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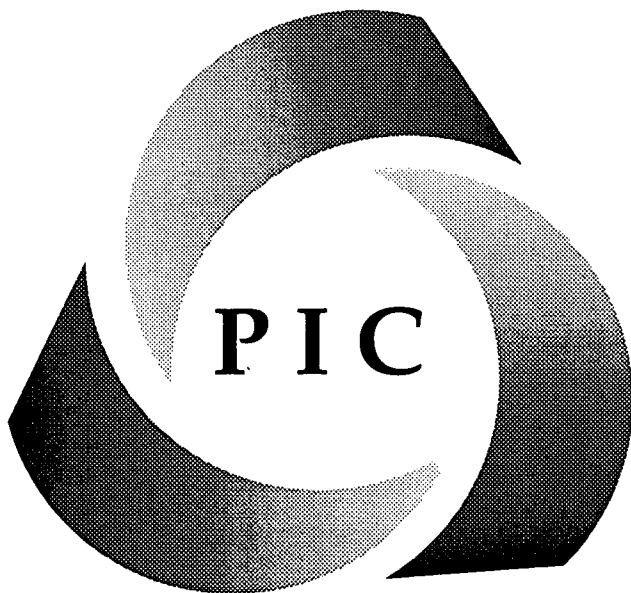PUB TYPE   Guides - Classroom - Teacher (052)
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ABSTRACT
                This publication presents a collection of tools that promote
instructional coherence. It focuses on the importance of teachers
collaborating to develop a deeper understanding of how children learn and
exploring relationships between teaching and learning. Coherence leads to
improved educational experiences for learners as teachers make their
instructional decisions by using both information collected in the classroom
about what and how their students are learning and information from external
sources about what is important for students to learn. The collection of
tools falls into five categories: (1) coherence (understanding the
rationale), (2) learning (placing learning at the center of practice), (3)
dialogue (establishing a dialogue), (4) reflection (developing reflective
practice), and (5) improving student learning (taking action). This
publication presents tools and activities for each of the five areas. An
appendix offers tools and strategies for facilitation, a bibliography of
material to develop understanding about issues of coherence, and masters for
cards used in designated activities. (Contains 20 resources.) (SM)

A Flashlight & Compass:
A Collection of Tools to
Promote Instructional Coherence

PIC

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Introduction to the Collection

Overview of the Design and Explanation of Coherence

Reform has confounded the decision-making process for teachers. Teachers are making decisions in a context that includes new policies, new ideas about learning, curriculum, instruction, and assessment, and a multitude of programs that claim to reflect these ideas. We believe that when teachers collaborate to develop a deeper understanding of how children learn and to explore the relationships between teaching and learning, they are in a better position to make instructional and curricular decisions that lead to coherent teaching practice and improved student learning.

"Instructional coherence" describes the relationship among the components of the system—curriculum, instruction, assessment, external mandates, and community context—that teachers create and communicate to their students. In creating a coherent practice, the teacher intentionally brings the components together with a focus on student learning. Coherence leads to improved educational experiences for learners as teachers make their instructional decisions by using both information collected in the classroom about what and how their students are learning and information from external sources about what is important for students to learn.

To develop this conception, we examined the research. The policy literature stresses systemic reform and the alignment of policy instruments as a means of improving teaching and learning. Studies about teachers' understanding of and response to reform initiatives suggest that the implementation of reform ideas into practice is more difficult than generally expected. We concluded that policy alignment is a good and necessary beginning, but it is not enough. The important issue for coherence in classroom teaching and learning is how the teacher makes sense of his or her work. The recent professional development literature focuses on collaboration and development of professional communities, suggesting that job-embedded learning (collegial groups engaged in dialogue, reflection, and inquiry) helps teachers make sense of and implement new ideas about teaching and learning.

Our Research Study

We used a collaborative research approach to learn about problems faced by typical practicing teachers as they mediate the various reform messages and mandates. We worked with groups of teachers at five diverse school and district sites. The 12-18 teachers at each site met regularly with a facilitator. They

engaged in reflective dialogues about teaching and learning, wrote in journals, participated in activities, tried out new ideas in their classrooms, and visited their colleagues' classrooms.

We learned about the importance of context, about the processes involved as groups of teachers engage in dialogue, and about issues of coherence. From these learnings, we developed a collection of tools and strategies that helped groups of teachers create more coherent educational experiences for their students.

The Process

We believe that teaching and learning can be improved as teachers
- shift their focus from what they teach to what students learn
- engage in dialogue with colleagues about educational issues and ideas
- reflect and be thoughtful as they make choices in their practice

There are multiple paths that might be taken in achieving greater coherence, and teachers may enter the process from various points or perspectives along a continuum of thoughtful practice. Any examination of teaching practice necessitates consideration of curriculum, instruction, and assessment. However, there is not a specific sequence or identical path that must be followed by everyone. Striving for coherence is a journey of continual improvement and sense making by the teacher—not a destination signaling completion or arrival. Individuals continually receive new input and make accommodations or reject it based on their frame of reference or values. Therefore, the process can never be static, fixed, or prescribed.

We have arranged the collection of tools in an order that reflects our understanding of the study group process, but we do not mean to convey that this is a linear process. The following outline provides an overview of the collection.

I. **Coherence: Understanding the Rationale**
   Teachers explore the rationale for considering participation in a study group as professional development and for focusing the initial study group work on an examination of learning. Activities in this section open the conversation about teaching and the role of learning in the professional life of educators.

II. **Learning: Placing Learning at the Center of Practice**
   Teachers learn to put their students' learning needs at the center of their decision making about classroom practices by reflecting on and refining their understanding of how children learn and considering how this understanding informs their teaching. Activities engage participants in collaborative learning experiences that provide a basis for further analysis and dialogue about the learning process.

III. Dialogue: Establishing a Dialogue

When teachers think and talk together about ideas that might be controversial or sensitive, a shared language and a shared understanding of the purpose of the conversation must be developed. Talking in this way requires the establishment of an atmosphere of trust so that substantive issues can be brought to the table. Activities in this section provide opportunities to develop a safe environment where ideas can be shared without fear of criticism or censure.

IV. Reflection: Developing Reflective Practice

Teachers consider some of the deeper philosophical questions that underlie their practices. Through reflection with colleagues and in personal journals, teachers can make intentional, purposeful decisions that promote student learning. The activities in this section provide opportunities for participants to become more reflective about their practice and to incorporate reflection as a natural part of practice.

V. Improving Student Learning: Taking Action

Teachers consider how curriculum, instruction, and assessment fit together and design learning experiences that reflect good choices about what is important for students to learn. When teachers reflect together to establish norms of quality for student work and for teaching practice, they begin to take a more systemic view of coherence. Activities in this section provide a structure for examining participants' particular focus of concern while leading to an incorporation of all aspects of practice.

VI. Appendix

Tools and strategies for facilitation are provided in this section. A bibliography of material to develop understanding about issues of coherence is also included. This section also contains masters for cards used in designated activities.

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A Flashlight and Compass: A Collection of Tools to Promote Instructional Coherence

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I. Coherence: Understanding the Rationale

Introduction

Teacher learning is the cornerstone to school reform and improvement. Without paying attention to teacher learning and providing structures to support that learning, school reform efforts are not likely to be effective or enduring. When teachers are able to work with colleagues, considered what they believe and understand about learning, refine that understanding by working together, read, have new experiences, and engage in dialogue they are able to make choices about curriculum, assessment, and instruction that focus on the learner. As teachers see the connections, interrelations, and a need for developing a more coherent practice, the boundaries between curriculum, instruction and assessment blur. Teachers come to realize that by focusing on learning and the learner, they are better able to understand how the pieces fit together.

Significant changes to improve student learning occur when teachers develop a stance toward each of six dimensions—authority, agency, professionalism, collaboration, knowledge, and instruction—that focus on learning and the learner. As teachers develop a stance toward authority that relies on their understanding, they became sense-makers who figured out the relationships between external demands or mandates and the learning needs of their students. As they develop a stance toward agency of having the power and responsibility to impact student learning, teachers take themselves off center-stage and put learning there. As they develop a stance toward teaching as a profession, they take responsibility for their own growth and learning and become thoughtful and reflective practitioners. As they develop a stance toward collaboration as a learning experience, teachers form a relationship of interdependence with their colleagues that provides support for making changes in the classroom. As they develop a stance toward knowledge as constructed, they see themselves and their students as meaning-makers. And as they develop a stance toward instruction as focused on learning, they change classroom practices to better reflect their understanding of learning.

A group's dialogue and participation in activities support developing a stance or a point of view from which to make decisions based on what is good for learners. Professional developers can learn to attend to these dimensions in working with teacher groups in order to help them move along the dimensions. Purposeful activities can help teachers look at teaching and learning in different ways. By asking questions and creating situations that uncover and examine assumptions and beliefs, barriers to improvement may be removed and concerns and issues used to help teachers explore connections and relationships. Coherence is a relationship issue, not an issue of materials or policy.

Dialogue, inquiry, and reflection can promote teacher learning and growth. Teachers are professionals who construct their own knowledge of teaching and learning, and as such, can and should be partners in generating knowledge of teaching. Teachers can learn to focus their decision-making on students and learning. Professional development should support them in their efforts.

Activities in this section:

- Activity 1: Restoring Meaning to Teaching
- Activity 2: Constructing a Story
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Activity 1: Restoring Meaning to Teaching

A reading for use with teacher study groups.

This reading may be used to interest participants in becoming part of a study group. It may also be used as a group activity to begin the study group process. The facilitator might want to have participants write about their reactions to the ideas presented. After some time into the study group process (six months to a year), participants might find it beneficial to re-read the piece, their earlier reflection, and then discuss differences in meaning it may have for them.

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Restoring Meaning to Teaching

By drawing on the stories, experiences, and feelings of teachers, we gain insight into the complex nature of teaching today. We read teacher stories about the challenges, dilemmas, and successes of teaching. We hear of their frustrations and their joys; we see their smiles and their frowns. They talk about their difficult students and their easy ones, their good days and their bad. They describe unimportant and irrelevant workshops and others that led to some critical insight or skill. They speak about reforms and new curricula that might hold promise, but are pushing them to the limit with more paperwork and demands on their time. They are excited about some changes and overwhelmed by others. We see, however, that most teachers keep searching for what works despite the many challenges they face. Through this paper, we offer encouragement and guidance in that search.

We, the authors, are also educators who have felt overwhelmed and frustrated and have tried many educational solutions, but we, like you, have also had successes and felt satisfaction. Concern about effective teaching has driven our current work as researchers. We believe that there are ways to search for answers and insights to rejuvenate your practice that are often overlooked. In this paper, we share ideas that come from a research project that involved more than 75 teachers in five states. We invite you to carefully consider what we have learned and how it might help you find more satisfaction and joy in your teaching.

The teachers, whose words are quoted in italics in this paper, participated in study groups of 12-18 teachers that we supported as part of a research project. The teachers met with a facilitator every two to three weeks to have conversations about teaching and learning. They learned from and with each other as they explored their beliefs and assumptions about teaching, tried new approaches in their classrooms, read articles, wrote in their journals, and visited

each other's classrooms. These were ordinary teachers from typical rural, suburban, and urban schools in the Southwest who set aside a few hours a month for group meetings after school, during early release time, or on weekends.

People have lots of reasons—some philosophical, some practical—for becoming teachers. Most of us, beginning and experienced teachers alike, envision and aspire to be the ideal teacher who is a nurturer, guide, facilitator, or maybe a performer. But on those frustrating days that come all too frequently in the real world—as real teachers in real schools with real children—many practicing teachers feel more like survivors, lion tamers, or control freaks, and they wonder what happened.

Do you ever ask yourself why you stay in teaching? As we began our work with the teachers, we heard that question in their voices.[1]

> *We are on information overload—we never have enough time.*
> *The chore of being a teacher is overtaking the joy of teaching.*

We know that it is difficult to be a teacher these days. Expectations are higher, but time, tools, and resources remain scarce. Teachers' frustrations are real—we see it in their faces and hear it in their voices. We wonder if you, like so many teachers today, have found that the sense of purpose and promise with which you first entered this profession is draining away in the daily flood of tests, trainings, curriculum committees, evaluations, paperwork, troublesome parents, and troubled children?

A sense of purpose in your work is not something that someone else can give to you, but we think that you can find it again for yourself with persistence and support. Our experience working with teachers suggests that they hope to increase their successes and satisfaction but are unsure how to turn their hopes into reality. They stay in the profession because of the promise of having positive interactions with kids that lead to learning. A sixth-grade teacher, Carrie,[2] said

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[1] We use the written and spoken words of participating teachers who were in various stages of self-reflection and inquiry.

[2] We use pseudonyms for the teachers' names.

> *The main thing I try to do is focus on the positives that I have as a teacher. I vent about the negatives but don't dwell in them. If I were to get sucked into the negatives, I'd end up as a greeter at Wal-Mart instead of an educator. Luckily, a small token from just one student can make it worthwhile—when I see the discovery in their eyes. What other job offers that?*

Some days, however, the negatives in the job blind teachers from looking for the light in the students' eyes. Through our work, we see a dilemma in teaching that causes the frustration and despair experienced by some teachers. Teachers feel compelled to serve so many masters[3] that they find it difficult to remember and pay attention to the fundamental reason for going into teaching—the children and learning. They become overwhelmed by new demands—standards, tests, checklists, or forms—and are left with "no time to care for or connect with their students. When this happens, teachers feel that their fundamental purposes have been lost—with catastrophic results for their commitment and effectiveness" (Hargreaves, 1997, p. ix).

In our work with teachers, we are discovering that the "solution" to this dilemma lies more in internal commitment and transformation than in external programs. Asking and answering the "hard" questions about teaching practice can spark this transformation. At one of our research sites, for example, a group of teachers was discussing how to be more purposeful and thoughtful in their teaching. They developed a set of questions to keep critical issues in the foreground as they planned lessons and made decisions. The voicing of questions for consideration pushed the teachers to examine their assumptions about teaching and learning in an open dialogue that gave voice to their feelings, beliefs, values, dilemmas, and tensions. We hope the questions we raise in this paper will likewise spark your interest and prompt your reflection on the decisions you make in your teaching practice.

Parker Palmer, author of *The Courage to Teach*, asks, "How can we who teach reclaim our hearts, for the sake of our students, ourselves, and educational reform?" (1998, p. 19). He believes that "when you love your work, the only

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[3] State and national policies, district and campus rules and guidelines, professional society recommendations, community expectations, and so on.

way to get out of trouble is to go deeper in" (p. 2). Going deeper takes courage as you carefully and critically consider the teaching and learning that happens in your classroom. We have come to believe that three key strategies can guide your efforts to improve student learning and make your work more meaningful and satisfying:

- shifting your focus from what you are teaching to what students are learning,
- talking with colleagues about educational issues and ideas, and
- reflecting and being thoughtful as you make choices in your practice.

We offer ideas—not a map, but a flashlight and compass—to help you find your own path as a teacher through the maze of educational trails.

Making Student Learning Central to Teaching

Every dedicated teacher is concerned about student learning. However, the day-to-day pressures of teaching, much of the dialogue about educational ills and improvements, and professional training tend to push attention toward what *teachers* do rather than toward what *students* learn. We see that it is critically important to make student learning the central focus of instructional decision making. This involves a thoughtful examination of the process of learning. Carol, a seventh grade teacher, wrote in her journal,

> *It still amazes me when you think you have taught a concept so well and still a couple of kids bomb a test. Is it that they are just bad test-takers? That they don't seek assistance when they have no clue? That they are not developmentally ready to grasp the concept? That I am not really teaching what I think I am teaching? That they need more practice to really learn the concept? It could be all of the above. It depends on the student and the situation. Seeing their work and making them talk about their work and their understanding of the concept gives the teacher vital information as to what next step should be. . . .Teaching the same thing [over again] in the same way will not necessarily produce successful learning. I must target the specific problem.*

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Carol has begun to question the relationship between her teaching and her students' learning. However, teachers' views of *how* children learn often go unexamined. As Bruce Pirie, an English teacher and author, says

> For most of us, our teaching has been formed by a few influential teachers from our own schooling, a handful of respected colleagues, readings from books or journals, and the push and pull of classroom realities. From this, we assemble a practice that keeps us going, but which has not always been scrutinized in its assumptions or challenged for inconsistencies. (1997, p. 6)

Most of us focus primarily on the methods of practice—the *hows*—and pay less attention to the foundations and directions—the *whys*. Examined or not, those ideas that constitute the foundations (such as views of how children learn and the purposes of schooling) impact our decisions about instructional practice.

Examining beliefs about how children learn

Ten teachers[4] from two schools are sitting in an elementary classroom. They have recently begun meeting every couple of weeks to talk about teaching and learning. The following perspectives are from their dialogue about learning, a dialogue that occurred in their third two-hour meeting.

> Beth: *Learning involves repetition, lots of repetition—doing things over and over again—that's how kids learn. They have learned it if they can repeat it, answer the questions.*
> Jane: *In learning, hands are doing and the learning comes from what they are doing. Learning is demonstrated by students' actions—we know that they have gotten it when they can do something.*
> Carrie: *I picture learning as someone pouring stuff into your head from the pitcher of knowledge, feeding stimuli, helping you learn. Learning is taking in new things. I don't really know what it is, learning is this vast, vague thing. What is the difference between learning and regurgitating things?*
> Maureen: *Well, students are not learning when the teacher is talking all of the time. That stuff just bounces off the kids. Learning is better when it is generated from the child's interests.*

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[4] In this paper, the dialogue excerpts are from one study group and are used to illustrate the kinds of conversations that occurred in all five of the study groups. Other quotes and examples are taken from the other four study groups.

