherence (Bogard & Takanishi, 2005) while providing a context-specific and developmentally sensitive metric for each grade level.

At the broadest level, interactions between teachers and students can be grouped into three domains: Emotional Support, Classroom Organization, and Instructional Support. Figure 1.1 provides an overview of these domains and the dimensions within each domain as measured by the CLASS. This organizational structure for classroom interactions has been validated in more than 3,000 classrooms from preschool to fifth grade (Hamre, Mashburn, Pianta, & Downer, 2006).

CLASS DOMAINS

The following discussion elaborates on the major domains of classroom experience assessed by the CLASS. A more complete discussion of the theoretical and empirical basis for the CLASS is available elsewhere (Hamre & Pianta, 2007, La Paro, Pianta, & Stuhlman, 2004).

Emotional Support

Children's social and emotional functioning in the classroom is increasingly recognized as an indicator of school readiness (Blair, 2002; Denham & Weissberg, 2004; Raver, 2004), a potential target for intervention (Greenberg, Weissberg, & O'Brien, 2003; Zins, Bloodworth, Weissberg, & Walberg, 2004), and even a student outcome that might be governed by a set of standards similar

to those for academic achievement (Illinois State Board of Education, 2004). Children who are motivated and connected to others in the early years of schooling are much more likely to establish positive trajectories of development in both social and academic domains (Hamre & Pianta, 2001; Ladd, Birch, & Buhs, 1999; Pianta, Steinberg, & Rollins, 1995; Silver, Measelle, Essex, & Armstrong, 2005). Teachers' abilities to support social and emotional functioning in the classroom are therefore central to any conceptualization of effective classroom practice. The dimensions included in the Emotional Support domain on the CLASS include the following:

- Positive Climate: The emotional connection, respect, and enjoyment demonstrated between teachers and students and among students
- Negative Climate: The level of expressed negativity such as anger, hostility, or aggression exhibited by teachers and/or students in the classroom
- Teacher Sensitivity: Teachers' awareness of and responsiveness to students' academic and emotional concerns
- Regard for Student Perspectives: The degree to which teachers' Interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view

These dimensions collectively and separately predict to students' performance on standardized tests of literacy skills in preschool and first grade (NICHD ECCRN, 2003; Pianta, 2003), levels of mother-reported internalizing behaviors in kindergarten and first grade (NICHD ECCRN, 2003), and students' engagement in the classroom across all grade levels (Bryant et al., 2002; NICHD ECCRN 2002, 2005).

Although these processes are important for all students, they may be particularly important for students at risk for school failure. For example, among a group of students who displayed significant behavior and emotional problems in kindergarten, those who were placed in first-grade classrooms offering high levels of emotional support made academic progress at levels similar to their low-risk peers, whereas high-risk students placed in classrooms offering lower levels of emotional support fell further behind their low-risk peers (Hamre & Pianta, 2005). These studies demonstrate that emotional support in the classroom uniquely predicts student outcomes, after adjusting for selection effects and prior student functioning.

Classroom Organization

The Classroom Organization domain includes a broad array of classroom processes related to the organization and management of students' behavior, time, and attention in the classroom (Emmer & Stough, 2001). Classrooms function best and provide the most opportunities for learning when students are well-behaved, consistently have things to do, and are interested and engaged in learning tasks. The theoretical underpinnings of this domain include work by developmental

psychologists studying how children develop self-regulatory skills (Blair, 2003; Raver, 2004), work by ecological psychologists examining the extent to which these skills are determined by environmental factors (Kounin, 1970), and constructivist theories exploring how young children are best engaged in learning (Bowman & Stott, 1994; Bruner, 1996; Rogoff, 1990; Vygotsky, 1978). The term self-regulated learning (Schunk, 2005; Sperling, Howard, & Staley, 2004) often is used to refer to the regulatory skills students need to be successful in classroom settings. This term is defined as "an active constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment" (Pintrich, 2000, p. 453). A point of emphasis across this definition and the work of other ecological and process-product researchers is that the development and expression of regulatory skills is highly dependent on the classroom environment (Anderson, Evertson, & Emmer, 1980; Emmer & Stough, 2001; Kounin, 1970; Pintrich, 2000; Sanford & Evertson, 1981; Soar & Soar, 1979). At the simplest level, this work suggests that students exhibit better self-regulation in well-regulated classroom environments. The CLASS framework incorporates three dimensions of this classroom-level regulation:

- Behavior Management: How effectively teachers monitor, prevent, and redirect behavior
- Productivity: How well the classroom runs with respect to routines and the degree to which teachers organize activities and directions so that maximum time can be spent in learning activities
- Instructional Learning Formats: How teachers facilitate activities and provide interesting materials so that students are engaged and learning opportunities are maximized

