Jordan Performance Appraisal System Domains Document
Version 5.0

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The Jordan Performance Appraisal System
Domains Document
Version 5.0
2008

DOMAIN I: MANAGING THE CLASSROOM

The teacher efficiently manages student behavior, time and materials

1. Students off-task
2. Interrupts/obscures instruction
3. Fails to address misunderstandings
4. Fails to respond immediately to disruptive behaviors
5. Adjusts instruction
6. Smooth transitions

7. Courteous climate
8. Responds consistently to behaviors
9. Applies low key tactics for misbehavior
10. Identifies initiators of disruptive behavior
11. Uses management routines
12. Classroom management
13. Minutes of non-academic time

DOMAIN I: MANAGING THE CLASSROOM

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS

1. Students off-task (record approximately 10 minutes apart):
 	
a)   ○○○○
       ○○○○○○○
 	
b)   ○○○○
       ○○○○○○○
 	
c)   ○○○○
       ○○○○○○○
 	
d)   ○○○○
       ○○○○○○○
	Four times during the observation, at approximately ten minute intervals, scan the classroom and count the number of students off-task. Off-task behavior includes socializing, out-of-seat, sleeping, engaged in an activity other than an assigned activity, etc.
	The first scan should begin approximately five minutes after the observation begins.
		At the beginning of the observation, divide the period into <u>four equal intervals, approximately ten minutes apart, beginning five minutes after the observation begins</u>. Record these times in the space labeled "Number of students off-task" in the Notes section of the observation instrument.
		
		At each interval time, make one quick scan from one side of the classroom to the other, counting the number of students off-task as you scan. Record this number next to the appropriate time slot. At the end of the observation, transfer the numbers of off-task students from the Notes Section to indicator number one, filling in the appropriate number circles.
		
		NOTE: Avoid scanning during a transition. If you cannot complete a fourth scan (as may happen with a 30 minute observation) leave the bubbles on 1. d) <u>blank</u>.

REFERENCES: Effective teachers know whether or not students are on-task (Kounin, 1970). When off-task behavior escalates, the effective class manager will employ one of a number of tactics to get students involved in learning activities (see above). Engagement rate is positively related to achievement. A major factor influencing opportunity to learn is time on task, the amount of time within a lesson that students spend engaging with the curriculum rather than on activities such as socializing, moving around the classroom, and being disciplined (Brophy & Good, 1986; Reynolds and Muijs, 1999). Research reveals that teachers whose classrooms are characterized by high percentages of engaged time produce learners who achieve better than teachers whose classrooms are characterized by lower percentages of engaged time (Armstrong, Henson, & Savage, 2001). The amount of time students are engaged in learning academic content is positively related to their achievement in that content area (Burden & Byrd, 1999). According to Stronge (2002), as students focus on academic engagement, the potential for behavior problems to occur is greatly reduced.

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
2. Interrupts\obscures Instruction ○○○○○○○○	A tally is recorded each time the teacher interrupts or obscures instruction by: • referring to irrelevant stimuli • using vague or indeterminate terms (i.e., pretty much, some, not many, not very, almost, could be, sometimes, somewhere) or uses incorrect information • using redundancies and false starts • frequently starting and stopping • over-correcting self • stringing questions together • repeatedly using a distracting word or phrase (e.g., uh, ok, at this point in time, "sh", etc.) A maximum of one tally is recorded for repeated use of a distracting word or phrase.	EXAMPLES: **Tally**: The teacher begins a discussion about the plot development of Romeo and Juliet. After a few sentences, he says, "Wait, you need to know something about Italy during that time period." Then after a few statements about the time period, he brings up the controversy over whether or not Shakespeare really wrote the plays. A teacher says, without pausing; "Why are people prejudiced? Are they really out to discriminate? Are people basically bad?" (stringing questions together) During a math lesson, the teacher interrupts instruction to ask about a pupil's absence (referring to irrelevant stimuli). **NOTE**: Don't record a tally for each time an indeterminate term is used but rather when the term obscures the instruction.

REFERENCES: Interrupting instruction disrupts the momentum of a class by diverting student attention from the task at hand. A teacher interrupts instruction by using indeterminate terms and choppy speech patterns that obfuscate the central concepts the teacher hopes to communicate. Smith (1977) discovered that the use of "uh" depresses student achievement. Clarity of presentation correlated highly with student achievement (Brophy & Good, 1986; Walberg, 1985). Explanations communicate best when they are free from ambiguous, value, and imprecise terms (Armstrong, Henson, & Savage, 2001). According to Muijs and Reynolds (2001), the teacher should maintain the momentum during the lesson and avoid actions that can impede momentum such as "dangling" (teacher starts an activity but then stops it leaving it dangling), "flip-flops" (teacher starts an activity but then goes to another activity before finishing it), "over-dwelling" (teacher continues to explain instructions after students have grasped what they need to do), and "fragmentation" (teacher breaks down activities into too many steps).

DOMAIN I: MANAGING THE CLASSROOM

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
3. Fails to address misunderstandings ○○○○○○○○	A tally is recorded each time the teacher misses an opportunity to address student concerns or misunderstandings. A tally is also recorded if the teacher acknowledges a concern or misunderstanding but does nothing to resolve the problem. Concerns or misunderstandings include uncertainty about class procedures, activities, or academic concepts or processes.	The observer will note concerns or misunderstandings when students respond incorrectly, fail to complete activities, or by asking questions which reveal unaddressed concerns. EXAMPLES: **Tally**: The teacher tells the class there will be a test tomorrow on the 120-page poetry section of their literature book. Five different students ask, "Do we need to know about all of the poems and authors even those we haven't discussed?" Each time the teacher replies, "Yes" without further clarifications or explanations of her expectations. **Don't Tally**: After the first student asks if they need to know all the poems, etc., the teacher responds, "Let me clarify and then discuss with you what my expectations will be for the test".

REFERENCES: Emmer, Evertson, and Anderson (1980) found that academic performance is higher when students' questions and concerns are answered or when feedback is volunteered by the teacher when there is an incorrect response. More effective teachers listen to concerns and clarify any misunderstandings the student might have (Emmer, Evertson, & Anderson, 1980). Feedback and opportunities for correction are essential steps in instruction (Block & Burns, 1976; Bloom, 1976; Rosenshine, 1983). The effective teacher provides supportive corrective feedback to incorrect responses (L.M. Anderson, Evertson, & Brophy, 1979; Stallings & Kaskowitz, 1974; Stallings, 1978; Stallings, Needles, & Stayrook, 1979; Rosenshine, 1983). Brophy (1997) suggests that when many students have the same question or misconception, it is worthwhile to clarify the problem to the entire class. Otherwise, it is usually best to provide private help to those who need it while allowing the rest of the students to work on the assignment without interruption.

Managing Student Behavior

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
4. Fails to respond immediately to disruptive behavior ○○○○○○○○	A tally is recorded if the teacher <u>fails</u> to recognize disruptive behavior (social talk, excessive noise, or interruptions) or fails to immediately stop it from continuing. One tally is recorded each time disruptive behavior is allowed to disturb another student. A tally is <u>not</u> recorded if one student is talking to another, without disturbing others.	EXAMPLES: **Tally**: One student is making noises, flipping pieces of paper at others, etc. A tally is recorded each time a new student's attention is diverted from the teacher to the disruptive student. A group of students is continually socializing and causing disruptions. A tally is recorded each time a new student is drawn into the disruption and diverted from the learning activity. **Don't Tally**: Two students are quietly socializing, but they are not disturbing other students. **NOTE**: This indicator focuses on what students are doing and the teacher's lack of response to that behavior.

REFERENCES: Effective teachers do not allow social talk, excessive noise, or interruptions during teacher-directed instruction (Evertson, Emmer, Sanford, & Clements, 1983). Less effective teachers tolerate more out-of-seat students, while more effective teachers require students to remain in their seats during instruction (Evertson, Emmer, Sanford, & Clements, 1983). In most cases, it is crucial for teachers to spot the misbehavior as quickly as possible and deal with it immediately) Borich, 1996; Arends, 1998). Much misbehavior can be ignored. When it is not disruptive there is no point in interrupting activities to call attention to it. If misbehavior continues or becomes disruptive, direct intervention is needed. ”When students know what they are supposed to be doing and when the nature of their misbehavior is obvious, there is no need to question them. Return them to productive activity as quickly and non-disruptively as possible. When it is not possible to use non-disruptive techniques, call the students' names and correct their behavior by telling them what they are supposed to be doing or reminding them of the rules. Such intervention should be brief, direct, and focused on desirable behavior. “Questions, threats, and nagging should be avoided.” (Brophy, 1997) Slavin (1997) believes that misbehavior should be corrected with the simplest, least intrusive intervention that will work.

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
5. Adjusts Instruction ○ yes/no need ○ no	"Yes" is marked if the teacher adjusts instruction to give students opportunities to participate in activities which are tailored to meet their needs. Adjusted instruction may be observed when teachers divide students into groups in order to provide more direct teaching for remediation, revise teaching strategies, reteach material, etc. This may also be observed when the teacher matches instruction to student performance. "Yes" is also marked if there were no indications that the instruction needed to be adjusted as demonstrated by students participating, completing tasks with minimal help, and showing minimal off task behavior. "No" is marked if the teacher does <u>not</u> modify the instruction in response to poor student performance (i.e., apparent student confusion, the need for frequent clarifications, low success rates, high number of students off-task).	<u>"YES" EXAMPLES</u>: Two versions of a handout are delivered to students according to their needs. The teacher states, "We are going to learn how to add fractions. I am going to show you a different way than your book does. Because of this we will skip pages 45-48." The teacher tells the class to copy the information off the board. As the students begin, she calls two students to her desk and gives them a copy of the information on the board. She then reviews the material with them. <u>"NO" EXAMPLES</u>: The teacher distributes a worksheet and instructs the students to match the synonyms. Within three minutes, seven students request help reading the words. The teacher lets the students struggle through the assignment. The teacher randomly breaks the class into groups by having them count off. The students are asked to discuss the story they have just read in the group.

REFERENCES: Bloom (1976) found that one of the three major factors influencing achievement is the degree to which instruction is appropriate to the needs of the learner. Prepared curriculum rarely matches the diversity of learning styles among students. In order to generate this match, teachers must allow students to influence the development of curriculum (SCANS, 1992). Cognitive research indicates that many learning styles lead to similar learning outcomes. Consequently it is <u>not</u> important that students learn in a fixed fashion, but that they learn. Effective teachers are those who adapt and develop appropriately matched curricula for all learners (Curry & Samara). Since students learn at different rates, effective teachers plan academic enrichment and remediation opportunities for students. Effective teachers recognize individual and group differences among their students and accommodate those differences in their instruction by adapting instruction to meet student needs. The ability to improvise while teaching to meet the learning needs of all students is another sign of an effective teacher. Students are most engaged and achieve most successfully when instruction is appropriate suited to their achievement levels and needs. (Stronge, 2002)

Managing Time and Routines

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS

6. Smooth transitions
   ○ yes
   ○ no
   ○ no transitions
	"Yes" is marked if no time is wasted in making transitions from one activity to another. A transition may be a change in a format or activity. It may or may not involve a planned movement in the classroom. Students demonstrate that they have been prepared for a quick and efficient transition from one activity to the next by showing minimal misbehavior. The teacher facilitates smooth transitions by having materials prepared.
	
	"No" is marked if the teacher has to spend time disciplining students, retrieving materials, etc., during a transition, causing the transition time to be excessive. <u>If any of several transitions takes an excessive amount of time, "no" is marked</u>.
	
	The "no transitions" response is marked if no transitions were observed.
		<u>"YES" EXAMPLE</u>:
		   Students move from a lecture to groupwork quickly. There is minimal talking as students move into groups. All necessary materials for the activity are quickly distributed to the groups.
		
		<u>"NO" EXAMPLE</u>:
		   Students are instructed to move into groups. After the instruction is given, students need to ask how to move into groups and what group they should go to.
		
		   Two transitions during the observation are smooth, but one transition takes an excessive amount of time.
		
		NOTE: Time lost to lengthy transitions (more than a minute) should be recorded as **Minutes of nonacademic time**.
		
		If <u>no</u> transitions occur during the observation mark the circle for **"no transitions"** by this indicator.
		
		This is a summary indicator.

REFERENCES: The structure of transitions is facilitated by clear teacher directions to students on how to close the first activity, make changes, and begin the second activity. Such structure allows time for teacher corrective feedback during transitions and routine tasks (Gump, 1982). By reducing transition time, the teacher keeps students focused on learning activities. Research indicates that roughly 35% of class time is spent in transition activity (i.e., collecting and distributing papers, rearranging the room, cleaning up, etc.). In a study by Arlin (1979), it was found that during transitions students' off-task behavior (talking loudly, hitting, throwing things, etc.) occurred twice as frequently as during structured class activities. One way to ensure maximum time on task is to ensure that not too much time is wasted during transitions from one part of the lesson to the next. Transitions need to be as short and smooth as possible. A useful technique is cuing, alerting students to the fact that a lesson transition is about to occur (Muijs & Reynolds, 2001). A period when loud talk can occur is during lesson transitions. According to Borich (1996) it is best to institute a no-talking rule during transitions, as allowing low levels of talk is difficult and often unsuccessful.

DOMAIN I: MANAGING THE CLASSROOM

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
7. Courteous climate ○ yes ○ no	"Yes" is marked if the teacher listens to and responds to student questions, requires that students listen to each other in class interactions, encourages cooperation, and models courtesy. "No" is marked if the teacher makes any comment to or about a learner which is obviously personally demeaning or embarrassing to the learner. "No" is also marked if the teacher does not stop student interaction which is discourteous. This would include students calling each other demeaning names, students saying demeaning things about one another or the teacher, repeated instances of students yelling out while another student has the floor, etc.	"YES" EXAMPLE: A teacher who promotes courtesy would remind one student not to talk out when another student is talking. "NO" EXAMPLE: A class in which students are encouraged not to talk, to work individually, and are discouraged from asking questions. This environment does not encourage interaction. **NOTE**: The focus of this indicator is on the ways in which the teacher encourages cooperation, interaction, and courtesy. This is a summary indicator.

REFERENCES: Effective teachers respect students' contributions to the class (Evertson, Anderson, C., Anderson, L.M., & Brophy, 1980). There is also evidence that negative affective teacher behaviors can discourage learning (Rosenshine, 1980; Soar & Soar, 1979; Borich, Kash, & Kemp, 1979; Dunkin & Biddle, 1974). Negative feedback should not include personal criticism (Brophy, 1981b). Negative feedback is negatively related to student achievement in secondary basic skills classes (Stallings, 1978). A meta-analysis conducted by Wang, Haertel and Walberg (1997) found classroom climate to be one of the most important factors to affect student achievement. Learning environment was also found to be related to achievement (Fraser, 1994). One of the main elements in developing a positive classroom climate is creating a warm, supporting environment in which students feel safe and are therefore willing to make a positive contribution to the lesson (Muijs &Reynolds, 2001).

Managing Student Behavior

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
8. Responds consistently to behaviors ○ yes ○ no	"Yes" is marked if the teacher responds consistently to student behavior. "Yes" is selected unless blatant inconsistencies are observed. "No" is marked if the teacher responds inconsistently to student behavior.	The teacher states, "I will only call on those students who raise their hands": "YES" EXAMPLE: The teacher then only calls on students who have raised their hands and ignores students who call out. "NO" EXAMPLES: The teacher then responds to students who call out their answers. The teacher reprimands some students for calling out or socializing while accepting call outs or socializing from other students. This is a summary indicator.

REFERENCES: Teachers who respond consistently to student behaviors demonstrate fairness and the importance of following rules and procedures. In an extensive study on classroom management procedure, Evertson, Emmer, Sanford, and Clements (1983) found that more effective classroom managers consistently used rules and procedures and were more consistent in responding to student behaviors. They recommended that teachers avoid inconsistency between stated and practiced procedures. Credibility provides structure that students want and need. If they can depend on what teachers say, students will be less likely to test their teachers and more able to accept responsibility for their own behavior. When teachers establish fair rules and enforce them consistently, rule breakers can get angry only at themselves (Brophy, 1997). Borich (2000) says that consistency is a key reason why some rules are effective while others are not.

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
9. Applies low key tactics for misbehavior ○ **low**: over use/no use ○ **moderate**: Uses to reduce misbehavior ○ **high**: uses to promote positive behavior/no need	A **low** score is given if the teacher uses low key tactics excessively and the misbehavior continues or if the teacher does not use low key tactics for misbehavior. A **moderate** score is given if the teacher uses low key tactics to reduce misbehavior. A **high** score is marked if there was no need to use low key tactics. Low key tactics include: making a brief request, using proximity control, making eye contact and hold it until the misbehavior stops, using nonverbal signals (e.g., a finger to the lips), stating the students' name, or reinforcing a student using the desired behavior. Response to routine misbehavior should be brief and undramatic and should not slow down classroom activity.	EXAMPLES: Billy and Patricia are talking during instruction. **low:** The teacher says "Billy and Patricia" seven times during the lesson, or the teachers says "Billy and Patricia, how many times do I have to tell you not to talk? You wasted our time yesterday with your talking. If you don't stop talking, I will have to change your seats. **moderate:** The teacher says "Billy and Patricia" or the teacher moves next to Billy and Patricia while continuing to teach. **high:** The teacher makes a brief request, "Billy, will you please read the next paragraph?" making it difficult for Billy to continue talking and promoting a positive behavior. Or, the teacher tells attentive students sitting near Billy and Patricia, "Ed and Sue, thank you for listening. This information will help you on the test." **NOTE:** Statements reinforcing the appropriate behavior of students who are not the target of the low key tactic would be recorded as **Reinforces desired behavior** (Domain III). This is a summary indicator.

REFERENCES: Effective teachers use proximity control (moving closer to misbehaving students) to minimize disruptive behavior and encourage participation (Emmer, 1987; Evertson, 1980, 1982; Weber, Crawford, Roff, & Robinson, 1983; Classroom Process Research Committee, 1984). Calling attention to misbehavior highlights deviancy, diverts attention from instruction (Davis & Thomas, 1989) and may result in increased off-task behavior (Gump, 1982). Ineffective managers use threats and length corrective responses to misbehavior (Hinley & Ponder, 1981). Doyle (1984) found that in classes with a high incidence of inappropriate and disruptive student behavior, successful managers focused on the curriculum, talking about work rather than misbehavior. Less successful managers focused on the misbehavior and productive work ceased (Wittrock, 1986). Effective teachers use three or four praise statements for every negative statement or consequence delivered. (Rhodes, Jenson, & Reavis, 1992). Minor episodes of misbehavior need to be handled so that the flow of the lesson is not interrupted. Nonverbal responses allow teachers to indicate to a student that an inappropriate behavior has been noted. Nonverbal responses allow teachers to indicate to a student that an inappropriate behavior has been noted. Nonverbal signals include direct eye contact, hand signals, and facial expressions (Armstrong, Henson & Savage, 2001). Researchers and educators agree that teachers should move from low to high-intervention when developing a plan to address misbehavior (e.g., Charles, 1996; Levin & Nolan, 1996; Wolfgang, 1995).

DOMAIN I: MANAGING THE CLASSROOM

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
10. Identifies initiators of disruptive behavior ○ **low**: does not Identify initiators ○ **moderate**: Identifies initiators ○ **high:** few or no disruptions	A **low** score is given if the teacher ignores the initiator(s) of disruptive behavior, or targets bystanders rather than the actual initiator(s) of the disruption; also check this circle if the disruptive student(s) does not respond to the teacher's intervention. A **moderate** score is given if <u>several</u> disruptions occur, but the teacher correctly identifies the initiator(s) of disruptive behavior and those students respond to the teacher's intervention. A **high** score is given if the teacher has <u>very few</u> or no disruptions and quickly halts the disruptions by identifying initiators.	<u>EXAMPLES</u>: **low**: The teacher says to a disruptive student, "Come on, let's get to work." In a moment, the student continues the disruptive behavior and the teacher does not intervene. **moderate**: Two students are socializing and ask a third student what he thinks. The teacher asks the first two students to find the answer to the next problem. The students do. Later in the class, the same two students resume their discussion and ask the third student a question. The teacher intervenes and stops the disruption. Along with these disruptions, other disruptions occur. **high**: The high is distinguished from the moderate in that the same two disruptions as presented in the moderate example occur, but no other disruptions happen during the class. **NOTE:** This is a summary indicator.

