

# Preface

---

**D**iagnostic classroom observation (DCO), originally developed as a tool for principals and other supervisors of instruction, is a complete system of supervision and evaluation grounded in the real life of today's classrooms. Its primary audience is the building-level principal, providing guidance in a graphic way for the entire supervisory process from preconference, to classroom observation, to postconference and follow-through, to the improvement of practice. While the principal will be the primary beneficiary of the approach, this book has several secondary audiences, including teachers, teacher leaders, and mentors, guiding them to self-assess, consult with peers, and work to improve instruction by presenting vivid examples of the many indicators of successful teaching. It can also help superintendents and school boards or any others in charge of hiring who have included a site visit and classroom observation in their hiring practices. An additional secondary audience includes designers and implementers of teacher preparation programs. DCO can help create accomplished teachers *before* they acquire habits that impede maximum student learning.

This book presents the criteria, indicators, and examples of evidence of DCO. It includes a rationale for each indicator and examples of evidence. In addition, I give examples of many of the indicators with vignettes of how they play out in actual classroom settings for Grades K through 12. The vignettes presented offer a variety of ways of looking at the indicators of the tool. Some of them are positive examples of what it looks like when things are going well. Some depict instances when a well-prepared teacher can "seduce" an observer with a well-run activity that misses the mark. Still others demonstrate how the lack of adequate performance on a particular indicator can seriously affect student learning. These examples come from real-life observations done in the course of my career as a teacher, principal, professional developer, researcher, and consultant, unless specifically noted. These observations include examples from kindergarten through Grade 10. Some of these are composites. (Note that the concepts and strategies explicated should be easily transferable to more advanced classrooms, provided that the teacher and the supervisor have the depth of knowledge in the subject area to be able to make those connections.) The remainder of the examples described are based on portions of videotapes from various series developed to study math, science, technology, and literacy instruction by the Annenberg Foundation/CPB Math and Science Collection (1995, 1996, 2000, and 2002) and WGBH-TV as well as the Southwest Educational Development Laboratory (2000). Finally, I look at the sum total of the three observation criteria (implementation, content, and classroom culture) to see the role that they each play in creating a complete picture of truly effective instruction, demonstrating what it looks like when any one of them is seriously absent.

The observation criteria of DCO adhere strictly to the four assumptions on which it was built: an investigative environment; the merging of content and process; the deepening of learning through dialogue and collaboration, and the necessity for a safe, respectful culture that honors the individual and the collective learning community; and the effective use of technology. Each of the criteria directs the observer to carefully examine teacher choices and actions, student engagement and learning, and the interaction between the teacher and students. The Math/Science Version was the first to be developed, field tested, and used. The Literacy and Composite Versions followed. The format for each of the versions is the same, each containing four sections that are described below. The differences between the Math/Science and Literacy Versions rest in the particular content pedagogy for the disciplines. The Math/Science Version assesses classrooms by the ability to use inquiry, exploration, and scientific investigation to teach fundamental, enduring concepts as outlined in national standards. The Literacy Version focuses on the building blocks of comprehensive literacy from building fluency, depth of comprehension, and analysis and criticism in both reading and writing. The Composite Version is appropriate for the principal who evaluates instruction in many content areas. It combines elements of the Math/Science Version that apply to any good instructional event with key indicators from the Literacy Version that support reading and writing across the curriculum.

DCO was developed to address teaching and learning in real classrooms with the hope of making the benefits of research come to life for our students. The four sections of DCO paint a vivid picture of high-quality classroom practice and extensive student engagement. They are:

- Planning and organization of the lesson

This set of criteria is concerned with the quality of the planning, organization, and structure of the lesson, *not* a written lesson plan. The planning section is designed to be used prior to the observation. It presents a set of questions that can guide a preconference and direct the teacher's attention to what the observer will be watching for. It includes a set of examples for each question to guide the observer's listening as well, and it suggests areas to probe if not immediately present in the teacher's response. Each numbered indicator is preceded by the letters "PO." The full Planning and Organization sections can be found in Appendices A (the Math/Science Version) and B (the Literacy Version), and a detailed discussion about how to use this section in the process of the preconference appears in Chapter 7.