> Lisa: *I think that students have to construct their own knowledge and that is based on what they bring with them—their prior knowledge—and what experiences the teachers provide. Experiences have to be meaningful, hands-on and connected to student lives.*

To put learning at the center of instructional practice, it's necessary to understand learning. The teachers above are beginning to examine their personal ideas about *how* learning happens, ideas that come from their educational experiences as children, students, parents, and teachers. Our first ideas about learning come from our childhood interactions with our parents, teachers, other adults, as well as our peers. How did they teach us, motivate us, reward us, or punish us? What did we experience that helped us learn or that prevented us from learning? As adults, we modify, refine, or extend our beliefs about learning based on new experiences.

During preservice, most of us learned a lot about being a teacher and little about learning. Until the mid-1980s, education professors projected the view of learners as passive beings, blank slates, or empty vessels. They focused on the *teacher, teaching* processes, *teaching* materials, and *teaching* outcomes. Teachers were seen as the holders of knowledge and learners as passive receivers of information. A number of different views of learning persist and exert influence on teaching practice, although understanding about how learning happens has become more sophisticated over time.

The instructional strategies we use today originate with theories of learning that were popular at different times in the past. Broadly speaking, we use drill and practice (behaviorism); information processing strategies such as selecting, organizing, integrating, and memorizing (the cognitive view of learning); and active learning strategies such as hands-on inquiries, collaborative work, reflection, and metacognition (constructivism). Constructivism is a complex theory of learning that emphasizes the active role of the learner and is currently accepted by many educators. However, our standard instructional practices most often place students in the role of passive receivers of expert knowledge. Even as we've tried to shed these representations, few of us have taken time to consider what ideas and images, if any, have replaced them.

Our ideas about the learning process remain largely unexamined or unconscious, and yet they influence the instructional choices we make every day. Researchers Renate and Geoffrey Caine study contemporary learning theory in an attempt to link it to classroom practice. They conclude that one of the most fundamental issues in educational improvement "hinges on the understanding that [teachers] have about how human beings learn" (1997, p. 9). By exploring one's own beliefs about learning, rethinking these beliefs, and remaining open to new ideas, one can learn to be more thoughtful about which ideas and approaches are appropriate for different learning situations.

We can ask ourselves reflective questions to help focus attention on learning. Are my images of school about teaching or about learning? How am I thinking about learning? How do children learn? Looking at teaching practice through the lens of learning, we begin to see children in new ways.

Thinking of children as learners

Karen Gallas, a first grade teacher, researcher, and author, watches children, collects their artwork, notes, and doodles, and records their conversations. She shares her insights as stories of children. She tells of a homeless child, an immigrant child, and a typical "bad boy." The vignette used in this section illustrates her view of a child as a learner.

> As we begin our weekly science talks, I am somewhat apprehensive about how the open-ended structure of the talks will work with Michael [the "bad boy"] as a participant. He still has great trouble censoring the words that come out of his mouth...The question under consideration for our first science talk is: How did animals begin?...As the discussion begins, the children are extremely settled. Early on in the talk Michael...gets up on his knees, and Anita [the aide] and I make eye contact. I know we are both wondering what that movement signals. (1994, pp. 62)

A common tension for teachers is balancing the needs of the group with needs of the individual child. Gallas has chosen an instructional strategy that she believes is best for the group. She has some concern, however, about the reactions of Michael and so pays close attention to him.

> As I watch, it becomes clear that his erect posture mirrors an intellectual excitement that he can barely contain. Michael speaks frequently in the talk, maintaining an earnest and wide-eyed attitude. He shows an unusual interest in adopting parts of other children's thoughts, expanding them, and is effusive in his praise of others... (Gallas, 1994, pp. 69)

Michael found the question interesting and was drawn into the learning situation *as a learner*. We generally think of the children in our classrooms as *students*. Schools create a picture of a "good student" based on exemplars of behavior, obedience, respect, and performance, but they do not tend to create a similar picture of a *learner*. We all remember a child who was a wonderful learner but not a very successful student. To know a child as a learner, we must talk with her, observe her, see what she understands, and examine how she understands. Focusing on learning involves finding out what your kids know, how they think, how they learn, what's important in their lives, and what experiences and stories they bring to school.

A second grade teacher learned to really listen to her students and draw out their ideas and understandings by using a problem-centered curriculum approach, small group collaboration, and large group discussions. She learned, for example, to "suspend her own adult knowledge about mathematics and to realize that children have their own way of thinking about mathematics" (Wood, Cobb, & Yackel, 1995, p. 417). She was amazed to find that her students' thinking was far more sophisticated than she had imagined. She said, "I never knew second graders knew so much about math" (p. 417). Gallas says that when we take the time to listen carefully to their stories, we gain insights into children's thinking and learning.

> By looking carefully at the stories of bad boys, I have been able to change my response to their actions. My response has moved from a purely visceral, defensive reaction toward a child who threatens my ability to control a class, to one of examining what that child is telling me about his needs as a learner and his view of the world. (Gallas, 1994, pp. 70)

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As we search for the history and logic that underlie "problematic" behaviors by looking "for the story the learner would tell if he could," we learn a great deal about the child as a learner (Greenleaf, Hull, & Reilly, 1994, p. 526). How do his background, experiences, and knowledge come into play in the classroom? How do classroom activities look from his point-of-view? As we learn about and from our students by facilitating more open-ended classroom discussions, for example, we can make better decisions about what is important and meaningful for them to learn.

Deciding what your students need to learn

We rejoin the study group teachers who have now been meeting for more than a semester. The following are highlights from their dialogue about teaching and what is important for students to learn.

Maureen: *I really enjoy teaching from March through May because the test monster is not coming to bite off our heads and tell us how horrible we all are. The kids can learn a few things that they will remember and be able to use later.*

Beth: *Last year, I was trying to do everything I thought I was supposed to. Now I am thinking more about what is important, I know more where my focus is. There is less stuff, but more time spent on the important topics.*

Lisa: *It is difficult, but I am trying to figure out what is important for me to teach and for them to learn.*

Jess: *In the first-grade meeting, we decided what was fluff in our curriculum and what was important. . . . and then took out the fluff.*

Pat: *I was trying to rush through so many things in the past years that I didn't have time to sit down with them and look at what they were writing or see if they'd got the meaning of the story. But now I've even started to throw away some of the topics and activities—you just can't cover everything.*

Ellen: *I have been one in the past who taught one unit for only one week. All this does is expose the student to a subject. It does not allow time to learn. I am not doing that anymore.*

The teachers are becoming more reflective about their decision making, asking themselves, *What do our students need to know?* Most of us believe that students need more than facts, formulas, and vocabulary; they need a grasp of

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larger concepts, as well as skills that can help them work through problems on their own. But what are those big concepts? What do students need in order to understand those concepts? How do students learn the necessary skills? When do they learn them? How can we help students link what they have encountered and will encounter in other classes and at other grade levels? These are difficult but important questions, questions that help establish and maintain a focus on student learning.

Teaching decisions are often based on the textbook, available activities, or favorite topics without real consideration of the concept to be learned. Jess, a first-grade teacher in the group above, struggled with the question, *Why do I teach bats?* She was perplexed at first, but she did come to an answer—she wants her students to understand the characteristics that all mammals, including unusual ones like bats, have in common—and she redesigned her unit to make this purpose clearer. She still "teaches bats," but now focuses her entire unit on her real reason for teaching about bats.

Splintered Vision, a recent report on the Third International Mathematics and Science Study of instruction and student outcomes in a number of countries, concluded that, "Our [U.S.] curricula, textbooks, and teaching all are a mile wide and an inch deep" (Schmidt, McKnight, & Raizen, 1996). If you've had any exposure to recent reform ideas, you've no doubt heard the phrase, "less is more." This tricky but useful concept doesn't really mean that you *do* less in the classroom. Rather, you relinquish *breadth* of coverage for *depth* of coverage, introducing fewer topics, each of which is explored in greater depth and detail. Students investigate ideas and information in more meaningful ways, and teachers have time to discover what their students are actually understanding. After experimenting with this approach, one teacher told us,

> *I'm coming to the idea that less really is more, but I am having difficulty in deciding where the less is.*

Deciding where the less is—determining where to cut and where to go deeper—is not always a simple task. The state or national standards provide guidelines that may help us decide what is important for students to learn.

However, many of us don't have the experience needed to use these documents in any way other than as a list of topics "to cover." By taking the time to explore the rationale behind the development of the standards with colleagues and being thoughtful about what is truly important for students to learn, our choices may become clearer.

Pulling it together

After participating in the group for a year, the study group teachers are reflecting on changes they have made in their practice.

Beth: *As we talked about being more thoughtful, I found it became easier to explain what I was doing in class to other people, I can say that this is what is important for these kids, instead of relying on what the book says.*

Lisa: *There are so many ways of teaching, so many books, so much involved. . . . It is good to get together to talk about what we do, to learn to be thoughtful. I have thought deeply about the choices I make, about the big concepts my students need to learn. I have gained confidence that I can make good decisions about what I should be teaching and what the kids should be learning. I cover fewer topics, but I do it so that the students learn how to really use the math concepts—to really understand them.*

Sue: *It is quality not quantity. . . . I gave up a lot of structure and the students struggled with it, but the whole atmosphere in the classroom is better. Building a trust-based relationship with these students has taken from August to now. I know how hard I have worked, and I think they realize it.*

Maureen: *I have been thinking about what kids are going through in school, how they are thinking. I have really changed the way I do things in the classroom. I have changed my whole approach to teaching—I am giving choices, letting go of the control.*

Jill: *I have incorporated Montessori methods into my reading and my kids seem more enthusiastic. . . . I am looking at them in a new way, looking to see when they understand. If you had been in my classroom last year and then come in this year, you would see that I have changed everything I do. The kids want to come to my room. . . . Karen said I would be able to feel it when kids are concentrating, everyone learning, and I had that experience the other day. I had people observing in my room when it happened, and I wanted to say, "Did you feel it? Did you feel it?" And they did, I didn't really ask them, but they told me.*

The teachers in the project questioned their decisions and evaluated their choices in terms of the needs of their students. Remember the dilemma mentioned earlier—of serving the many masters on the one hand while remaining true to personal beliefs about being a teacher on the other. With a clear focus on student learning, the teachers found it easier to deal with the problems created by this dilemma. By standing back, evaluating the problems, and asking, "What does this have to do with learning?" teachers were empowered to make choices that were good for kids. Maureen is less driven by the "test monster," Beth selects the important topics for her special education students to learn, and Lisa focuses on helping her students learn to *use* math concepts.

Knowing your colleagues

At the end of the project, the teachers talked about their experiences with their teacher study group.

> Jill: *We shared our individual successes and failures in an environment without judgment, everyone was willing to help or offer suggestions, support, and new ideas.*
>
> Anna: *I have really looked forward to these meetings. You always leave here with new ideas. It was rejuvenating.*
>
> Lynn: *I realized I was not alone, that other people were having problems.*
>
> Lisa: *We looked at how children learn and the relationship to our teaching, but without a rigid format. Flexibility and collegiality were really important.*
>
> Carrie: *We never have a time to really be with other teachers. We need to be able to vent with colleagues on this level.*
>
> Maureen: *We had interesting and deeper conversations. This was the first time I have ever met with a group of teachers where I was not afraid to say what I wanted. It was a safe place.*

The teachers used the study group to explore ideas together, consider alternative viewpoints, and establish common ground. They found it meaningful to engage in a process that involved explicating and questioning their theories, beliefs, and assumptions about teaching and learning with colleagues. As they engaged in personal and group reflection, the teachers began to value and also question the knowledge and expertise that they brought to teaching. They also

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identified areas where they needed to improve. Even the least experienced among us has what Parker Palmer describes as "a teacher within," an inner voice that—if we attend to it—can help guide us to our best work. This inner voice "is not the voice of conscience but of identity and integrity. It speaks not of what ought to be but of what is real for us, of what is true" (1998, p. 30).

Carrie, who started the project with the view of learning as "someone pouring stuff into your head," found that working with colleagues had a positive impact on her practice. She wrote,

> *I do a lot more analysis of myself as a teacher of children and as a part of an adult community of teachers. I find that I try much harder to really understand how kids learn. This group. . . allowed me to feel comfortable enough to share who I am as a teacher and as a person. . . . It gave me a great feeling of respect for my fellow teachers, and I, in turn, felt highly respected. . . . Also, I am trying much harder to make sure that what I teach my kids has a purpose and has meaning.*

Teachers in the five study groups found answers and insights to rejuvenate their practice by becoming learners themselves. Jennifer talked about how she has changed her perception of herself and her profession.

> *I followed the teacher's manuals faithfully. I figured that these people had done a lot of research and knew more than I did. Now, I have more confidence in me. Having the time to talk to other teachers and hear their views has helped me have the courage to try some different things. Now, my objective is for both my students and me to know what is important and what is expected. . . . Talking to other teachers has given me the time to reflect on exactly what I'm doing and how to make it better. . . . I trust teachers who are in the classroom daily. . . . I have renewed my joy in teaching.*

The teachers in the groups found some strategies helped them make better decisions that focused on student learning. Carol said she began to really observe what was going on in her class, and Camille said she started asking for input from her kids and involved them in classroom decisions. Elizabeth tied the group process to the overall improvement of her teaching.

Just getting to know my fellow teachers as professionals has changed the way I teach. . . . [Now] I see my job as to help my students learn, help them learn how to learn, and help them assess their own growth and learning.

In the teacher study groups, teachers examined their choices about curriculum, instruction, and assessment. Together, they developed an understanding of learning and of students that could guide their instructional decision-making. They learned that each of them had knowledge of teaching that is valuable, and this was empowering for them.

In Conclusion

Improving teaching practice is an immense and unending process. There have been many major reform initiatives and programs, and yet they have resulted in fewer enduring improvements than expected. It has become clear that there are no easy answers, so we can assume that meaningful educational change will be difficult, complex, and even controversial. The encouraging news is that you have the ability to choose your own pathway to improve teaching and learning in your classroom. It is, after all, your thinking, your decisions, and your actions that impact your students and their learning. The study group teachers decided to join our project because they were concerned, for example, about how to help students who weren't successful learners, how to know if students understood concepts, how to teach science in elementary grades, or how to use new state standards. The teachers in our project found that thinking and talking with others about their concerns was a valuable first step. Then, through reading, inquiry, and dialogue, each teacher decided how to go about improving his or her practice.

The study group teachers said that participation in the facilitated teacher study group, with its focus on student learning, helped them find new meaning in their teaching practice. Specifically, they reported that, through this process, they

- built a support network of colleagues
- engaged in meaningful dialogue about educational issues, ideas, and practices
- came to understand more about themselves as the teachers they are and want to be
- examined, reflected on, and refined their understanding of learning
- used their understanding of learning to make better decisions about teaching
- improved student learning in their classrooms

The study group process and the time it requires are not generally supported by traditional school structures. However, there is a changing view of professional development that has led many administrators to creatively carve out the time for teachers to learn together in this way (Murphy, 1997). The teachers said that they felt that the process was so worthwhile that they were willing to find the time in their busy schedules. One teacher said

At first, I thought I had made a mistake. Was I crazy to try and do the study group when I was also taking a graduate course and going to the usual workshops, team meetings, and so on? In the end, I realized that I got more out of this group than out of all of that others—I should have dropped the graduate course!

The teachers came to see how placing learning at the center of their teaching could help them reach their ultimate goal of improved student learning. They would agree with teacher educator Andy Hargreaves, that effective school change requires both individual voices and a collective vision. He said, "A world of voice without vision is a world where there are no means for arbitrating between voices, reconciling them or drawing them together" (1994, p. 251). A project teacher observed,

If we are to be at our best as a system, then we must share the vision, we must see, together, the end of the tunnel.

There is a lot of interest currently in helping teachers build professional confidence and understanding so that they have the tools needed to improve teaching practice for the benefit of students. Researchers and teachers alike are

finding that some professional development strategies are more successful than others in supporting teachers in their improvement efforts. We found that the use of study groups was a successful strategy, although there are undoubtedly other approaches that also promote teachers' professional growth. The ideas of teacher learning and sense making were key for us. Study groups provided teachers with the time, support, and structure to make sense of the impact of their choices on student learning and this opportunity for dialogue and reflection helped them to be more thoughtful in their choice-making. We have confidence in this process and invite and encourage you to join colleagues in reflective dialogue, guided activities, journal writing, and collaborative inquiry as members of a facilitated study group.

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[5] Annotations of these references are available in the Promoting Instructional Coherence Annotated Bibliography, available on-line at http://www.sedl.org/pitl/pic/bib.html

Text Box--goes on page 3 near "In our work with teachers, we are discovering..

Field notes from a study group meeting.
These questions are the ones we should ask about our teaching:
- *How do I decide what to teach and why?*
- *In this lesson, what do I want my students to learn?*
- *Why is it important for these kids to learn this?*
- *How will I teach this concept so that my students can learn it?*
- *How will I know if they understand the concept?*
We need to go further. We are not just teachers. Other questions can help us think about our lives as teachers and people:
- *What can I do to keep my life in balance?*
- *How am I growing—personally and professionally?*
- *Whom am I doing this for?*
- *Where do I go for support?*
- *How can I be supportive of others?*

Activity 2: Constructing A Story

Why do this activity?