REFERENCES: Targeting the actual initiators of disruptive behavior demonstrates that the teacher knows what is going on throughout the classroom (Brooks, 1985). This principle has been dubbed "with-it-ness" which requires frequent eye contact and scanning of the group to communicate awareness (Kounin, 1970; Davis & Thomas, 1989). Effective teachers cite the specific offender and the rule which has been broken (Emmer, Evertson, & Anderson, 1980). An important skill is the ability to spot misbehavior quickly and to identify the right student as the initiator. Kounin (1970) refereed to this skill as with-it-ness—teacher knowing what's going on in all parts of the classroom all of the time and communicating this awareness to students. Stronge (2002) states that effective teachers have a heightened awareness of all actions and activities in the classroom.

Managing Time and Routines

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
11. Uses management Routines ○ No need for Routines ○ **low**: no routines used ○ **moderate**: routines require repeated instructions ○ **high**: students follow routines efficiently	The "No need for routines" response is marked if management of the class did not require the use of any routines. A **low** score is given if management routines (such as collecting or distributing papers) do not exist or exist but lead to increased off-task behavior and wasted time. A **moderate** score is given if management routines exist, but repeated explanations are required for the students to carry out those routines. A **high** score is given if students follow classroom routines efficiently without needing detailed explanations.	Routines include: collecting/distributing papers, reporting scores, taking roll, dividing into groups, handling transitions, taking the lunch count, lining up and getting needed materials, etc. EXAMPLES: **low**: Papers are given to one student who randomly distributes the papers, purposely not giving papers to some students, throwing the paper to others, etc. Students call out, "Where is my paper?" This takes five minutes and the teacher must get the handout for some students. **moderate**: The teacher explains to the students at the head of each row that they need to take a paper and pass the rest back. The teacher reminds students several times to take one paper and pass the rest back. **high**: The teacher doesn't say anything but gives papers to the first student in each row, the papers are quickly distributed and each student is able to start working. **NOTE**: Time spent in dealing with management routines (more than one minute) should be recorded as **Minutes of nonacademic time** in Domain I. This is a summary indicator.

REFERENCES: Classroom rules establish standards for student behavior. They are essential for effective management, and research consistently documents their (Evertson, Emmer, Clements, & Worsham, 2000). Rules provide guidelines for appropriate behaviors so that teaching and learning can take place. Consequently, they need to be realistic, fair, and reasonable (Burden & Byrd, 1999). Procedures need to be well-established so that students follow them without having to be told. This frees the teacher to devote energy to instruction. If procedures are poorly established, teachers must spend time and energy reminding students, for example, how to turn in their work, to wait for help until they are finished with another student, or to avoid disrupting the discussion to go and sharpen a pencil (Jacobsen, Eggen & Kauchak, 2002).

DOMAIN I: MANAGING THE CLASSROOM

Engaging Students in Learning

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
12. Classroom management ○ **low**: behavior interrupts learning ○ **moderate**: behavior requires interventions ○ **high**: behavior requires few or no interventions	A low score is given if the teacher ignores disruptive behavior which diverts student attention from an academic task. A low is also given if the teacher's interventions fail to stop the disruptive behavior or stop the behavior only momentarily. A moderate score is given if the teacher intervenes to manage the class and to deal with disruptive behavior. The moderate score identifies the teacher who switches abruptly back and forth between instruction and discipline. The interventions are successful in stopping the behavior. A high score is given if the teacher conducts the class with little or no need to apply any management procedures. If management procedures are used, they are minimal and preventative. The teacher reinforces appropriate behavior by providing a model, explicit explanations of expectations, etc. which are interwoven in the delivery of instruction.	EXAMPLES: **low**: Two students are talking in the back of the classroom and call out to two students in the hallway. The two students in the hallway enter the classroom, which attracts the attention of six more students in the classroom. The teacher ignores the disruption. **moderate**: While working with a small group, the teacher stops instructions three times during class period to remind different students who are out of their seats talking loudly that it is a time to be working and not talking. In each case, the student who was talking does not disrupt the class again. **high**: During a discussion, which students are very interested in, the teacher responds to a student's comment with: "That is a good point. I appreciate your holding on to it until I called on you. What do you think would happen if…". The teacher uses statements calling attention to positive behavior several more times during the class period. This represents the teacher's proactive approach to managing a situation where student behavior could interrupt learning. This is a summary indicator.

REFERENCES: Successful teachers are unlikely to make management errors such as switching abruptly back and forth between instruction and discipline (Davis & Thomas, 1989). Effective classroom managers are able to increase student engagement in learning and make good use of every instructional moment. Effective teachers manage and attend to the needs of all students within the classroom (Stronge, 2002). Brophy (1997) found that teachers who approached classroom management as a process of establishing and maintaining effective learning environments tended to be more successful than teachers who placed more emphasis on their roles as authority figures or disciplinarians.

DOMAIN I: MANAGING THE CLASSROOM

Managing Time and Routines

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
13. Minutes of Nonacademic time ○○○○○○○ ○○○○○○○○	Record the number of minutes lost to nonacademic activities during the observation. Nonacademic activities include <u>socializing, lengthy management routines, disorderly or disruptive transitions, extended disciplinary interruptions, and other halts in instruction</u>. If the majority of students are <u>not</u> engaged in an academic activity, nonacademic time is recorded. Academic activities are defined as activities related to outcome measures. This indicator is designed to measure how well the teacher maximizes available time for instruction for the majority of the students.	Nonacademic time can be tracked in the **Notes** section or tallied, by the minute, in the box next to the indicator on the observation form. At the end of the observation, all nonacademic time is totaled and the appropriate bubbles marked. <u>DO NOT</u> subtract minutes of nonacademic time from **Time in Class** on the front of the form. EXAMPLES: After correcting an assignment as a group, the teacher takes five minutes to call on students individually to report their scores. No assignment is given to students to do during this time. Record 5 **Minutes of nonacademic time**. The teacher stops instruction to remind a tardy student he should be on time and spends two minutes reviewing the consequences of being tardy. Record 2 **Minutes of nonacademic time**. NON-EXAMPLES: After correcting an assignment as a whole group, the teacher initiates a new learning activity. As the students work, the teacher calls on individual students to report their scores. No **Minutes of nonacademic time** are recorded. A student enters the class late. The teacher continues his lecture. When the students have begun independent work, the teacher moves to the tardy student and quietly reviews the consequences of being tardy. No **Minutes of nonacademic time** are recorded. This is a summary indicator.

REFERENCES: Academic Learning Time, defined as the time students are engaged with materials or activities related to the outcome being measured (usually achievement tests), is highly related to measures of student achievement (Berliner, 1984; Davis & Thomas, 1989). According to Stallings, 80% of class time should be spent in academic activities. Researchers have found that learners in classes with teachers who maximize the amount of class time used for instruction perform better than those in classes where less time is spent on instruction (Good & Brophy, 2000). In some classrooms, as much as 50% available time is devoted to nonacademic tasks. This situation deprives learners of much time needed for working on academic tasks. It can have strong, negative, long-term influence on achievement (Armstrong, Henson & Savage (2001).

DOMAIN II: DELIVERING INSTRUCTION

The teacher effectively structures, presents and conveys knowledge and skills and monitors student acquisition of the knowledge and skills

14. Factual questions
15. Explains academic concepts
16. Demonstrates skills/procedures
17. Illustrates relationships
18. Emphasizes important points
19. Reviews
20. Pre-assessment
21. Advance organizer
22. Teaching/learning strategies
23. Structure and sequence of activities
24. Energy and enthusiasm
25. Goals, objectives, expectations
26. Instructional delivery

27. Higher-order questions
28. Wait time
29. Sustains interactions
30. Task-oriented peer interaction
31. Problem solving
32. Cause-effect analysis
33. Application activity
34. Brainstorming and use of ideas
35. Prepares students for activities
36. Supervises independent practice
37. Correctives
38. Monitors student performance

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
14. Factual questions	A tally is recorded for each factual question asked. Factual questions require that the student recognize or recall information such as facts, definitions, names, details, etc. The questions deal with academic content, not procedures or personal experiences. If the teacher asks the <u>same</u> factual question to several different students, one after the other, tally the question once. Do not tally rhetorical questions.	EXAMPLES: **Tally**: What is a denominator? How many Justices are there on the Supreme Court? **Don't Tally**: What is something you are afraid of? (personal experience) What do you need to do when you know you are going to miss a test? (procedure) How do species become extinct? (higher order) **NOTE**: Not every question asked during an observation period will be tallied. Some questions are neither factual nor higher-order. Also, if the content of the lesson is a procedure, e.g. the class rules, then questions about the procedure are treated as factual questions.

REFERENCES: Brophy and Good (1986) found that low-level or factual questions facilitate learning, even of higher-level objectives. Research indicates that effective teachers ask more questions than do those who are less effective (Eggen and Kauchak, 1997; Hamilton and Brady, 1991; Patton and Hales, 1986). If the goal is fact-level learning, a high percentage of low-level questions are appropriate. For more complex goals, higher level questions are required. Students with limited backgrounds about a topic should be asked many low-level questions, and the number of higher-level questions should increase as their background improves (Kauchak & Eggen, 1998). Good and Brophy (1997) found that a large number of questions is one indicator of active teaching and a well-organized and interactive lesson. Research reveals that questions should be asked at regular intervals and addressed to a large number of class members (Good & Brophy, 2000).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
15. Explains academic Concepts ○○ ○○○○○○○○	A tally is recorded each time the teacher explains an academic concept by defining it **and** by doing one of the following: • providing examples and non-examples (what is and what is not) • describing rules that apply • pointing out distinctive attributes • comparing and contrasting it with related concepts	EXAMPLES: **Tally**: The teacher introduces the concept of symmetry by saying, "Symmetry is a balance of opposite parts in size, shape and position." She then demonstrates how to determine whether a picture is symmetrical or asymmetrical by folding the picture and asking students if there is balance from one side of the fold to the other. Those that demonstrate balance are placed together in one category and those that are not balanced are placed together in another category. **Don't Tally**: The teacher introduces the concept of murder by providing the following definition: killing someone else. Then moves on without distinguishing it from manslaughter, homicide, etc. **NOTE:** Record only one tally for each academic concept presented

REFERENCES: Teacher definitions of academic terms, accompanied by examples, non-examples, synonyms, and classifications are related to student achievement (R.C. Anderson, 1972; Johnson & Stratton, 1966). The lack of non-examples during instruction is related to incomplete concept learning (Tennyson, Woodley, & Merrill, 1972). When defining concepts, examples are most effective if they differ widely in variable attributes and non-examples are most effective if they exhibit a number of criterion attributes (Klausmeier, 1976; Klausmeier, Ghatala, & Frayer, 1976; Tennyson, Woodley, & Merrill, 1972). Research supports the value of examples in concept learning (Eggen & Kauchak, 2001). The use of non-examples is also important. By noting what positive examples have in common and contrasting them with negative examples, students are often able to figure out the essential characteristics for themselves (Jacobsen, Eggen & Kauchak, 2002). Research indicates that providing students with concrete examples to illustrate abstract ideas improves students' ability to understand those ideas (Eggen and Kauchak, 1997).

DOMAIN II: DELIVERING INSTRUCTION

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
16. Demonstrates skills/procedures ○○○○○○○○	A tally is recorded each time the teacher does one of the following in presenting a skill or procedure: • models the skill or procedure students or • uses manipulatives, visual representations, or hands-on material to demonstrate a skill or procedure students are expected to perform The distinguishing feature of this indicator is that the teacher goes through the physical process of demonstrating a skill or procedure that students are expected to perform.	EXAMPLES: **Tally**: The teacher demonstrates a strategy for editing written work for capitals, organization, punctuation and spelling by "thinking aloud" - that is, verbalizing the steps she goes through as she corrects an example of writing on the overhead. The teacher works a math problem on the board explicitly showing and explaining the steps involved. **Don't Tally**: The teacher explains two ways to approach choosing the answer to a reading comprehension exercise in a multiple choice format but does not guide the students through the process step by step. **NOTE**: Demonstrating a skill/procedure typically precedes **Guided practice** in Domain III.

REFERENCES: By modeling skills, teachers help students view the processes and products that they are expected to perform and produce. In a study of math classes, Good, Grouws and Ebmeier (1983) found that more effective teachers spent at least 50% of class time on demonstrations and guided practice. In modeling skills, the teacher explains the skill and demonstrates how it is performed, also called the development phase (Murphy et al, 1986), the presentation phase (Rosenshine, 1983), and input and modeling (Hunter, 1984). Effective teachers have two goals in explaining a skill. First, to enable students to understand the skill and how it works; second, to enable students to understand its usefulness and importance. In explaining a skill, the teacher describes what the ski is, how it is applied, why it is useful, and when it should be used. In modeling the skill, the teacher uses actual examples to illustrate the skill (Kauchak & Eggen, 1998).

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
17. Illustrates relationships ○ ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time the <u>teacher</u> illustrates relationships by tying new information to concepts the students understand. This may be done by: • providing multiple examples of the new idea • presenting previously learned material in a new situation (e.g., creating a story from a list of vocabulary words) • discussing subject matter as it relates to students' lives (e.g., working with fractions in a cooking context) • explaining the subject matter in a context beyond the school (telling a story which illustrates how the concept applies to life.	<u>EXAMPLES</u> **Tally**: The teacher introduces adjectives and then identifies twenty adjectives in a poem the students have to read. In a writing activity where the goal is to clearly report on a topic in memo format, the teacher explains why and how memos are used in business. The teacher introduces subtraction with decimals and then uses money problems to guide the students in determining if the correct change has been given in a transaction. The teacher uses the internet as a research tool for historical or current events. **Don't Tally**: The teacher shows students how to derive the area of a square. The students then figure the area of five different squares.

REFERENCES: By illustrating relationships between subject matter the teacher helps students gain a deeper understanding of the concepts. Learning and memory are increased through associations and by relating new ideas to past knowledge and experience (Wittrock, 1986). Improving comprehension in learners involves helping them see the relationships between or among parts (Wittrock, 1986). Linden and Wittrock (1981) taught elementary children how to relate texts to their own experience and knowledge. These students scored much higher on reading comprehension tests than students who did not know how to make such connections. Dooling and Christaansen (1977), Pichert and Anderson (1977), and Au (1977) derived similar results. Paris, Lindauer, and Cox (1977) found that children who were taught how to construct stories out of sentences they learned demonstrated greater comprehension of those sentences. Wang and Walberg (1985) cited good examples and skills taught through meaningful application as highly important variables for learning.

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
18. Emphasizes important points ○ ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time the teacher alerts students to an important part of the lesson by: • saying "this is important", "listen carefully", "remember this", "get this", "learn this", etc. • underlining important points on the chalkboard or overhead or highlighting by drawing or posting information. • drawing attention to key points by repeating them throughout the lesson. • Using a Power Point presentation while emphasizing important points.	**NOTE**: **Emphasizes important points** is recorded when the teacher focuses student attention on important points of the lesson rather than simply gaining the attention of the students, which is recorded as **Gets student attention** in Domain III. Tally once per important point. If the teacher reiterates the same point several times (to emphasize it), only tally the point once. Important points are points of the lesson, not important parts of classroom procedures. **Don't Tally**: "It's important that everyone have a piece of paper. (procedure)

REFERENCES: Mayer (1983) found that repetition of important points was highly related to student achievement. Student achievement gains also correlate positively with detail and redundancy in teacher explanations (Rosenshine, 1983). During the lesson the teacher needs to emphasize the key points of the lesson. At the end of the lesson, the main points should again be summarized wither by the teacher or students. Teachers should build a certain amount of redundancy into the lesson in the form of repeating and reviewing general rules and key concepts in order to facilitate student retention and understanding of the topic. This is important for more demanding topics or rules (Muijs & Reynolds, 2001).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS

19. Reviews
 	
○○○○○○○○
	A tally is recorded each time the teacher reviews or summarizes concepts or skills of a previous lesson or the current lesson. A tally is recorded per review or summary rather than per item contained in the review or summary.
	
	Reviews and summaries are conducted to help students remember concepts, information, etc., that have already been taught.
	
	This may be done by:
	
	    • Involving the class in recalling or discussing the content or
	
	    • by the teacher providing the review
	
	Reviews or summaries may take place at the beginning, in the middle, or at the end of a lesson.
	
	A tally is <u>not</u> recorded for merely referring to the current or previous lesson.
		Examples:
		
		Tally:
		"Yesterday we discussed the order in which ingredients are combined to make muffins. Who can tell me which ingredients we mix together first? What is mixed together next?" etc.
		
		Don't Tally:
		
		"Yesterday we learned how to multiply polynomials, today we will divide them." The teacher proceeds with the lesson.
		
		NOTE: A review is examining the lesson, discussion, etc. again. A summary is to reduce the lesson, discussion etc. to a few concise words.

REFERENCES: A review involves reteaching and is intended to reinforce previously learned material and to give new meaning to the material. Reviews can be in the form of summaries at the end of a lesson, unit or term; quiz games; outlines; discussions; questioning sessions. Daily reviews at the start of a class help teachers determine if students have the necessary pre-requisite knowledge or skills for the lesson. (Burden & Byrd, 1999). Weekly and monthly reviews help check student understanding, insure that the necessary prior skills are adequately learned, and also check on the teacher's pace (Rosenshine, 1986).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
20. Pre-assessment ○ yes ○ no	"Yes" is marked when the teacher determines if students have the prerequisite skills and/or knowledge for understanding new concepts, materials, or tasks before introducing them. The assessment may take one of many forms: • an oral question/answer period, • a written test, • completion of a written assignment, etc. and may be administered to the entire class, groups, or individuals. The teacher must somehow check for prerequisite knowledge and skills before introducing new ideas that require prerequisite knowledge. "No" is marked if the teacher does not conduct a pre-assessment.	"YES" EXAMPLES: Prior to introducing subjects and predicates, the teacher puts several sentences on an overhead and asks the students to identify the nouns in the sentences and then goes through the same process having the students identify the verbs. Prior to choosing a woodworking project, the teacher asks the students to identify the "hardness" of each type of wood and what types would be useful for what kinds of projects. "NO" EXAMPLE: The teacher gives the students a worksheet, with no introduction or instructions, and asks the students to circle adverbs and underline adjectives. NOTE: Reviews may also be pre-assessments.

REFERENCES: Pre-assessments are used prior to introducing new content in order to reveal students' prerequisite skills. Effective teachers try to prevent errors and misconceptions by assuring that students demonstrate "mastery of the critical prerequisite skills" before presenting new material (Hofmeister & Lubke, 1989). "An inappropriate curriculum will cause low success levels" (Davis & Thomas, 1989). Effective teachers attempt to understand "students' thought processes" (Knight & Waxman, 1991; Pressley, Goodchild, Fleet, Zajchowski, & Evans, 1989). The purposes of pre-assessment are to determine if students have the prerequisite skills and to establish whether or not students have already mastered the lesson's objectives. The teacher finds out what students already know and adapts the instruction accordingly (Jacobsen, Eggen & Kauchak, 2002). Pre-assessment can help teachers gauge students' prior knowledge of the material so that the teacher can take into account the abilities of their students and the students' strengths and weaknesses as well as their interest levels (Stronge, 2002).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
21. Advance organizer ○ yes ○ no	"Yes" is marked if the teacher provides a brief overview of the new material that helps students anticipate what they will be learning. This may consist of an overview of the new material, relating it to previously learned material, or a preview of the new material that includes general principles, an outline, or questions which establish a learning set. "No" is marked if the teacher does not provide an advance organizer.	"YES" EXAMPLES: Before reading a mystery, the teacher explains to the class that they will read the mystery together, answer questions about the content of the story as a class and then break into small groups to write a two page critique of the mystery. Before describing twenty penalties that can occur during hockey games, a P.E. teacher tells the students: "Today we are going to discuss the difference between minor and major penalties. I will describe 15 minor penalties and five major penalties. At the end of the period, I will show you twenty slides and ask you to name the penalty illustrated and state whether it is major or minor". "NO"EXAMPLE: The teachers states "Yesterday we talked about igneous rocks, today we will talk about sedimentary rocks." **NOTE**: In some instances, an **Advance organizer** may also be a **Teaching/learning strategy** which is also in Domain II.