Each of these dimensions captures a distinct aspect of classroom organization that has demonstrated associations with children's learning. With regard to behavior management, classrooms with positive strategies for preventing and redirecting behavior tend to have students who make greater academic progress (Good & Grouws, 1977; Soar & Soar, 1979). In addition, intervention studies provide evidence that teachers who adopt these types of practices after training are more likely than teachers in control groups to have students who are engaged and learning (Emmer & Stough, 2001; Evertson, Emmer, Sanford, & Clements, 1983; Evertson & Harris, 1999). In terms of productivity, early work by process-product researchers has focused attention on the importance of time management, providing consistent evidence that students are most engaged in productive classrooms and that this engagement, in turn, is directly associated with student learning (Brophy & Evertson, 1976; Coker, Medley, & Soar, 1980; Good & Grouws, 1977; Stallings, 1975; Stallings, Cory, Fairweather, & Needels, 1978). In fact, in their review of teacher behavior and student achievement, Brophy and Good (1986) concluded that the link between the quantity of time spent on instruction and student achievement was the most consistently replicated finding of process-product researchers. Finally, for students to learn they must not only have something to do but also must be effectively engaged and interested in the instructional activities

provided to them as well (Yair, 2000). Consistent with constructivist theories that guide much of early childhood practice (Bowman & Stott, 1994; Bruner, 1996; Rogoff, 1990; Vygotsky, 1978), when teachers provide high-quality learning formats, students are not just *passively* engaged in learning but are *active* participants in the learning experience. Taken together, these dimensions of classroom organization set the stage for learning in preschool to third-grade classrooms.

Instructional Support

The theoretical foundation for the CLASS conceptualization of instructional support comes primarily from research on children's cognitive and language development (e.g., Catts, Fey, Zhang, & Tomblin, 1999; Fujiki, Brinton, & Clarke, 2002; Romberg, Carpenter, & Dremock, 2005; Taylor, Pearson, Peterson, & Rodriguez, 2003; Vygotsky, 1991; Wharton-McDonald, Pressley, & Hampston, 1998). This literature highlights the distinction between simply learning facts and gaining usable knowledge-learning how facts are interconnected, organized, and conditioned on one another (National Research Council, 1999)-noting that gaining usable knowledge is the more important of the two when it comes to cognitive development. The development of metacognitive skills, or the awareness and understanding of one's thinking processes, also is critical to children's academic development (Veenman, Kok, & Blöte, 2005; Williams, Blythe, & White, 2002). A child's ability to develop metacognitive skills is contingent on the opportunities that adults provide to express existing skills and scaffold more complex ones (Davis & Miyake, 2004; Skibbe, Behnke, & Justice, 2004; Vygotsky, 1991). Thus, as with the other CLASS domains, interactions between adults and children are the key mechanism through which instructional support is provided to children in the early years of schooling. As a result, the CLASS Instructional Support domain does not focus on the content of curriculum or learning activities but rather on the ways in which teachers implement whichever curriculum they are using to effectively support cognitive and language development. The CLASS has three dimensions that focus on instructional support:

- **Concept Development:** How teachers use instructional discussions and activities to promote students' higher-order thinking skills in contrast to a focus on rote instruction
- **Quality of Feedback:** How teachers extend students' learning through their responses to students' ideas, comments, and work
- **Language Modeling:** The extent to which teachers facilitate and encourage students' language

These dimensions together, and Quality of Feedback in particular, form an index of the instructional value of the classroom that predicts to student academic functioning in the areas of literacy and general knowledge (Howes et al., in press), with indications that this association is a result of increased student engagement in the activity (NICHD ECCRN, 2003)

As with emotional support, there is some evidence that these instructional processes may be particularly important for students at risk for school failure. In one study, students identified as at

risk based on low levels of maternal education who were placed in first-grade classrooms offering moderate to high instructional quality displayed academic achievement at a level commensurate with their low-risk peers, whereas those students in low instructional quality classrooms fell further behind (Hamre & Pianta, 2005).

USES OF THE CLASS

The CLASS provides a mechanism through which researchers, policymakers, and practitioners can collect standardized information on the quality of classroom environments from preschool through third grade. Uses of the CLASS include the following:

Research

The CLASS may be used in large or small studies of young students in which researchers want a measure of classroom processes that are 1) linked to students' concurrent school performance and 2) associated with students' development and behavior over time. The CLASS has been used successfully as a part of large research projects documenting the quality of classroom environments across the early grades as well as in evaluation studies seeking to determine whether school-based programs affect classroom processes.

Accountability Efforts

The unprecedented level of investment in and attention to early education has taken place in the context of a policy climate that emphasizes accountability. In particular, when public funds are spent for education, educational providers are increasingly held responsible for their contribution to children's academic and social development. Accountability assessments typically rest on direct evaluation of students. Adopting policies and practices that view direct assessment of students as the only means for ensuring accountability of early education and elementary classrooms is markedly limited for young students for a number of reasons. Direct assessment of young students is known to be less reliable and valid than direct assessment of older students, in large part because younger students' competencies are fairly unstable and situationally dependent (La Paro & Pianta, 2000). Furthermore, because the competencies of students are in large part dependent on the quality of their experiences in educational settings, it makes sense to assess, for accountability purposes, the quality of those settings (Pianta, 2003). In short, when determining accountability in early education classrooms, it may be better to focus on developmental inputs rather than outputs. The CLASS allows for a direct assessment of these inputs.