It has frequently been assumed that providing workshops to inform teachers about new instructional strategies and telling them how to use them will result in the strategies being implemented in their classroom. The reality is quite different. Adults learn by doing—experiencing, practicing, and reflecting.

What should participants experience?

This activity is designed to serve as a metaphor for the learning process in the educational system. Participants will experience the confusion of trying to construct a story when the parts do not readily fit or make sense together. They will share their understanding of relationships among the components of the educational system and develop a better understanding of the process of creating coherence or understanding.

Time Required

50–60 minutes

Materials

Set of story cards for each group of 3–4 (masters are located in Appendix)
Overhead transparencies and pens

Facilitation Guide

1. Distribute the story card sets to a group of 3–4 participants and tell them that their task is to create a story that makes sense to them using the cards. Do not give any other specific details. They will have about 20–30 minutes to complete the task.

2. Circulate among the groups to clarify the task if needed and to listen to the process they are using to complete the task.

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3. When all groups have completed their story ask each group to pair up with another group and take turns telling the gist of their story. After both groups have told their story ask them to describe how they created their story and to reflect on the differences they noted in the two versions. Each combined group should have a recorder to compile their thoughts.

4. Facilitate a whole group discussion around one of the following questions:

    How was creating a story from excerpts on the cards like the experience students have in making sense of their school experiences? (to focus the attention of a mixed group of participants on a student's experience)

    or

    How was creating your story like the process a teacher goes through to construct coherent, meaningful educational experiences for their students? (to focus attention on the work of teachers)

    Record responses on overhead.

5. Closure:
    Ask participants to identify lessons this experience has for their work and record ideas on overhead.

Examples of previous responses

We used prior knowledge.
There were gaps that had to be invented.
There was more than one story there.
We started over a lot
We discarded the things that didn't make sense.
Our personal contexts changed the interpretation.
Collaboration helped reach the objective.
The task created a sense of disequilibrium.
We had to make sense of the task.
Working together kept the group on task.
We must see a need to complete the task.
We were looking for the one right answer.
Time constraints made the task more difficult.

Sources for Constructing a Story Cards

Each story source and sections taken from that source are listed below. Card masters for reproduction are included in the Appendix.

Carter, Angela (1985). *The Company of Wolves.* In Gilbert, Sandra M & Gubar, Susan (Eds.), The Norton Anthology of Literature by Women. New York: W. W. Norton Company.

It is midwinter and the robin, the friend of man, sits on the handle of the gardener's spade and sings. It is the worst time of all the year for wolves, but this strong minded child insists she will go off through the wood. She is quite sure the wild beasts cannot harm her ... she lays a carving knife in the basket her mother has packed with cheeses... bottle of harsh liquor ... a batch of flat oat cakes ...a pot or two of jam. The flaxen haired girl will take these delicious gifts to a reclusive grandmother so old the burden of her years is crushing her to death. Granny lives two hours' trudge through the winter woods, the child wraps herself up in her thick shawl...she steps into her stout wooden shoes, she is dressed and ready and it is Christmas Eve. The malign door of the solstice still swings upon its hinges, but she has been too much loved ever to feel scared.

It is winter and cold weather. In this region of mountains and forest, there is now nothing for the wolves to eat. Goats and sheep are locked up in the brye, the deer departed from the remaining pasturage on the southern slopes–wolves grow lean and famished. There is so little flesh on them that you could count the starveling ribs through their pelts, ... those slavering jaws; the lolling tongue; the rime of saliva on the grizzled chops–of all the teeming perils of the night and the forest, ghosts, hob goblins, ogres that grill babies upon gridirons, witches that fatten their captives in cages for cannibal tables, the wolf is worst, for he cannot listen to reason.

Snow half-caked the lattice and she opened it to look into the garden. It was a white night of moon and snow; the blizzard whirled round the gaunt, gray beasts who squatted on their haunches among the rows of winter cabbage, pointing their sharp snouts to the moon and howling as if their hearts would break. Ten wolves; twenty wolves–so many wolves she could not count them, howling in concert as if demented or deranged. Their eyes reflected the light from the kitchen and shone like a hundred candles.

Chase, Howard L. (1956). Ladle Rat Rotten Hut. Anguish Languish. Englewood Cliffs, NJ: Prentice-Hall.

Daze worry on-forger-nut ladle gull's lest warts. Oil ofer sodden, caking offer carvers an sprinkling otter bet, disk hoard-hoarded woof lipped own pore Ladle Rat Rotten Hut an garbled erupt.

Inner ladle wile, Ladle Rat Rotten Hut a raft attar cordage, an ranker dough ball "Comb ink, sweat hard,"setter wicket woof, disgracing is verse. Ladle Rat Rotten Hut entity bet-rum and stud buyer groin-murder's bet.
"O Grammar!" crater ladle gull historically, "Water bag icer gut! A nervous sausage bag ice!"
"Battered lucky chew whiff sweat hard," setter bloat-Thursday woof, wetter wicket small honors phase.
"O Grammar, water bag noise! A nervous sore suture anomolous prognosis!"
"Battered small your whiff, doling," whiskered dole woof, ants mouse worse waddling.
"O Grammar, water bag mouser gut! A nervous sore suture bag mouse!"

Dahl, Roald. (1997). *Little Red Riding Hood and the Wolfe*. The Roald Dahl Treasury. New York: Viking.

He sat there watching her and smiled.
He thought, I'm going to eat this child.
Compared with her old Grandmamma
She's going to taste like caviar.

When Grandma opened it, she saw
The sharp white teeth, the horrid grin,
And Wolfie said, "May I come in?"
Poor Grandmamma was terrified,
"He's going to eat me up!" she cried.
And she was absolutely right.
He ate her up in one big bite.

And Wolfie wailed, "That's not enough!
I haven't yet begun to feel
That I have had a decent meal!"
He ran around the kitchen yelping,
"I've got to have a second helping!"

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Garner, James Finn. (1994). *Little Red Riding Hood*. <u>Politically Correct Bedtime Stories</u>. Retrieved September 23, 1998. [WWW Document] URL http://remus.rutgers.edu/~rhoads/Jokes/PC/red_riding_hood

"You know, my dear, it isn't safe for a little girl to walk through these woods alone."

But because his status outside society had freed him from slavish adherence to linear, Western-style thought, the Wolf knew of a quicker route to Grandma's house.

Red Riding Hood said, "I find your sexist remark offensive in the extreme, but I will ignore it because of your traditional status as an outcast from society, the stress of which has caused you to develop your own, entirely valid worldview. Now, if you'll excuse me, I must be on my way."

"And what do you think you're doing?" asked Red Riding Hood..."Bursting in here like a
Neanderthal, trusting your weapon to do your thinking for you!" "Sexist! Speciesist! How dare you assume that womyn and wolves can't solve their own problems without a man's help!"
When she heard Red Riding Hood's speech, Grandma jumped out of the Wolf's mouth, took the woodchopper-person's axe, and cut his head off. After this ordeal, Red Riding Hood, Grandma, and the Wolf felt a certain commonality or purpose. They decided to set up an alternative household based on mutual respect and cooperation, and they lived together in the woods happily ever after.

She replied, "Some healthful snacks for my grandmother, who is certainly capable of taking care of herself as a mature adult."

"Grandma, I have brought you some fat-free, sodium-free snacks to salute you in your role of a wise and nurturing matriarch."
...the Wolf said softly, "Come closer, child, so that I might see you."
Red Riding Hood said, "Oh, I forgot you are as optically challenged as a bat. Grandma, what big eyes you have!"
"They have seen much, and forgiven much, my dear."
"Grandma, what a big nose you have--only relatively, of course, and certainly attractive in its own way."
"It has smelled much, and forgiven much, my dear."
"Grandma, what big teeth you have!"
The Wolf said, "I am happy with who I am and what I am" ...He grabbed Red Riding Hood in his claws...Red Riding Hood screamed, not out of alarm at the Wolf's apparent tendency toward cross-dressing, but because of his willful invasion of her personal space.

Levert, Mireille, (1996). <u>Little Red Riding Hood</u>. Buffalo: Douglas & McIntyre.

"How are you, Little Red Riding Hood?" he said.
"I'm fine, thank you, Wolf."
"And where are you going so early?"
"To visit my sick grandmother."
"What are you carrying in that basket?"
"I'm taking cake and wine to help her get well."
"But, Little Red Riding Hood, where does your grandmother live?"
"About fifteen minutes from here, under three large oak trees. You know the place."

Once upon a time there was a dear little girl who was loved by everyone who knew her. Her grandmother loved her most of all, and she could never do enough for the child. She gave her a cape made of red velvet, and it looked so sweet that the little girl never wanted to wear anything else. So everyone began to call her Little Red Riding Hood.

Milloy, Steven J. (1997). *A Grim Fairy Tale*. Retrieved September 16, 1998. [WWW Document] http://www.junkscience.com.news.grim.html

Realizing his grave mistake, the public health research wolf turned to run. But the Junkman grabbed the wolf by the tail and made him eat his words. The public health research wolf choked on his own junk science.

And everyone lived happily every after.

The End.

Prewett, Geoffrey. *A Fairy Tale Retold*. Retrieved September 23, 1998. [WWW Document] URL http://www-physics.mps.ohio-state.edu/~prewett/fractal.html

"P'raps you misunderstood me, eh?" Francois said with those smiling faces that say "I'm not really the nice guy my refined tone suggests." "I said I'd like to lighten your load a bit. How 'bout we start with one of those nice pastries there?"

"S'cuse me, mademoiselle, I couldn't help but noticing that you have been carrying some absolutely scrumptious smelling pastries and fruits and I was wondering if I could help ease your load a bit. (You didn't think he was threatening to eat her did you? What kind of barbarians do you think wolves [especially French ones] are, anyway?) Grandmother's house is a long way, and I wouldn't want your arm to fall off between here and there. She'd be so upset, you know."

About this time Grandfather, who, being a Boy Scout, was always prepared, had been carrying his Swiss Army knife, cut his ropes and Grandmothers and marched upstairs. He laid into Francois again... swearing loudly how he would sue him till the cows came home. Francois, not having been able to say his prepared lines, and quite upset from Gilda's bouncing on his stomach, shook her off and began huffing and puffing up a storm. Quite a wind ensued and everyone became entangled in miscellaneous shirts, knick-knacks, pieces of glass from the windows, and Grandmother had a sneezing fit from the dust, when in walked the third little pig, dressed up in black suit and bowler, and carrying a bowler, just like a lawyer should.

Scanlon, Jim. (1997, January). *The Politically Correct Tale of Little Red Riding Hood*. The Coastal Post. Retrieved September 23, 1998. [WWW Document] URL http://www.costa/post.com/97/1/23/htm

"No I think I'm the real victim, here," said the woodchopper. "I've been dealing with my anger since I saw her picking those protected flowers earlier. And now I'm going to have such a trauma. Do you have any aspirin?"

"But mother, aren't you oppressing me by ordering me to do this?"

The Wolf could not take any more of these specist slurs, and, in a reaction appropriate for his accustomed milieu, he leaped out of bed, grabbed Little Red Riding Hood, and opened his jaws so wide that she could see her poor Grandmother cowering in his belly.

"Aren't you forgetting something?" Red Riding Hood bravely shouted. " You must request my permission before proceeding to a new level of intimacy!"

Many people believed that the forest was a foreboding and dangerous place, but Red Riding Hood knew that this was an irrational fear based on cultural paradigms instilled by a patriarchal society that regarded the natural world as an exploitable resource, and hence believed the natural predators were in fact intolerable competitors.

"And what do you think you're doing?" cried Little Red Riding Hood. "If I let you help me now, I would be expressing a lack of confidence in my own abilities, which would lead to poor self esteem and lower achievement scores on college entrance exams."

Thurber, James. (1940). *The Little Girl and the Wolfe*. Fables for Our Time. New York: Harper & Row.

She had approached no nearer than twenty-five feet from the bed when she saw that it was not her grandmother but the wolf, for even in a night-cap a wolf does not look any more like your grandmother than the Metro-Goldwyn lion looks like Calvin Coolidge. So the little girl took an automatic out of her basket and shot the wolf dead.

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Constructing a Story

How was creating a story from card excerpts like the experience students have in making sense of their school experiences?

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Constructing a Story

How was creating your story like the process a teacher goes through to construct coherent and meaningful educational experiences for students?

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Activity 3: Who Killed Professional Development?

Why do this activity?

Those who provide for teachers' professional development are challenged to create time for teachers to engage in their own learning and develop useful and effective strategies to help teachers make the best decisions in their teaching practice. Recent trends in professional development incorporate new strategies to enable teachers to become more thoughtful practitioners. There has been a shift from "acquiring skills and information" to creating collegial learning communities.

What should participants experience?

This activity simulates initial feelings study group members may have as they begin the process of collaborative inquiry and reflection on practice. It illustrates the issues that must be addressed before meaningful dialogue is possible, such as the discomfort of working with a group, the difficulty in effectively communicating, and the importance of overcoming distrust. It also focuses on the study group process as professional development.

Time Required

60–75 minutes

Materials

Set of suspect cards for each participant
Chart paper and markers or overhead transparencies and pens
Suspects list

Facilitation Guide

1. Begin by talking about the attitudes frequently heard when teachers and other school staff talk about professional development. A possible introduction might be:

Though there are programs that are more responsive to staff needs in many districts and schools, we have all heard horror stories of inspirational speakers who either don't inspire or have no impact beyond their presentation, how-to sessions that provide no support for implementation and result in no changes to practice, and mandatory workshops that have no relationship to the needs of participants.

Even though there has been a lot of progress toward improving professional development, there are still those who want to see it become an endangered species. When the budget ax falls, professional development is one of the first areas to feel the cuts. When state appropriations are being determined, teachers and professional organizations have spoken out against setting aside money for professional growth. So, who is killing professional development?

2. Each participant reviews the descriptions of prime suspects in this crime, then ranks the candidates from most likely to least likely. Individuals should be ready to defend their reasoning. There may be other suspects not listed and participants should feel free to add suspects based on their expert knowledge of the crime. (Allow 15 minutes)

3. In groups of three or four, share the top suspects. The group should rank order their top suspects and be ready to defend your choices. Have a recorder indicate the group's top three suspect on the posted list. (Allow 30 minutes)

4. Groups report out about the suspect(s) who killed professional development. Compile a group list and allow reasons to be shared. (Allow 15 minutes)

5. Ask how educators can combat the negative impact of these detractors on effective professional development. Create a list of supports or principles for designing effective, quality professional development.

Character descriptions for Who Killed Professional Development?

Betty Board member In The Boardroom With A Budget Axe?

Betty Board member firmly believes that when you hire a teacher, they have already been taught all they needed to know. She feels that spending money for staff development is frivolous and only leads to problems since the teachers will just want money to implement some new idea. Betty votes against all institutes, conferences, and early release days for teachers and administrators. She is heard to say at school board meetings.... "Let them go to summer school on their own money. The taxpayers aren't paying hard-earned money for teachers to have days off. They don't need to think that they will get credit for classes they take. How do we know that the classes are even useful. I've heard about those classes from that Professor Plum."

Colonel Calendar In The Central office With A Crystal Ball?

Colonel Calendar has lived in the community for years and therefore knows or can visualize what everyone wants the school year to look like. Traditions must be preserved at the school and five-day weeks must be the norm. He schedules no staff development in the fall so that he saves Thanksgiving for families to take off and teachers to have inservice. Every afternoon before a major holiday, vacation, or spring break he generously assigns to staff development. There is no such thing as early release or late arrival because the bus drivers get upset if the schedules were changed.

Dr. Didactic, The Superintendent, In The Office With A Full Franklin Planner.

Dr. Didactic has good intentions to appoint a staff development committee for the district. But there is never a good time for the group to meet. So, staff development is always a last minute phone call to the university or to a colleague who can come and talk on <u>something.</u> Time is the element that keeps Dr. Didactic from investing any real effort in staff development.

George Gridlock In The Cafe With An Ancient Schedule?

George Gridlock is the assistant principal in charge of scheduling. He firmly believes that the computerized scheduling program that he bought ten years ago can still do the job in the Middle School. Even though the staff wants a block schedule, he said it could not be done unless they eliminated band from the school day. He doesn't see how the program could enable teams have back to back classes or flex time. His major concern is that the lunchroom groups are not too large. When new schedules are suggested, he simply refutes them by saying they wouldn't work with his program.

Malcolm Mandate In The State Legislature With Smoke & Mirrors

Malcolm Mandate wears a three-piece suit, a silk tie, and a monogrammed handkerchief in his pocket. He looks professionally groomed (somewhat like a show poodle). He carries a leather briefcase loaded with printouts of test scores and the phone numbers of influential lobbyists. He has never been a teacher but has a degree in business education from a mail order college and an uncle who contributes heavily to a state senator. Malcolm writes mandates for the schools in his state. He just wrote a new mandate reallocating money from the state lottery to staff development and the "new money" represents a 75% decrease from last year's funding. He is easily swayed by the media. He has never spent an entire day in a school but drives by one on his way to work. Malcolm is being hailed as an advocate for education. Those who have met him describe him as sinister. Some have even gone so far as to call him Evil.

Noah Message In The Auditorium With A Long Drawn Out Speech To The Staff About Absolutely Nothing Of Relevance.