REFERENCES: Students who have partial or incorrect knowledge about content tend to recast new information they encounter to conform to their prior knowledge, unless teachers intervene to help students reconcile new and old information (Lysakowski & Walberg, 1983; Alvermann, Smith, & Readence, 1985). Effective lectures begin with advance organizers or previews that include general principles, outlines or questions which establish a learning set (Good & Brophy, 1991). Advance organizers can be used to introduce a lesson in the form of generalization, a definition, a story, or some information that enables the learner to relate the lesson materials to previous knowledge. An advance organizer provides an overview and focus. Advance organizers help students by focusing their attention on the subject being considered, informing them where the lesson is going, relating new material to content already understood, and providing structure for the subsequent lesson (Burden & Byrd, 1999).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
22. Teaching/learning strategies ○ yes ○ no	"Yes" is marked if the teacher uses a teaching or learning strategy to aid students in acquiring and processing new information. Teaching strategies are tools used by the teacher during presentation of content material which promote effective processing of information by the students. Learning strategies are techniques taught to students that they can use independently to promote effective processing of information. "No" is marked for routine lectures from the book or notes the teacher uses or if the teacher does not use a teaching or learning strategy. Strategies include: graphic organizers, study guides, outlines, class-wide peer tutoring, use of student projects, cooperative learning, self monitoring, verbal rehearsal, mnemonics, work associations, key words, imagery links, note taking, etc.	"YES" EXAMPLES: Prior to a lecture, the teacher hands out an outline of the lecture with key words missing, then tells the students to follow the outline during the lecture and to fill in the blanks as each point is covered. (Teaching strategy) The teacher reminds the students to use the P.L.E.A.S.E. strategy (a writing strategy) when giving a writing assignment. (Learning strategy) After completing a lecture on the parts of flowers, the teacher says, "You can remember these parts by developing a mnemonic. Let's see if we can come up with one example together." (Learning strategy) "NO" EXAMPLES: The teacher pulls out note cards prior to beginning a lecture and refers to the notes throughout the lecture to refresh his memory on key points. The teacher uses the scientific method in conducting an activity but fails to identify it as a strategy or to point out that it is a strategy that can be used over many activities. In some instances, a **Teaching/learning strategy** may also be an **Advance Organizer**.

REFERENCES: Effective experienced teachers are better able to apply a large range of teaching strategies and demonstrate more depth and differentiation in learning activities. Research indicates that instructional planning for effective teachers includes using advance organizers, graphic organizer, and outlines to plan for effective instructional delivery. Considering student attention spans and learning styles is important when designing lessons. Flexibility and adeptness with a variety of teaching strategies contribute to teacher effectiveness. Effective teachers are constantly searching for group instruction strategies that are as effective as one-on-one tutoring. Teachers who successfully employ a range of strategies reach more students because they tap into more learning styles and student interests. They can also use different strategies to ensure that concepts are well understood. Effective teachers routinely combine instructional techniques that involve individual, small group, and whole-class instruction. This allows them to monitor and pace instruction based on the individual needs of students. Strategies that promote achievement include direct teaching, guided and independent practice, concept mapping and graphic organizers. (Stronge, 2002). Research indicates that a major difference between high and low ability students is their knowledge and use of learning strategies. (Eggen and Kauchak, 1997).

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DOMAIN II: DELIVERING

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
23. Structure and sequence of activities ○ yes ○ no	"Yes" is marked if the structure and sequence of lessons is such that the students master prerequisite concepts prior to moving on in the curriculum. The teacher checks that sufficient instruction has been given before the students are given practice activities. Students are informed about where they are in the lesson and why. This may be done through the use of transition statements. "No" is marked if practice activities are given without sufficient instruction or if the majority of the students are unable to respond to questions or complete assignments because they show signs of not understanding the material (e.g. asking many questions about how to proceed, many students off-task, students saying they don't understand how, etc.).	"YES" EXAMPLES: The teacher moves from a description of igneous rocks to a description of sedimentary rocks by saying: "That completes the description of igneous rocks. Who can tell me three characteristics of igneous rocks?" On completing this activity, the teacher says "Now let's examine the second group of rocks — sedimentary rocks." A teacher leads a discussion about how Congressmen are elected and then moves to directions on how to complete a mock election activity by saying "And that's the way Congressmen get elected. Please look at the handout titled Mock Election, and we'll discuss our next activity." "NO" EXAMPLE: The teacher says, "Yesterday we talked about multiplying polynomials. Here is a worksheet on dividing polynomials; you have twenty minutes to complete it." This is a summary indicator.

REFERENCES: Kallison (1986) found that making lesson organization and sequence explicit was positively associated with gains in achievement. Teachers highlighted the organizational structure of a lesson through transition statements. Rosenshine (1986a) found that effective teachers give more explanations and examples, check for understanding, and provide sufficient instruction before conducting guided practice or engaging students in independent practice. Hunter (1985) recommended that teachers closely analyze students' performance in order to appropriately structure and sequence activities. Lessons should have a clear structure so students can understand the lesson and how it relates to what they already know. Material should be presented in small steps matched to the students' level, which are practiced before going on to the next step. Teachers need to focus on one point at a time, avoid digressions and ambiguous phrases (Muijs & Reynolds, 2001).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
24. Energy and enthusiasm ○ **low**: disinterested delivery ○ **moderate**: some energy and enthusiasm ○ **high**: very energetic and enthusiastic	A **low** score indicates a disinterested, delivery with speech patterns that are not cheerful or dynamic. A **moderate** score indicates use of vocal energy with variations in speech and occasional use of body language. A **high** score indicates energetic and enthusiastic speech, varied, dramatic body movements, or clearly discernable interest in the subject matter.	EXAMPLES: **low**: The lecture is memorized and delivered in monotone punctuated by sighs and lengthy pauses. **moderate**: The use of vocal energy, enthusiasm and displays of personal interest in the subject is demonstrated by the teacher during the observation. **high**: The teacher shows surprise, suspense, joy, and other feelings in her voice. She makes material interesting to students by relating it to her experiences. She shows a sincere interest in the subject and displays vigor and a dynamic voice throughout the observation. **NOTE:** The focus of this indicator is on the energy and enthusiasm of the teacher not the enthusiasm level of the students. This is a summary indicator.

REFERENCES: When teachers are enthusiastic about their subject matter, students are more likely to pay attention and develop enthusiasm of their own. Ultimately they are also more likely to achieve at higher levels (Rosenshine, 1970; Rosenshine & Furst, 1973). Teacher enthusiasm has been related to higher achievement (Good & Brophy, 1997). Enthusiasm has two important dimensions: interest and involvement with the subject matter, and vigor and physical dynamism. Enthusiastic teachers are often described as stimulating, dynamic, expressive, and energetic. Enthusiasm can be conveyed in a variety of ways: gestures, eye contact, voice inflection, and movement round the room. A teacher who is enthusiastic in the classroom often manages to develop enthusiastic students (Burden & Byrd, 1999).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
25. Goals, objectives, and expectations ○ **low:** no statement of goals, objectives, or expectations ○ **moderate:** states goals, objectives, or expectations ○ **high:** relates activities to goals, objectives, or expectations	A **goal** is a broad, long-term aim. An **objective** is a short-term step necessary for reaching the goal. An **expectation** is the standard that must be met for the objective or goal to be accomplished. A **low** score is given if the teacher fails to explicitly state or write the goals, objectives, or learning expectations of a lesson. A **moderate** score is given if the teacher explicitly states or writes either the goals, objectives, or learning expectations of the lesson. A **high** score is given if the teacher explicitly states the goals, objectives, or expectations <u>and</u> relates the goals or objectives or expectations to the learning activity.	EXAMPLES: A lesson on story problems: **Goal**: When we finish this unit we will be able to solve story problems with distracters. **Objective**: Our first step will be identifying the operation we Should use (add, subtract, multiply, divide), to solve a story problem. **Expectation**: Before we move on to the next step, each of you will be able to correctly identify the operation in four story problems within three minutes. A lesson on World War II: **Goal**: We are beginning our discussion on World War II today. When we finish, you will be able to identify the causes and effects of this war on the history of the world. **Objective**: Let's begin by focusing on the events that caused the war. **Expectation**: By the end of the week you all will need to submit and have "passed off" an essay describing three events that led to the war and in what way they contributed to the war starting. I'll give you more details on how to do this at the end of the period. This is a summary indicator.

REFERENCES: Students should be accountable for being involved in lessons and learning all the material. It is helpful to ask a question or require the student to periodically make some kind of response (Good & Brophy, 1997). Information learners of the objective early in the lesson helps them organize their thinking in advance of the lesson by providing "mental hooks" on which to hang the key points. The best way to communicate the objective is to provide examples of tasks that the teacher expects students to be able to perform after the lesson (Burden & Byrd, 999). Explaining the objectives to the students provides a "road map" for them and gives them a better idea of what to expect during the lesson. This enables the students to see how ideas are interrelated (Borich, 1996; Jacobsen, Eggen, & Kauchak, 1993). Students are more likely to stay on task when they are held academically accountable for their work. (adapted from Emmer et al. (1997), Evertson et al. (1997), and Jones and Jones (1998).

DOMAIN II: DELIVERING INSTRUCTION

Presenting Instruction

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
26. Instructional Delivery ○ **low:** lacks instruction and/or integration ○ **moderate:** limited instruction or integration ○ **high:** integrates elements of instruction	A **low** score is given if the teacher does not integrate elements of instructional delivery or the amount of instruction observed is inadequate as indicated by the inability of students to begin or complete tasks. A **moderate** score is given if the teacher integrates some but not all elements of instructional delivery. A **high** score is given if the teacher integrates the elements of instructional delivery. The lesson is related to objectives. Throughout the lesson the teacher explains key concepts and reviews main ideas and sub-parts as appropriate. Examples and demonstrations are used when necessary to enhance student understanding. Activities used help the students understand the objective of the lesson. Elements of instructional delivery include: goals, expectations, questions, demonstrations, applications, reviews, etc.	EXAMPLES: **low**: Most of the elements of instructional delivery are missing or presented haphazardly. **moderate**: Concepts and instructions may be clearly presented, key points emphasized, and examples offered, but the activities don't show integration with the objective of the lesson. **high**: Presentation of academic concepts is clear. Key points are emphasized and examples offered when necessary. The teacher may use outlines or overviews to structure the lesson. The activities help the students accomplish the objective of the lesson. The observer and students know what is being taught and why. This is a summary indicator.

REFERENCES: Effective teachers provide very clear and explicit directions, instructions, questions, and expectations so that the students know what is expected of them (Burden & Byrd, 1999). To be clear, Borich (1996) suggests that teachers (a) inform learners of the objective (b) provide advance organizers (c) check for learning and reteach if necessary (d) give directions slowly and distinctly (e) know the ability levels of students and teach to those levels (f) use examples, illustrations, and demonstrations to explain and clarify (g) provide a review or summary of important points. According to Strong (2002), "effective communication in teaching requires teachers to clearly understand subject matter and how to share that subject matter with students in a way that they come to own it and understand it deeply."

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
27. Higher-order questions ○○ ○○○○○○	A tally is recorded for each question asked that requires students to use a higher order thinking skill. These include questions that require students to: • compare and contrast • determine cause and effect • give evidence to support a hypothesis • systematize or analyze information • provide criteria to judge the merit of problems, solutions, products or ideas • support an opinion or judgment • integrate information into different contexts or generalize across contexts	EXAMPLES: **Tally**: "Brian, explain the ways in which you think baseball and cricket are the same and the ways in which they are different." (compare and contrast) "Class, using the attributes of rocks we have discussed, who can look at this new rock and explain what type of rock it is?" (systematize or analyze information) "Sandra, why are you against a light rail system?" (support an opinion) **Don't Tally**: "How do you feel about capital punishment?" "What do you need to do if you are going to miss a test?" (procedure) **NOTE**: Not every question asked during an observation period will be tallied. Some questions are neither factual nor higher-order. Questions requiring a "yes" or "no" response are not higher-order. If students are required to provide information as to why they answered "yes" or "no", then it becomes higher-order. If a higher-order question is asked as a review (student's have discussed the question before), and therefore students are simply recalling the information, it is tallied as a factual question.

REFERENCES: Asking higher level questions that required students to interpret and evaluate information resulted in greater student involvement in classroom activities (Ciardiello, 1986). Recent summaries of research reveal inconsistent results regarding the effects of higher level questions on learner achievement (Good & Brophy, 2000). Research has now established that asking higher level questions, by itself, does not ensure academic success. Learners must have the knowledge base necessary to engage in complex thinking skills. Whether higher level or lower level questions are "best" seems to be determined by variables associated with the particular goals established for a specific lesson and with variables related to the individual instructional context (Good & Brophy, 2000).

DOMAIN II: DELIVERING INSTRUCTION

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
28. Wait time ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time the teacher asks a question or designates a task before calling on a particular student to respond <u>and</u> pauses for at least three seconds before requiring a response. The observer should note a silence following a question. A tally is <u>not</u> recorded if students blurt out comments or the teacher rapidly calls on an individual student.	<u>EXAMPLES:</u> **Tally**: Before posing a question, the teacher tells the students to raise their hands when they know the answer. After stating the question, the teacher waits until the majority of the students have their hands raised and then calls on a student to respond. **Don't Tally**: The teacher calls on <u>one</u> student, poses the question and gives the student time to think before responding. The teacher poses a question and some students immediately call out the answer. **NOTE**: **Wait time** is counted for factual or higher order questions but not for questions about procedure or personal experiences. **Wait time** may be counted when the teacher is asking students to demonstrate a task.

REFERENCES: Wait time and group alerting tactics increase student involvement in thinking processes. When teachers pause after stating questions (a form of wait time), students are encouraged to work through problem solving processes. The group alerting tactic is used when the teacher states a question or proposes an academic task before specifying who should respond; this increases student anticipation of their personal involvement which boosts engagement rates. Feldman (2003) found that when wait time is expanded to three seconds, students answers became substantially longer and contained more examples of speculative thinking. Effective teachers wait at least five seconds after asking the question before calling on a student. The average teacher waits for less than one second before calling on a student or answering the question himself/herself (Burden & Byrd, 1999). Allowing call-outs can increase management problems and higher-achieving students can dominate the class interaction forcing reticent students out of participating (Kauchak & Eggen, 1998).

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
29. Sustains interactions ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time <u>the teacher</u> sustains dialogue with a student by restating the student's response or asking follow-up questions about the student's contribution. A tally is recorded only if <u>the teacher elicits</u> continued participation by a student, not merely for every restatement of student responses. The sustained interaction may occur when the teacher is working with the total class, a group, or with a student individually. No matter how many exchanges there are between the teacher and student, only one tally is marked for the interaction.	<u>EXAMPLES</u> **Tally**: The teacher asks, "If a house is not lived in for six months what happens to the floors and furniture?" A student replies, "It gets dusty." The teacher asks the same student, "Then what would the mice in this story need to do if they didn't want anyone to know they were living in the house?" The student replies, "Cover their footprints with dust." The teacher says, "Yes, what else would they do?" etc. (Mark one tally). **Don't Tally**: Same as the example above, except when the student says, "They get dusty", the teacher replies, "Right" and then moves on to a different item. A student asks the teacher "which is the denominator and which is the numerator?" After explaining the difference, the teacher asks the same student "In this problem, which is the denominator and which is the numerator?" (The teacher must elicit the sustained dialogue). **NOTE:** When a teacher **Sustains interactions** by asking questions, the questions should also be tallied as **Higher-order questions** (in Domain II) or **Factual questions** (in Domain II), or **Factual questions** (in Domain II), as appropriate.

REFERENCES: Teachers who sustain interactions with students by rephrasing questions or responses produce higher student achievement rates than those who do not (L.M. Anderson, Evertson, & Brophy, 1979; Clark & Elmore 1979). Sometimes a student's response is correct but is insufficient because it lacks depth. It is important for the teacher to have the student supply additional information to have better, more complete answers. This strategy is called probing. Probing provides an opportunity for the student to process information, to deal with the why, the how, and the "based-on-what" of their answers (Jacobsen, Eggen & Kauchak, 2002).

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
30. Task-oriented Peer interaction ○ yes ○ no	"Yes" is marked if a learning task is initiated by the teacher that involves all students in instruction or academic interaction with a peer (e.g., ask your neighbor, work in pairs or small groups, etc.). "No" is marked if there is no task requiring peer instruction or academic interaction for the whole group. "No" is marked if the interaction is one student or a small group of students instructing or presenting to the remainder of the students in the class.	Students may ask task-relevant questions of other students, discuss among themselves ways to complete the task, explain problem-solving processes to other students, etc. "YES" EXAMPLE: Students work in pairs to practice multiplication tables. Using flashcards, one takes the role of the teacher and the other the role of the student. When all the cards have been reviewed, the students switch roles. The teacher asks students to pair-share 3 ways that guinea pigs are similar to turtles. "NO" EXAMPLE: A student gives a book report to the entire class and answers questions from the students at the conclusion. The teacher instructs the students to pass their papers to the student behind them and then the class corrects the papers. **NOTE**: When a student makes a report to the class or demonstrates how to complete a problem in front of the class this is recorded in **Student demonstrations of knowledge or skills** (in Domain III).

REFERENCES: Group work can be used to involve students in higher-level learning tasks such as problem solving or inquiry. The teacher must ensure that all members of the group participate; lower achievers or less aggressive students often defer to the higher achievers resulting in reduced involvement by less able students (Kauchak & Eggen, 1998). According to Kauchak & Eggen, Learning and Teaching, Research Based Methods (1998), "group work provides an effective strategy for promoting high levels of student involvement by engaging students in tasks to be solved in a group." When combined with skilled questioning, it can also help students develop social skills and promote the development of higher order thinking skills." Research on cooperative learning strategies indicate that cooperative learning produces cognitive, affective, and interpersonal benefits (Johnson & Johnson, 1994; Slavin, 1995). Slavin (1995) found that cooperative learning strategies can improve students achievement as a result of increased student motivation, greater time-on-task, and active involvement. He also found that students' self-esteem increased. When cooperative learning is used, students' initial learning, retention, and transfer of concepts tend to be higher than when students work individually (Johnson & Johnson, 1994; Johnson, Johnson, & Johnson-Holubec, 1990).

DOMAIN II: DELIVERING INSTRUCTION

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
31. Problem solving ○ yes ○ no	"Yes" is marked if the teacher presents an activity in which a problem is posed. There the teacher supports the students through the process of identifying a solution or solutions. The support offered is some combination of the following: • providing additional instruction • giving cues (either visual or oral) • reframing suggestions for arriving at a solution • supplying additional questions to be considered • modeling This support is temporary and is removed when the students show increased competency and self-sufficiency. "No" is marked if the teacher asks a question, students respond, and the teacher confirms or disconfirms and then the cycle is repeated. "No" is also marked if no problem-solving activity occurs during the observation.	"YES" EXAMPLE: Teacher: "Class, we need drinks for our party but we only have $10.00 and there are 36 students. What should we do?" Student: "Let's see what kind everyone wants." Teacher: "OK, what will happen if we get 36 different requests?" Student: "We'll buy one can each." Student: "It's cheaper if you buy a six pack." Teacher: "How much does just one can cost?" Student: "I bought one Tuesday, it was $.45, so $.45 X 36 = . . ." "NO" EXAMPLE: The teacher asks a student, "What is the circumference of the earth?" The student replies "18,000 miles". The teacher says "No". The teacher asks the same student, "What is the circumference of the earth?" **NOTE**: Questions which lead students to analyze and solve problems can also be recorded as **Higher-order questions** (in Domain II).