Program Planning and Evaluation

For programs seeking to improve the quality of their classroom offerings, the CLASS provides a standardized mechanism for assessing classroom-level factors that are amenable to intervention. For example, by administering the CLASS in all K-3 classrooms in a district, administrators may identify systemwide strengths and develop plans for making systematic improvements in areas of

weakness. Districts may find that their teachers display high-quality emotional supports and organization but are weaker than teachers in other districts in the instructional areas. They may use that information to plan for a set of workshops aimed at improving teacher knowledge and implementation of high-quality instructional strategies.

Professional Development and Supervision

The CLASS may be used to provide teachers with direct feedback about their actual classroom practices. Teachers can be observed and provided with feedback at regular intervals during the school year. Using the CLASS in this way allows teachers to get feedback about the dimensions of their teaching that are associated with more positive social and academic development for students. In addition, they are given an objective and concrete measurement of their areas of strength and weakness as well as their improvements over the course of the year. The CLASS also can be used as a training tool for preservice teachers by providing them with a framework for understanding the components of their teaching that really matter for students as well as by providing a mechanism for systematic feedback and support throughout their training and early careers. Finally, the CLASS can serve as the basis for new models of in-service training that break away from the traditional workshop model by focusing on providing teachers with ongoing, flexible, individualized, and collaborative support to improve their interactions with students (e.g., My Teaching Partner system, <http://www.myteachingpartner.net>).

CLASS TRAINING

The previous section outlined some of the ways the CLASS can be used to assess classroom processes in preschool to third-grade classrooms. Potential users include researchers, teachers, principals, school psychologists, and educational consultants.

Reliable use of CLASS tool requires training. The level of training required depends on the intended use of the system. It is essential that all individuals interested in using the CLASS to collect standardized data on classrooms or for research, accountability, or evaluation purposes attend official training workshops. Learn to fairly and accurately assess teacher-student interactions using the CLASS tool. Attend one of Teachstone's training programs to become a certified CLASS observer or affiliate trainer. Find out more and register for a Teachstone training at: <http://www.teachstone.com/training/programs/>.

If the CLASS is being used for research or evaluative purposes, it also is important that regular checks on reliability occur after initial training. Conducting regular "double coding" sessions during which at least two observers code the same classroom observation or videotape and check their codes for consistency is highly recommended. In addition, holding regular meetings during which observers code videotaped segments together can help keep people coding consistently. Finally, it is recommended that all observers watch several refresher/drift segments at least once a year after training or prior to each data collection wave to ensure a high degree of reliability with the CLASS manual and master coders.

Observing Classrooms with the CLASS

CHAPTER TWO

This chapter describes the recommended procedure for using the CLASS in live observation. Ways to use the CLASS to code from videotape and variations in observational strategies when the observer wants the scores to be focused on one teacher, rather than the whole classroom, also are briefly reviewed. These procedures may be adapted to fit the individual needs of a project, but any adaptations should keep the following principles in mind:

- Maximizing the number of observations will increase reliability of measurement.
- Both structured and unstructured times of the school day are important to observe.

Unlike discrete behavioral coding, the CLASS requires the observer to derive one score for each dimension per observation cycle based on the degree to which certain behavioral markers characterize the classroom during that cycle. A score ranging from 1 (minimally characteristic) to 7 (highly characteristic) is given for each dimension and represents the extent to which that dimension is characteristic of that classroom. Each cycle of observation consists of a 20-minute period during which the observer watches classroom interaction (mostly focused on the teacher) and takes notes followed by a 10-minute period for recording codes. To complete the ratings, the observer must make judgments based on the range, frequency, intention, and tone of interpersonal and individual behavior during the observation time.

GENERAL LIVE OBSERVATION PROCEDURE

The entire CLASS observation typically starts at the beginning of the school day and continues throughout the morning for at least 2 hours. However, the observation can be scheduled to begin later in the day, as desired by the project. Prior to the observation, the observer should discuss with the teacher the schedule for the day and use that information to plan the observation so as to maximize the number of 30-minute cycles that can be obtained. The observer should conduct the observation according to the following rules:

- Observation starts at the time the school day begins, according to the teacher, or at another predetermined time.
- Coding then proceeds using the 30-minute cycle (i.e., 20-minute observe, 10-minute record) until the end of the observation.
- A minimum of four cycles should be obtained. Please note that the Scoring Summary Sheet included with the six Observation Sheets contains space for recording six cycles.

The observation procedure requires the observer to watch, without interruption, activity in the classroom for a period of 20 minutes. During this time, the observer should watch the who, what, and how of everything that happens at the classroom level, with particular attention to the teachers' instructional interactions and behaviors.