At one time, Noah was a Middle School Principal and had implemented teaming with moderate success. While his school had never been exceptional and had never truly been a Middle School, Noah was available on the day his old friend called and said they needed a speaker for their inservice. Noah has been retired for ten years and has forgotten most of what really happened. But to oblige an old friend, he talked to the teachers anyway. While most of them slept in the hot auditorium, Noah droned on about nothing in particular. His joke was even one everyone had heard before. The staff decided not to pursue Middle School.

Section I. Coherence
Activity 3: Who Killed Professional Development?   SEDL. 2000

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Priscilla President In The Union Hall With The Contract

Prissy knows that most middle school teachers are just waiting to get a real job at the high school. The middle school staff wants to form study groups to look at better ways to organize their day and curriculum. Prissy reminds them that their workday is clearly defined. She tells them that IF they are meeting beyond the regular school day, they MUST be compensated. She also states that administrators just use these groups as a ploy to make teachers think that what they think counts. Prissy's motto is: "More pay. We're worth it; You'll pay it! How in the world can we ever make progress in the next negotiations if these teachers are willing to just give their time away."

Ms. Peacock In The Classroom With Her Holier Than Thou Attitude?

Ms. Peacock never walked down the hallways of the school...she acknowledges her subjects as if she were the queen of teaching in her school. She needs no staff development because she was asked to present her ideas at a conference once and is now a self-recognized expert on all topics related to middle school. Whenever the principal asks that she join a committee or study group to offer her ideas, she acts insulted that she has to give up her time to do so. She belittles teachers who participate in strategic planning or study groups and assumes they do so because they just aren't as skilled as she. Visitors are not allowed in her classroom because it upsets the climate that she creates with her students. She has been known to stare daggers at anyone who dared come to her room while she is lecturing.

Professor Plum In The Ivory Tower With An Ivy Vine.

Professor Plum firmly believes that his courses are so important they can only be taught in a room six feet from his campus office, Wednesdays at 3:00 p.m. He is frequently heard to say, "If those schools want to know what I have learned, let them come to me." While his research base is sound and even interesting to middle school teachers, it is difficult for most of them to take his classes. When approached by a local school to offer an inservice, he felt that it would be cheapening his research to do so. He suggested that the teachers get together and read his articles. There probably wouldn't be any questions because he knew that he wrote with great clarity. Because of his connection with an uncle in a foundation, he continues to get money to do middle school research, but it is rarely disseminated to people who could use it. He believes that he is a middle school expert because he writes about middle schools and has a long publication record.

Principal Pointless In The Library With A Long List Of Minute Business Items And A Handheld Microphone?

Principal Pointless loves to use the microphone. She loves to talk over the intercom, which may explain why the morning advisory is always taken up by her morning announcements. Early release days, designated as staff development, are entirely taken up by administrative issues—which have little or nothing to do with instruction or staff development. Principal Pointless periodically invites someone in to speak to the staff on topics that leave the staff wondering why. When encouraged to bring in a teaming specialist, she decided that having been on a team once herself she would lead the session. The staff decided that teaming would be a bad idea. Principal Pointless is truly clueless when it comes to what her staff needs, but she has a friend on the school board.

Section I. Coherence
Activity 3: Who Killed Professional Development?   SEDL. 2000

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of 6 pages

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Sam Sarcasm In The Inservice Session With A Rolled Up Newspaper?

Sam is a social studies teacher for the seventh grade team and a wrestling coach. He has an attitude towards kids, school, and himself that make some of his colleagues cringe. Sam attends all staff development meetings with grade sheets to do, wrestling meets to schedule (so often he is late or leaves early), and a copy of *Wrestling World* magazine. Sam ridicules all ideas presented to the staff, refuses to participate in group discussions, and is rude to outside consultants. When "reading across the curriculum" was introduced Sam was heard to say, "I'm not about to teach these kids to read, that's what we have language arts teachers for. Besides, they learn to read in elementary school and that should be enough." Sam was a rude, crude, lewd, dude and frequently lets other teachers do their job and his too!

Vera Veteran In The Teachers Lounge With Her Venomous Advice?

Vera has been around the school since dirt. She firmly believes that if staff ignores all staff development and new ideas, things will be just fine. She has taken it upon herself to mentor new teachers. She advises them to just close their doors and teach. Because she offered them her help, they came to depend on her and soon believe most of what she tells them. She does not like teaming or advisory and has convinced most of the newcomers to stand their ground with the administration and they wouldn't have to do anything new. She volunteers to be on school committees so that she can voice her veteran opinion early and squelch any opposition or changes before they are proposed to the entire staff. She rarely comes to staff meetings because she has more important things to do.

Based on "Who's Killing Staff Development?" created by Sherrel Bergmann and Joan Maute, Napierville, IL.

Who Killed Professional Development?

Professor Plum

Betty Boardmember

Sam Sarcasm

Principal Pointless

Ms. Peacock

Colonel Calendar

George Gridlock

Vera Veteran

Noah Message

Dr. Didactic

Priscilla President

Malcolm Mandate

_____

_____

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Activity 4: Assumptions About Changing Teacher Practice

Why do this activity?

It has frequently been assumed that providing workshops to tell teachers about new instructional strategies and telling them how to use them will result in the strategies being implemented in their classroom. The reality is quite different. Adults learn by doing—experiencing, practicing, and reflecting.

What should participants experience?

This activity is designed to engage participants in a discussion about their experiences and knowledge of educational change—specifically, about how teachers change their instructional practices and attitudes. Participants will listen to a short story, record their assumptions about how teachers change practice, and then engage in reflective small and large group dialogues about their prior assumptions.

Time Required

30 minutes

Materials

Overhead transparencies and pens

Facilitation Guide

1. Tell the following story to the group:

    The Donkey Story:

This is a story about two donkeys. They were on a long journey together. One of them was carrying a load of salt, the other a load of cotton. As they traveled they complained to each other. The donkey with the salt cried, "Oh, my aching back — this load is so heavy!" The donkey with the cotton moaned, "This cotton is so bulky — it's getting in the way of everything!" And as they journeyed, each complained to the other until they drove each other crazy.

Eventually they came to a river. The donkey with the salt said to himself, "I know how I can lighten my load," and waded into the river. The soothing water washed over him and when he was satisfied he came out of the river and dried himself in the sun.

The other donkey, watching his friend happy and with a lighter load decided to wade into the water also. He went gaily into the water and after a time was ready to dry off. To his surprise he could barely move. Instead of a lightened load, the load was breaking his back. As he struggled to climb the river bank and stand next to his contented friend, he realized that his assumptions about the river and what it could do for him had changed.

This story was taken from the *Facilitating Systemic Change in Science and Mathematics: A Toolkit for Professional Developers* and adapted with permission of Robert Garmston, Facilitator Associates, El Dorado Hills, CA

2. Put the following question on the overhead. Share an example from your practice. Ask participants to write for two minutes on the question.

    What are your assumptions about how teachers change their practice?

3. Have participants discuss some of their assumptions about the way teachers change their practice with one or two people sitting nearby.

4. Ask for volunteers to share their assumptions and list them on an overhead.

5. The group could then identify assumptions they believe other people have about how teachers change their practice. A reflective dialogue could focus on the following questions:

    *   What is the impact of any disconnects between their assumption and those of others?
    *   Are there actions that can be taken to overcome these?

Assumptions About How
Teachers Change their Practice

What are your assumptions about how teachers change their practice?

Activity 5: Post Cards

Why do this activity?

This activity provides a strategy for participants to introduce themselves to other group members by sharing their feelings about teaching. It is equally effective with groups whose members already know each other well.

What should participants experience?

Participants begin finding common ground and establishing personal connections as each individual shares his or her feelings and listens to those of others. This can set the stage for deeper reflective dialogue about practice.

Time Required

20 minutes

Materials

A collection of post cards that allow personal interpretation. Black and white post cards from the 50's to 60's have been used successfully. There should be more cards than the number of participants so that they have choices. These cards are usually available at bookstores.

Facilitation Guide

● Before the participants arrive, spread post cards on a table with directions beside them with the following question:

Which card shows your feelings about teaching or what teaching means to you?

● Ask participants to pick up a card that answers the question.

● When everyone has a card, ask individuals to introduce themselves and explain why they chose that card.

● As closure, the facilitator could ask participants to talk about the common experiences or feelings revealed by this activity.

Activity 6: My Teaching Practice

Why do this activity?

To deliver effective classroom instruction, teachers must have clear and coherent visions of both what knowledge and skills their students need and how to design instructional experiences that enable students to fulfill their potential as learners. This series of analysis tools provides an opportunity for study group participants to examine their personal beliefs and practices as they explore instructional coherence issues.

Participants have the opportunity to share their responses with others, providing a high level of engagement and interaction. Teachers identify their current views and will be able to follow the evolution of their thinking through participation in the study group. The observations that teachers share with each other can result in a greater awareness and understanding.

What should participants experience?

The analysis tools are designed to help individuals analyze their beliefs and practices as they consider specific issues of instructional coherence. Participants respond to a series of statements by indicating their current position on a continuum of beliefs or practice. As study group members explore the domains of professional vision, teaching and learning, curriculum, and student data use, they have opportunities to reflect on their beliefs and practices. The analysis of their beliefs and practices can help them to understand the relationships between the various domains and to formulate strategies for creating a more coherent instructional practice.

Time Required

60–75 minutes per analysis tool

Materials

A copy of an analysis tool for each participant (masters included in this activity)
Chart paper and markers or overhead transparencies and pens

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Facilitation Guide

1. Introduce the activity by reviewing the following rationale for the ongoing assessment of teacher beliefs and practice:

   It is necessary for teachers to examine their beliefs and practices in order to create more coherent learning opportunities for students. This examination enables them to identify key issues and plan for change.

2. Based on the current needs and interests of your study group, the facilitator chooses <u>one</u> of the following analysis tools:

   5. *My Professional Vision*
   6. *My Beliefs About Curriculum*
   7. *Student Data Use*
   8. *Teaching and Learning.*

   Distribute a copy of the analysis tool to study group participants. Analysis tools not chosen at this time may be used at a later date.

3. Ask participants to reflect on their current beliefs and practices and to mark their level of agreement for each statement on the analysis tool. After responding to the provided statements, encourage participants to record any comments or related thoughts about particular issues addressed by the statements.

4. Participants share and discuss their responses to the items with a small group (3-5 members). The group looks for trends and differences in responses and discusses factors that influenced their responses.

5. While the groups work, circulate and clarify the task as needed, encouraging the groups to think about the factors that influenced their responses. Use information from the handout *Factors that Influence Instructional Coherence* to guide participant discussions.

   Stress that a teacher's professional vision reflects how decisions are made, how responsibilities are determined, how collaboration takes place, what professional development is chosen, and how instruction is designed.

6. After small groups have completed their task, survey and record responses from the groups. Identify issues or ideas for further exploration.

7. Repeat the process using the remaining analysis tool forms. The sequence and timing for use of the different tools becomes more obvious as a group determines its most important concerns.

8. An **Analysis Key** may be used by the facilitator to tally group responses to statements on each tool after the study group session. This will provide an overview of the current stance or position of the group as a whole.

   1. Record the total number of participant responses for each Analysis Tool item on the frequency chart for that tool.

   2. Examine trends in responses. Participants may tend to be in agreement or vary widely along the continuum of answers. A wide variance in responses may indicate that participants need additional information in order to come to a greater understanding of instructional coherence.

9. Also, the facilitator may wish to use the key with individual participants. Individuals may record their own responses to analyze their current thinking and encourage reflection about their teaching practice.

My Vision Of Teaching

This questionnaire surveys your perceptions about your current practice related to your professional vision of teaching. There are no right or wrong responses. For each statement, circle the number that best reflects your practice. Use the comments section to provide any explanation that you feel necessary.

	Strongly Disagree	Disagree	Sometimes Agree	Agree	Strongly Agree
1. I use guidelines and procedures when making decisions.	1	2	3	4	5
2. I participate in ongoing dialogue with others about my educational philosophy.	1	2	3	4	5
3. I seek out professional development opportunities.	1	2	3	4	5
4. I am actively involved in developing professional learning opportunities.	1	2	3	4	5
5. I believe student success is determined by external factors.	1	2	3	4	5
6. I believe instruction should allow students to try out their own ideas.	1	2	3	4	5
7. My job is to provide an essential core of knowledge for my students to learn.	1	2	3	4	5
8. My job is to provide student with skills to access knowledge and facilitate their own learning.	1	2	3	4	5

COMMENTS

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My Conceptions of Curriculum

This questionnaire surveys your perceptions about your current practice related to your conceptions of curriculum. There are no right or wrong responses. For each statement, circle the number that best reflects your practice. Use the comments section to provide any explanation that you feel necessary.

	Strongly Disagree	Disagree	Sometimes Agree	Agree	Strongly Agree
1. My curriculum decisions are determined by state and district guidelines and policies.	1	2	3	4	5
2. I share curricular ideas and materials with others.	1	2	3	4	5
3. I use commercially designed materials for instructions.	1	2	3	4	5
4. I use personally designed curricular materials.	1	2	3	4	5
5. I believe that curriculum should concentrate on the teaching of discrete skills.	1	2	3	4	5
6. I believe that curriculum should be organized according to "big ideas."	1	2	3	4	5
7. I believe curriculum includes all student experiences, both planned and unplanned.	1	2	3	4	5

COMMENTS

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Student Data Use

This questionnaire surveys your perceptions about your current practice related to student data use. There are no right or wrong responses. For each statement, circle the number that best reflects your practice. Use the comments section to provide any explanation that you feel necessary.

	Strongly Disagree	Disagree	Sometimes Agree	Agree	Strongly Agree
1. I use standardized tests to make decisions about classroom instruction.	1	2	3	4	5
2. I interpret and use student data information on my own.	1	2	3	4	5
3. I consistently work with others to interpret and use student data.	1	2	3	4	5
4. I determine the types of student data used for classroom assessment purposes.	1	2	3	4	5
5. I believe my district uses student data to report student achievement and to plan for improvement	1	2	3	4	5
6. I involve my students in the evaluation and interpretation of their assessment data.	1	2	3	4	5
7. I use student data to evaluate instruction.	1	2	3	4	5

COMMENTS

Teaching and Learning

This questionnaire surveys your perceptions about your current practice related to your views about teaching and learning. There are no right or wrong responses. For each statement, circle the number that best reflects your practice. Use the comments section to provide any explanation that you feel necessary.

	Strongly Disagree	Disagree	Sometimes Agree	Agree	Strongly Agree
1. I primarily use instructional methods as suggested by curriculum documents.	1	2	3	4	5
2. I teach collaboratively with other teachers.	1	2	3	4	5
3. I facilitate student learning along with my students.	1	2	3	4	5
4. I often allow my students to make their own instructional decisions.	1	2	3	4	5
5. I have a fixed classroom arrangement that seldom changes.	1	2	3	4	5
6. Communication in the classroom is initiated and sustained by me.	1	2	3	4	5
7. I help my students make meaningful connections among content areas.	1	2	3	4	5

COMMENTS

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Analysis Key: My Vision of Teaching

On the vertical axis, numbers 1-8 represent the statements from the analysis tool. On the horizontal axis, numbers 1-5 represent the level of agreement recorded on the analysis instrument. The questions are grouped into categories of concern within the domain.

		PARTICIPANT RESPONSE								
		Strongly Disagree 1		Disagree 2		Sometimes Agree 3		Agree 4		Strongly Agree 5
Source of Authority	1									
Interaction With Others	2									
Orientation to Work	3									
	4									
Power for Action	5									
Beliefs about Knowledge	6									
Approach to Instruction	7									
	8									

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Analysis Key: My Conceptions of Curriculum

On the vertical axis, numbers 1-7 represent the statements from the analysis tool. On the horizontal axis, numbers 1-5 represent the level of agreement recorded on the analysis instrument. The questions are grouped into categories of concern within the domain.

		PARTICIPANT RESPONSE								
		Strongly Disagree 1		Disagree 2		Sometimes Agree 3		Agree 4		Strongly Agree 5
Source of Authority	1									
Interaction With Others	2									
Power for Action	3									
	4									
Beliefs About Knowledge	5									
	6									
Approach to Instruction	7									

Analysis Key: Student Data Use

On the vertical axis, numbers 1-7 represent the statements from the survey. On the horizontal axis, numbers 1-5 represent the level of agreement recorded on the analysis instrument. The questions are grouped into categories of concern within the domain.

		PARTICIPANT RESPONSE				
		Strongly Disagree 1	Disagree 2	Sometimes Agree 3	Agree 4	Strongly Agree 5
Source of Authority	1					
Interaction With Others	2					
	3					
Power for Action	4					
	5					
Beliefs about Knowledge	6					
Approach to Instruction	7					

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Analysis Key: Teaching and Learning

On the vertical axis, numbers 1-7 represent the statements from the survey. On the horizontal axis, numbers 1-5 represent the level of agreement recorded on the analysis instrument. The questions are grouped into categories of concern within the domain.

		PARTICIPANT RESPONSE								
		Strongly Disagree 1		Disagree 2		Sometimes Agree 3		Agree 4		Strongly Agree 5	
Source of Authority	1										
Interaction With Others	2										
Orientation to Work	3										
Power for Action	4										
Beliefs about Knowledge	5										
	6										
Approach to Instruction	7										

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Factors Influencing Instructional Coherence

There are factors that influence the development of "instructional coherence."
For further exploration into these factors, a list of references is provided.