REFERENCES: Langer and Applebee (1986), and Palinscar and Brown (1984) have demonstrated that scaffolding techniques enable students to grasp solutions and, with practice, internalize the process. The procedures have been successfully applied in reading (Palinscar & Brown, 1986), composition (Scardamalia & Bereiter, 1984), and mathematics (Schoenfeld, 1985). Effective teachers stress the importance of higher mental processes, such as problem-solving techniques, analytical thinking skills, and creativity. These skills enable students to relate their learning to real-life situations and incorporate concepts into long-term memory (Stronge, 2002). When the teacher feels the students have a basic understanding of the skill, students are ready for teacher-directed practice. The teacher provides additional examples and gives student support to ensure that they can make progress on their own-referred to as scaffolding (Kauchak & Eggan, 1998). Other names for this phase include monitored practice (McGreal, 1985) and checking for understanding and guided practice (Hunter, 1984).

DOMAIN II: DELIVERING INSTRUCTION

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
32. Cause-effect analysis ○ yes ○ no	"Yes" is marked if the teacher engages students in an activity during which they: • hypothesize about possible causes or potential effects of an action **or** • predict the outcomes of variable inputs. The teacher involves the students in viewing the situations as the results of complex cause-effect relationships. "No" is marked if no cause-effect analysis occurs during the observation.	Cause-effect analysis in the classroom may include: Discussion of social/political systems "YES" EXAMPLE: "What would happen if we didn't have rules in the classroom?" "NO" EXAMPLE: "What are the rules in the Classroom? Analysis of motivational flows in literature which include: "YES" EXAMPLE: "What factors motivated Iago to Destroy Othello's life in Othello?" A discussion follows. "NO" EXAMPLE: "What did Iago do to destroy Orthello's life?" Predicting the effect of altering variables in a math problem "YES" EXAMPLE: "If the train increased its speed to 80 mph what would happen?" The students make predictions. "NO" EXAMPLE: "Increase the speed in this problem to 80 mph and find the answer. **NOTE**: Questions which require students to analyze cause and effect can also be recorded as **Higher-order questions** (in Domain II).

REFERENCES: The ability to perceive systemic change stimulates individual adaptability and initiative. When students visualize how occurrences contribute to society and how society affects them personally, they can more easily anticipate and cope with change. Such insights promote individual responsibility. If students are to become capable of consciously directing their lives, they must be exposed to the dynamics of their world through curriculum which reflects complex interrelationships of cause and effect (SCANS, 1992; Senge & Lannon-King, 1991; Forrester, 1990). Social, organizational, and technological systems determine trends in lifestyle opportunities. Through an understanding of systems, students can learn how to function within them; this includes: distinguishing trends, predicting impacts, correcting malfunctions, and modifying and evaluating systems in relation to specified goals (SCANS, 1993). See also Schlicter, 1979; Taylor, 1967; Seghini, 1979.

DOMAIN II: DELIVERING INSTRUCTION

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
33. Application Activity ○ yes ○ no	"Yes" is marked if the teacher provides students with an activity that applies learning to their personal experience, future lives, or potential work situations. This must be an extensive activity (exceeding 2 minutes) requiring students to apply the concepts they are learning to real life situations. "No" is marked if no application activity is provided during the observation.	"YES" EXAMPLE: After presenting how to find the area of a rectangle, a geometry teacher involves the class in measuring the room to determine how many square feet of carpet would be needed to re-carpet the floor. After a lesson about coins and their value, a teacher asks the students to go home and ask one of their parents if they may look at all the coins they have. They are then to count how many nickels are included and decide what they are worth. The students are told they will report on this homework assignment in class the next day. "NO" EXAMPLE: The teacher demonstrates how to find the area, in square feet, of a rectangle. The students then practice finding the area of five other rectangles.

REFERENCES: Wittrock (1981) demonstrated that students learn more when they can associate new information with past experiences, meaning that if activities are related to their lives, students will learn more. In classes where future life opportunities as well as out-of-school applications and job-relevance of course content were discussed, students reported more independent learning, greater school enjoyment, and better peer relationships (IBRIC, 1984). Student background knowledge plays an important role in all types of learning; what students already know influences what and how much they'll learn in the future (Ormrod, 1995). Stronge (2002) states that students have higher achievement rates when the focus of instruction is on meaningful conceptualization, especially when it builds on and emphasizes their own knowledge of the world. Researchers have consistently found improved learning to be associated with instruction that allows learners to engage in application activities (Good & Brophy, 2000).

Developing Thinking Skills

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
34. Brainstorming And use of ideas ○ yes ○ no	"Yes" is marked if the teacher allocates time for one or more activities where students express (orally or in written form) many varied ideas. The activity can be structured (where the students either take turns expressing alternative ideas or recording their individual ideas on paper) or unstructured (where students call out their ideas). To receive credit, strings of student ideas must be compiled and related to the goals and objectives of the class. "No" is marked if no brainstorming activity occurs or if the students generate a list of ideas, but these ideas are not compiled and related to the goals and objectives of the class.	"YES" EXAMPLE: The teacher asks students to give him words that come to mind when they think of spring. After a list is developed, the teacher asks students to write a poem in the iambic pentameter form (which they had recently studied), using the words from the list they just generated. "NO" EXAMPLE: The teacher asks students to give her words or phrases that come to mind when they think about their fathers. After the list is generated, the teacher praises the students for all the excellent thoughts they contributed and then begins a lesson on math without any further reference to the word list. The teacher asks the students to recall all the facts they can about osmosis. She writes the facts on the board as the students say them. NOTE: See the glossary for a definition of brainstorming.

REFERENCES: Innovation and creativity are vital to increasing productivity and standards of living. Consequently, innovation and creativity promote our economic well-being (Reich, 1988). Also, organizational research indicates that when employers encourage workers to generate innovative ideas, worker satisfaction increases (Segal, 1992). By encouraging students to think creatively, placing value on student thoughts, and motivating students to evaluate their own ideas, teachers promote student ownership of education which increases student responsibility and satisfaction. (See also Schlicter, 1979; Taylor, 1967; Seghini, 1979). Brainstorming is a technique used to elicit large numbers of imaginative ideas or solutions to open-ended problems. Students should be encouraged to expand their thinking beyond the routine sort of suggestions. After all the ideas are presented, the students then focus on evaluating solutions (Ornstein & Lasley, 2000).

DOMAIN II: DELIVERING INSTRUCTION

Coaching Performance

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
35. Prepares students For activities ○ **low**: no Directions/no work ○ **moderate**: states Directions ○ **high**: directions and understanding	A **low** score is given if the teacher does not state directions about how to complete an activity or assignment or if there are no activities or assignments observed. A **moderate** score is given if the teacher states directions or demonstrates how to complete assignments or activities but does not check for understanding of the directions. A **high** score is given if the teacher states directions or demonstrates how to complete assignments or activities, specifies the completion time or date, and checks to make sure students understand what to do. The teacher may check understanding by asking a student or students what they are to do or by asking the students to do the first item or items and then, as a class, correcting the item(s) before the students move on.	A teacher assigns a worksheet on adverbs. EXAMPLES: **low**: The teacher tells the students to read the directions and complete the paper. **moderate**: The teacher demonstrates how to complete the assignment by circling the adverbs in several sample sentences. She then directs the students to complete the paper. **high**: The teacher demonstrates how to complete the assignment by circling the adverbs in several sample sentences. She then asks students to circle the adverb in the first sentence on the assignment, and together they check their work. She then tells the students when the assignment is due. **NOTE**: If more than one activity occurs during the lesson, a score should be noted for each to determine the most descriptive overall score for this indicator. This is a summary indicator.

REFERENCES: Teacher efforts to identify and help individual students who do not understand directions for activities correlate positively with student engagement (Doyle, 1985). Effective teachers show students how to do the task (Hines, Cruickshank, & Kennedy, 1985). More effective teachers prepared students for independent seatwork during guided practice and demonstration (Evertson, Emmer, & Brophy, 1980; Fisher et al., 1978). Successful teachers also had students work as a group on the first few seatwork problems before releasing them for individual seatwork (L.M. Anderson, Evertson, & Brophy, 1979). Successful independent practice requires both adequate preparation of the students, and effective teacher management of the activity. Neither preparation nor management alone is sufficient (Rosenshine & Stevens, 1986).

DOMAIN II: DELIVERING INSTRUCTION

Coaching Performance

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
36. Supervises independent practice ○ No independent practice ○ **low:** doesn't circulate ○ **moderate:** circulates**,** but limited assistance ○ **high:** circulates and assists students	The "No independent practice" response is marked if no independent practice was observed. A **low** score is given when the teacher does not circulate among students during independent practice. A **moderate** score is given when the teacher circulates but does not assist any or only a few students. A moderate score is also given if the teacher circulates but does not check student work during individual or group work or if the teacher spends too much time with one student. A **high** score is given when the teacher circulates to make sure the assigned work is being done <u>and</u> inspects individual papers frequently, but does not limit assistance to a few students.	EXAMPLES: **low**: The teacher assigns independent practice and leaves the room. **moderate**:The teacher allows students to come to her for help rather than instructing them to stay in their seats so she can come to them. This results in a circle of students around her waiting for help. **high**: Several times during independent practice, the teacher circulates, checking student work as she goes. **or** The teacher calls each student to her desk, individually, during independent practice to provide assistance. **NOTE**: If no independent practice is assigned during the observation, check the "No independent practice" response for this indicator. The intent of this indictor is to capture teacher assistance and monitoring of students during independent practice. If a teacher called the majority of the students to her desk to assist them during independent practice, a high score would be marked. During independent practice, students may be working either as individuals or in groups independent of the teacher. This is a summary indicator.

REFERENCES: Circulating during seatwork and group work diminishes the opportunity for students to engage in off-task behavior and eliminates incentives for students to finish their assignments as rapidly as possible without regard to the quality of their performance (Berliner, 1986; Davis & Thomas, 1989). Teachers minimize disruptions and inappropriate behavior during seatwork and maintains engagement by actively monitoring seatwork but keeping individual contact to a minimum (Doyle, 1984, 1986; Berliner, 1984). Research indicates that interaction with individuals should normally be less than 30 seconds during seatwork (Rosenshine, 1983). Guidelines for successfully implementing seatwork come from a variety of sources (Anderson, 1985; Jones & Jones, 1998; Rosenshine & Stevens, 1986; Weinstein, 1996; Weinstein & Mignano, 1997). The following recommendations represent a synthesis from these sources: Seatwork is intended to practice or review previously presented material. Devote no more time to seatwork than is allocated to content development activities. Give clean instruction-explanations, questions, and feedback-and sufficient practice before the students begin seatwork. Work through the first few problems together with the students before having them continue independently. Circulate from student to student during seatwork, actively explaining, observing, asking questions, and giving feedback. Monitoring students to provide this possible and corrective feedback is very important. (Methods for Effective Teaching, 1999).

DOMAIN II: DELIVERING INSTRUCTION

Coaching Performance

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
37. Correctives ○ No correctives needed ○ **low:** supplies answers ○ **moderate:** Identifies misunderstandings ○ **high:** gives prompts and reteaches	Mark "No correctives needed" if no incorrect student responses were observed. A **low** score is given if the teacher responds to incorrect responses by giving the answer, calling on other students without clarifying the error, or not identifying that the responses are incorrect. A **moderate** score is given if the teacher responds to incorrect responses by telling students what part of their response is inadequate or giving nonspecific encouragement, giving long explanations, or inappropriate prompts. A **high** score is given if the teacher responds to incorrect responses by rephrasing questions, providing prompts to lead students to the correct answer, or briefly reteaching the material to those who don't understand while preserving the pace of the lesson.	EXAMPLES: **low**: A student gives a wrong answer and the teacher says, "Does anyone else know the answer?" **moderate**: The teacher gives a long, detailed explanation of how to work a problem when only a part of the solution was incorrect or the teacher gives a prompt such as "You can do better than that". **high**: The student misspells the word receive; The teacher asks the student what the rule is about "i" and "e" together. The student says "i" before "e" except after "c". The teacher says, "That's right now look at the way you spelled receive and tell me how you will change it." **NOTE**: In many instances, correctives will also be recorded in **Academic feedback** (Domain III). If no incorrect student responses were observed, then mark "No correctives needed". This is a summary indicator.

REFERENCES: "Teachers who produced high academic achievement gains were more likely than other teachers to sustain the interaction with the original respondent by rephrasing the question or giving clues rather than be terminating it or giving the answer or calling on someone else." (L.M. Anderson, Evertson, & Brophy, 1979; Clark & Elmore, 1979). Effective teachers provide supportive corrective feedback to incorrect student responses (L.M. Anderson, Evertson, & Brophy, 1979; Stallings & Kaskowitz, 1974; Stallings, 1978, Stallings, Needels, & Stayrook, 1979; Rosenshine, 1983). The importance of feedback (giving students information about the accuracy or appropriateness of a response, is well documented (Weinert & Helmke, 1995). Stronge (2002) says that feedback is one of the most powerful modification techniques for increasing learning outcomes in students. Effective teachers provide feedback in a timely manner and ensure that it relates specifically to the criteria of the task. Studies found that the amount of time between the activity and the feedback has a critical effect on student achievement. The longer the delay in giving feedback, the less likely students will respond to the feedback and less likely learning will be enhanced. Effective teachers provide feedback that is primarily corrective by providing specific explanations of what students are doing correctly, what they are not doing correctly, and how to fix it (Stronge, 2002). Kauchak and Eggen (1998) state that "the value of feedback and practice in improving learning is one of the most consistent findings from research on teaching". (Good and Brophy, 1997; Rosenshine and Stevens, 1986; Rutherford and Algren, 1990).

DOMAIN II: DELIVERING INSTRUCTION

Coaching Performance

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
38. Monitors student performance ○ **low:** does not monitor ○ **moderate:** monitors ○ **high:** monitors and guides performance	A **low** score is given if the teacher generally does not monitor student performance or understanding. For example, a teacher might move through instruction without stopping to assess student understanding. A **moderate** score is given if the teacher monitors how well students are acquiring new knowledge and skills. The teacher actively observes the performance or understanding of most students, but feedback is lacking in depth. A **high** score is given if the teacher monitors <u>and</u> actively guides student acquisition of new knowledge and skills by prompting, elaborating, or reteaching based on student performance. Through the monitoring of student performance, the teacher directs instruction to help <u>all</u> students achieve increased levels of performance and understanding.	In a kindergarten class each student is to make a pop-up book. EXAMPLES: **low**: The teacher demonstrates how the book is put together one step at a time. He then tells the students to make their own. **moderate**: The teacher demonstrates how the book is put together one step at a time. After each step, she tells the students to do just what she did. She scans the room and when she sees a student has glued a piece on upside down she goes to that student and glues it on right. **high**: The teacher demonstrates how the book is put together one step at a time. As he models each step, he verbalizes what he is doing. He tells the students to do what he has done. As the students work, he circulates. When he observes a student having difficulties, he asks a student who has successfully completed the step to help that student. He makes sure the student does it correctly. When he sees the majority of the students are gluing a piece on upside down, he asks all students to look at him while he demonstrates that step again. **NOTE:** This is a summary indicator.

REFERENCES: Effective teachers continually monitor understanding and performance of students. This may occur when the teacher asks specific questions or asks the students to summarize a particular point. The teacher reteaches any misunderstood aspect of the lesson. Teachers should not assume understanding if they ask broad questions such as "are there any questions?" nor should they assume understanding if only a few volunteers answer questions correctly, <u>all</u> students need to be monitored individually (Rosenshine, 1986a). When, after careful monitoring, the teacher discovers that many learners are not performing at an acceptable level, the teacher should stop the independent practice activity and engage in reteaching to clear up misunderstandings. Successful reteaching is tightly focused, dealing with only those points that seem to be causing problems for learners. Teachers whose classes are characterized by high percentage of academic learning time monitor learners carefully to ensure that the learners understand the lesson. These teachers frequently ask learners what they are doing and circulate through their classrooms as learners work on assigned tasks, providing corrective feedback to those students who are experiencing difficulties (Armstrong, Henson & Savage, 2001).

DOMAIN III: INTERACTING WITH STUDENTS

The teacher actively encourages all students to participate and gives students feedback about their performance

39.	Student participation
40.	Academic feedback
41.	Gets student attention
42.	Encourages reluctant students
43.	Reinforces desired behavior
44.	Acknowledges learning efforts
44.	Student demonstrations of knowledge or skills

45.	Students demonstration of knowledge or skills
46.	Practice communication skills
47.	Guided practice
48.	Checks for understanding
49.	Learning environment

DOMAIN III: INTERACTING WITH STUDENTS

Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
39. Student participation [ ] ○○○○○○○○ ○○○○○○○○	A tally should be made in the box each time the teacher initiates an interaction with a different student about the academic content of the class.. Each student is counted only once, the first time they respond to a teacher request verbally or with a demonstration. Participation is counted only if it occurs as an individual; one student at a time. The teacher must initiate the interaction. Record each new student who participates.	Participating in class may include individual responses to teacher questions, volunteered responses or comments, or demonstrating skills, etc. Choral and group responses are not recorded on this indicator. **Tally**: When circulating during independent practice, the teacher stops at Ana's desk to ask her what character she is writing about. The teacher has not interacted with Ana prior to this. **Don't Tally**: All students in a band class play a piece at the teacher's request. (This is not a one-on-one interaction.) The teacher asks all students to turn to their neighbor and report three things they know about a bear's habitat. (Pair-shares are not a one-on-one interaction with a teacher.) **NOTE**: The focus of this indicator is on the teacher interacting with students on a one-on-one basis.

REFERENCES: Teachers increase anticipation, interest, and interaction by engaging all students in class activity. This requires proposing thought provoking questions before designating who should respond and randomly selecting a variety of students to participate so that all students anticipate their personal involvement in the on-going activity (Kounin, 1970; Davis & Thomas, 1989). The time the students spend engaged in the teaching and learning activity is an important contributor to classroom success. To encourage student involvement in activities and lesson, effective teachers use varying strategies including calling on students in random order, providing any necessary additional clarification and illustration, and finding something positive to say when students do respond or interact. Teachers who use positive reinforcement are more likely to actively engage students in learning. Effective teachers vary instructional strategies, types of assignments, and activities to increase student involvement (Strong, 2002).

Providing Feedback

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
40. Academic feedback	A tally is recorded each time the teacher provides academic feedback. This includes: • acknowledgement of correct responses and strategies ("that's right," "correct," etc.) • providing short statements to students who are correct but unsure of themselves (e.g., "that's correct," "good," etc.) • briefly re-explaining the steps used to arrive at the correct answer or about specific strengths of the response • correcting partially correct or incorrect responses A tally is <u>not</u> recorded if the teacher responds to an incorrect response by saying "that's wrong", "no", etc. and moves on. A tally is not recorded for "okay" in response to a student's answer.	<u>EXAMPLES</u> The teacher asks the students to complete the factoring of an algebraic equation. She asks Larry to write the equation and factor it on the board. Larry completes the problem writing the values for x and y in parenthesis. The teacher says: **Tally**: "Larry you have completed the factoring correctly, however, there is something about the way you've written the values for x and y that is incorrect. Can you see it?" **Don't Tally**: "That's wrong. Can anyone else show us how to do it?" "Okay" When the teacher repeats back exactly what the student said (parroting).