- Implementation of the lesson

This focuses on the effectiveness of the instructional event. Observations of both teacher and student activity are noted, including the efforts to engage students and the actual quality of their engagement. It emphasizes the ability of students to investigate concepts, construct knowledge, and become aware metacognitively of their own learning. Numbered indicators in this section are preceded by the letters "IM." Chapter 2 discusses in detail the implementation of math and science classes, while Chapter 3 does the same for literacy instruction. Each implementation indicator with its examples of evidence appears one by one with explanations and examples. In addition, the full Implementation sections appear in Appendices C (the Math/Science Version) and D (the Literacy Version).

## X DIAGNOSTIC CLASSROOM OBSERVATION

- Content of the lesson

Here we note the content's accuracy, level of abstraction, and connections to other concepts. The section emphasizes how to recognize conceptual closure, correction of student misconceptions, and clear guidelines for judging the effectiveness of student assessment, both formative and summative, which emphasizes student learning. It also notes the ability of the teacher to flexibly deliver the depth of content in accordance with national, state, and local standards. Content indicators are designated with the letters "CO." As with the implementation criteria, the content indicators are analyzed one by one with discussion and examples in Chapters 2 and 3, and appear in their entirety in Appendices C and D.

- Classroom culture

This section assesses the learning environment, including the climate, classroom routines, behavior and the way it is monitored and managed, the level of student engagement, the nature of the working relationships, and issues of equity. Classroom culture indicators are identified with the letters "CU." Because this section is almost identical in both versions, Chapter 4 is dedicated to the issues raised by the classroom culture section with examples given from math, science, and literacy classrooms. Appendices C and D contain the Classroom Culture along with the Implementation and Content sections.

Each section describes standards of behavior for both teacher and students. While this can make the observation process more complex, the payoff comes in a number of ways. First, it more accurately portrays what actually occurs in the classroom—just like the shared juggling metaphor in which the teacher puts the ball into play, but what unfolds depends on the students' next move. Second, it gives the observer many opportunities to engage the teacher in a productive postconference that will focus on student learning and allow the teacher to reflect on the classroom event with less defensiveness and with a more problem-solving approach. The postconferences will be discussed in detail in Chapter 7 along with guidelines and suggestions for making this critical component of the supervisory process a worthwhile investment of time.

## THE STRUCTURE OF THE OBSERVATION TOOL

Rather than present a complex rubric using value-laden terms, DCO lays out some clear criteria for quality teaching, a few key indicators of those criteria, and an accompanying set of bullets, which create not only a vivid picture of the quality indicator itself, but a sense of what that indicator looks like in a live classroom. The quality indicators appear in the left-hand column of the tool. To the right of each indicator is a series of bullets titled "Examples of Evidence." These are observable actions or elements to support the degree of presence or absence of the indicator. This column is called *examples* of evidence as there is no way to exhaust every possible way in which an indicator might be present. The purpose of the second column is to help paint the picture of a classroom where the particular indicator flourishes. Users of the tool are encouraged to add their own examples as appropriate for their own settings. Integration of technology is part and parcel of the other four sections. Quality elements of technology use in the classroom are woven directly into the tool to model the concept that technology is not to be viewed as an "add-on."

Chapter 1 presents an overview of the instrument and identifies the assumptions on which it is built and the knowledge base that supports those assumptions. It demonstrates the ways in which DCO aligns with previous work on classroom observation and qualities that distinguish it from them, enumerating the key distinctions of this observation system. A further look at the comparisons between DCO and three other well-known, effective observation systems (Danielson, 1986; Horizon Research, 1997; Saphier, Haley-Speca, & Gower, 2008) appear in Appendix E, where the areas of alignment and divergence are outlined.

Chapter 2 introduces the Math/Science Version of DCO. Using vignettes of actual classroom performance to illustrate specific indicators and examples of evidence described in the tool, it allows the reader to gain a graphic sense of how these indicators play out in real life. They demonstrate how math and science concepts must be taught in an inquiry-based environment but how inquiry alone can yield an engaging and seductive lesson, which is ultimately void of real learning, or what I have called the “neat activity syndrome.” All indicators in this version are identified with the letters “MS” prior to the indicator number. For example, the third implementation indicator in the Math/Science Version is designated MS-IM#3. Technology indicators appear in shaded boxes and are prefaced with the letter “T.”