Source of Authority. Teachers rely on a variety of sources to provide the
authority for their instructional decisions. These sources of authority can range
from externally imposed policies to the context of the learning environment. This
dimension indicates the sources of authority teachers use as they make
instructional decisions. (Cohen and Ball, 1990; Darling-Hammond, 1990;
Thompson and Zeuli, 1999; Tyack and Cuban, 1995; and Yinger and Hendricks-
Lee 2000)

Interaction with Others. Within schools, teachers commonly work alone in their
classrooms without significant input from their peers. However, practitioners are
encouraged to become increasingly collaborative in their work in order to share
goals and strategies, support each other in the assessment of progress, and work
together to overcome obstacles that impede student learning. This dimension
describes instances where teachers choose individualistic versus collaborative
interactions and how those choices impact their work. (Briscoe, 1996; Darling-
Hammond,1998; Hargeaves, 1994; Tyack and Cuban, 1995; and Nelson, 1999).

Orientation to Work. Traditionally, it is accepted that teachers should spend
their time in the classroom teaching their students leaving little time for
reflection on practice and the development of effective educational strategies for
improving student learning. However, current reform efforts encourage teachers
to adopt an expanded view of professional learning, both personal and
professional in order to improve student learning. This dimension describes
instances where teachers may view teaching as being a job versus a profession
and how their views impact their work. (Briscoe, 1996; Darling-Hammond, 1998;
Hamachek, 1999; and Hargreaves, 1994; and Lieberman, 1995)

Power for Action. Teachers may feel that they have minimal or significant
impact on learning dependent on the amount of power they have to act. This
dimension describes the amount of power teachers perceive in order to make
decisions and act. (Briscoe, 1996; Darling-Hammond, 1990; Hamachek, 1999;
Little, 1997; and Marble, 1997)

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Beliefs About Knowledge. Teacher beliefs and understanding of knowledge and learning impacts the instructional decisions that they make. This dimension describes the levels of teacher understanding about learning and how that understanding manifests itself in their practice. (Cochoran-Smith and Lytle, 1999; Gardner and Scherer, 1999; Nelson, 1999; Thompson and Zeuli, 1999; and Tyack and Cuban, 1995)

Approach to Instruction. Teachers have traditionally been responsible for imparting knowledge to their students in a "one size fits all" format.   However, a current understandings of learning encourage teachers to structure learning experiences in such a way that the student actively constructs meaning. This dimension describes how teacher beliefs about knowledge are enacted in the classroom (Brooks and Brooks, 1999; Briscoe, 1996; Cochoran-Smith and Lytle, 1999; Gardner and Scherer, 1999; and Cohen and Hill, 1998)

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II. Learning: Placing Learning at the Center of Practice

Introduction

A theory of learning drives the development of teaching practice. However, many teachers have never considered their theories of learning. They focus on the methods and materials of practice rather than on the foundations of that practice. Teachers may not have articulated their views about how children learn, nor scrutinized them for inconsistencies, but these views still influence their choices about curriculum, instruction, and assessment.

The constructivist view of learning has gained broad acceptance in the educational community, underlies most of the reform initiatives, and represents the view of this project. Constructivsm is a multifaceted theory that suggests that knowledge is personally and actively constructed by the individual through experience and language. Learners construct meaning by making connections between what they already know and the new learning situation. An essential part of learning involves social interaction where students discuss and test their ideas with others.

According to this view, students are better able to construct meaning and develop deep understanding when teachers create opportunities for them to have hands-on experiences, to go into depth on fewer topics, to work with other students in varied groupings, to make real-world connections, to purposefully access their prior knowledge, and to integrate concepts across subjects. For teachers to come to a deep understanding of constructivist ideas, a real paradigm shift is required, especially for the many teachers who learned to teach when the behaviorist view of learning was prevalent. Substantial changes in practice may be necessary in order to be more consistent with the constructivist view of learning. This will require a deep rethinking of teaching, learning, and the teacher's role in the classroom, and teachers need the time and support to engage in this thoughtful enterprise.

In this section of *A Flashlight and Compass,* we provide activities and conversation starters that help teachers reflect on and refine their understanding of how children learn. Their understanding of learning is often tacit, that is, not explicit or clearly defined. The *Draw Learning* activity helps teachers bring their beliefs and understandings about learning to the surface for examination. They elaborate on their conceptions of learning after viewing the video, *Private*

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Universe. From these and other experiences, teachers create, as a group, a set of *Principles of Learning* that they believe should inform their teaching practice. An authentic learning experience, *The Man in a Boat,* provides a shared experience that the group can use to ground the development of their Principles. The group spends time reflecting on how these principles might help them make better instructional decisions. Finally, the teachers begin a consideration of what learning looks like in the classroom. They ask, discuss, and reflect on the question, *What does it mean to understand?*

Activities in this section:

- Introduction
- Activity 1: Draw Learning
- Activity 2: Principles of Learning
- Activity 3: Man in a Boat
- Activity 4: It's All in the Words
- Activity 5: What Does It Mean to Understand?

The facilitator should choose an engaging learning experience based on the preferences and needs of their study group. *Man in a Boat* is a science activity and may be used with general audiences. Some groups may prefer to use *It's All in the Words,* a language arts activity. Though there is no one sequence of activities that is appropriate for every group, using activity 1, then 2, either 3 or 4, and 5 has been a successful sequence.

Activity 1: Draw Learning

Why do this activity?

This activity is designed to assist teachers to come to a deeper, and possibly different, conceptualization about how students learn. This activity promotes the development of the core beliefs for the reflective work of the study group.

Though there is no set sequence of activities that fit all needs or groups, it is recommended that facilitators follow this activity with the Principles of Learning activity and then a second Draw Learning process. This combination of experiences has proven to be important for educators to clarify their understanding of how learning takes place and how to foster learning.

What should participants experience?

As participants move through the events in this activity, they will investigate their own beliefs about how learning occurs, share those beliefs with others and come to a new understanding about how learning occurs.

Time Required

90 - 120 minutes

Materials

Private Universe tape (Pyramid Film and Video, P. O. Box 1048, Santa Monica, CA
    90406)
Chart paper and markers (other materials such as construction paper and other
    craft items are optional)
Overhead transparencies and pens

Facilitation Guide

1. Ask the participants to perform a quick write of about 2 or 3 minutes on the
    topic:

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What is the process of learning?

2. Ask each pair to create a visual of their understanding of how learning occurs. In this visual they may use anything from the stack of supplies provided; however, they may not use words or numbers. Possible supplies might include large sheets of paper, markers and such. The sample on this page is typical of the type of drawings the pairs will create. These drawings typically focus on the head or brain and the senses.
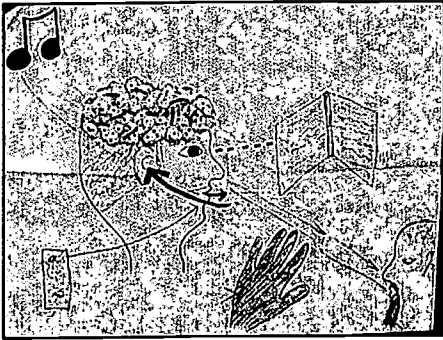
3. Ask the pairs to present their visual to the group and explain their thinking in their creation and the symbols they have chosen. It is also a good idea to post the representations for the group to see.

4. Show the *Private Universe* videotape to the group. Stop the tape at key points and discuss what has occurred. Though it is not suggested that the facilitator introduce the key points in the text box to the right, it is important that the facilitator look for dialogue to occur in these areas and direct the discussion to include these areas if they are not introduced by the group.

5. Allow participants to adjust their drawings to reflect new ideas they may have.

Key Points from the *Private Universe* Tape
1. Even those facts which educators assume all students know may not be known. 2. Many times teachers think students understand when they do not. 3. Once a student has learned something incorrectly, it is difficult to unlearn the wrong ideas or concepts.

6. Ask participants to identify common elements or themes represented in the drawings. Are there things that have been left out? Thinking about current research, do the drawings reflect what is know about learning?

The facilitator may want to keep the drawings for review by the group at a later time (six months or more). Most participants will find that their growth in understanding and application of principles of learning will be documented over time through the representations.

Activity 2: Principles of Learning

Why do this activity?

This activity serves as a mechanism for teachers to begin thinking about their curriculum design and instructional approach and how it does or does not support student learning. It engages participants in a reflective process that unites learning theory and actual classroom practice.

It is recommended that facilitators precede this strategy with the *Draw Learning* activity and use the inquiry activity (*Man in a Boat* or *It's All in the Words*) after step 8.

What should participants experience?

As they participate in reflective dialogue, the participants delve deeply into their own personal understanding of how children learn and what they can do as teachers to ensure that student learning occurs.

Time Required

This activity is actually a series of events and it is recommended that it be done in four sessions—90 minutes for each session.

Materials

1. Large writing space (Though it is possible to use chart paper or an overhead, it is strongly suggested that facilitators use multiple chalkboards as there will be many erasures and a need to see multiple written areas at the same time.)

Facilitation Guide

First Session:

1. Divide the participants into groups of 2 or 3. Ask the participants to develop principles of learning that would help teachers make decisions about classroom practice.

Participants are likely to include cliches or jargon on the first attempt. They are also likely to use educational terminology without understanding its meaning (or different meanings by other participants). The richness of this activity comes from their dialogue and their personal and group discoveries. Facilitators should give groups free rein to talk about and debate these issues with just enough direction to keep them moving forward.

2. Ask the small groups to write their list on the chalk board.

3. Ask the group to compile the small group lists into a single list.

4. Once the combined list is on the chalk board, encourage the participants to discuss the words and phrases that are used, making sure that their words convey the meanings intended. Ask them to clarify phrases or words used. For example if they have chosen the statement that "learning must be relevant," ask what *relevant* means. Encourage them to ask probing questions of each other and themselves. Make modifications to the list as the group dictates.

Second Session:

5. (If this activity has been broken into two meetings, it is important to write their Principles of Learning on the chalk board before the group arrives.) After the group has finalized the list, ask the participants the following question:

   Think back to when you began to learn to drive. List the skills that you had to acquire in order to learn to drive.

   Ask each person to record his/her answer on a sheet of paper.

6. Ask the group to look at the list of Principles of Learning on the chalk board. Ask them to correlate their Principles of Learning to their list of driving skills. Ask the group,

   As you look at your driving skills list and the Principles of Learning on the board, what observations can you make?

   Again, it is important for them to discover their own answers. They will quickly begin to see the difference between principles of teaching and principles of learning. [See example principles on page 4.]

7. Ask the group if they wish to revise the Principles of Learning written on the board based on this new perception.

Third Session:

8. At this point, it is recommended that the group participate in the inquiry activity, Man in the Boat. This activity engages participants in a reflective process about the characteristics of learning. Revisit the list to refine the group's principles of learning after completing the inquiry activity.

9. Ask the participants to take their revised principles into the "real" world of their classrooms by looking at the design of a specific lesson or unit to see if the principles are reflected.

Fourth Session:

10. Before the next meeting begins, write their principles on the chalk board or provide them with printed copies. With the principles in full sight of the group, ask them to discuss what they found from their analysis. Encourage them to modify the principles to reflect their new learning. A group's ability to come to a final list will be determined by their maturity in teaching practice, but it usually takes 3 to 4 sessions for the final list to be produced. Again, at the conclusion of the meeting, ask them to take their principles and see if they reflect their classroom curriculum design and instructional strategies.

11. Repeat this process until they are making few if any changes. A sample series of principles that was developed is included below. **This sample is included for the facilitator's use, not to be given to the participants.**

Principles of Learning Samples

First Set	Mid-Process Set	Final Set
1. There is structuring in the activities of the lesson that is built upon a purpose for both the teacher and the student. 2. School and staff have common goals and focus. 3. The best teachers always remain students. 4. Teachers should know curriculum and be goal oriented. 5. The child should be able to explore, discover and interact. 6. Children should take ownership of their learning. 7. Teachers should be flexible. 8. Parents and community should be involved in education. 9. Curriculum should be relevant to life. 10. All children are here to learn. 11. You need an active and interactive classroom environment. 12. You need a risk free and nurturing environment. 13. Start with the child — end with the child.	1. Structure underlies learning and validates meaning. 2. Confidence from learning empowers the learner to make connections beyond the classroom. 3. Learning promotes interaction; interaction promotes learning. 4. Exploration and flexibility facilitate learning. 5. Relevance gives meaning, value, and ownership to the learner. 6. Learning is an on-going process that should extend beyond the classroom. 7. Interaction facilitates learning and sharing. 8. The opportunity to take risks enhances learning. 9. Learning reflects the community.	1. The process of making connections (finding patterns and relationships) leads to meaning and learning. 2. The opportunity to explore leads to learning. 3. Relevance motivates learning. 4. Interaction (with others, materials, ideas, environment) facilitates learning. 5. Reflection clarifies learning. 6. Learning is an on-going process. 7. Parent and community involvement supports learning. 8. A positive or negative atmosphere affects learning. 9. Prior knowledge and experience impact learning.

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Activity 3: Man in a Boat

Why do this activity?

The key to improving teaching practice begins with developing an understanding about how learning occurs and making instructional decisions based on that understanding. Every learner experiences some of the same problems and conflicts when trying to understand—or make sense of—new information. Frequently, the new information challenges or is in conflict with the learner's prior knowledge and experiences. This activity provides a shared learning experience that will be the basis for a closer look at how this struggle plays out. It stimulates dialogue about learning and provides a basis for thinking more deeply about the learning process. It is recommended that this activity be done in conjunction with the Principles of Learning activity.

What should participants experience?

The man in the boat problem is presented without any prior lecture or reading assignment. The participants' knowledge on the topic is highly variable and the solution to the problem is not readily apparent to most individuals. Looking up an answer in a book cannot solve the problem. As the teachers talk about the problem, participants make their own ideas more explicit and consider the ideas of others. Each contributes what he or she already knows from past learning and experiences. They must use reason to predict what will happen. They conduct an experiment and work to understand what happened from two viewpoints. First, there is a scientific dialogue about the problem itself. Second, there is a reflective dialogue about learning and the implications for practice.

Time Required

75–90 minutes

Materials

Handouts
Plastic shoeboxes and water
A variety of small heavy rocks (approximately 1"diameter)
Plastic or styrofoam cups or small bowls
Grease pencils
Overhead transparencies and pens

<u>Facilitation Guide</u>

1. Present the problem:
   You have a swimming pool. Floating in the pool is a rowboat. In the boat is a man with several large granite rocks. The man picks up the rocks and drops them into the pool, being careful not to splash any water. What happens to the level of the water along the wall of the pool? Does it go up or down or stay the same?
   (transparency).

2. Have participants work alone: *Write what you believe will happen to the water level in the pool and justify your answer. Also, identify the outcomes which you rejected and describe why each of those outcomes is not plausible.* (transparency)

3. Have participants get into small groups (3-4 people each). Groups should use a "dialogue format" (listen carefully to each other's comments in a thoughtful way) to share personal predictions and justifications for what will happen to the water level. Time should be spent learning from and with each other.

4. They develop a prediction and justification. Any member may hold a dissenting opinion, but all members of the group should understand the group's prediction. Post this prediction on a chart. (transparency)

5. Have the small groups design and conduct an experiment to test their prediction using materials available. They then compare their prediction with their results and have a dialogue about the experiment and its results. (transparency)

6. Groups present their results and an explanation of their learnings.

7. Individual participants reflect and record their personal learnings from the activity, how they felt when they worked individually and as a member of a group, and the specific characteristics of their learning experience. They then share their thoughts in their small groups.

8. In a whole group discussion, create a list of the characteristics of learning that were experienced in this activity.
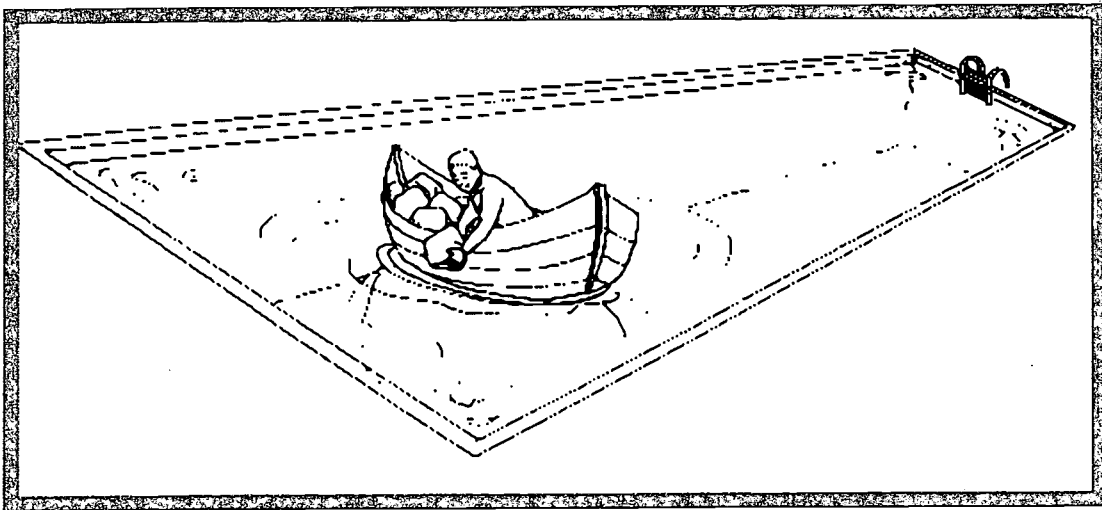

<u>Background Information for the Facilitator—The Scientific Explanation</u>

When the rocks are in the boat, the boat displaces an amount of water equal to the weight of the boat, the man, and the rocks. Rocks typically have a density of approximately 2.5 g/cm^3. That means that a volume of rock will weigh about two and a half times as much as an equal volume of water. When the rocks are placed in the water, however, they displace water equal to their volume. Thus, when the rocks are in the boat, they displace about two and a half times as much water as when they are at the bottom of the pool.