REFERENCES: Feedback is more likely to be effective when specific rather than global, and when used with dependent or anxious rather than confident students and when delivered in ways that focus attention on the content or accomplishment. During the initial stages of learning new material, student errors often stem from unclear ideas about facts or processes. Process feedback which shows the student how to achieve the correct answer is effective (Good & Grouws, 1977). Fisher and colleagues (1980) found that academic feedback was more strongly and consistently related to student achievement and learning than any other teaching behavior. Feedback on student performance should be constructive and prompt. A long delay between behavior (or performance) and results diminishes the relationship between them (Ornstein & Lasley, 2000). Research reveals that student ideas and contributions, especially when in the context of the naturally occurring dialogue of the classroom, are more strongly and consistently related to student engagement than simply approving a student's answer with "Good". (Good & Brophy, 1997).

DOMAIN III: INTERACTING WITH STUDENTS

Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
41. Gets student attention ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time the teacher uses a technique or procedure to get students' attention before proceeding with the lesson. The technique may be verbal or non-verbal. A tally is only recorded if the procedure or technique <u>increases student attentiveness</u>.	<u>EXAMPLES</u>: **Tally:** The teacher says, "All eyes on me, please" or "I need your attention" or "Make sure you have your book open to...." The teacher uses nonverbal signals, such as raising a hand or waiting quietly until students are quiet, as a means to get student attention. **Don't Tally:** The teacher says, "Larry, look at me." **NOTES**: In contrast to **Emphasizes important points** (in Domain II), this indicator deals with student behavior. When the teacher stops instruction to gain student attention before going on, **Gets student attention** is tallied. When a teacher emphasizes a point of instruction for students to focus students, tally **Emphasizes important points**. If a teacher uses a student's name to get that individual's attention, this is **Applies low key tactics** (in Domain I), <u>NOT</u> **Gets student attention**. If the teacher uses an attention getting device repeatedly to manage student behavior, it is captured in **Applies low key tactics**; not **Gets student attention**.

REFERENCES: Slavin (1997) defines attention as focusing on certain stimuli while screening out others. Securing and maintaining attention is an important responsibility. If students are not engaged in the learning process, it is unlikely that they will learn the material (Burden & Byrd, 1999). Students should understand that they are expected to give full attention to lessons at all times. According to Jones & Jones (1998), the following are approaches designed to secure the students attention and reduce distractions that might occur at the beginning of a lesson: select a cue for getting attention (Verbal and non-verbal), do not begin until everyone is paying attention, remove distractions. Eggen & Kauchak (1997) group attention getting strategies into four categories: physical (attracts one ore more of the senses), provocative (use of unique events), emotional (calling a student by name), emphatic ("pay careful attention now").

Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
42. Encourages reluctant students ○ ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded each time the teacher recognizes students who are not participating or volunteering their comments <u>and</u> solicits that student's involvement in the lesson. A tally is <u>not</u> recorded if the teacher is not patient and/or embarrasses the student while soliciting their involvement.	EXAMPLES During a class discussion, the teacher recognizes that three students have not said anything. **Tally**: The teacher asks each of them what they think and provides prompts if necessary. **Don't Tally**: The teacher says to the three, "Don't you have anything at all to contribute to this discussion?" During seatwork, a student says "I can't do this." **Tally**: The teacher helps the student break the task into smaller parts, makes sure the student understands the directions, or works through part of the assignment with the student. **Don't Tally**: The teacher says, "If that assignment isn't done by the end of class, you'll have to do it after school." **NOTE**: The same teaching behavior may be tallied as both **Acknowledges learning efforts** (in Domain III) and **Encourages reluctant students**.

REFERENCES: Encouraging reluctant students communicates high expectations and provides more direct instruction. Low teacher expectations (expressed by requiring less work, extending fewer opportunities to practice new material, and interacting less with students) negatively impact student achievement (Good & Brophy, 1991). Effective teachers call on students whose hands are not raised to check their understanding and encourage their participation (Rosenshine, 1983). Brophy and Evertson (1976) assert that it is best to get reluctant students to respond and participate in any way possible. By calling on students who are not volunteering their comments, the teacher encourages shyer students to have more interaction and more practice (L.M. Anderson, Evertson, & Brophy, 1979). Research indicates that calling on non-volunteers can be effective as long as students who are called on can answer the question most of the time. It is unacceptable to embarrass them with their inability to answer the questions. Calling on non-volunteers increases the likelihood that low-achieving students will be included in the discussion and that the teacher will really see if students understand the material (Ornstein & Lasley, 2000).

DOMAIN III: INTERACTING WITH STUDENTS

Providing Feedback

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
43. Reinforces desired behavior ○ ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded if the teacher offers **specific** praise to individuals, sub-groups, or the entire class to reinforce acceptable behavior. A tally is based only on **specific statements about following rules or procedures.** A tally is not recorded for general statements such as "Good job" or for academic praise.	EXAMPLES: **Tally**: The teacher says to the class, "When we were walking back from recess, everyone stayed in a straight line and was very quiet; you were very well behaved," or "I appreciate your having your notebooks open and ready to write." **Don't tally:** The teacher says, "John, the time you spent on this assignment really shows. Your work shows you really thought about the assignment and took care in completing it." **NOTES**: Praise related to academic performance is recorded as **Academic feedback** (in Domain III). Statements that acknowledge student learning efforts (rather than efforts to follow rules and procedures) are recorded as **Acknowledges learning efforts** (in Domain III).

REFERENCES: Less effective teachers seldom provide clear feedback as to whether teacher expectations have been met (L.M. Anderson, Evertson, & Emmer, 1979). Praise regarding correct behavior is given by effective classroom managers (Evertson, Emmer, Sanford, & Clements, 1983). When used appropriately, teacher attention and praise can reinforce desired behavior by helping students to know that their efforts are seen and appreciated. This is especially likely if the praise is delivered in natural, genuine language that includes a description of the specific behavior being commended (Good & Brophy, 1991). Small, frequent rewards are more effective than large, infrequent ones. Praise is a particularly powerful reward, especially if delivered in a natural voice to students for specific achievements (Good & Brophy, 1997). Verbal praise is one of the most common forms of reinforcement. Teachers should use many different praise statements, including those that mention more specifically what the student did that was praiseworthy (Burden & Byrd, 1999).

DOMAIN III: INTERACTING WITH STUDENTS

Providing Feedback

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
44. Acknowledges learning efforts ○ ○ ○ ○ ○ ○ ○ ○ ○	A tally is recorded for each statement or nonverbal gesture a teacher makes to acknowledge or praise the effort a student has made in learning new material. The statement should help the student understand that effort, as well as ability, is linked to success. This may include a variety of verbal and nonverbal reinforcements. A tally is <u>not</u> recorded for non-specific statements.	<u>EXAMPLES:</u> **Tally**: Verbal reinforcements may include: "John, you accomplished a lot today. This was a difficult assignment and you stayed with it until you got it right." or "Sally, you worked very hard today. Your persistence really paid off." Nonverbal reinforcements may include tangible reinforcers (e.g., a sticker, positive written comments, etc. which point out the student's effort) or the use of a student's work as an example of what can be accomplished when a student puts forth the effort. **Don't Tally**: Non-specific statements such as "good job" or "nice work". **NOTES**: Statements such as "good job" or "nice work" can be recorded as **Academic feedback** (in Domain III) but are <u>not</u> tallied as **Reinforces desired behavior** (in Domain III). The distinction between **Reinforces desired behavior** and this indicator is that **Reinforces desired behavior** focuses on students following classroom rules and procedures, whereas **Acknowledges learning efforts** focuses on the student's persistence, effort.

REFERENCES: Students attend more fully in a positive learning environment. Responding positively to their efforts is one way to accomplish this. Positive and encouraging statements are important for all students (Burden & Byrd, 1999). Students who feel that they can master the required learning and succeed often stay on task and actually do succeed. Teachers can help build the confidence that success is possible by focusing on improvements, recognizing contributions, building on strengths, showing confidence in students, acknowledging the difficulty of a task, and focusing on past successes to point out things students do correctly (Burden & Byrd, 1999; Albert, 1989). One of the best ways to establish a positive learning environment is to respond positively to students' efforts. Teachers should make many more positive and encouraging statements than negative statements (Burden & Byrd, 1999).

DOMAIN III: INTERACTING WITH STUDENTS

Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
45. Student demonstration ○ yes ○ no	"Yes" is marked if the students share their knowledge or skills with others through some type of demonstration. The students must perform a skill or give an oral presentation of knowledge. Oral presentations may be prepared in advance or extemporaneous and should demonstrate the student's skills in integrating information and explaining it to other students. "No" is marked if there are no student demonstrations of knowledge or skills during the observation.	"YES" EXAMPLE: Student demonstrations may include working problems on the board, oral presentations, role plays, oral explanations of positions taken in a class discussion, etc. "NO" EXAMPLE: Standardized tests, quizzes, written papers, and Show and Tell do not qualify as skill demonstrations. Brief oral responses to factual or higher-order questions do not qualify as oral presentations. **NOTE**: Show and Tell is recorded as **Practices communication skills** (in Domain III).

REFERENCES: Student demonstration of knowledge or skills involves the student performing the skill or giving an oral presentation of knowledge. By performing skills or relaying information, students become aware of their abilities. Demonstrating skills and knowledge more thoroughly ingrains new concepts into the consciousness of learners, helping them to capture learning. "Hands on involvement is essential in internalizing ideas and establishing them as one's own mental modes" (Forrester, 1990, p.6). Rosenshine and Stevens (1986) found that student demonstrations improve learning because it allows students to practice the new skill in a controlled environment, allowing them to become more confident in the skill. It also allows the teacher to check for understanding and reteach if necessary. Two studies (L.M. Anderson, Evertson, & Brophy, 1979; Good & Grouws, 1979) found that in classrooms with more student demonstrations of knowledge, the achievement level was higher than in those with fewer demonstrations.

DOMAIN III: INTERACTING WITH STUDENTS
Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
46. Practices communication skills ○ yes ○ no	"Yes" is marked if students practice oral communications skills of the following kind: • identifying and stating others' needs • restating the main points of an idea expressed by another • role playing • descriptive activities (listing various ways to describe something, similes, comparisons, etc.) • expressive activities (show and tell, Very Important Person, relating personal experiences, showing feelings or thoughts without words, etc.) • engaging in negotiating processes "No" is marked if communication skills are not practiced during the observation.	"YES" EXAMPLE: Two students enter the room arguing. The teacher tells the class to work on yesterday's assignment for the first part of the class and then calls the two students up to her desk. She says "Josh and Justin, let's see if we can solve this problem. Josh, I want you to listen - just listen and not say anything. Justin, I want you to tell Josh and me what happened to start your argument. Josh, you will get a turn to do the same. When Justin is finished I'm going to ask you to tell me what Justin said." She then reverses the roles. After each student has taken both roles she asks Josh and Justin for some ideas on how they can solve their disagreement. "NO" EXAMPLES: The teacher directs students to talk to one another for the last five minutes of class. The teacher gives pairs of students a completely scripted role play to perform to each other without discussing any skill demonstrated in the role play. **NOTE**: Not every peer interaction is an example of practicing communication skills. A primary purpose of any interaction recorded in this indicator should be to enhance communication skills.

REFERENCES: In a society which hinges on relationships, communication skills are necessary for efficiency and individual fulfillment. Listening to and understanding what others say and do is very important (SCANS, 1993). Through communications activities, students learn that their peers possess valuable information and that knowledge can be acquired through personal relationships (SCANS, 1993; Marshall & Tucker, 1992). Marshall and Tucker (1992) state that the capacity to communicate effectively in work-groups, resolve conflicts, and assume responsibility, enhances the social and economic value of an individual. These skills help to diffuse conflicts, animosities, and ignorance in the work place and community (SCANS, 1993). An understanding of interpersonal dynamics allows students to become more flexible and interactive as they learn to understand the perspectives and ideas of others and to express their own ideas and feelings clearly.

DOMAIN III: INTERACTING WITH STUDENTS
Providing Feedback

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
47. Guided practice ○ yes ○ no	"Yes" is marked if the teacher provides guided practice of new concepts, tasks, procedures, etc., after they have been taught. Guided practice involves students answering a high number of questions while the teacher frequently checks for understanding to ensure a high success rate. "No" is marked if no guided practice occurs during the observation.	Guided practice sessions often include structured question and answer periods with random versus ordered turns and choral versus individual responses. A high success rate is defined in the literature as above 80% when practicing new material and above 90% when reviewing previously taught material. Or, guided practice may include repeated demonstrations by the students during which the teacher stops the students when errors are made and provides the student with instruction which helps them correct the error. "YES" EXAMPLE: The teacher practices decoding words with long vowel sounds with students. She shows the group 35 different words with long vowel sounds, one at a time, and asks the students to read them in unison. When she hears an error, she stops and asks several different students to re-read the word correctly and then has the whole group read it again. During an orchestra class, the teacher has the students play a piece and stops them each time he hears an error, provides the students with information about the error, and then has them repeat the piece. "NO" EXAMPLE: The teacher asks students as a group to read a list of words with long vowel sounds. Half of the students respond with the wrong word. The teacher continues on down the list.

REFERENCES: Student responses are monitored by the effective teacher in order to ascertain whether students are performing successfully (Stallings & Kaskowitz, 1974; Rosenshine, 1983). Success rates should be 80% when practicing new material and above 90% when reviewing. In general, teachers should teach material in small steps in order to decrease errors and practice until over-learning occurs (Brophy, 1980). The purpose of guided practice is to supervise the students' practice of a skill and to provide the reinforcement necessary to progress new learning from short-term memory into long-term memory (Burden & Byrd, 1999).

DOMAIN III: INTERACTING WITH STUDENTS

Providing Feedback

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
48. Checks for understanding ○ yes ○ no	"Yes" is marked if the teacher checks for understanding of information being presented. The teacher does this <u>periodically</u> during the delivery of material to determine whether adjustments need to be made in pace, clarity, etc., to enhance student understanding. Checking for understanding may be done by: • questioning • brief written exercises which are immediately corrected • choral responses • brief demonstrations by the students • breaking into groups to review the information, etc. "No" is marked if the teacher only asks general questions, calls on volunteers, or does not check for understanding during the observation.	This may include guided practice, choral responses, cooperative student groups, etc. <u>"YES" EXAMPLE</u>: After a discussion of important events in Beethoven's life and on symphonies he wrote, the teacher asks the students to listen to the symphonies she will name. "If the symphony was written before Beethoven lost his hearing, put your thumbs up. If it was written after, put your thumbs down." <u>"NO" EXAMPLE</u>: Credit is not given if the teacher asks general questions such as "Does everyone understand?" or "Are there any questions?" or if the teacher <u>only</u> calls on volunteers. **NOTE:** This is a summary indicator.

REFERENCES: It is important to check for student understanding throughout the lesson. The evaluation may include checking for comprehension by questions or activities in which the students are quizzed about the content of the lesson. Student responses will give feedback about student mastery and will help the teacher decide whether to continue with the lesson or reteach some part. Review questions at the start of a lesson also provide a gauge concerning student understanding (Burden & Byrd, 1999). A number of studies indicate that teachers who are more effective in obtaining student achievement gain a large number of questions (Wilen, 1991).   Rosenshine (1983) also notes that checking for understanding requires a variety of questioning techniques and active student participation. The <u>wrong</u> way to check for student understanding is to ask few questions, call on volunteers, or ask "Are there any questions?" (Rosenshine, 1983).

DOMAIN III: INTERACTING WITH STUDENTS
Encouraging Participation

INDICATORS	DECISION RULES FOR OBSERVERS	EXAMPLES & INSTRUCTIONS
49. Learning Environment ○ **low:** low or ineffective ○ **moderate:** limited interaction ○ **high:** high student interaction	A **low** score is given if the teacher uses says or does anything to embarrass a student or if the environment is such that there are limited opportunities for students to interact with the teacher or other students on academic tasks. A **moderate** score is given if there are opportunities for students to interact with the teacher or other students on academic tasks. The majority of the students are interested in the task and eager to participate. A **high** score is given if there are many observed interactions between the teacher and students or students with students on academic tasks, and the majority of the students are very interested in the task and eager to participate. The teacher attempts to interact with each student, and the students are focused on the task. Types of interaction are: instruction/explanation, discussion/review, reading aloud, practice/drill, etc.	EXAMPLES: **low:** The teacher tells the students to work independently for the full class period. The students are reminded not to talk to one another or to get out of their seats. The teacher remains in the back of the room working on the computer. **moderate:** The first ten minutes of a class the students spend in cooperative learning groups. There are many interactions among students and between the students and the teacher. The last 30 minutes of the class the students work independently. **high:** The teacher leads a discussion during the class in which the majority of the students participate several times, responding to the teacher's questions and to points raised by other students. **NOTE**: This is a summary indicator.

REFERENCES: In Exemplary Practice in Science and Mathematics Study, Tobin and Fraser (1987) found that exemplary teachers maintained a favorable classroom learning environment. Students learned in environments that were safe (the teachers did not embarrass the students), interactive (the teachers maximized the involvement of students by encouraging participation), and positive (teachers were sensitive to the needs and feelings of students). The effective teacher will create an environment where all ideas are welcome and where students can give and receive constructive criticism in a supportive climate (Borich, 1996; Jacobsen, Eggen, & Kauchak, 1993). A good learning climate is warm, supportive, and pleasant, encouraging and helpful. Such a climate encourages work and promotes a sense of enjoyment and accomplishment for everyone (Charles, 1996). Research indicates that academic achievement and student behavior are influenced by the quality of the teacher-student relationship (Jones & Jones, 1998). Slavin (1997) states, "Love of learning, confidence in learning, and cooperative attitudes are important objectives that teachers should have for students."

DOMAIN IV: PLANNING

The teacher plans to maximize academic learning time and to monitor and adjust instruction based on student needs

50.   Rules and consequences
51.   Learning objectives
52.   Varied assessments
53.   Assessment of student performance

54.   Differentiated curriculum
55.   Student-directed learning
56.   Plans for substitutes

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

50. Rules and Consequences
 	
a) Shows rules
    ○ yes
    ○ no
 	
b) Shows consequences
    ○ yes
    ○ no
 	
c) Shows acknowledgement
    ○ yes
    ○ no
	Rules: "Yes" is marked if the teacher shows how written rules have been presented to one class. Rules may be for how students are to act in the class or for academic expectations. Rules shown must be for the current academic year.
	
	Consequences: "Yes" is marked if the teacher shows that consequences for <u>following and breaking</u> class rules have been presented to one class. These consequences correspond to the rules presented.
	
	Acknowledgement: "Yes" is marked if the teacher demonstrates students have acknowledged <u>rules and consequences</u> for the class.
		<u>"YES" EXAMPLES</u> (**Rules**): The teacher presents an example such as a written list of the rules, a poster of rules, a pictorial representation of the rules, or a disclosure statement including rules for expected behavior (the expected behavior can be academic behavior), etc.
		
		<u>"YES" EXAMPLES</u> (**Consequences**): The teacher presents an example such as a written list of consequences which correspond to the rules, a lesson plan listing consequences and how they are presented to students, or a disclosure statement including consequences (consequences may be academic consequences such as a deduction of points for late assignments), etc.
		
		<u>"YES" EXAMPLES</u> (**Acknowledgement**): The teacher presents an example such as a list of rules and consequences with <u>student signatures</u> (e.g., a "Bill of Rights"), a sheet of paper with <u>student signatures</u> indicating they have heard rules and consequences, a <u>signed</u> disclosure statement, a poster of rules with <u>student signatures</u>, a quiz or assignment on rules and consequences which includes a <u>student's name</u>, a <u>signed</u> note from home saying the parents went over the rules and consequences with their child, or a list of student names where students have <u>checked or marked by their names</u> that they know the rules, etc.
		
		<u>"NO" EXAMPLES:</u> (**Acknowledgement**): The teacher presents a disclosure statement with a blank line for a student signature. The teacher presents a list or rules with student signatures but no consequences have been discussed.