The Observation Sheets have space next to each dimension for the observer to jot down notes to help him or her assign a rating score at the end of each observation cycle. Notes must be taken for each dimension during every observation cycle. These notes form the basis for coding and will help observers make a judgment about a code. Notes should reflect the key elements of the dimension and not extraneous information. Note taking typically helps the coder focus on these key aspects of the interaction they are watching (see the filled-in Observation Sheet on page 16 for an example).

At the end of the 20 minutes of dedicated observation and note taking, the observer should derive numerical ratings for each of the CLASS dimensions. These ratings are based on the observer's knowledge of the dimension definitions and markers and the written notes that the observer has made during the entire observation window for each dimension. After assigning ratings, the observer should begin a new CLASS cycle.

Classrooms with More than One Teacher/Adult

If multiple adults are present in a classroom, weigh their behaviors according to the number of students with whom they are working, the amount of time they spend with the students, and their responsibility for the activities.

The CLASS dimensions are intended to reflect the value of the classroom environment for all of the students in the class or, in other words, the experience of a typical or average student in the class. The dimensions do not target a single student or a single adult but instead are intended to capture the resources present to all students in the classroom. When more than one adult is present in a classroom, the observer must be clear about how to weigh the contributions of each adult when they assign scores on the CLASS dimensions. Most often, the primary teacher will be the focus of the codes. The primary teacher is that individual who is ultimately responsible for everything that happens in the classroom and, in most cases, is leading the interaction being viewed.

If another adult is present in a classroom, he or she is likely a paid teacher's aide, a parent volunteer, or another teacher (i.e., co-teacher). In these cases, observers must use their judgment to decide how to balance their observation time and the resulting codes. Again, the primary principle to remember is that the CLASS codes should reflect the experiences of the typical or average student in the classroom. If most of the students are working under the direction of one adult and a few students are working with another adult, the observer should code the teacher working with the majority of the students. If students are working in small groups and a separate adult is leading each group, the observer should spend time watching each group and code the average of these experiences over the whole 20 minutes, across the groups. If the primary teacher is leading the

activity by him or herself while the second adult is making copies, code the primary teacher's interactions. If the second adult is “floating” in the group while the teacher is leading, the codes, again, should be based primarily on the lead teacher's behavior. If the second adult has complete responsibility for a period of time while the teacher sits at his or her desk, code according to what the second adult is doing.

The CLASS codes are derived based on the behavior of all of the adults in the room during a given cycle. In classrooms with multiple adults, it can be assumed that the primary teacher is orchestrating the classroom activities and sanctions all adult interactions with the students. The other adults act as his or her proxies and help maintain the classroom climate in terms of the amount of allowable contact with and between students, academic support to the students, and the amount of control exercised in the classroom.

Rules for What to Observe and Terminating a Cycle

For the most part, observers should watch and code nearly all of the activities that take place in the classroom. If necessary, however, observers may follow the students and teacher outside to code an activity (e.g., for a walk or a science discovery lesson). Observers should terminate observation and not assign codes during recess and outdoor free time. All other periods—music, art, transitions, language arts and/or academics, free choice, and centers—should be coded. Depending on the setting and goals of observation, the observer may choose to observe during snack and mealtime as well. In many early childhood settings, students receive a good deal of instruction during these times a lot of teaching can occur while students wash their hands and get ready for snack.

If the teacher ends an activity and the students go to recess in the middle of the observation portion of a cycle, the observer should stop observing. Ratings still can be assigned to the CLASS codes based on what the observer has observed up to that point provided that 10 minutes of the observation have been completed. The ratings will be based on what was observed during that 10-minute period.

If the observation cycle is terminated before 10 minutes of observation have occurred, the next observation period should be started once the classroom activity fits the eligible observation description above. For example, if the students return from recess and start getting ready for art instruction, observation can begin during the transition. It is fine, and in fact desirable, to observe during the transition back to the room.

Challenges for the Observer

The CLASS requires observers to make a series of judgments. Although very detailed behavioral markers in the manual, as well as the observers' experience during CLASS training, guide these judgments, observers should keep in mind several important challenges while using the CLASS.

Remaining Objective

Over the course of a complete visit, the observer must guard against injecting external explanations for what he or she sees taking place within the classroom. The visitor must remain true to the individual dimensions. For example, the observer may be tempted to make allowances for the time of day. Thoughts such as "The teacher must be tired considering she has all these tough kids" must not be considered in coding. The dimension and its markers remain stable. The numerical ratings change based on behaviors observed.

When assigning scores, it is imperative to base codes on the written descriptions of the dimensions. Observers should not adjust their codes upward or downward based on any information other than what they have observed in the classroom. It is a common inclination to inflate ratings because observers take the perspective of the teacher. "Oh, she didn't really mean to do that. She just didn't see who really was at fault." Or, "He would have taught the lesson better if the overhead projector had been working properly. I've had things like that happen lots of time. He didn't really mean to be so negative." Perspective taking such as this may cause the observer to adjust the codes to explain more positively what takes place at any given time in the classroom. This should be minimized as much as possible. In addition, the observer should be careful not to adjust ratings based solely on the activity provided for the students. For example, if the teacher is conducting a rote lesson and asks one good Concept Development question, the coder should not adjust the score significantly higher for this because "she did as much as she could with this lesson." The descriptions of dimensions within the manual should always be the basis for assigning scores.