“A good idea—poorly implemented—is a bad idea” (Guskey, 2002, as cited in Ainsworth & Viegut, 2006). An additional feature is called, “When good ideas go bad.” These demonstrate the depth of understanding needed to take full educational advantage of the best practice research. These examples help to break through the veneer of best practice and give specific remedies to deepen learning. While the majority of examples of classes described in Chapter 2 are from the elementary and middle levels, there are examples from high school as well. Chapters 2 through 6 end with several suggested methods for administrative or supervisory teams to process together the concepts in the chapter and practice using the parts of the tool. These include discussions, co-observations, and scoring exercises using score sheets provided for training purposes only. (The score sheets appear in Appendix F, and their use is carefully described in Chapter 7.)

Chapter 3 has two sections that embody both “learning to read” and “reading to learn.” Section 1 presents the Literacy Version of DCO, providing real-life examples of the indicators and good ideas going bad. Section 2 contains the Composite Version of DCO. It provides three additional implementation indicators and one content indicator that, when added to the Math/Science Version, become an instrument for the observation and supervision of any content-area class. Although the examples in this section are all from the high school level, they demonstrate how literacy skills integrated across the curriculum enhance learning of any content area and create a metacognitive element to the learning for all students in all grades. Literacy indicators are identified with the letter “L” prior to the indicator number. Indicators that are part of the Composite Version are designated as such. Chapter 3 ends as Chapter 2 does, with suggested discussion questions and activities to practice using the Literacy and Composite Versions of the tool.

Chapter 4 is the classroom culture component of DCO. As both the Math/Science and Literacy Versions are essentially identical, they are presented together, with any differences between them noted as they arise. A unique feature of the classroom culture criteria is the focus on “equity of access.” This refers to many elements of the classroom climate. It encompasses fair and equitable treatment of students as individuals and equal access to the full educational resources of the learning environment, including teacher attention, grouping for maximum benefit to all students, and access to technology.

Chapter 5 focuses on assessment from the standpoint of the classroom observer. It dissects the activities that sometimes pass for assessment and helps you determine whether a teacher is effectively (or even actually) assessing his or her students. Different methods of assessment are discussed, exploring assessments at differing depths or styles of understanding, and examples of useful and not so useful assessment practices are presented to give a clear picture of what good assessment looks like when it's an integral part of instruction. The discussion section at the end of Chapter 5 focuses readers' attention on the assessment practices they have observed and offers some material for discovering what has been taught through analyzing what has been assessed.

Chapter 6 is called "Putting It All Together." This chapter makes the case that despite the common wisdom that nobody is perfect, optimal instruction must address each of the three main criteria. The chapter gives a graphic example of what happens when each criteria in its turn is missing from the instructional mix. There is a discussion about how to use this system to literally diagnose instruction so that you can focus your supervisory efforts for maximum strategic effect and have a real impact on improving instructional practice in your school.

In Chapter 7, I describe the training and research protocols that have helped DCO become truly useful in various settings, and I provide guidance for introducing DCO into your school for the maximum beneficial extent. I give some serious cautions and provide examples of the range of uses that this system can have. I discuss the scoring sheets that appear in Appendix F with information about how and when to use them, with strong caveats about how and when *not* to do so. Here, I speak directly to my primary audience: the building principal. For DCO to have an impact on actually improving instruction, the principal must be knowledgeable and aware of how to best use the instrument. I offer a variety of ways in which the approach can be introduced into a school or school system with suggestions for how to process the information in the book, apply its strategies, and use it to build a professional learning community, either of groups of principals or any of the other professionals who will read and want to use this book. I provide specific tools and guidelines for the preconference, observation, and postconference, which are the sum total of the supervisory process, to make the strongest case I can for principals as instructional leaders, despite the many pressures that draw their attention away from that critical responsibility. I challenge them to fearlessly face the shortfalls in instruction and instructional supervision to really make a difference.

## ACKNOWLEDGMENTS

This book is the culmination of eight years that have encompassed my work and experiences with various people and organizations. I thank each and every one of them for their contributions to my evolving thinking regarding the observation and improvement of teaching and learning, which has resulted in the development of Diagnostic Classroom Observation.

It began at the Vermont Institute for Science, Math, and Technology (VISMT) in 1997. Vermont was designated in the early 1990s as one of several State Systemic Initiatives by the National Science Foundation (NSF). VISMT was a nonprofit organization established to lead Vermont's efforts to support the NSF goal to dramatically transform math, science, and technology education. VISMT was at the forefront