Activity from: Keller, J. D. (1992-3). The man in the boat. *Science Activities, 29* (4), 11-13.

Man in a Boat

You have a swimming pool. Floating in the pool is a rowboat. In the boat is a man with several large granite rocks. The man picks up the rocks and drops them into the pool, being careful not to splash any water. What happens to the level of the water along the wall of the pool? Does it go up or down or stay the same?

Man in a Boat

Individual Work:

- What do you think will happen to the water level in the pool?

- Justify your prediction.

- Describe why each of the rejected outcomes is not plausible.
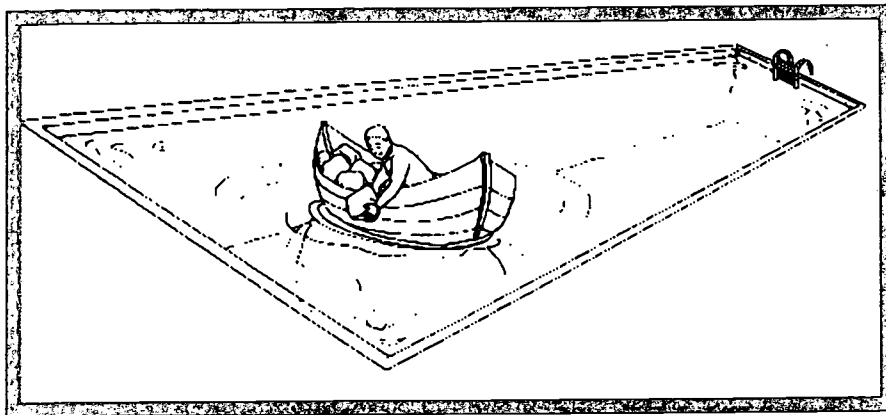
Man in a Boat

Group Work:

- Share your prediction and justifications with your group.

- Develop and justify a group prediction. [A group member may hold a dissenting view but should understand the group's prediction.]

- Post your prediction.
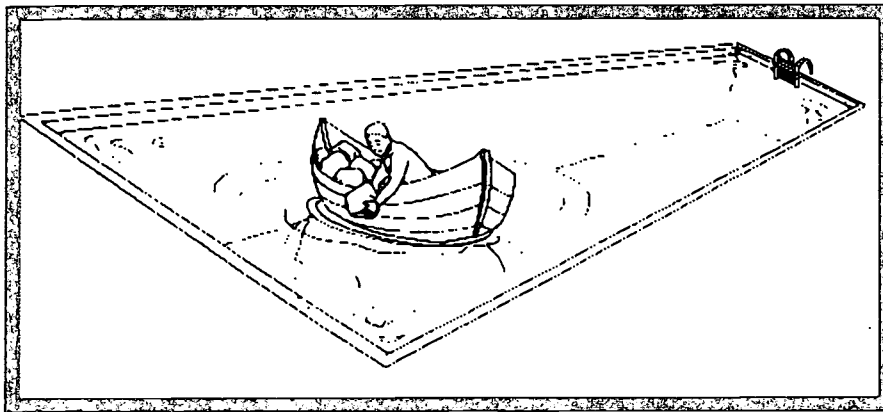
Man in a Boat

Group work:

- Design and conduct an experiment to test your prediction.

- Compare your results with your prediction and develop an explanation for the results.

- Share your results with the whole group.

Activity 4: It's All in the Words

Why do this activity?

Participants are involved in an authentic instructional activity that provides a forum for analyzing the process and strategies involved in sense making by individuals and groups. For audiences that might not be comfortable with Man In a Boat, this provides a language based alternative to achieve the same goal of analyzing how learning takes place.
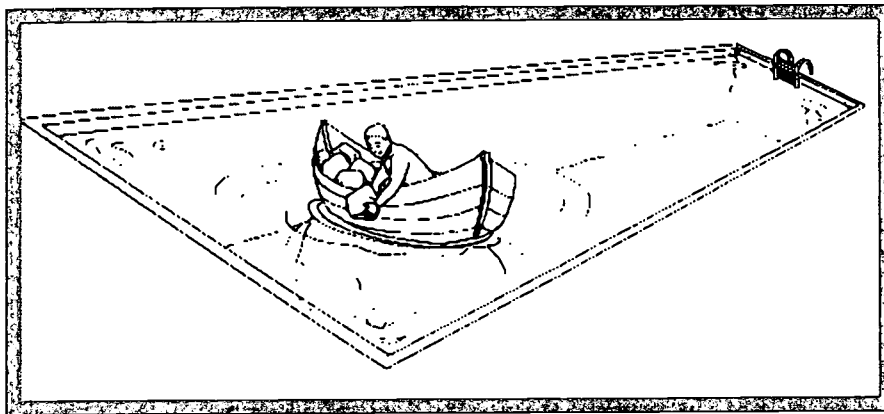
What should participants experience?

Participants participate in a lesson that requires students to use prior knowledge, problem solving skills, and collaborative learning strategies to determine the meaning of a short literary selection. As they reflect on the experience, they will identify strategies for effective teaching.

Time Required

60 minutes.

Materials

- A copy of a section from the original text for *The Tragedie of Mariam, The Faire Queen of Iewry* by Elizabeth Cary (1613). (Notation, the original text has tall s's, inconsistent spelling, and archaic language. A modern translation will not accomplish the same end goal.)

Facilitation Guide

1. Divide the participants into groups of 2 or 3. Introduce the activity by saying something like the following:

   For this next activity, we are going to look at instructional design. In order to do this, I am going to give you a real assignment that has been pulled from a classroom. As you do this assignment, you need to keep your dual role in mind: first, you are a learner participating in a learning event; second, you are an educator engaged in the design of instruction.

For this activity, each of you will be given a section from a closet play to read and interpret. Closet plays were written by women during the Renaissance period. It was called a closet play because it was hidden from the public. Since women were not encouraged to write, their writings were hidden from the general public, but often shared with family and close friends. That is why you may not have heard of this author or this play. However, the closet writers of the Renaissance did have a significant impact on the literature of the period. They also provide a different perspective, a feminine one, to the Renaissance period.

Elizabeth Cary's Story of Mariam in Brief

Herod married Mariam after seizing control of throne by killing Mariam's brother and grandfather. Mariam, trying to be a "good" wife did her best to hide her ill feelings and desire for revenge. It is important to note that too much grief or regret expressed for these deaths would be considered disloyal to Herod. She made every effort to act appropriately. In the mean time, Salome developed a dislike for Mariam. She began to seed a web of lies so that Harod would be forced to put Mariam to death for her disloyalty. She was successful, and Harod had her put to death.

As you read this section, determine Cary's message and be prepared to discuss:

What is Elizabeth Cary's message to mankind?
Is her message appropriate in today's world?

Renaissance Type Setting

Compositers working during the Renaissance Era

1. used a letter called the tall *s* — this letter looks like a small case *f* with the right hand bar removed
2. did not use consistent spelling;
3. used *u*'s *i*'s, and *v*'s interchangeably
4. used *j*'s and *i*'s interchangeably
5. used archaic words such as *seld*=seldom.

2. Divide the participants into pairs or triads. Give them copies of the text and ask them to begin answering the questions you have provided. Suggest to the groups that reading a text out loud will help them in their interpretation.

3. As the groups struggle to read the text, walk around the room and encourage them. Though it is best to let them discover the tall *s* issue on their own, if a group is extremely frustrated and cannot "see" the tall *s*'s, give them a hint. As they struggle to read the words, they will also be finding the meaning of the passage.

4. Once all of the groups have finished the assignment, engage the group in a discussion of the questions provided above.

5. After the discussion of the task, engage them in a dialogue about the process of this learning event. Possible questions to focus the dialogue might be

> What instructional strategies were used in this process?
> What strategy did you find the most effective?
> What other instructional strategies might engage learners in this material?
> Would these ways have changed what was learned?

The Tragedie of Mariam, The Faire Queene of Iewry
by Elizabeth Cary (1613)

This Chorus is meant to set the moral tone for the character's actions. Chorus context: Herod has put his sister to death for treason. Herod's nephews, sons of his now dead sister, vow revenge. Revenge becomes the driving force for the war that now begins.

Chorus

THe faireft action of our humane life,
    Is fcorniug to reuenge an iniurie:
      For who forgiues without a further ftrife,
His aduerfaries heart to him doth tie.
      And tis a firmer conqueft truely fed,
      To winne the heart, then ouerthrow the head.

If we a worthy enemie doe finde,
To yeeld to worth, it muft be nobly done:
But if of bafer mettall be his minde,
In bafe reuenge there is no honor wonne.
      Who would a worthy courage ouerthrow,
      And who would wraftle with a worthles foe?
We fay our hearts are great and cannot yeeld,
Becaufe they cannot yeeld it proues them poore:
Great hearts are task't beyond their power, but feld
The weakeft Lyon will the lowdeft roare.
      Truths fchoole for certaine doth this fame allow,
      High hartednes doth fometimes teach to bow.

A noble heart doth teach a vertuous fcorne,
To fcorne to owe a dutie ouer-long:
To fcorne to be for benefits forborne,
To fcorne to lie, to fcorne to doe a wrong.
      To fcorne to beare an iniurie in minde,
      To fcorne a free-borne heart flaue-like to binde.

But if for wrongs we needs reuenge muft haue,

Then be our vengeance of the nobleſt kinde:
Doe we his body from our furie ſaue,
And let our hate preuaile againſt our minde?
 What can gainſt him a greater vengeance bee,
 Then make his foe more worthty farre then hee?

Had *Mariam* ſcorn'd to leaue a due vnpaide,
Shee would to *Herod* then haue paid ner loue:
And not haue bene by ſullen paſſion ſwaide
To fixe her thoughts all iniurie aboue
 Is vertuous pride. Had *Mariam* thus bene prou'd,
 Long famous life to her had bene allowd.

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It's All in the Words

As you read this section, I would like you to discover and be prepared to discuss:

What is Elizabeth Cary's message to mankind? Is her message appropriate in today's world?

80

It's All in the Words

Process Discussion Questions

- What instructional strategies were used in this process?

- What strategy did you find the most effective?

- What other instructional strategies might engage learners in this material?

- Would these ways have changed what was learned?

Activity 5: What Does It Mean to "Understand?"

Introduction

Teachers may be led to believe that a student understands a concept because he is able to correctly answer questions on a test. However, if the student is questioned about how he arrived at an answer it becomes clear that there are gaps and misconceptions in the student's thinking. By explicitly articulating acceptable evidence for mastery, the teacher can determine an individual's progress toward the goal and initiate appropriate experiences to help reach the goal.

Purpose

This activity is intended to help participants consider what "understanding" means and the implications of this perspective for teachers. As participants engage in reading and dialogue they will distinguish differences in knowing (recall, being able to recite the Pledge of Allegiance) and being able to demonstrate understanding, as described in the six facets of understanding presented in *Understanding by Design*. Participants will also begin to consider how this perspective impacts teaching and identify experiences that could help students reach learning goals.

Goals

Participants will:
- Distinguish among the different ways of knowing.
- Clarify their understanding of what understanding means.
- Identify implications that "understanding" has for their work.

Time Required

80–90 minutes

Materials

Adapted readings from *The Understanding By Design Handbook*
Overhead transparencies and pens
Handout, "Evidence of Understanding"

Facilitation Guide

1. In small groups, discuss the following statement:

    Understanding is different from knowledge.

2. Distribute a handout for one of the 6 facets described in Wiggins and McTighe's book, *The Understanding by Design Handbook*, to each participant, making sure that all facets will be discussed. If there are fewer than six participants in the group you may want to repeat this a second time to cover all six facets.

3. Ask individuals to read their assigned section. If there is more than one person per facet, those with the same reading can discuss the facet in a small group before joining the general discussion. It is important for individuals to note important ideas for sharing with the group. Ask participants to identify ways that students might demonstrate their understanding of the assigned facet.

4. Facilitate a discussion of the six facets with all members (If there are enough participants you may have more than one group of 6).

5. Give participants a list of assessment tasks and give the following directions:

    Place each assessment task with the facet it most closely fits.

6. In small groups or as a single group have participants discuss their placement of tasks.

7. Conclusion:
    It is easy to be misled into believing that a student has learned by signs of apparent understanding, such as correct terms or formulas. In order to determine if students have developed real understanding, it is necessary to probe their thinking and ask for explanations of how they arrived at an answer or way of thinking. The choice of assessment must match the kind of performance that would indicate the student's understanding.

Pose the following question for reflection by participants:

What are the implications of "understanding" for your work?

Note: If the group is interested in further study of the facets of understanding and the backward design process for curriculum development you might use *The Understanding By Design Handbook*, based on the theory presented in *Understanding by Design*. Both publications are by Wiggins and McTighe and are available from ASCD.

What Does It Mean to Understand?

Understanding

is different

from knowledge.

The Six Facets of Understanding

When we truly understand, we

1. Can *explain*: provide thorough, supported, and justifiable accounts of phenomena, facts, and data.
2. Can *interpret*: tell meaningful stories; offer apt translations; provide a revealing historical or personal dimension to ideas and events; make it personal or accessible through images, anecdotes, analogies, and models.
3. Can *apply*: effectively use and adapt what we know in diverse contexts.
4. Have *perspective*: see and hear points of view through critical eyes and ears; see the big picture.
5. Can *empathize*: find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior direct experience.
6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 1, Explanation

Explanation: Sophisticated and apt explanations and theories, which provide knowledgeable and justified accounts of events, actions, and ideas.

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*We see something moving, hear a sound unexpectedly, smell an unusual
odor, and we ask What is it?. . .When we have found out what it signifies,
a squirrel running, two persons conversing, an explosion of gunpowder,
we say that we understand.*

—Dewey, 1933, p. 137, 146

Why is that so? What explains such events? What accounts for such action? How can we prove it? To what is this connected? How does this work? What is implied?

√ A cook explains why adding a little mustard to oil and vinegar enables them to mix. The mustard acts as an emulsifier.

√ A 10th grade history student provides a well-supported view of the economic and political causes of the American Revolution.

X A 10th grade student knows the facts of the Boston Tea Party and the Stamp Act but not why they happened and what they led to.

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Facet 1 involves the kind of understanding that emerges from a well-developed and supported theory, an explanation that makes sense of puzzling or opaque phenomena, data, feelings, or ideas. It is understanding revealed through performances and products that clearly, thoroughly, and instructively explain how things work, what they imply, where they connect, and why they happened.

Knowledge of Why and How

Understanding is thus not mere knowledge of facts but knowledge of why and how, laid out in evidence and reasoning. We know that the Civil War happened, and we can perhaps cite a full chronology. But why did the war happen? What was its impact? A student who can explain why steam, water, and ice, though superficially different, are the same chemical substance better understands the chemical formula H_2O than someone who cannot. To understand in this sense is to connect facts and ideas, including seemingly odd, counterintuitive, or contradictory ones, into a theory that works. More thought or in-depth understandings involve more insightful and systematic explanations, where many diverse events or data are linked and subsumed under more powerful principles.

When we understand in this way, we can make inferernce and offer predictions. We can go beyond the information given to make connections and associations. We understand guiding principles that explain and give value to the facts. Illuminating mental and physical models are one result of such understanding. We can bind together seemingly disparate facts into a coherent, comprehensive, and helpful account. We can predict unsought for or unexamined results, and we can illuminate strange or unexamined experiences.

Warranted Opinions

Explanatory understandings go beyond true opinions (mere right answers) to *warranted* opinions, a person's ability to explain his opinion so that he can justify how he got there and why it's right. Educators call upon learners to reveal their understanding by using such verbs as *explain, justify, generalize, support, verify, prove,* and *substantiate.* Regardless of the subject matter or the age and sophistication of a student, when the student understands in the sense of Facet 1, she has the ability to "show her work": explain why an answer is right or wrong, give valid evidence and argument for a view, and defend that view against other views, if needed. The student with the most in-depth understanding in this sense explains diverse data more precisely and grasps the more subtle aspects of the ideas or experience in question.

Teachers invariable describe this type of understanding as thorough, nuanced, and in-depth (as opposed to merely glib, sweeping, or grandiose theorizing). An explanation or theory without such understanding is typically not so much wrong as it is incomplete or naive. It is not wrong to say that the Civil War was fought over slavery, or that literature often involves good versus evil—just naïve or simplistic.

Merely learning and giving back on tests the official theory of the textbook or teacher are not adequate evidence of understanding. Facet 1 calls for a student to be given assignments and assessments that require an explanation of varied and novel events before the teacher can conclude that the student understands what was taught.

Instructional Implications

Instructionally, this facet suggests that we deliberately seek a better balance between knowledge transmission (through a teacher and text) on the one hand and student theory building and testing on the other. A simple strategy to accomplish this goal is to focus on the 5 "W" questions at the heart of journalism: who, what, where, when, and why.