REFERENCES: Effective classroom managers post rules for student behavior and devote time to explaining those rules (Emmer, Evertson, & Anderson, 1980; Sanford & Evertson, 1980; Evertson & Emmer, 1982). Effective managers specify and give reasons for consequences when classroom rules are broken (Evertson, Emmer, Sanford, & Clements, 1983). More effective rules delineate both positive and negative behaviors in order to encourage students to act appropriately, instead of merely discouraging them from acting inappropriately (What Works, 1987). Students must know the consequences of following behavioral rules and know that the consequences will be applied. Rules should be consistently enforced according to the pre-determined consequences. Effective classroom managers also involve parents in improving the behavior of certain students. The probability of disruptive behavior decreases when teachers set definite behavior limits and clear standards for student behavior (Sanford & Evertson, 1980).

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

51. Learning Objectives
 	
a) Shows assessment types
   ○ yes
   ○ no
 	
b) Shows corresponding activities
   ○ yes
   ○ no
	Scope and sequence: "Yes" is marked if the teacher presents a written list of goals <u>and</u> the objectives to meet those goals for one class (secondary) or one subject area (elementary). The objectives are arranged in a logical or sequential order. <u>If a State Core Curriculum exists for the class, the scope and sequence shown must either be the core curriculum or be based on it.</u>
	
	Corresponding activities: "Yes" is marked if the teacher presents <u>three</u> different types of learning activities that correspond to the scope and sequence presented. The activities may all be for one goal, or each may correspond to a different goal from the scope and sequence. These activities help students attain identified objectives leading to the goals. (To correspond to the scope and sequence shown, the activities must be from the **same subject** area).
	
	A teacher must have presented a **Scope and sequence** to receive a "yes" on **Corresponding activities**.
		<u>DEFINITIONS:</u> A **goal** is a broad, long-term aim. An **objective** is a short-term step necessary for reaching a goal.
		
		<u>"YES" EXAMPLES</u> (**Scope and sequence**): The teacher presents an example such as a copy of the goals and objectives from the State core for the class, District guides for the class, a copy of a list of goals and objectives from the class text, a list of goals and objectives that the teacher has independently produced, or an Individualized Educational Plan (IEP).
		<u>"NO" EXAMPLES</u> (**Scope and sequence**): The teacher presents a list of units that will be covered in the class or a list of the chapter and chapter topics from the text used in the class. The teacher presents a scope and sequence; however, it is not related to the State Core Curriculum.
		
		<u>"YES" EXAMPLES</u> (**Corresponding activities**): For each of the three activities, the teacher presents an example such as:
		• a lesson plan describing the activity and the objective it develops
		• a student product showing the goal attained
		• a handout or worksheet given to students
		• a description of a student presentation, etc.
		
		NOTE: Types of activities include: Teacher directed reviews, presentations of new material, opportunities to practice or apply the new material in different ways under direct teacher supervision, opportunities for practicing or applying content independently, and activities to assess student understanding of the content. Activities may also be of the type which guide the student from concrete to abstract, i.e. manipulative activity to a pictorial or representational activity to an abstract activity.

REFERENCES: Effective teachers explicitly link learning activities to specific learning objectives and more broadly defined desired student outcomes (Hofmeister & Lubke, 1989). The Academic Learning Time (ALT) model requires that learning activities be tied to outcome measures, that is all meaningful activities are tied to instructional assessments and student outcome goals (Berliner, 1984). Good and Grouws (1979) found that when teachers increased their emphasis on the following five teaching functions, their students achieved more than students of teachers not emphasizing these teaching functions: 1. Check the previous day's work and reteach where necessary. 2. Present new content or skills, proceeding rapidly, but in small steps, while giving detailed instructions and explanations. 3. Have students practice the materials while providing feedback and corrections. 4. Have students do independent practice. 5. Provide weekly and monthly reviews.

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

52. Varied assessments
 	
   a) Shows
      assessment
      types
      ○ yes
      ○ no
   b) Shows
      feedback
      ○ yes
      ○ no
	Assessment types: "Yes" is marked if the teacher shows that <u>three different types of assessment activities</u> are used to measure student progress toward the attainment of objectives and goals in one subject area during a grading period of the current academic year.
	
	Feedback: "Yes" is marked if the teacher shows that feedback was given to the students on each of the assessment types presented above. The feedback is timely and gives students specific information about their performance (stimulating improvement). Feedback that is held until the end of the grading period does not meet the requirements.
	
	A teacher must have presented three different **Assessment types** to receive a "yes" on **Feedback**.
		Types of assessment activities include: research paper, student presentation, student demonstration, individual or group project, homework assignment, multiple choice test, essay, etc.
		"YES" EXAMPLES (**Assessment types**):
		• A tracking sheet which shows number of errors a student made during oral reading, grade on a written reading comprehension assignment, and the reading rate for the student (words read per minute)
		• Lesson plans that describe three different assessment activities
		• A completed student essay, graded multiple-choice test, and a sample of a homework assignment.
		"YES" EXAMPLES (**Feedback**): The teacher presents examples of assessment types along with the feedback given to the students for each, such as
		• an essay returned to a student with written comments about performance
		• a written report of participation points for a class period or a week
		• a precision teaching graph or a chart that graphically shows progress
		• a test or assignment with errors on specific items clearly marked
		
		"NO" EXAMPLES (**Feedback**): The teacher presents one of the following examples of feedback for an assessment type:
		• no indication of feedback
		• a report of participation points given to a student at the end of a grading period which is longer than one week
		• a completed project without evidence of prior feedback on performance
		• an essay with a grade by no comments
		• a test or assignment with a total score but missed items are not identified
		
		NOTE: Feedback should not be held until the end of a grading period or the end of a project. It should be contingent and should promote student improvement rather than summarize student performance.

REFERENCES: Effective teachers recognize that different students have different learning styles and that different assessment techniques favor different learning styles (Wang & Walberg, 1985). More effective teachers vary assessment techniques to help students express their learning in different ways and gain a more valid understanding of real student progress. Feedback to students about their work is important in improving achievement. Brophy and Good (1986) state, "Performance on assignments should be monitored for completion and accuracy and students should receive timely and specific feedback."

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS
53. Assessment of student performance Shows an average of 1 assessment ○ yes ○ no	**Average of 1 assessment**: "Yes" is marked if the teacher demonstrates that over a grading period <u>an average of one or more assessments per week</u> of student performance was obtained. For elementary schools, this must be shown for two subject areas. For secondary schools, this must be shown for each class preparation type. Records should be for the <u>most recently completed grading period</u>.	<u>"YES" EXAMPLES</u>: The teacher presents assessment records such as one of the following: • scores recorded in a grade book with dates • a computer generated or hand written tracking sheet with dates • precision teaching charts with dates • tracking sheet with dates and notations indicating how students performed (a check, a plus or minus sign, etc.) • current Power School scores NOTE: Schools need to identify what a "grading period" is for their particular situation.

REFERENCES: Jordan School District's Philosophy of Instruction states, "Student achievement shall be monitored and communicated to parents on a regular basis." Frequent and systematic monitoring of students' progress helps students, parents, teachers, administrators, and policy makers identify strengths and weaknesses in instruction and student learning (What Works, 1987). Student performance is monitored more by effective teachers (Berliner, 1979). Effective monitoring requires a teacher to perform diagnosis activities in order to assign appropriate work to students. Frequent diagnosis allows teachers to help students achieve consistently high success rates in their school work. Effective teachers make instructional decisions that adjust instruction based on the needs and the performance of their students; whereas, ineffective teachers present instructional material on a random or a rigid, scheduled basis and fail to adjust for student performance (Brophy and Good, 1986). Such decision making requires a teacher to constantly monitor student performance.

DOMAIN IV: PLANNING — Preparing Instruction

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

54. Differentiated curriculum
 	
a) Shows varied requirements
  ○ yes
  ○ no
 	
b) Shows modified activities
  ○ yes
  ○ no
	Varied performance requirements: "Yes" is marked if the teacher presents documentation that different requirements have been used to accommodate for students with accelerated, remedial, or special needs. Different requirements may include altering the amount of work required to complete a task, the number of points required to obtain a passing grade, or the time period for a task to be completed. Documentation must be from the current academic year.
	
	Modified activities: "Yes" is marked if the teacher shows an activity that has been changed from the activity of the majority of students to accommodate for a student with accelerated, remedial or special needs. "Yes" is also marked if the teacher shows that extended or unique opportunities for learning are provided to individual students. The activity shown must be from the current academic year.
		"YES" EXAMPLES (**Shows varied requirements**): The teacher presents evidence of varied performance requirements such as:
		• a roll book showing differences in amount of work or points required for students to complete a course or assignment
		• a contract adjusting work requirements for a student's performance
		• copies of graded assignments where different assessment benchmarks were used
		• an Individualized Educational Plan (IEP).
		"NO" EXAMPLE (**Shows varied requirements**): The teacher presents a roll book that designates advanced and remedial students.
		
		"YES" EXAMPLES (**Modified activities**): The teacher presents evidence of a modified activity such as:
		• a list of projects that shows varying degrees of difficulty from which the students can choose
		• a list of cooperative learning groups specifying how group organization accommodates students with different ability levels
		• a lesson plan specifying modifications in activities for some students
		• an example of a worksheet or handout modified for a particular student
		• a record of materials supplied to students based on their particular abilities
		"NO" EXAMPLES (**Modified activities**): The teacher presents a sample of various activities (to be completed by the entire class) each of which favors a different learning style, or the titles of three different activities listed in the grade book.

REFERENCES: To maximize learning time, teachers should differentiate their curriculum to meet the varied needs of students (Berliner 1984). Differentiated curriculum engages more students in more personally meaningful activities. Mackenzie (1983) notes that effective schooling provides appropriate levels of difficulty for learning tasks, opportunities for individualized work, and a wide variety of opportunities to learn. More effective teachers stimulate the pursuit of higher aspirations and promote the development of independence and self-direction in learning (McLeod and Cropley (1989). One of three major factors influencing achievement is the degree to which instruction is appropriate to the needs of the learner (Bloom, 1976). Effective teachers adapt and develop appropriately matched curricula for all learners (Curry and Samara, 1992).

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES
55. Student-directed learning Shows sample activity ○ yes ○ no	**Sample activity:** "Yes" is marked if the teacher shows a document or product that indicates that <u>students have done</u> one of the following: • planned the goals, time-lines or priorities in completing an activity specified by the teacher • determined the materials to use in reaching an objective presented by the teacher • identified the process needed to accomplish the task described by the teacher • produced a product unique to themselves given the materials or resources presented to them by the teacher The sample activity shown must be from the current academic year.	<u>"YES" EXAMPLES</u>: The teacher presents evidence of a sample activity such as one of the following: • a handout given to students that explains a student-directed project • a lesson plan for a student-directed project • notes about directions for a student-directed activity • the product of a student-directed activity • a contract developed by a student that specifies what he/she will do to meet goals and objectives presented by the teacher <u>"NO" EXAMPLES</u>: The teacher presents a handout about an assignment which instructs students to make minor modifications to a given sample in producing a final product.

REFERENCES: Student engagement increases when they determine what they will learn and how. Students must learn how to learn as well as memorize facts. Student-directed learning teaches students how to set goals, prioritize activities, and identify and solve real problems. When students direct their own learning, they develop planning and management skills which are vital to success in the work force; successful workers are able to plan and manage tasks. "Learning and doing must become a single activity" if students are to gain skills important in the work place (SCANS, 1992). Marshall and Tucker (1992) found that the most valuable employees in the current economic environment were those who were self-governing and able to manage their own work without extensive supervision. Students who are allowed to participate in designing their own learning activities also perceive a greater role in the educational process. By bringing their own experiences and concerns into the activities, students can learn content while solving real problems (SCANS, 1992).

DOMAIN IV: PLANNING — Structuring the Class

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS
56. Plans for Substitutes a) Shows planned activities ○ yes ○ no b) Shows management information ○ yes ○ no	**Planned activities:** "Yes" is marked if the teacher presents written plans of what should be done or shows activities prepared for a substitute to use if the teacher is absent for one day. **Management information:** "Yes" is marked if the teacher presents two pieces of information that help the substitute manage a class over the school day. Plans, activities and management information shown must be for the current academic year.	**NOTE:** The examples for **Plans for substitutes** may be for activities that build upon the content currently being covered by the teacher or for activities that can be carried out by a substitute at any time. Plans should be for future use. "YES" EXAMPLES (**Planned activities**): The teacher presents a written plan that directs a substitute as to appropriate learning activities or where to find activities for a one-day absence. "YES" EXAMPLES (**Management information**): The teacher presents a plan or list that explains to a substitute two or more of the following: • classroom management procedures and policies • students in the class who can help the substitute • seating charts • names of teachers who can help the substitute • additional or alternative activities to do

REFERENCES: Academic Learning Time is positively correlated to student achievement (Berliner, 1984; Davis & Thomas, 1989); therefore, time allotted to instructional materials related to outcome measures should be maximized to maximize student achievement. Maximizing academic learning time requires advance planning by administration and teachers (Block, 1980). Effective teachers prepare to maximize academic learning time when special activities shorten class periods, the teacher is called out of the room, or the teacher is ill. Effective teachers provide clear guidance to substitutes so that academic learning time may be maximized when the teacher is absent.

DOMAIN V: PROFESSIONAL GROWTH AND RESPONSIBILITIES

The teacher participates in professional development activities and fulfills duties outside of the classroom

57. Professional development
58. Communication with parents
59. Co-worker cooperation

60. Administrative requests
61. Out-of-class duties

DOMAIN V: PROFESSIONAL GROWTH AND RESPONSIBILITIES

Enhancing Skills

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

57. Professional development
 	
a) Shows development activity
  ○ yes
  ○ no
 	
b) Shows product of innovation
  ○ yes
  ○ no
	This is an opportunity for the interviewer to commend teachers who make outstanding efforts in this area by thanking them for the time and money they expend to improve themselves as educators.
	
	Development activity: "Yes" is marked if the teacher shows personal participation in a professional development activity <u>during the past year</u>.
	
	Product of innovation: "Yes" is marked if the teacher shows or demonstrates the use, in one of his/her classes, of new instructional techniques, methods, or materials that are based on the knowledge gained in the professional development activity discussed above.
	
	A teacher <u>must</u> have participated in a **Development activity** to receive a "yes" on **Product of innovation.**
		"YES" EXAMPLES (**Shows development activity**): The teacher presents evidence of a development activity such as one of the following:
		• a record of conference or convention attendance
		• a degree earned
		• a book or article read
		• a formal or informal inservice activity (an example of informal is one team member instructing other team members in a new technique, etc. during a team or department meeting)
		• an enrollment record for a university class
		• a record of attendance at a district workshop
		• a document of membership in a professional group.
		
		"YES" EXAMPLES (**Shows product of innovation**): The teacher presents one of the following as evidence of innovation in one of his/her classes:
		•a copy of new materials • a lesson plan
		•a written method • a student project
		The innovation is based on the **Development activity** presented.
		
		NOTE: The **Development activity** and **Product of innovation** must have been completed by the teacher *within one year of the interview*.

REFERENCES: Students benefit when their teachers expand their job-relevant knowledge. It is also important for teachers to continually enhance their abilities by keeping up to date with current research findings. They must be able to learn all of the time as the knowledge required to do their work changes with new challenges and new technology (A Nation Prepared, 1986). Effective teachers implement new ideas, methods and materials in their curriculum based on their research findings. New techniques and materials must be evaluated to determine how they are influencing student learning.

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS

58. Communication with parents
 	
a) Shows contact about positive performance
  ○ yes
  ○ no
 	
b) Shows contact about possible problems
  ○ yes
  ○ no
	This is an opportunity for the interviewer to congratulate teachers with outstanding performance in this area.
	
	Contact about positive performance:
	"Yes" is marked if the teacher shows that he/she has communicated with at least one parent about a positive performance (academic or behavioral) by a specific student during the current academic year.
	
	Contact about possible problems:
	"Yes" is marked if the teacher shows that he/she has communicated with at least one parent about possible problems (academic or behavioral) with a specific student's performance during the current academic year.
	
	*Parent includes any person acting as the student's legal guardian.
		"YES" EXAMPLES (**positive performance**): The teacher presents evidence of a positive communication such as:
		• a copy of a postcard, certificate, or letter sent home for at least one student
		• a record for at least one student of a telephone call or log which designates the reason for the call, who was contacted, and when the call was made.
		"NO" EXAMPLES (**positive performance**): The teacher presents a blank commendation card or a mark in the roll/grade book indicating parental contact.
		
		"YES" EXAMPLES (**possible problems**): The teacher presents evidence of communication about a possible problem such as:
		• a copy of a deficiency notice or letter sent home to at least one student
		• a record for at least one student of a telephone call or log which designates the reason for the call, who was contacted, and when the call was made
		• a copy of a behavioral contract for one student that has been signed by the parent
		•
		"NO" EXAMPLES (**possible problems**): The teacher presents a blank deficiency notice or a mark in the roll/grade book indicating parental contact.

REFERENCES: Effective classroom managers involve parents in improving the behavior of certain students. Parental involvement should supplement rather than replace the teacher's management of student behavior. Teachers who effectively monitor attendance and other behavioral indicators have higher average class attendance leading to increased academic learning time; effective monitoring includes communicating behavioral problems to school administration and parents. Parental involvement also helps children learn more effectively. Parents can become involved by being made aware of their child's progress and the content of their learning (Mackenzie, 1983). Effective teachers also support each other and gain cooperation from parents and students regarding the school's norms for student behavior (USOE, 1984). Effective schooling also recognizes and rewards outstanding academic effort and achievement. Effective teachers inform parents about their child's educational progress including information about what learning objectives should be met and where the child is in relation to those objectives should be met and where the child is in relation to those objectives (USOE, 1984).

DOMAIN V: PROFESSIONAL GROWTH AND RESPONSIBILITIES

Enhancing Skills

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS
59. Co-worker cooperation Shows product of collaboration ○ yes ○ no	*This is an opportunity to thank and congratulate those teachers who have made outstanding efforts to help other teachers, administrators, and staff members.* **Collaboration**: "Yes" is marked if the teacher describes collaborative efforts carried out with colleagues to help students <u>and</u> presents a product of the collaboration. The product shown must be from the current academic year.	EXAMPLES: The teacher presents and discusses a product of collaboration such as: • a note about an activity that was jointly planned • a schedule of events or classes where teachers work with other teachers' classes • materials collected for other teachers • curricular materials that were jointly developed • a copy of materials made for other teachers • a file used to share materials among a group of teachers • a lesson plan, notes, or materials used to instruct aides in how to work with students • a copy of a behavior management plan developed with a bus driver to handle students while on the bus

REFERENCES: Students benefit academically when their teachers share ideas, cooperate in activities, and assist one another's intellectual growth. Good instruction flourishes when teachers collaborate in developing goals that emphasize student achievement. Effective schools have a climate of staff collegiality and use mutual support as a means of improving pupil achievement. School leaders in such schools set aside time for faculty interaction and provide specific opportunities for teachers and administrators to work together on such tasks as setting school policies, improving instructional practice, selecting textbooks, and strengthening discipline (What Works, 1987). Evidence reported by Little and others indicates that when teachers work together strong collegiality and professional relations develop, along with higher enthusiasm for teaching. School attitudes and student achievement are also positively impacted. High staff interaction also improves innovation rates and curriculum complexity and variety (Davis & Thomas, 1988). Cooperation, as stated, includes the sharing of ideas, materials, and methods; staff involvement in school-wide problem solving; and the coordination of school and department goals (USOE, 1984).