Another area in which observers must be careful to remain objective is in the tendency to develop initial impressions of teachers and to look for evidence confirming these initial impressions. This tendency often causes observers to miss important behaviors that may disconfirm these initial impressions. It is sometimes helpful for the observer to consciously reflect on his or her initial impression a few minutes into the observation and then make an active effort to look for disconfirming evidence. In addition, while the observer is reviewing notes prior to scoring—particularly if all of his or her notes reflect one end of the dimension—he or she should spend a minute reading through the other end of the dimension to see if that cues any thoughts about behaviors he or she may have seen but failed to record.

Independence of Cycles

Another challenge for the observer is to record the ratings accurately without regard to how each dimension was scored in previous cycles. Each cycle must be considered independently of the others with no expectation or need for change or stability. Any pattern in the ratings across time should occur naturally and must be external to the observer's manipulation. Often, there may be little change within one lesson or across lessons with the same teacher in the same classroom. The observer may sense that he or she is responsible for this apparent redundancy or even that, at times, he or she is just giving the same ratings over and over again. There is no expectation that the ratings

must vary from cycle to cycle to be considered accurate or to document that the observer is not in what might feel like a response bias. There is, in fact, no expectation that an average teacher in one classroom would change greatly across the morning, for example. Changes are more likely to occur when students experience different class groupings, different teachers, different subject materials, or different classrooms or across different students in different schools.

Weighing Single Incidents

Care should be taken not to allow a single incident to be given too much weight in an overall rating. In general, specific incidents that are markers for the different dimensions should be noted and contribute to the rating, but care should be taken that the rating characterizes the whole observation period and not a single occurrence. The observer should make sure that he or she mentally reviews the entire observation segment prior to giving a rating. For example, a classroom should not receive a rating of 1 for Productivity if the teacher takes a brief moment to look for a book or has a brief conversation at the door with another adult. Because these events have occurred, the teacher should not receive a 7, but the teacher's behavior during the entire segment must be evaluated and considered in the rating.

Exemplars

For each rating category (i.e., high, middle, and low) on all of the dimensions, examples are included in the form of statements. Remember that these are only examples and everything in the example does not have to be true in order for a classroom to fit into a given rating category. In addition, events and situations may occur in classrooms that are not included in the examples but still fit well within a given rating category for a given dimension. The examples are intended to serve as guidelines but are not an exhaustive list of all behaviors that could fit into a rating category.

Independence of Dimensions

The dimensions are intended to be analytically distinct, although overlap often occurs. It is often the case that an individual incident in a classroom contributes to the scoring on several dimensions; however, each dimension still should be rated independently. It is important for observers to remain objective and guard against adopting an overall picture of a teacher and then spending the observation period looking for confirmation of that impression across dimensions rather than looking for objective evidence of each dimension throughout the observation.

Seeking Perfection

The high-end markers for each dimension reflect good teaching practice; however, to score in the high range a classroom does not have to be perfect. There may be one or two things that are less than ideal in a given observation, but if the overall classroom experience is characterized by the markers at the high end, the classroom should be scored that way. This may be an issue for

observers using the CLASS as a professional development tool. Receiving a high score on a dimension does not preclude the usefulness of a discussion with the teacher being observed about her practice in that area. It is often the case that teachers are not aware of exactly what they are doing well; hearing the specifics of their successes might help them to be more intentional and consistent in implementing these practices in the future.

ALTERNATIVE OBSERVATION PROCEDURES

The observation procedures described previously are those typically used for the CLASS. However, the CLASS was designed to work flexibly with other observational procedures as needed for specific projects. We describe a few alternative observational procedures next.

Videotaped Observation Procedure

The CLASS has been validated for use in coding videotapes of classrooms (Mashburn, Hamre, Downer, & Pianta, 2007). Videotaping may be completed by teachers or by outsiders. The general procedures described previously for live coding also apply to coding videotape. Here, the biggest concern is the degree to which the videotape adequately captures the visual and auditory information present in classroom interactions. The following are recommendations for obtaining high-quality videotape:

- During whole- and small-group time, it is a good idea to use digital video cameras that adequately capture sound without having to have a microphone on the teacher. In some cases, however, such as group work or center time, the teacher may be difficult to hear over the hum of the classroom. Experiment with a few options before collecting a lot of videotape. Most modern computers come with software that allows for easy importation of digital video.
- Make sure the teacher (or person doing the taping) tells the students what is happening prior to the first videotaping. The students should be told why they are being videotaped and allowed to share any concerns they may have about the process. Although students sometimes act up for the camera initially, most quickly forget that it is there.
- Start the video prior to the beginning of a lesson and run the videotape during the transition from one activity to another. Often, these nonlesson times provide interesting moments to watch and discuss.
- Use tripods and place the camera in such a way that the teacher and most of the students can be seen clearly. Often, setting up the camera to the side so that the facial expressions of the teachers and students are visible is most helpful. Move the tripod as needed, but try not to use handheld video as the picture tends to be shaky.