Facet 1 calls for building units around questions, issues and problems that demand student theories and explanations, such as those found in problem-based learning and effective hands-on and minds-on science programs. Other implications for assessment are straightforward—use assessments (e.g., performance tasks, projects, prompts, and tests) that ask students to explain, not simply recall; to link specific facts with larger ideas and justify the connections; to show their work, not just give an answer; and to support their conclusions.

The Six Facets of Understanding

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3. Can *apply*: effectively use and adapt what we know in diverse contexts.
4. Have *perspective*: see and hear points of view through critical eyes and ears; see the big picture.
5. Can *empathize*: find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior direct experience.
6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 2, Interpretation

Interpretations, narratives, and translations that provide meaning.

Juzo Itami's films revealed truths to the Japanese they never knew existed—even though they were right there in their daily life. "He could express the inside story about things people think they understand but really don't," said film critic Jun Ishiko

—Washington Post, 1997, p. Al

The object of interpretation is understanding, not explanation. Understanding is the outcome of organizing essentially contestable but incompletely verifiable propositions in a disciplined way. One of our principal means of doing so is through narrative: by telling a story of what something is about. But as Kierkegaard had made clear many years before, telling stories in order to understand is no mere enrichment of the mind; without them we are, to use his phrase, reduced to fear and trembling

—Burner, 1996, p. 90

What does it mean? Why does it matter? What of it? What does it illustrate or illuminate in human experience? How does it relate to me? What makes sense?

√ A grandfather tells stories about the Depression to illustrate the importance of saving for a rainy day.

√ An 11th grader shows how Gulliver's Travels can be read as a satire on British intellectual life; it's not just a fairy tale.

X A middle school student can translate all the words but does not grasp the meaning of a Spanish sentence.

We value engaging storytellers because a good story both enlightens and entertains. A clear and compelling narrative helps us find meaning, where before there may have been only scattered facts, cold and impersonal theory, and abstract ideas. Stories help us remember and make sense of our lives and the lives around us. The deepest, most transcendent meanings are found, of course, in the stories, parables, and myths that anchor all religions. A story is not a diversion; the best stories make our lives more understandable and focused.

Meanings Transform Understanding

The meanings we ascribe to all events, big and small, transform our understanding and perception of particular facts. The student with such an understanding can show an event's significance, reveal an idea's importance, or provide an interpretation that strikes a deep chord of recognition and resonance. Consider how memorable Martin Luther King Jr.'s March on Washington speech ("I have a dream") and imagery crystallized the many complex ideas and feelings behind the Civil Rights movement. Or, think of how the best newspaper editorials make sense of complex political currents and ideas.

Meaning, of course, is in the eye of the beholder. Think of how much November 22, 1963 (the day of President Kennedy's assassination), means as a watershed event to those of us who came of age in the '60s, and how little that date means to today's students. Or, consider the different readings of the same newspaper account of severe child abuse when the reader is a mother, a police officer, or an adolescent in a foster home. Social workers and psychologists might well have an accepted theory of child abuse in the sense of Facet 1. But the meaning of the event, hence an understanding of it, may have little to do with the theory; which is a scientific account with no bearing on the abused child's view of the event and the world.

Making sense of the stories of others involves translation and interpretation. Whether we think of a student struggling in German 1, a 4th grader reading Charlotte's Web, or a scholar poring over the Dead Sea Scrolls, the challenge is the same: to understand words rooted in an author's intent but a puzzle to the reader, who cannot see a clear meaning and significance. Similarly, experts in fields like history and archaeology must reconstruct the meaning of events and artifacts from clues provided by the historical record. With this type of understanding, teachers ask learners to interpret, translate, make sense of, show the significance of, decode, and make a story meaningful.

Explanation and Interpretation

Explanation and interpretation are thus related but different. We may know the relevant facts and theoretical principles, but we can and still must ask, What does it all mean? What is its importance to me? To us? A jury trying to understand child abuse seeks significance and personal intent, not generalizations from theoretical science. A theorist builds objective and general knowledge about the phenomenon called abuse, but the story told by the lawyer, witness, or journalist may offer as much or more insight.

As the example reveals, all acts of interpretation are more fraught with ambiguity than the act of theory building and testing. A text or a speaker's words may have different but valid meanings. As noted researcher Jerome Bruner (1996) puts it: "Narratives and their interpretations traffic in meanings, and meanings are intransigently multiple" (p. 90). A theory needs to be true to work, a story need only illuminate, engage, and have verisimilitude. The same physical phenomenon cannot have three accurate explanations. But the same stories and events can have many different plausible and illuminating interpretations.

This narrative building (as well as the theory building of Facet 1) is the true meaning of constructivism. When we say that students must make their own meaning, we mean that handing them prepackaged "interpretations," without their working through a problem and coming to see these explanations and interpretations as valid, is counterproductive—sham understanding. A purely didactic teaching of *the* interpretation is likely to lead to misunderstanding, and forgotten knowledge, and ignores the arguable nature of interpretation, thus misleading students. The inherently problematic nature of certain ideas, texts, and experiences mandates an education that requires students, not just teachers and textbook writers, to develop interpretations and stories, an education that also ensures that student ideas get the feedback necessary to force continual testing and revision of those accounts.

Implications for Instruction and Assessment

The implications for instruction parallel those for the other facets. Educating students so that they will be able to think intelligently as adults requires that they learn to build stories and interpretations, not just passively take in official ones. They need to see how knowledge is built "from the inside." For example, a teacher might ask students to fashion an oral history from disparate interviews, a mathematical formula and graph from discrete properties, or an interpretation of a story from a careful reading. Learning cannot merely be the process of receiving what someone else says is the meaning of something, except as a way to model meaning making or as a prelude to testing an interpretation for better understanding the possibilities.

The Six Facets of Understanding

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3. Can *apply*: effectively use and adapt what we know in diverse contexts.
4. Have *perspective*: see and hear points of view through critical eyes and ears; see the big picture.
5. Can *empathize*: find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior direct experience.
6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 3, Application

The ability to use knowledge effectively in new situations and diverse contexts

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[By understanding] I mean simply a sufficient grasp of concepts, principles, or skills so that one can bring them to bear on new problems and situations, deciding in which ways one's present competencies can suffice and in which ways one may require new skills or knowledge

—Gardner, 1991, p. 18

How and where can we use this knowledge, skill, or process? In what ways do people apply this understanding in the world beyond school? How should my thinking and action be modified to meet the demands of this particular situation?

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√   A young couple uses their knowledge of economics (e.g., the power of compounded interest and the high cost of credit cards) to develop an effective financial plan for saving and investing.

√   7th grade students use their knowledge of statistics to accurately project next year's costs and needs for the student-run candy and supply store.

X   A physics professor cannot diagnose and fix a broken lamp.

To understand is to be able to use knowledge. This is an old idea in U.S. education—indeed, an old idea in the long tradition of our U.S. pragmatism and cultural disdain for mere ivory-tower, academic thinking. We say to young and old alike, "You need to walk the walk, not just talk the talk.

Matching Ideas to Context

Gardner's definition of genuine performance mentioned earlier echoes what Bloom (1956)and his colleagues said in the taxonomy. They saw application as central to understanding and quite different from the kind of plugging-in and fill-in-the-blanks pseudoapplication found in so many classrooms.

> *Teachers frequently say: "If a student really comprehends something, he can apply it.". . Application is different in two ways from knowledge and simple comprehension. The student is not prompted to give specific knowledge, nor is the problem old-hat (p. 120).*

Application also needs to reflect real-world situations:

> *Problems should be as close as possible o the situation in which a scholar/artist/engineer, etc., attacks a problem. The time allowed, conditions of work, etc., should be as far from the typical controlled exam situation as possible (Bloom Madaus, & Hastings, 1981, p. 268).*

Understanding involves matching one's idea or action to context. To show that we understand something we show our ability to use it, adapt it, customize it, not simply plug in knowledge in a formulaic manner. When we must negotiate different constraints, social contexts, purposes, and audiences, understanding is revealed as performance know-how, the ability to accomplish tasks successfully, with "grace under pressure" and with "tact for the concrete situation" (James, 1899/1958, p. 24).

Swiss child psychologist Jean Piaget (1973/1977) argued more radically that student understanding reveals itself by student's innovation when applying knowledge. He said that many so-called application problems, especially in mathematics, were not truly novel and hence not indicative of true understanding:

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Real comprehension of a notion or a theory implies the reinvention of this theory by the student. Once the child is capable of repeating certain notions and using some applications of these in learning situations he often gives the impression of understanding; however, this does not fulfill the condition of reinvention. True understanding manifests itself by new spontaneous applications (pp. 726-732).

Implications for Instruction and Assessment

Thus, the instructional and assessment implications of Facet 3 call for an emphasis on performance-based learning—work that focuses on and culminates in more authentic tasks, supplemented by more conventional tests (for more information see Wiggins, 1998; McTighe, 1996-1997).

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The Six Facets of Understanding

When we truly understand, we

1. Can *explain*: provide thorough, supported, and justifiable accounts of phenomena, facts, and data.
2. Can *interpret*: tell meaningful stories; offer apt translations; provide a revealing historical or personal dimension to ideas and events; make it personal or accessible through images, anecdotes, analogies, and models.
3. Can *apply*: effectively use and adapt what we know in diverse contexts.
4. Have *perspective*: see and hear points of view through critical eyes and ears; see the big picture.
5. Can *empathize*: find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior direct experience.
6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 4, Perspective

Critical and insightful points of view.

The profit of education is the ability it gives to make distinctions that penetrate below the surface....One knows that there is a difference between sound and sense, between what is emphatic and what is distinctive, between what is conspicuous and what is important.

—Dewey, in Johnson, 1949, p. 104

An important symptom of an emerging understanding is the capacity to represent a problem in a number of different ways and to approach its solution from varied vantage points; a single, rigid representation is unlikely to suffice.

—Gardner, 1991, p. 13

From whose point of view? From which vantage point? What is assumed or tacit that needs to be made explicit and considered? What is justified or warranted? Is there adequate evidence? Is it reasonable? What are the strengths and weaknesses of the idea? Is it plausible? What are its limits? So what?

√ A 10-year-old girl recognizes in TV advertising the fallacy of using popular figures to promote products.

√ A student explains the Israeli and Palestinian arguments for and against new settlements on the Gaza Strip.

X A bright but rigid student refuses to consider that there is another way to look at gun control.

To understand in this sense is to see things from a dispassionate and disinterested perspective. This type of understanding does not involve a student's particular point of view but instead is a mature recognition that any answer to a complex question typically involves a point of view. Therefore, an answer is often one of many possible plausible accounts. A student with perspective is alert to what is taken for granted, assumed, overlooked, or glossed over in an inquiry or theory.

Seeing from a Critical Distance

Perspective implies seeing from a distance, the ability to see the whole forest, not just the near trees. Different perspectives are often found by asking, What of it? And to see an answer—even a teacher or textbook answer—as a point of view. Perspective involves making tacit assumptions explicit, bringing to light and analyzing unexamined habits of thought and action. Students with perspective expose questionable and unexamined conclusions and implications.

Such perspective can lead to a powerful form of insight, because by shifting perspective and casting familiar ideas in a new light, one can create new theories, stories, and applications. When a student can take different perspectives, she gains a critical distance from the habitual or knee-jerk beliefs, feelings, theories, and appeals that less careful and less circumspect thinkers fall prey to. Then she can shift her point of view, try out new ways of seeing, and discover new theories and interpretations.

A definition of the verb *understand* in the Oxford English Dictionary is "to know the import of" something. By this criterion, the U.S. educational system is not very successful in causing understanding. Few students leave school with an understanding of the value of their schoolwork—and of the value of the discipline required to learn the disciplines. Few can successfully ask and answer, What of it? Such an attitude is central to what is meant by a liberal education.

Perspective involves the *discipline* of asking, Why might this matter? How might its value be clearer from another point of view? How, for example, would my critics see things? In his autobiography, Darwin (1958) noted that this critical stance was key to his success in defending his controversial theory:

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> *I.. . . followed a golden rule that whenever a published fact, a new*
> *observation or thought came across me, which was opposed to my*
> *general results, to make a memorandum of it without fail and at*
> *once; for I had found by experience that such facts and thoughts were*
> *far more apt to escape from memory than favorable ones. Owing to*
> *this habit, very few objections were raised against my views that I*
> *had not at least noticed and attempted to answer* (p. 123).

Perspective as an aspect of understanding is a mature achievement, an escape from our egocentric beliefs in systematizing different vantage points. Novice learners, just setting out on the road to mastery, may have a revealing point of view, even when they lack a thorough explanation of things. Consider the child who speaks out in *The Emperor's New Clothes*. But novices, by definition, lack the ability to take *multiple* perspectives.

A student with a sophisticated perspective can simultaneously value teacher and textbook accounts while recognizing them as representing points of view. What is the point of view of the authors of a U.S. history or a physics textbook about what is true, verified, and important? Do other authors share those views? Do different experts, teachers, and authors establish different priorities? If so, what is their justification? What advantages or disadvantages do other points of view have? That this line of questioning seems too esoteric or odd shows how far education is from giving students needed perspective. Everyone recognizes the problem of maintaining perspective in newspaper reporting, so why isn't it addressed in textbook writing? Everyone knows that authors' views shape choice of content, emphasis, and style, so why aren't students helped to use these language arts skills in understanding textbook and the theories in them?

Implications for Instruction and Assessment

Facet 4 suggests that instruction include explicit opportunities for students to confront alternative theories and diverse points of view about big ideas. An essential perspective o perspective involves encouraging students and designing coursework to ask and answer these questions. What of it? What does it mean? What follows? These questions need to be asked for all core knowledge and texts in the student's experience. One might say that these questions and attempts to answer them are the perspective of any liberally educated person. Instructional and assessment strategies need to better highlight the means and ends of a liberal education, namely greater control over essential questions and ideas so that students can see both intrinsic and extrinsic value in intellectual life.

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6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 5, Empathy

The ability to get inside another person's feelings and worldview.

To understand is to forgive.
—French proverb

"Do women ever come up to you and say, 'How did you know that? How did you feel that?' I ask, and for the first time, he turns and looks at me evenly:

"Yeah, that's the normal response," he says in a voice that suddenly isn't so shy. "It's not that I understand women any better than anyone else, but I do understand feelings....All you have to do is imagine what that girl is going through, just turn it around and put yourself in those same shoes....We're all the same people."
—The singer Babyface *New York Times Sunday Magazine*, 1997, Sec. 6, p. 22

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Section II, Learning
Activity 5: What Does It Mean to Understand?   SEDL, 2000

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How does it seem to you? What do they see that I don't? What do I need to experience if I am to understand? What was the artist or performer feeling, seeing, and trying to make me feel and see?

√   An Israeli adolescent empathizes with the restrictive constrained lifestyle of his Palestinian contemporaries.

√   From a recent British national exam: "*Romeo and Juliet*, act 4. Imagine you are Juliet. Write your thoughts and feelings explaining why you have to take this desperate action."

X   An accomplished basketball player-turned-coach berates his young players often because he cannot relate to their struggles to learn the game.

Empathy, the ability to walk in another's shoes, to escape one's own emotional reactions to grasp another's, is central to the most common colloquial use of the term *understanding*. When we try to understand another person, people, or culture we strive for empathy. It is not simply an affective response or sympathy.

Empathy is a *learned* ability to grasp the world from someone else's point of view. It is the discipline of using one's imagination to see and feel as others see and feel. It is different from seeing in perspective, which is to see from a critical distance, to detach ourselves to see more objectively. With empathy, one sees from inside the person's worldview; embracing the insights that can be found in the subjective or aesthetic realm.

A German scholar, Theodor Lipps, coined the term *empathy* at the turn of the 20th century to describe what the audience must do to understand a work or performance of art. Empathy is the deliberate act of finding what is plausible, sensible, or meaningful in the ideas and actions of others, even if they are puzzling or off-putting. Empathy can lead us not only to rethink a situation but to have a change of heart as we come to understand what originally seemed odd or alien.

This kind of understanding implies an existential or experiential prerequisite. If, when referring to such experiences as poverty, abuse, racism, or high-profile competitive sports, someone says, "You cannot possibly understand without having been there," the implication is that the insight from experience is necessary for understanding. A recent controversy involving the songwriter Paul Simon echoed the same theme (*USA Today*, 1997). Some Puerto Ricans contended that a Jewish man cannot possibly understand the experience of Puerto Ricans. The subject was a new musical, "Capeman," cowritten and produced by Simon and Ruben Blades. Though we might disagree with that particular sentiment, we regularly acknowledge as teachers that students need to directly or indirectly experience the ideas they study or their understanding will be hobbled.

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Empathy as a Form of Insight

Empathy, too, is a form of insight because it involves the ability to get beyond odd, alien, or seemingly weird opinions or people to find what is meaningful in them. Students have to learn how to open-mindedly embrace ideas, experiences, and texts that might seem strange, off-putting, or just difficult to access, in order to understand them and their connection to what is more familiar. They need to see how weird or dumb ideas can seem insightful or sophisticated once we overcome habitual responses, and they need to see how habit can block our understanding of another person's understanding.

Empathy is linked to self-knowledge (Facet 6) because we must bracket our prejudices to empathize.

> The hermeneutical attitude supposes only that we self-consciously designate our opinions and prejudices and qualify them as such . . . In keeping to this attitude, we grant the text the opportunity to apprea as an authentically different being and to manifest its own truth, over and against our preconceived notions (Gadamer, 1994, pp. 238–239).