Maintaining Relationships

INDICATORS	DECISION RULES FOR INTERVIEWER	EXAMPLES & INSTRUCTIONS
60. Administrative requests Responds to complaints ○ yes ○ no ○ no written complaints in past year	*The administrator **only** initiates discussion in this area if **a preview of records prior to the interview indicates that a "no" response may be marked**.* *Typically this indicator will provide an opportunity for the administrator to commend teachers who have made outstanding efforts to resolve complaints.* **Responds to complaints:** "Yes" is marked if the teacher has responded to all written administrative requests to resolve complaints over the past calendar year. "No" is marked if the administrator presents a record of the teacher not responding to written administrative requests to respond to complaints within the past calendar year. "No written complaints in past year" is marked if the teacher has received no written administrative requests to respond to complaints within the past year.	**DEFINITIONS**: <u>Complaints</u> refers to a written communication from an administrator to a teacher about a concern from a parent, colleague, student, etc., requesting a response from the educator. Complaints may also include administrative documentation that a teacher has not submitted written information in accordance with deadlines. <u>Written information</u> refers to information on grades, surveys, attendance records, test materials, inventory records, etc. <u>"YES" EXAMPLES</u>: • According to administrative records the teacher has responded to all written requests to resolve complaints. or • Administrative records note that a written request to respond to a complaint was given to the teacher, but there is no record of the teacher's efforts to respond <u>AND</u> the teacher presents a copy of a letter, certificate, or a telephone log (designating who was called, the date of the call, and what was discussed) for each written request to respond to a complaint. <u>"NO" EXAMPLES</u>: The administrator presents a copy of a note or memo describing a meeting where a request to resolve a complaint was made, <u>AND</u> there is no record of a response from the teacher.

REFERENCES: The JSD Philosophy of Instruction states, "Student achievement shall be monitored and communicated to parents on a regular basis," which requires effective communication skills. The smooth flow of information helps students, parents, teachers, administrators, and policy makers identify strengths and weaknesses in instruction and student learning (What Works, 1987). Effective teachers resolve problems in a cooperative manner (Mackenzie, 1983). Student development requires unity and coordination; positive relationships between teachers, parents, and administrators must be maintained. Teachers who humiliate, embarrass, or treat students unfairly have a strong negative impact on student development. College students identified interactions with teachers as the primary source of growth-inhibiting experiences (Branan, 1982).

DOMAIN V: PROFESSIONAL GROWTH AND RESPONSIBILITIES

Maintaining Relationships

INDICATORS	DECISION RULES FOR INTERVIEWERS	EXAMPLES & INSTRUCTIONS
61. Out-of-class duties a) Is present for required meetings/ duties ○ yes ○ no b) Supports school goals ○ yes ○ no	*The administrator **only** initiates discussion in this area if a **preview of records prior to the interview indicates that a "no" response may be marked**. The administrator may wish to use this indicator as an opportunity to commend teachers who consistently attend and enthusiastically support school goals.* **Is present for required meetings/duties**: "Yes" is marked if there are no written administrative records showing that the teacher has a pattern of unexcused absences for required meetings and/or duties during the past year. "No" is marked if the <u>administrator</u> presents written administrative records that show the teacher has a pattern of unexcused absences from required meetings and/or duties over the last year. **Supports school goals:** "Yes" is marked if the teacher has been supportive of written school goals during the past year. "No" is marked if <u>administrative</u> evidence exists that the teacher has not supported school goals during the past year. To receive a "no" on either part of this indicator, the educator must have been previously informed of the problem.	<u>"NO"EXAMPLES</u> (**required meetings**): • The <u>administrator</u> presents attendance records that note a pattern of unexcused absences from required meetings and that have been **previously brought to the educators attention**; or • The <u>administrator</u> presents a note, which has been **previously brought to the educator's attention**, indicating that the teacher missed a function he/she had agreed to attend or had not fulfilled a duty he/she had agreed to complete. • <u>"NO" EXAMPLES</u> (**Supports school goals**): • The <u>administrator</u> presents a note(s), from a **meeting(s) previously held with the educator**, where failure to support a school goal was discussed, or a copy of a document that the teacher has produced which is non-supportive of a school goal, or an administrative record showing that the teacher has not attended meetings to develop and discuss school goals. • **NOTE:** School goals are those goals developed cooperatively by the faculty and principal which are in written form.

REFERENCES: Effective teachers recognize their role as members of an integrated, interdependent education system; they accept and perform duties outside of the classroom; they help establish a safe environment for student development. They help create a positive schooling environment for the growing number of students whose environment outside of school does not support intellectual growth and responsibility (A Nation Prepared, 1986). Effective teachers realize that students must feel safe, physically and mentally, in order to develop their individual capacities (District Philosophy of Instruction). Jordan District policy requires teachers to attend all required meetings. Effective teachers extend their influence beyond the classroom (SCANS, 1991), meaning that they are cooperative partners involved in school-wide planning and problem-solving. Effective teachers contribute to effective schooling which requires total staff involvement in school improvement, goal-focused activities to provide educational unity, and shared consensus on values and goals (Mackenzie, 1983).

BIBLIOGRAPHY

BIBLIOGRAPHY

Alvermann, D.E., Smith, L.C., & Readence, J.E. (1985). Prior knowledge activation and the comprehension of compatible and incompatible text. *Reading Research Quarterly*, *20*(4), 420-436.

American Association of School Administrators. (1982). *Time on task*. Arlington, VA: Author.

Anderson, B.O. (1978). The effects of long wait time on high school physics pupils' response length, classroom attitudes and achievement. *Dissertation Abstracts International*, 39, 3493A. (University Microfilms No. 78-23, 871)

Anderson, J.R. (1989). A theory of human knowledge. *Artificial Intelligence*, 40, 313-315.

Anderson, L. (1985). What are students doing when they do all that seatwork? In C.W. Fischer & D.C. Berliner (Eds.), *Perspectives on Instructional Time* (pp. 189-202.) New York Longman.

Anderson, L.M., Evertson, C.M., & Brophy, J.E. (1979). An experimental study of effective teaching in first grade reading groups. *The Elementary School Journal*, *79*(4), 193-223.

Anderson, L.M., Evertson, C.M., & Brophy, J.E. (1982). *Principles of small-group instruction in elementary reading*. (Occasional paper No. 58). East Lansing: Michigan State University, Institute for Research on Teaching.

Anderson, L.M., Evertson, C.M., & Emmer, E.L. (1979). *Dimensions in classroom management derived from recent research*. In S. Dasho (Chair), Perspectives on classroom management research. Symposium presented at the annual meeting of the American Educational Research Association, San Francisco. (ERIC Document Reproduction Service No. ED 175 860)

Anderson, R.C. (1972). Learning concepts from definitions. *American Journal of Educational Research*, 7, 385-390.

Andrews, G., & Debus, R. (1978). Persistence and causal attribution of failure. Modifying cognitive attributions. *Journal of Educational Psychology*, 70, 154-166.
Arends, R.I. (1998) *Learning to Teach*. Boston, MA: McGraw-Hill.

Arlin, M. (1979). Teacher transitions can disrupt time flow in classrooms. *American Educational Research Journal*, 16, 42-56.

Armbruster, B.B., Anderson, T.H., & Ostertog, J. (1987). Does text structure/summarization facilitate learning from text? *Research Reading Quarterly*, 22.

Armstrong, David G., Henson, Kenneth T., and Savage, Tom V. (eds.) (2001) *Teaching Today, An Introduction to Education* (6th ed.) Upper Saddle River, NJ: Merrill, Prentice Hall

Au, K. (1977, December). *Cognitive training and reading achievement*. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, Atlanta, GA.

Ausubel, D. (1963). *The psychology of meaningful verbal learning*. New York: Grune and Stratton.

Ausubel, D., & Youssef, M. (1965). The effect of spaced repetition on meaningful retention. *Journal of General Psychology*, *73*, 147-150.

Becker, N.C. (1977). Teaching reading and language to the disadvantaged - What we have learned from field research. *Harvard Educational Review, 47*, 518-543.

Bennett, William J., U.S. Department of Education. (1987). *What works: Research about teaching and learning*. Washington DC: U.S. Government Printing Office.

Bereiter, C., & Bird, M. (1985). Identification and teaching of reading strategies. *Cognition and Instruction, 2*(2), 131-156.

Berliner, D.C. (1979). Tempus educar. In P. Peterson & H. Walberg (Eds.), *Research on teaching: Concepts, findings, and implications*. Berkeley, CA: McCutchan.

Berliner, D.C. (1984). The half-full glass: A review of the research on teaching. In P. Hosford (Ed.), *Using what we know about teaching*. Alexandria, VA. Association for Supervision and Curriculum.

Berliner, D.C. (1986, November-December). When kids "do seatwork", what do they do? *Instructor*, 14-15.

Berliner, D.C. & Tikunoff, W. (1976). The California Beginning Teacher Evaluation Study, Overview of the ethnographic study. *Journal of Teacher Education*, 27(1), 24-30.

Berliner, D.C. & Tikunoff, W. (1977). Ethnography in the classroom. In G. Borich and K. Fenton (Eds.) *The Appraisal of teaching: Concepts and process*. Reading, MA: Addison-Wesley.

Block, J.H., & Burns, R.B. (1976). Mastery learning. In L.S. Shulman (Ed.), *Review of Research in Education*, Vol. 4. Itasca, IL: Peacock.

Bloom, B.S. (1976). *Human characteristics and school learning*. New York: McGraw-Hill.

Borich, Gary D. (1996) *Effective Teaching Methods*. 3rd ed. New York: McMillan.

Borich, G.D., Kash, M.M., & Kemp, F.D. (1979). *What the teacher effective research has to say about teaching practices and student performance*. Austin, TX: Southwest Educational Development Laboratory. (ERIC Document Reproduction Service No. ED 189 077)

Brooks, D.M. (1985). Beginning the year in junior high: The first day of school. *Educational Leadership, 42*(8), 76-78.

Brophy, J. (1980). *Recent Research on Teaching*. East Lansing, Michigan: Institute for Research on Teaching, Michigan State University.

Brophy, J. (1981a). Teacher praise: A functional analysis. *Psychological Review*, 88(2), 93-134.

Brophy, J. (1981b). On praising effectively. *Elementary School Journal*, 81(5), 269-278.

Brophy, J. (1986). *On motivating students*. (Occasional Paper No. 101). Lansing, Ml: Michigan State University for Research on Teaching. (ERIC Document Reproduction Service No. ED 276 724)

Brophy, J., & Evertson, C. (1974). *Process-product correlations in the Texas Teacher Effectiveness Study: Final Report.* (Report No. 74-4). Austin, TX: The University of Texas, Research and Development Center for Teacher Education. (ERIC Document Reproduction Service No. ED 091 394)

Brophy, J., & Evertson, C. (1976). *Learning from Teaching: A Developmental Perspective*. Boston: Allyn & Bacon.

Brophy, J., & Good, T.L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching (3rd ed.)* (pp. 328-375). New York: Macmillan.

Burden, Paul R. and Byrd, David M. (eds.) (1999) *Methods for Effective Teaching*. Needham Heights, MA: Allyn & Bacon.

Capie, W., Ellett, C., & Johnson, C. (1980). *Relating pupil achievement gains to ratings of secondary student teacher performance*. Paper presented at the Eastern Educational Research Association, Norfolk, VA. (ERIC Document Reproduction Service No. ED 185 023.78)

Capie, W., Tobin, K.G., and Bowell, M. (1980). *Using science achievement to validate ratings of student teacher competencies*. Paper presented at the National Association for Research in Science Teaching, Boston. (ERIC Document Reproduction Service No. ED 186 261)

Carver, R.P. (1973). Effect of increasing the rate of speech presentation upon comprehension. *Journal of Educational Psychology, 65*, 118-126.

Charles, C. M. (1996). *Building Classroom Discipline* (5th ed.). New York: Longman.

Ciardiello, A.V. (1986). Teacher questioning and student interaction: An observation of three social studies classes. *The Social Studies, 77*, 119-122.

Clark, C.M., & Elmore, J.L. (1979). *Teacher Planning in the First Weeks of School*. Research Series No. 56. E. Lansing: Institute for Research on Teaching, Michigan State University.

Classroom Process Research Committee (1984). *Research on Effective Schools/ Classroom Processes*. Paper presented for the Utah State Office of Education, Salt Lake City, Utah.

Cooley, W., & Leinhardt, G. (1980). The instructional dimensions study. *Educational Evaluation and Policy Analysis, 2*, 7-25.

Curry, James, & Samara, John. (1992). *Middle School Curriculum Institute 1992-1993*. Paper written for The Curriculum Project. Austin, TX.

Davis, G.A., & Thomas, M.A. (1989). *Effective Schools and Effective Teachers*. Massachusetts: Allyn & Bacon.

Denham, C., & Lieberman, A. (Eds.). (1980). *Time to Learn*. Washington, DC: National Institute of Education.

DeTure, L.F., & Miller, A.P. (1985). *The effects of a written protocol model on teacher acquisition of extended wait time*. Paper presented at the annual meeting of the National Science Teachers Association, Cincinnati, Ohio.

Dooling, D.J., & Christiansen, R.E. (1977). Episodic and semantic aspects of memory for prose. *Journal of Experimental Psychology: Human Learning and Memory, 3*, 428-436.

Doyle, W. (1984). How order is achieved in classrooms: An interim report. *Journal of Curriculum Studies, 16(3)*, 259-277.

Doyle, W. (1985). Effective secondary classroom practices. In R.M.J. Kyle (Ed.), *Reading for excellence: An effective schools sourcebook*.

Doyle, W. (1986). Classroom organization and management. In M.C. Wittrock (Ed.), *Handbook of research on teaching*, (3rd ed.). (pp. 392-432). New York: Macmillan.

Dunkin, M.J., & Biddle, B.J. (1974). *The study of teaching*. New York: Holt, Rinehart and Winston.

Durkin, D. (1978-79). What classroom observation reveals about reading comprehension instruction. *Reading Research Quarterly, 14*, 481-533.

Edmonds, R.R. (1979). Effective schools for the urban poor. *Educational Leadership, 37*, 15-27.

Eggen P. & Kauchak, D. (1997). Educatinoal Psychology: Windows on Classrooms (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Eggen P. & Kauchak, D. (2001) Educational Psychology: Windows on Classrooms (5th ed., pp. 82, 91). Upper Saddle River, NJ: Merrill/Prentice Hall.

Ellett, C.D., Capie, W., & Johnson, C.E. (1981). *Further studies of the criterion-related validity of the Teacher Performance Assessment Instruments*. Athens, GA: Teacher Performance Assessment Project.

Emmer, E.T. (1987). Classroom management and discipline. In V. Richardson-Koehler (Ed.), *Educators' Handbook: A Research Perspective*. New York: Longman.

Emmer, E.T., Evertson, C.M., & Anderson, L.M. (1980). Effective classroom management at the beginning of the school year. *The Elementary School Journal, 80(5)*, 219-231.

Emmer, E.T., Evertson C.M., Clements, B.S., & Worsham, M.E. (1997). *Classroom Management for Secondary Teachers* (4th ed.). Boston, MA: Allyn & Bacon

Emmer, E.T., Evertson C.M., Clements, B & Worsham, M. (2000). *Classroom Management for Secondary Teachers* (5th ed.). Needham Heights, MA: Allyn & Bacon.

Emmer, E.T., Evertson, C., Sanford, J.,Clements, B., & Worsham, M. (1982). *Organizing and Managing the Junior High Classroom*. Austin, Tx: Research and Development Center for Teacher Education, University of Texas.

Emmer, E.T., Evertson, C.M., Sanford, J.P., Clements, B.S., & Worsham, M.E. (1984). *Classroom management for secondary teachers*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Evertson, C.M. (1980). *Differences in instructional activities in high and low achieving junior high classes*. Austin, TX: The University of Texas, Research and Development Center for Teacher Education. (ERIC Document Reproduction Service No. ED 195 546)

Evertson, C.M. (1982). Differences in instructional activities in higher- and lower achieving junior high English and Math classes. *Elementary School Journal, 82*, 329-350.

Evertson, C.M., Anderson, C., Anderson, L.M., & Brophy, J. (1980). Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. *American Educational Research Journal, 17*, 43-60.

Evertson, C.M., & Emmer, E. (1982). Effective management at the beginning of the school year in junior high classes. *Journal of Educational Psychology, 74(4)*, 485-498.79

Evertson, C.M., Emmer, E.T., & Brophy, J.E. (1980). *Predictors of effective teaching in junior high mathematics classrooms*. (Report 4069). Austin, TX: The University of Texas, Research and Development Center for Teacher Education.

Evertson, C.M., Emmer, E.T., Clements, B.S., & Worsham, M.E. (1997). *Classroom Management for Elementary Teachers* (4th ed.). Boston, MA: Allyn & Bacon.

Evertson, C.M., Emmer, E., Clements, B. & Worsham, M. (2000). *Classroom Management for Elementary Teachers* (5th ed.). Needham Heights, MA: Allyn & Bacon.

Evertson, C.M., Emmer, E.T., Sanford, J.P., & Clements, B.S. (1983). Improving classroom management: An experiment in elementary classrooms. *The Elementary School Journal, 84*, 173-188.

Feldman, Sandra (2003). The right line of questioning. *Teaching PreK-8*, Jan. 2003, Vol. 33, Issue 4, p.8.

Fisher, C.W., Berliner ,D.C., Filby, N.N., Marliave, R., Cahen, L.S., & Dishaw, M.M. (1980). Teaching behaviors, academic learning time, and student achievement: An overview. In C. Denham & A. Lieberman (Eds.), *Time to Learn* (pp.7-32). Washington DC: National Institute of Education.

Fisher, C.W., Filgy, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J., & Berliner, D. (1978). *Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study*. San Francisco: Far West Laboratory.

Fister, S., & Kemp, K. (1993). Translating research: Classroom application of validated instructional strategies. In R.C. Eaves & P.J. McLaughlin (Eds.) *Recent Advances in Special Education and Rehabilitation*. Stoneham, MA: Andover Medical Publishers.

Forrester, J.W. (1990). System dynamics as a foundation for pre-college education. In G.P. Richardson, D.F. Anderson, & J.D. Sterman (Eds.), *Volume I: System Dynamics*. (pp.367-380). Lincoln, MA: System Dynamics Society.

Good, T., & Brophy, J. (1991). *Looking in Classrooms*. (5th ed.). New York: Harper-Collins Publishing.

Good, T., & Grouws, D.A. (1977). *Teacher's manual: Missouri mathematics effectiveness project*. Columbia, MO: University of Missouri, Center for Research in Social Behavior.

Good, T., & Grouws, D.A. (1979). The Missouri mathematics effectiveness project: An experiment studying fourth-grade classrooms. *Journal of Educational Psychology, 71(3)*, 355-362.

Good, T.L. & Brophy, J.E. (1997) *Looking in Classrooms* (7th ed.). New York: Longman

Good, T.L. & Brophy, J.E. (2000) *Looking in Classrooms* (8th ed.). New York: Longman

Good, T.L., Grouws, D., & Ebmeier, M. (1983). *Active mathematics teaching*. New York: Longman.

Gump, V.P. (1974). Operating environments in schools of open and traditional design. *School Review, 82(4)*, 575-593.

Gump, V.P. (1982). School settings and their keeping. In D. Duke (Ed.), *Helping teachers manage classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED 218 710)

Guthrie, J.T., Samuels, S.J., Marzuta, V., Seifert, M., Tyler, S.J., & Edwall, G. (1976). *A Study of the Locus and Nature of Reading Problems in the Elementary School: Final Report, Section II*. Newark, DEL: International Reading Association.

Hamilton, R. & Brady, M. (1991). Individual and classwide patterns of teachers' questioning in mainstreamed social studies and science classes. *Teaching & Teacher Education*, 7 (3) 253-262.

Harris, V.W., & Sherman, J.A. (1973). Effects of peer tutoring and consequences on the math performance of elementary classroom students. *Journal of Applied Behavior Analysis, 6*, 587-597.

Hinely, R., & Ponder, G. (1981). *A study of the development of classroom routines and academic performance expectations in three tenth grade classrooms*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education. Dallas, TX. (ERIC Document Reproduction Service No. ED 200 534)

Hines, C.V., Cruickshank, D.R., & Kennedy, J.J. (1985). Teacher clarity and its relationship to student achievement and satisfaction. *American Educational Research Journal, 22(1)*, 87-99.

Hofmeister, A., & Lubke, M. (1989). *Implementing Effective Teaching Research*. Logan, Utah: Utah State University, College of Education.

Hunter, M. (1984). Knowing, teaching, and supervising. In P.L. Hosford (Ed.), *Using What WE Know About Teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

Hunter, M. (1985). What's wrong with Madeline Hunter? *Educational Leadership, 42(5)*, 57-60.