- In the case of group work or centers, focus the video on the primary teacher but occasionally pan the video out to capture the experiences of other students for several minutes at a time.

Using the CLASS to Observe One Teacher

For some professional development and research purposes, people are interested in obtaining ratings that reflect one teacher rather than the classroom as a whole. In most cases, it is still recommended that observers follow the general procedures described previously. The main classroom teacher is responsible for directing students' experiences in the classroom; therefore, information about interactions that students have with other adults may be important indicators of how the lead teacher has structured the classroom. There are some exceptions to this, however. For example, in work with preservice teachers, the scoring is focused specifically on their interactions with students rather than the interactions between students and the lead teacher. Therefore, if this preservice teacher is only working with a small group of students throughout the observation, only those students' experiences should be coded. Most of the other recommendations made in the general observation procedures section apply to this special use of the CLASS.

SCORING WITH THE CLASS

Scoring with the CLASS results in a set of scores for each classroom representing quality as observed on each dimension during each observation cycle. These scores can be averaged across cycles and consolidated to create domain scores, as described next.

Scoring within Each Cycle

CLASS scoring should be completed immediately after each observation cycle using the Observation Sheet (see Figure 2.1). Observers should give a score for each dimension using the 7-point range outlined in Chapter 3. The dimension descriptions in Chapter 3 provide a thorough explanation of each scale at the low (1, 2), middle (3, 4, 5), and high (6, 7) ranges. Observers should carefully review the dimension descriptions in Table 2.1 and make their judgments based on them.

It is important to note that although Table 2.1 provides a general scoring guideline, the CLASS is not a checklist and observers should view the dimensions as holistic descriptions of classrooms that fall in the low, middle, or high range. In many cases, it is not necessary to see indicators of all markers presented in the description of a given range to assign a score in that range. For example, within Positive Climate it is possible for a classroom to score in the high end, even if positive peer connections are not clearly demonstrated, as long as there are consistent indications of positive teacher-student relationships, positive affect from students and teachers, and mutual respect.



OBSERVATION SHEET

Teacher: 601 Observer: 522
 Start time: 830 am End time: 8:50 am
 Number of adults: 2 Number of children: 15

CONTENT (circle all; check majority): Lit/Lang Arts ✓ Math Science Social Studies Art Other: -----	FORMAT (circle all; check majority): Routine Whole group individual time Meals/snacks Small group Free choice/centers
---	--

Circle appropriate score.

Positive Climate (PC) <ul style="list-style-type: none"> • Relationships • Positive Affect • Positive Communication • Respect 	<i>Notes:</i> . Teacher sitting on floor close to students; leans in; eye contact . Teacher laughs with kids during "Boo" scene . Physical affection > hugs Sarah, pats Billy . Respect > thank you, please, using names	1 2 3 4 5 6 7
Negative Climate (NC) <ul style="list-style-type: none"> • Negative Affect • Punitive Control • Sarcasm / Disrespect • Severe Negativity 	<i>Notes:</i> . None observed	1 2 3 4 5 6 7
Teacher Sensitivity (TS) <ul style="list-style-type: none"> • Awareness • Responsiveness • Addresses Problems • Student Comfort 	<i>Notes:</i> . Notices child hand raised and comes back to her for question . Responsive to comments > "You did share well today!" . ignores one boy's comment ("Locks like dog") . Children raise their hands freely, eager to participate	1 2 3 4 5 6 7
Regard for Student Perspectives (RSP) <ul style="list-style-type: none"> • Flexibility and Student Focus • Support for Autonomy and Leadership • Student Expression • Restriction of Movement 	<i>Notes:</i> . Flexible at times > "Ok, we can sing that song again" . Turtle helper is responsible for morning message . Students are able to move more freely (some ile down) . Students able to choose their centers	1 2 3 4 5 6 7
Behavior Management (BM) <ul style="list-style-type: none"> • Clear Behavior Expectations • Proactive • Redirection of Misbehavior • Student Behavior 	<i>Notes:</i> . Inconsistent expectations > sometimes calling out is ok; other times, teacher becomes reactive . Lots of proactive praise ("Thank you for being ready")	1 2 3 4 5 6 7
Productivity (PD) <ul style="list-style-type: none"> • Maximizing Learning Time • Routines • Transitions • Preparation 	<i>Notes:</i> . Students always in activity > book reading and centers . Transition to centers is quick > using chart to choose center . Teacher prepared with book, and centers are already set up . Brief disruption w/ announcement; back to book quickly	1 2 3 4 5 6 7
Instructional Learning Formats (ILF) <ul style="list-style-type: none"> • Effective Facilitation • Variety of Modalities and Materials • Student Interest • Clarity of Learning Objectives 	<i>Notes:</i> . Facilitation > many questions in book rading . Modalities > book, chart, center materials, song . Teacher does motions in song, and students follow . Teacher uses voices during book reading	1 2 3 4 5 6 7
Concept Development (CD) <ul style="list-style-type: none"> • Analysis and Reasoning • Creating • Integration • Connections to the Real World 	<i>Notes:</i> . Rote instruction > "What color shirt is the mouse wearing?" . Some analysis > comparing size of blocks in center . Students brainstorm how mouse can find the cheese . No real world connections	1 2 3 4 5 6 7
Quality of Feedback (QF) <ul style="list-style-type: none"> • Scaffolding • Feedback Loops • Prompting Thought Processes • Providing Information • Encouragement and Affirmation 	<i>Notes:</i> . Brief loop around different sizes of blocks . Mostly general feedback providing affirmation; "good answer," "Ok," "nice job" . Some hints about letter sounds > "S makes same sound as "snake"	1 2 3 4 5 6 7
Language Modeling (LM) <ul style="list-style-type: none"> • Frequent Conversation • Open-Ended Questions • Repetition and Extension • Self- and Parallel Talk • Advanced Language 	<i>Notes:</i> . Some open questions promote conversation > "What will happen next? "How will the mouse find the cheese?" . Teacher repeats almost every student comment . Self-talk > "I'm turing the page," "I'm writing mouse here" . Advanced language > "foggy," "chilly," "mousetrap"	1 2 3 4 5 6 7

Figure 2.1. Filled-in Observation Sheet.

Table 2.1. Dimension descriptions or the CLASS

Low range		Middle range			High range	
1	2	3	4	5	6	7
The low-range description fits the classroom and / or teacher very well. All, or almost all, relevant indicators in the low range are present.	The low-range description mostly fits the classroom and / or teacher, but there are one or two indicators that are in the middle range.	The middle-range description mostly fits the classroom and / or teacher, but there are one or two indicators in the low range.	The middle-range description fits the classroom and / or teacher very well. All, or almost all, relevant indicators in the middle range are present.	The middle-range description mostly fits the classroom and / or teacher, but there are one or two indicators in the high range.	The high-range description mostly fits the classroom and / or teacher, but there are one or two indicators in the middle range.	The high-range description fits the classroom and / or teacher very well. All, or almost all, relevant indicators in the high range are present.

Before scores are assigned, the CLASS observer should carefully review the Dimensions Overview for each dimension (e.g., Positive Climate, Concept Development) to make initial decisions about the extent to which the observed behaviors reflect a low, middle,

ver, we recommend that observers new to the CLASS use the full low-, middle-, and high-range descriptions provided in the manual to make judgments about scores. As users become very familiar with these descriptions, they may use the Dimensions Overview for scoring purposes. However, all users will need to refer back to the detailed descriptions at times. Because of the highly inferential nature of the CLASS, scores should never be given without referring to the manual. In addition, because of the interactive nature of classrooms, we highly recommend that anyone using the CLASS go through an official training in which they learn to relate the examples given in the manual to actual classroom interactions. Training on master-coded videotape provides invaluable experience and helps users of the CLASS learn, for example, how much Concept Development is enough to earn a score of 7. More information on training is available on the Teachstone website (www.teachstone.com).

Getting Composite Scores Across Cycles

To get composite scores across cycles, individual cycle scores for each dimension are averaged across the number of cycles of observations completed. For example, the sample Scoring Summary Sheet in Figure 2.2 contains cycle level scores for each dimension from six observation cycles. Scores within each dimension are averaged, and the average score is recorded in the last column of the observation table. On the sample Scoring Summary Sheet, Positive Climate was scored as 5, 5, 5, 7, 6, and 6 across the six cycles. Summing these scores and dividing by the number of cycles (6) yields the average Positive Climate score of 5.67 recorded in the final column of the table. Continue down the column, averaging scores within each domain across all observation cycles.



SCORING SUMMARY SHEET

Teacher: 601	Observer: 522
Center/ID: C-22	Date: 10-5-07
Start time: 8:00 am	End time: 10:50 am

DIRECTIONS

Copy scores from observation sheets. Compute average scores for each dimension by adding cycle scores and then dividing by the number of cycles completed. Finally, compute Domain scores as indicated.