Hutchins, C.L. (1983). *Quality Schools: A Review of the Research on Effective Schools and Effective Teaching*. Kansas City, Missouri: Midcontinent Regional Educational Laboratory.

Institute for Behavioral Research in Creativity. (1984). *Utah Statewide Educational Assessment Program*. Report for the Utah State Office of Education. Salt Lake City. UT: Author.

Jacobsen, D.A., Eggen, P.D. & Kauchak, D.P. (1993). *Methods for Teaching: A Skills Approach* (4th ed.). Columbus, OH: Merrill Publishing

Jacobsen, David A. Eggen, Paul, and Kauchak, Donald (eds.) (2002) *Methods for Teaching: Promoting Student Learning* (6th ed.). Upper Saddle River, NJ: Merrill, Prentice Hall.

Jenkins, J.R., Mayhall, W.F., Peschka, C.M., & Jenkins, L.M. (1974). Comparing small group and tutorial instruction in resource rooms. *Exceptional Children, 40(4)*, 245-250.

Johnson, M., & Bailey, J.S. (1974). Cross-age tutoring: First graders as arithmetic tutors for kindergarten children. *Journal of Applied Behavior Analysis, 7(2)*, 223-231.

Johnson,D., & Johnson, R. (1975). *Learning Together and Alone*. Englewood Cliffs, NJ: Prentice Hall.

Johnson, D., & Johnson, R. (1994). *Learning Together and Alone. Cooperation, Competition, and Individualization* (5th ed.). Needham Heights, MA: Allyn & Bacon.

Johnson, D., Johnson, R., & Johnson-Holubec, E. (1990). *Circles of Learning: Cooperation in the Classroom* (3rd ed.). Edina, MN: Interaction Book Co.

Johnson, D.M., & Stratton, R.P. (1966). Evaluation of five methods of teaching concepts. *Journal of Educational Psychology, 57*, 48-53.

Jones, V.F. & Jones, L.S. (1998). *Comprehensive Classroom Management: Creating Communities of Support and Solving Problems* (5th ed.). Boston, MA: Allyn & Bacon

Kallison, J.M., Jr. (1986). Effect of lesson organization on achievement. *American Educational Research Journal, 23(2)*, 337-347.

Kauchak, Donald P. and Eggen, Paul D. (1998). *Learning and Teaching, Research-Based Methods* (3rd ed.). Needham Heights, MA: Allyn & Bacon

Kennedy, J.J., Bush, A.J., Cruickshank, D.R., & Haefele, D. (1978). *Additional Investigations into the Nature of Teacher Clarity*. Paper presented to the annual meeting of the American Educational Research Association, Toronto, Canada, March 1978. College of Education, Ohio State University, Columbus, Ohio.

Klausmeier, H.J. (1976). Instructional design and the teaching of concepts. In J.R. Levin & V.L. Allen (Eds.). *Cognitive Learning in Children*. New York: Academic Press.

Klausmeier, H.J., Ghatala, & D. Frayer. (1976). *Conceptual Learning and Development: A Cognitive View*. New York: Academic Press.

Knight, S.L., & Waxman, H.C. (1991). Students' cognition and classroom instruction. In H.C. Waxman & H.J. Walberg (Eds.), *Effective Teaching: Current Research*. Berkeley, CA: McCutchan Publishing Corporation.

Kounin, J.S. (1970). *Discipline and group management in classrooms*. Huntington, NY: Robert Krieger.

Kounin, J. (1970). *Discipline and Good Management in the Classroom*. New York: Holt, Rinehart and Winston.

Lancioni, G.E. (1982). Normal children as tutors to teach social responses to withdrawn mentally retarded schoolmates: Training, maintenance, and generalization. *Journal of Applied Behavior Analysis, 15(1)*, 17-40.

Land, M.L. (1979). Low-inference variables and teacher clarity: Effects on student concept learning. *Journal of Educational Psychology, 71*, 795-799.

Langer, J.A., & Applebee, A.N. (1986). Reading and writing instruction: Toward a theory of teaching and learning. In E.Z. Rothkopf (Ed.) *Review of Research in Education*. Vol.13. Washington DC: American Educational Research Association.

Lard, M., & Smith, L. (1979). *Low inference teacher clarity variables: Effects on student achievement*. Paper presented at annual meeting of American Educational Research Association, San Francisco.

Leeper, H., & Thomas, C. (1978). Young children's preferences for listening rates. *Perceptual and Motor Skills, 47*, 891-898.

Levin, J. & Nolan, J.F. (1996). *Principles of Classroom Management: A Hierarchiacal Approach* (2nd ed.). Boston, MA: Allyn & Bacon.

Linden, M., & Wittrock, M.C. (1981). The teaching of reading comprehension according to the model of generative learning. *Reading Research Quarterly, 17*, 44-57.

Lovitt, T., Fister, S., Freston, J., Kemp, K., Moore, R., Schroeder, B., & Baurenschmidt, M. (1990). Using precision teaching techniques: Translating research. *Teaching Exceptional Children, 22(11)*, 16-19.

Luiten, J.L., Ames, W., and Ackerman, G. (1980). Meta-analysis of the effects of advance organizers on learning and retention. *American Educational Research Journal, 17(2)*, 211-218.

Lysakowski, R.S., & Walberg, H.J. (1983). Cues, participation, and feedback in instruction: A quantitative synthesis. *American Educational Research Journal*.

Maddox, H. and Hoole, E. (1975). Performance decrement in the lecture. *Educational Review, 28*, 17-30.

Marshall, R., & Tucker, M. (1992). *Thinking for A Living*. New York: Harper-Collins Publishers.

Mayer, R.E. (1983). Can you repeat that? Qualitative effects of repetition and advance organizers from science prose. *Journal of Educational Psychology, 75*, 40-49.

McCord, C.R. (1944). Speech factors as related to teaching efficiency. *Speech Monography, 11*, 52-64.

McDonald, F.J. (1976). Report on phase II of Beginning Teacher Evaluation Study. *Journal of Teacher Education, 27(1)*, 39-42.

McGreal, T. (1985). *Characteristics of Effective Teaching:* Paper presented at the first annual Intensive Training Symposium, Clearwater, FL.

McKenzie, G. (1979). Effects of questions and testlike events on achievement and on-task behavior in a classroom concept learning presentation. *Journal of Educational Research, 72*, 348-350.

Medley, D. (1977). *Teacher competence and teacher effectiveness*. Washington, DC: American Association of Colleges for Teacher Education. (ERIC Document Reproduction Service No. ED 143 629)

Muijs, Daniel and Reynolds, David (2001) *Effective Teaching, Evidence and Practice*. London: Paul Chapman Publishing.

Murphy, J., Weil, M., & McGreal, T. (1986). The basic practice model of instruction. *Elementary School Journal*, 87, 83-95.

Noli, P. (1980). A principal implements BTES. In C. Denham & A. Lieberman (Eds.), *Time to Learn*. (pp.2213-222). Washington DC: U.S. Department of Education, National Institute of Education.

Okey, J., Capie, W., Ellett, C.D., and Johnson, C.E. (1978). *Teacher performance validation studies*. Paper presented at the annual meeting of the Georgia Educational Research Association.

Ormrod, J. (1995). *Human Learning* (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall

Ornstein, Allan C. and Lasley, Thomas J. II (2000). *Strategies for Effective Teaching* (3rd ed.). Boston, MA: McGraw-Hill

Palincsar, A.S., & Brown, A.L. (1984). Reciprocal teaching of comprehension - fostering and comprehension - monitoring activities. *Cognition and Instruction, 1(2)*, 117-175.

Palincsar, A.S., & Brown, A.L. (1986). Interactive teaching to promote independent learning from text. *The Reading Teacher, 39(8)*, 103-108.

Paris, S.G., Lindauer, B.R., & Cox, G.L. (1977). The development of inferential comprehension. *Child Development, 48*, 1728-1737.

Petrie, C.R. (1963). Informative speaking: A summary and bibliography of related research. *Speech Monographs, 30*, 79-91.

Pichert, J.W., & Anderson, R.C. (1977). Taking different perspectives on a story. *Journal of Educational Psychology, 69*, 309-15.

Pratton, J. & Hales, L. (1986). The effects of active participation on student learning. *Journal of Educational Research*, 79-2105.

Pressley, M., Goodchild, F., Fleet, J., Zajchowski, R., & Evans, E.D. (1989). The challenges of classroom strategy instruction. *Elementary School Journal, 89*, 301-342.

Reich, R.B. (1988). *Education and the Economy*. Washington DC: National Education Association.

Reid, E.R. (1978-1982). *The Reader Newsletter*. Salt Lake City, Utah: Exemplary Center for Reading Instruction.

Reynolds, J.H., & Glasser, R. (1964). Effects of repetition and spaces review upon retention of a complex learning task. *Journal of Educational Psychology, 55*, 297-308.

Reynolds, D. and Muijs, R.D. (1999b) Numeracy matters: contemporary policy issues in the teaching of mathematics. In I. Thompson (ed). *Issues in Teaching Numeracy in Primary Schools*. Ballmoor, Bucks: Open University Press.

Rhode, G., Jenson, W, & Reavis, K. (1992) *The Tough Kid Book*. Longmont, Colorado: Sopris West, Inc.

Riley, J.P. (1986). The effects of teachers' wait time & knowledge comprehension questioning on pupil science achievement. *Journal of Research in Science Teaching, 23*, 335-342.

Ritter, S., & Idol-Maestas, L. (1986). Teaching middle school students to use a test-taking strategy. *Journal of Educational Research, 79(6)*, 350-357.

Rosenshine, B. (1970). Enthusiastic teaching: A research review. *School Review, 78*, 499-514.

Rosenshine, B. (1980). How time is spent in elementary classrooms. In M.C. Denham & A. Leiberman (Eds.), *Time to Learn*. Washington, DC: National Institute of Education.

Rosenshine, B. (1983). Teaching functions in instructional programs. *The Elementary School Journal, 83(4)*, 335-351.

Rosenshine, B. (1986a). Synthesis of research on explicit teaching. *Educational Leadership, 43(7)*, 60-69.

Rosenshine, B. (1986b). Effective teachers: Six principles of explicit teaching. In G.A. Davis and M.A. Thomas (Eds.) *Effective Schools and Effective Teachers*. (1989). Massachusetts: Allyn & Bacon.

Rosenshine, B., & Furst, N. (1973). The use of direct observation to study teaching. In R. Travers (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally.

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching*. (3rd ed.) (pp. 376-391). New York: Macmillan.

Rowe, M. (1974). Wait-time and rewards as instructional variables, their influence on language, logic, and fate control: Part 1. Wait-time. *Journal of Research in Science Teaching, 11*, 81-94.

Rutter, M., Maughan, B., Mortimor., Ouston, J., with Smith, A. (1979). *Fifteen Thousand Hours: Secondary Schools with their Effects on Children*. Cambridge, Mass: Harvard University Press.

Samuels, S.J. (1981). Some essentials of decoding. *Exceptional Education Quarterly, 2*, 11-25.

Sanford, J.P. & Evertson, C.M. (1980). *Beginning the school year at a low SES junior high: Three case studies*. Austin, TX: The University of Texas, Research & Development Center for Teacher Evaluation. (ERIC Document Reproduction Service No. ED 195 547)

Sanford, J.P. & Evertson, C.M. (1981). Classroom management in a low SES junior high: Three case studies. *Journal of Teacher Education, 32(1)*, 385-390.

Scardamalia, M., & Bereiter, C. (1984). Teachability of reflective processes in written composition. *Cognitive Science, 8*, 173-190.

Schlicter, C.L. (1979). The multiple talent approach to the world of work. *Roeper Review, 2(2)*, 17-20.

Schoenfeld, A.H. (1985). *Mathematical Problem Solving*. New York: Academic Press.

Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor. (1992, April). *Learning a Living: A Blueprint for High Performance*. Washington DC: U.S. Government Printing Office.

Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor. (1993). *Teaching the SCANS Competencies*. Washington DC: U.S. Government Printing Office.

Segal, T. (1992, September). Saving our schools. *Business Week*, 70-78.

Seghini, J.B. (1979). *The longitudinal effects of creative training*. Unpublished doctoral dissertation, University of Utah, 1958.

Senge, P., & Lannon-King, C. (1991, November). Recapturing the Spirit of learning through a systems approach. *The School Administrator*, 8-13.

Shapiro, S. (1975). Preschool ecology: A study of three environmental variables. *Reading Improvement, 12*, 236-241.

Sharan, S. (1980). Cooperative learning in small groups. *Review of Educational Research, 50*, 241-271.

Silverstein, J.M. (1979). *Individual and environmental correlates of pupil problematic and nonproblematic classroom behavior*. Unpublished doctoral dissertation, New York University.

Slavin, R.E. (1978). Student teams and comparisons among equals: Effects on academic performance. *Journal of Educational Psychology, 70*, 532-538.

Slavin, R.E. (1980a). Cooperative learning. *Review of Educational Research, 50*, 315-342.

Slavin, R.E. (1980b). Effects on student teams and peer tutoring on academic achievement and time on task. *Journal of Experimental Education, 48*, 252-257.

Slavin, R.E. (1981). Student team learning. *Elementary School Journal, 82*, 5-17.

Slavin, R.E. (1995). *Cooperative Learning* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Slavin, R.E. (1997). *Educational Psychology* (5th ed.). Boston, MA: Allyn & Bacon

Smith L.R. (1977). Aspects of teacher discourse and student achievement in mathematics. *Journal for Research in Mathematics Education, 8*, 194-204.

Soar, R.S. and Soar, R.M. (1979). Emotional climate and management. In P. Peterson & H. Walberg (Eds.), *Research on teaching: Concepts, findings, and implications*. Berkeley, CA: McCutchan.

Spritzer, H.F. (1939). Studies in retention. *Journal of Educational Psychology, 30*, 641-656.

Stallings, J.A. (1976). How instructional processes relate to child outcomes in a national study of follow through. *Journal of Teacher Education, 27(1)*, 43-47.

Stallings, J.A. (1978). *Teaching basic reading skills in secondary schools*. Toronto, Canada: American Educational Research Association. (ERIC Document Reproduction Service No. ED 166 634)

Stallings, J.A. (1980). Allocated academic learning time revisited, or beyond time on task. *Educational Researcher, 8(11)*, 11-16.

Stallings, J.A. (1981). What research has to say to administrators of secondary schools about effective teaching and staff development. In Duckworth, E. Kehae, W. DeBevoise, & F. Donovas (Eds.), *Creating Conditions for Effective Teaching*. Eugene, Oregon: Center for Education Policy and Management, University of Oregon.

Stallings, J.A. (1986). Using time effectively: A self-analytic approach. In K.K. Zumwalt (Ed.), *Improving Teaching: 1986 ASCD Yearbook*. Alexandria, VA: Association for Supervision and Curriculum Development.

Stallings, J.A., Cory, R., Fairweather, J., & Needels, M. (1977). *Early Childhood Education Classroom Evaluation*. Menlo Park, CA: SRI International.

Stallings, J.A. and Kaskowitz, D. (1974). *Follow through classroom observation evaluation, 1972-73: A study of implementation*. Menlo Park, CA: Stanford Research Institute, Stanford University.

Stallings, J.A., Needels, M., and Stayrook, N. (1979). *How to change the process of teaching basic reading skills in secondary schools*. Menlo Park, CA: SRI International.

Stronge, James H. (2002) *Qualities of Effective Teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

Swift, J.N., & Gooding, C.T. (1983). Interaction of wait time feedback and questioning instruction on middle school science teaching. *Journal of Research in Science Teaching, 23*, 335-42.

Taylor, F.W. (1967). *The Principles of Scientific Management*. New York: W.W. Norton.

Tennyson, R.D., Woodley, & Merril, M. (1972). Exemplar and non-exemplar variables which produce correct concept classification behavior and specified classification errors. *Journal of Educational Psychology, 63*, 144-152.

Tobin, K. (1987). The role of wait time in higher cognitive level learning. *Review of Educational Research, 57*, 69-95.

Tobin, K. & Fraser, B.J. (Eds.). (1987). *Exemplary Practices in Science and Mathematics Education*. Perth: Curting University of Technology.

Van Patten, J.R., Chao, C.I., & Reigeluth, C.M. (1986). A review of strategies for sequencing and synthesizing information. *Review of Educational Research, 56*, 437-472.

Walberg, H.J. (1985). Synthesis of research on teaching. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching*. (3rd ed.). Chicago: Rand-McNally.

Wang, M.C., & Stiles, B. (1976). An investigation of children's concept of self-responsibility for their school learning. *American Educational Research Journal, 13*, 159-179.

Wang, M.C., & Walberg, H.J. (1985). *Adapting Instruction to Individual Differences*. Berkeley, CA: McCutchan.

Wang, M.C., & Walberg, H.J. (1991). Teaching and Educational effectiveness: Research synthesis and consensus from the field. In H.C. Waxman, & H.J. Walberg (Eds.), *Effective Teaching Strategies*. (pp. 81-104). Berkeley, CA: McCutchan Publishing Corporation.

Weber, G. (1971). *Inner-city children can be taught to read: Four successful schools*. Washington DC: Council for Basic Education.

Weber, W.A., Crawford, J., Roff, L., & Robinson, C. (1983, March). *Classroom Management: Review of the teacher education and research literature*. Princeton, NJ: Educational Testing Service.

Weinert, F. & Helmke, A. (1995). Learning from wise mother nature or big brother instructor. The wrong choice as seen from an educational perspective. *Educational Psychologist*, 30(3), 135-142.

Weinstein, C.S. (1979). The physical environment of the school: A review of the research. *Review of Educational Research, 49*, 557-610.

Weinstein, C.S. (1996). *Secondary Classroom Management: Lessons from Research and Practice*. New York: McGraw-Hill.

Weinstein, C.S. & Mignano, A.J. (1997). *Elementary Classroom Management: Lessons from Research and Practice* (2nd ed). New York: McGraw-Hill

Wilen, W.W., & Clegg, A.A., Jr. (1986). Effective questions and questioning: A research review. *Theory and Research in Social Education, 14*, 153-161.

Wittrock, M.C. (1981). Reading Comprehension. In F.J. Pirozollo, & M.C. Wittrock (Eds.), *Neuropsychological and Cognitive Processes of Reading*. New York: Academic Press.

Wittrock, M.C. (Ed.) (1986). *Handbook of research on teaching*. New York: Macmillan.

Wolfgang, C.H. (1995). *Solving Discipline Problems: Strategies for Classroom Teachers* (3rd ed.). Boston, MA: Allyn & Bacon.

Wood, P., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*, 89-100.

Zeigler, S. (1981). The effectiveness of classroom learning teams for increasing cross ethnic friendship: Additional evidence. *Human Organization, 40*, 264-268.

GLOSSARY

GLOSSARY

Advance Organizer — A brief overview of new material relating new concepts and terms to previous learning or providing students with an overview of what is to be learned.

Automaticity — Not needing to think through each step of a process to complete a task.

Brainstorming — Unrestrained and uncensored offering of ideas by all members of a group to seek solutions to problems.

Low Key Tactics — Subtle cues the teacher uses to control misbehavior. Examples: Making eye contact with or using nonverbal signals, etc. with a misbehaving student.

Proximity Control — A technique for reducing off-task behavior where the teacher positions him or herself in close proximity to the problem student(s).

Scaffolding — The process of supporting students in solving problems by providing additional instructions, giving cues, reframing suggestions, supplying additional questions to consider or modeling. The support is gradually removed.

Teaching Strategy — Tools used by the teacher, in presenting new information, that promote effective processing of the information by students.

Unitization — Putting the steps in a process together.

With-it-ness — The ability to monitor a classroom such that the students know the teacher knows what is going on. This requires keeping track of what is happening in the classroom no matter what else must be done. The "with-it" teacher scans the classroom continuously in order to detect and respond to problems quickly and nip problems in the bud.