	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Average
Number of students	15	15	10	15	12	15	
Number of adults	1	2	2	2	2	2	
Academic content <i>(circle all; check majority)</i>	Lit/Lang Arts Math Social Studies Science Art Other: -----	✓Lit/Lang Arts Math Social Studies Science Art Other: -----	Lit/Lang Arts Math Social Studies ✓Science Art Other: -----	Lit/Lang Arts Math Social Studies Science Art Other: -----	Lit/Lang Arts Math Social Studies Science Art Other: -----	Lit/Lang Arts Math Social Studies Science Art Other: -----	
Format <i>(circle all; check majority)</i>	Routine Meals/Snacks Whole group Free choice/centers Individual time Small groups	Routine Meals/Snacks ✓Whole group Free choice/centers Individual time Small groups	Routine Meals/Snacks Whole group Free choice/centers Individual time Small groups				
Start time	8:00	8:30	9:00	9:30	10:00	10:30	
End time	8:20	8:50	9:20	9:50	10:20	10:50	
PC	1 2 3 4 (5) 6 7	1 2 3 4 (5) 6 7	1 2 3 4 (5) 6 7	1 2 3 4 5 6 (7)	1 2 3 4 5 (6) 7	1 2 3 4 5 (6) 7	5.67
NC	(1) 2 3 4 5 6 7	(1) 2 3 4 5 6 7	1 (2) 3 4 5 6 7	1 2 (3) 4 5 6 7	(1) 2 3 4 5 6 7	1 (2) 3 4 5 6 7	1.67
TS	1 2 3 4 (5) 6 7	1 2 3 4 (5) 6 7	1 2 3 4 5 6 (7)	1 2 3 (4) 5 6 7	1 2 3 4 (5) 6 7	1 2 3 4 5 (6) 7	5.33
RSP	1 2 3 (4) 5 6 7	1 2 3 4 (5) 6 7	1 2 3 4 5 6 (7)	1 2 3 (4) 5 6 7	1 2 3 4 5 (6) 7	1 2 3 4 (5) 6 7	5.17
BM	1 2 3 4 5 6 (7)	1 2 3 (4) 5 6 7	1 2 3 4 5 6 (7)	1 2 3 4 5 (6) 7	1 2 3 4 (5) 6 7	1 2 3 4 5 6 (7)	6
PD	1 2 3 4 (5) 6 7	1 2 3 4 5 (6) 7	1 2 3 (4) 5 6 7	1 2 3 4 5 (6) 7	1 2 3 4 (5) 6 7	1 2 3 4 (5) 6 7	5.17
ILF	1 2 3 (4) 5 6 7	1 2 3 4 (5) 6 7	1 2 3 4 (5) 6 7	1 2 3 4 5 6 (7)	1 2 3 4 5 6 (7)	1 2 3 4 (5) 6 7	5.5
CD	1 (2) 3 4 5 6 7	1 (2) 3 4 5 6 7	(1) 2 3 4 5 6 7	1 2 (3) 4 5 6 7	1 2 3 (4) 5 6 7	1 2 (3) 4 5 6 7	2.5
QF	1 2 (3) 4 5 6 7	1 2 (3) 4 5 6 7	1 2 (3) 4 5 6 7	(1) 2 3 4 5 6 7	1 (2) 3 4 5 6 7	1 (2) 3 4 5 6 7	2.33
LM	(1) 2 3 4 5 6 7	(1) 2 3 4 5 6 7	1 2 3 (4) 5 6 7	1 (2) 3 4 5 6 7	1 2 (3) 4 5 6 7	1 2 (3) 4 5 6 7	2.83

Emotional Support
$\frac{5.67}{PC} + \frac{6.33}{reversed NC^1} + \frac{5.33}{TS}$ $+ \frac{5.17}{RSP}/4 = \boxed{5.63}$

¹To reverse NC, subtract average Score from 8.

Classroom Organization
$\frac{6}{BM} + \frac{5.17}{PD} + \frac{5.5}{ILF}$ $\div 3 = \boxed{5.56}$

Classroom Organization
$\frac{2.5}{CD} + \frac{2.33}{QF} + \frac{2.83}{LM}$ $\div 3 = \boxed{2.55}$

Figure 2.2. Filled-in Scoring Summary Sheet.

Obtaining Domain Scores

Once all of the average dimension scores are obtained, the composite domain scores can be calculated: Emotional Support, Classroom Organization, and Instructional Support. These domain scores represent the average of each of the corresponding dimension scores (following the formula provided for each domain; see Scoring Summary Sheet). For example, on the sample Scoring Summary Sheet, shaded boxes indicate dimensions that correspond to each of the CLASS domains. The first four dimensions, Positive Climate (PC), Negative Climate (NC), Teacher Sensitivity (TS) and Regard for Student Perspective (RSP), comprise the Emotional Support domain. The next three dimensions, Behavior Management (BM), Productivity (PD), and Instructional Learning formats (LF), comprise the Classroom Organization domain. The following three dimensions, Concept Development (CD), Quality of Feedback (QF), and Language Modeling (LM), comprise the instructional Support domain.

Average dimension scores are transferred to the corresponding spaces within each domain score box on the left side of the Scoring Summary Sheet. Note that the average score for Negative Climate (NC) is reversed; to reverse the score, subtract the average NC score from 8, and then record this value in the space provided. Calculate the average of the dimension scores within each domain and enter the average in the space provided. For example, on the sample Scoring Summary Sheet, the sum of the PC, NC, TS, and RSP scores is divided by 4, and the average score for the Emotional Support domain is calculated as 5.63. Note that although Emotional Support is comprised of four dimensions, the following two domains (Classroom Organization and Instructional Support) are each comprised of three dimensions, so the sum of their dimension scores is divided by 3.