All great interpreters and historians of ideas need empathy "If we laugh with derision" at the theories of our predecessors, as anthropologist Stephen Jay Gould (1980) says, we will fail "in our understanding of their world" (p. 149). From his own experience to find new meaning in what had seemed inadequate views about motion in Aristotle's work, Kuhm (1977) suggests:

> *When reading the works of an important thinker, look first for the apparent absurdities in the text and ask yourself how a sensible person could have written them. When you find an answer, when those passages make sense, then you may find that more central passages, ones you previously thought you understood, have changed their meaning (p. xi).*

An example of the need for empathy can be found in the U.S. system of government. Few students know that for more than 100 years, U.S. senators were appointed, not popularly elected. Fewer still understand why such a practice seemed like a good idea then. It is easy to imagine that our forefathers were misguided or hypocrites. Today's teachers could use assignments and assessments that ask students to role-play as the writers of the Constitution. The challenge would be to make a case to a group of citizens that appointed offices are in the citizens' best interest. A postscript could to ask for an essay or journal entry on the pros and cons of our current popular vote approach, and a futher consideration of the value, if any, of the electoral college.

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Need for a Change of Heart

As noted in an earlier discussion of language, understanding in the interpersonal sense suggests not merely an intellectual change of mind but also a significant change of heart. Empathy requires respect for people different from ourselves and openness to what they have to say. Respect for others causes us to more willingly and carefully consider others' views when they are different from ours.

It becomes easier, then, to imagine schoolwork that deliberately confronts students with strange or alien texts, experiences, and ideas to see if they can get beyond what is off-putting about the work. Such activity, in fact, is common to foreign language classes that stress cultural issues. It is the point of using many fables and such stories as Shirley Jackson's *The Lottery* and Camus' *The Stranger*. It is key to learning history, a point made by the Bradley Commission on the Teaching of History, which argues that a primary aim of history is to help students escape their ethnocentric and present-centered views (Gagnon, 1989).

Implications for Instruction and Assessment

To ensure greater understanding of abstract ideas, students must have far more direct or simulated experiences of them than most current textbook-driven courses now allow. We refer in *Understanding By Design* to the idea of an "intellectual Outward Bound" to capture the needed changes: Learning needs to be more experiential, more geared toward making students directly confront the effects—and *affect*—of decisions, ideas, theories, and problems. Put differently, the absence of such experience in learning may explain why so many important ideas are misunderstood and learnings so fragile, as the literature on misconception reveals. Assessment must also pay greater attention to whether students have overcome egocentrism, ethnocentrism, and present-centeredness in their answers and explanations.

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6. Have *self-knowledge*: perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; be aware of what we do not understand and why understanding is so hard.

Facet 6, Self-Knowledge

The wisdom to know one's ignorance and how one's patterns of thought and action inform as well as prejudice understanding.

All understanding is ultimately self-understanding....A person who understands, understands himself....Understanding begins when something addresses us. This requires...the fundamental suspension of our own prejudices.

—Gadamer, 1994, p. 266

It is the duty of the human understanding to understand that there are things which it cannot understand, and what those things are.

—Kierkegaard, 1959

How does who I am shape my views? What are the limits of my understanding? What are my blind spots? What am I prone to misunderstand because of prejudice, habit, or style?

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√ A mother realizes that her frustration with her daughter's shyness is rooted in issues from her own childhood.

√ Mindful of the fact that many students are visual learners, a middle school teacher deliberately includes visual organizers and images.

X "When all you have is a hammer, every problem looks like a nail."

Deep understanding is ultimately related to what we mean by wisdom. To understand the world we must all understand ourselves. Through self-knowledge, we understand that what we understand is often intertwined with what we believe and expect to see, that sometimes what we think we understand is "out there" is actually a mental habit projected onto reality.

With maturity, we come to understand that we do not understand. "Know thyself" is the maxim of those who would really understand, as the Greek philosophers often said. Socrates is the patron saint of understanding; he knew he was ignorant and needed to continually reflect and question beliefs.

In daily life, the capacity to accurately self-assess and self-regulate reflects such understanding or its absence. Metacognition, or self-knowledge about how we think, why we think it, and the relation between our preferred methods of learning and our understanding (or lack of it) are involved. The immature mind is thus not merely ignorant or unskilled but *unreflective*. A naive student, no matter how bright and learned, is lacking in self-knowledge to know when an idea seems objectively true but really only fits the student's beliefs, or to know how styles or perceptual frames shape how and what is understood. The challenge for self-knowledge is to learn when prejudice, not insight, determines our understanding.

Stephen Jay Gould (1996), Harvard paleontologist and popular writer on science, has eloquently warned about the danger of confusing insight with prejudice:

Our prejudices often overwhelm our limited information. . . . Nature is objective, but we can only view her through a glass darkly—and many clouds upon our vision are of our own making: social and cultural biases, psychological preferences, and mental limitations (p. 8).

This caution is an old one, going back to Francis Bacon's writing 300 years ago on the "idols" (illusions) that impede the progress of science:

The human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds...land] when it has once adopted an opinion draws all things else to support and agree with it....It is the peculiar and perpetual error of the intellect to be more moved and excited by affirmatives than by negatives....Numberless, in short, are the ways, and sometimes imperceptible, in which the affections color and infect the understanding (Aphorisms 46 and 49, pp. 50 and 52).

What Self-Knowledge Demands

Self-knowledge is a key facet of understanding because it demands that we self-consciously question our understandings to advance them. It asks us to have the discipline to seek and find the *inevitable* blind spots or oversights in our thinking and to have the courage to face the problems lurking underneath effective habits, naive confidence, strong beliefs, and worldviews. When we talk of subject-matter disciplines, such courage and persistence is the essential source of rational understanding as opposed to dogmatic belief.

Implications for Instruction and Assessment

Practically speaking, a greater attention to self-knowledge means that we must do a better job of teaching and assessing self-reflection.. In one area, we do that quite well: Many programs and strategies exist to help students develop greater metacognition and awareness of their own preferred learning style. But the ideas expressed in this book suggest that greater attention is needed to self-assess the philosophical abilities that fall under the heading "epistemology"—the branch of philosophy that addresses what it means to know and understand knowledge and how knowledge differs from belief and opinion.

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What Does It Mean to Understand?

Place each assessment task with the facet it most closely fits.

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What Does It Mean to Understand?

Six Facets of Understanding

1. **Explanation**—Sophisticated and apt explanations and theories that provide knowledgeable and justified accounts of events, actions, and ideas.
2. **Interpretation**—Interpretations, narratives, and translations that provide meaning.
3. **Application**—The ability to use knowledge effectively in new situations and diverse contexts.
4. **Perspective**—Critical and insightful points of view.
5. **Empathy**—The ability to get inside another person's feelings and worldview.
6. **Self-Knowledge**—The wisdom to know one's ignorance and how one's patterns of thought and action inform as well as prejudice understanding.

Place the number of the facet that most closely matches the assessment task below:

1. ___ What is the perimeter of a square that has an area of 36cm²? Show how you know.

2. ___ Draw several different shapes that have a perimeter of 36 units. Which covers the greatest area? Tell how you know.

3. ___ A rectangle has a perimeter of 36 cm. What could its area be? Draw pictures to show your thinking.

4. ___ What are the length and width of a rectangle that has a perimeter of 36 cm and covers the greatest possible area? How did you decide?

5. ___ Which is the better fit: A square peg in a round hole or a round peg in a square hole? How did you decide?

6. ___ Draw or describe a shape that has a perimeter of 36 units and covers the greatest possible area. How would you convince a classmate it covers the greatest possible area?

7. ___ You are given a set of four different pendulums. Two of the four pendulums have the same mass. Two are the same length, but do not have the same mass. Which of your four pendulums will swing back and forth at the same speed? Illustrate the four pendulums. Explain your answer and refer to your diagram.

8. ___ Design and conduct an experiment to show how changing the weight on the end of a pendulum affects the period of the pendulum.

What Does It Mean to Understand?

Reflection:

What are the implications of "understanding" for your work?

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III. Dialogue: Establishing a Dialogue

Introduction

Dialogue is a reflective learning process in which group members seek to understand each others' viewpoints and deeply held assumptions by talking together to deepen their collective understanding. Dialogue moves beyond any one individual's understanding and is a way to get below the noise of opinions and fragmented fact, to go deeply into processes, assumptions, and certainties that compose everyday activities.

Dialogue involves deeper levels of listening and reflecting since it involves the social negotiation of ideas—ideas that are shared freely, critically, and in ways that nurture rather than destroy. Open-endedness, a characteristic of dialogue, necessitates letting go of the need for specific results or outcomes from each meeting, although there are innumerable results that come from dialogue.

Dialogue is often compared to discussion. Discussion is used to make decisions and is done with the purpose of winning—using some sort of logical process to decide which idea of those presented wins. It is often a difficult or painful process, as a final choice must be made. While discussion can be painful, dialogue is risky as well. It is often unsettling, making us feel uneasy or uncomfortable. It is a process that stirs up contradictions and ambiguities. It requires a trusting, respectful environment that takes time to establish.

There are physical conditions that promote meaningful dialogue. By having all members face each other without obstacles (such as tables or chairs) between members prevents isolating individuals and discourages side conversations that detract from the group's discussion. A resource for improving facilitation skills in using dialogue and reflection in study groups is available from the National Council of Teachers of English, the National Staff Development Council, and various publishers.

This section of *A Flashlight and Compass* provides opportunities to learn the dialogue process. The group spends time establishing norms of dialogue for their group while having dialogues on topics such as collegiality and communication.

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Introduction

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Activities in this section:

- Introduction
- Activity 1: Dialogue vs. Discussion: Establishing Group Norms
- Activity 2: Introducing Collegiality
- Activity 3: Vision Quest: Toobers and Zots

Resources to enhance dialogue facilitation skills:

Birchak, B., Connor, C., Crawford, K. M., Kahn, L. H., Kaser, S., Turner, S., &Short, K. G. (1998). *Teacher study groups: Building community through dialogue and reflection.* Urbana, IL: National Council of Teachers of English.

Garmston, R. & Wellman, B. (1999). *The adaptive school: A sourcebook for developing collaborative groups.* Norwood, MA: Christophre-Gordon Publishers, Inc.

National Staff Development Council (1999). *Norms put the 'golden rule' into practice for groups.* Oxford, OH: NSDC.

Section III. Dialogue
Introduction

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Activity 1: Dialogue vs. Discussion

Why do this activity?

In order to support collegial relationships among study group members, it is important to establish rules or norms for dialogue. Because many teachers have had more experience in decision-making tasks than in reflective ones, they may not feel comfortable discussing personal beliefs and feelings without first establishing a safe, supportive environment. This activity helps participants distinguish between the purposes of decision making and dialogue, allowing them to have more meaningful conversations by establishing principles, or norms, to guide their interactions with each other

What should participants experience?

Participants discuss the differences between dialogue and discussion and establish group norms for their dialogue.

Time Required

45 - 60 minutes

Materials

Handout, *Discussion vs. Dialogue*
Chart paper, markers

Facilitation Guide

1. Talk with members about their experiences from previous discussion opportunities and about how they feel about sharing their personal beliefs and opinions. It will likely evoke memories of being made to feel that ones' ideas or beliefs were wrong or not valued. This also provides an opportunity to discuss the difference between a decision-making event and a dialogue.

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2. Distribute the handout and allow members to reflect on the relationship between the two terms. As participants reflect on the distinction in purpose of the two, record important considerations mentioned on chart paper so that all members can see. This can be used to begin identifying the group's norms or ground rules for interaction. The group should come to consensus on the norms.

Some examples of possible group norms:
No side conversations   Start and end on time
Everyone is important   Listen carefully to others
Speak for yourself, not for others   No name calling or stereotyping
Take care of yourself   Asking questions is okay

3. Tell members that their norms will be posted in view for each meeting. If members later violate one of the norms, having the norms posted makes it easier to point out the deviation from the agreed upon norms for the group's dialogue.

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Discussion vs. Dialogue

Conversation
↓
Deliberation
or
Choice Point

↙   ↘
Dialogue   Discussion

↙   ↘
Conviviality   Debate

↓   ↓   ↓

Understanding   Decision
+
Shared meaning

Dialogue	Discussion
To inquire to learn To unfold shared meaning To integrate multiple perspectives To uncover and examine assumptions	To tell, sell, persuade To gain agreement on one meaning To evaluate and select the best To justify/defend assumptions
Example of a dialogue topic: What is the purpose of professional development?	Example of a discussion topic: What will we do for professional development this year?

Dialogue is a reflective learning process in which group members seek to understand each others' viewpoints and deeply held assumptions by talking together to deepen their collective understanding.

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Activity 1: Dialogue vs. Discussion   SEDL, 2000   *Page 3*
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Activity 2: Introducing Collegiality

Why do this activity?

In order for study group participants to develop collegial relationships with other members of the study group it is important to establish norms of interaction. This allows the group to build a sense of trust and safety that encourages honest and open sharing of ideas. This activity engages participants in dialogue and stresses the importance of collegiality in improving practice.

What should participants experience?

Participants engage in dialogue about the importance of collegiality and establish group norms.

Time Required

45 - 60 minutes

Materials

A copy of the following for each participant:
Hoerr, T. R. (April 23, 1997). Making Time for Collegiality. *Education Week*, 40, 44.

Facilitation Guide

1. Choose a tool from the *Strategies for Text* (found in the Appendix) and use that strategy to facilitate a discussion based on the article.

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Activity 3: Vision Quest

Why do this activity?

As educators move through the process of school change, they encounter impediments, many of which can be traced back to problems involving communication. Clear and timely communication is a key to successful school improvement. This activity illustrates the difficult process of communicating abstract concepts.

What should participants experience?

Using the abstract concept of vision, participants engage in a simulation that reveals the effects of hierarchical structures and personal understanding on communication.

Time Required

60–90 minutes.

Materials

1. A package of Toobers and Zots for each group of 6 to 7 and one package for the facilitator. It is important that each set have exactly the same items. This commercial product may be ordered from Hands On Toys at: http://www.handsontoys.com/index.html.

2. Several pieces of poster board to make a shield

Facilitation Guide

1. Before the group begins the activity, construct a complex arrangement of Toobers and Zots and place it behind a screen. This will serve as the VISION model that needs to be communicated to the larger group.

2. Divide the participants into groups of 6 or 7. Since it is important to emphasize the complications inherent in school communication, the use of a larger number stresses that point.

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3. For this simulation the facilitator will assume the role of the *Great Visionary Leader*. Communicate the VISION, represented by the Toobers and Zots model, for the district in the steps described below.

4. Each group will be given an unassembled package of Toobers and Zots. It is important that each of the packages contain the same pieces as the package used to create the VISION.

5. Use the following statement to set a context:

   The Red Robin School District has been experiencing several problems for the first time in the 50- year history of the district.

   1. *The scores on standardized tests are dropping.*
   2. *Fewer students are taking the SAT/ACT or planning to attend post secondary institutions.*
   3. *Teachers report that their students are less interested in learning.*
   4. *Administrators are concerned about the number of negative encounters they have had with parents and community members.*

6. Each of the groups functions as a campus in this scenario. All of the groups together represent the school district. Appoint one person from each group to be the "campus" Liaison for the change initiative. This person is the only one allowed to communicate with the *Great Visionary Leader*. Use the following statement to explain to participants what the district plans to do about these problems.

   Communicating the Effective Model

   The Great Visionary Leader visited several schools outside the area that have initiated programs that address educational concerns similar to the Red Robin District. Based on these visits and other research activities, the Great Visionary Leader has constructed an effective schools model that represents the new vision she has for the district.

   The Great Visionary Leader has designed a plan to share this vision with all employees. Liaisons from each campus will meet with her and discuss the vision and then they will communicate this vision to their respective campuses. To minimize confusion, the Liaisons are the only ones who will communicate with the Great Visionary leader. The Liaisons will be called to regular meetings with the Great Visionary Leader and may ask for individual meetings to clarify the vision.

7. Each group will recreate the VISION, the Toobers and Zots model that has been created and hidden behind the screen. Allow the Liaison to view the model and return to the home campus and tell the others in the group about the VISION. However, in giving directions to the Liaisons use as much

"educationese" and enthusiasm as possible. **Remember no one in the room should hear your directions except the Liaisons.** Allow the Liaisons to hold additional discussions with the *Great Visionary Leader* if the *Great Visionary Leader* has time. [It would be appropriate for a Liaison to request a meeting and be told to wait (not more than a minute) because the *Great Visionary Leader* is occupied.]

8. About 10 - 15 minutes into the scenario, make the announcement that the Liaisons have fallen ill — all of them have been stricken with the same disease. They will still serve on the team, but must take a less active role. Appoint a new Liaison. Bring the new Liaisons to the model and go through the same educational speech and send them out to communicate the vision. It is important to note that everyone in the groups will think that another knowledgeable person will help in their building of the VISION. It is likely that it will not help. In fact, it may create more confusion since the two will see the vision differently.

9. About 10 - 15 minutes after this change, the Great Visionary Leader decides that the Liaisons have not been able to communicate her vision as well as she expected. Make the following announcement:

> *Since the vision process has not gone as well as I had hoped, I have called all of you here today to share my vision with you. Here is my vision for the district (show creation). Now I would like you to go back to your individual campus and finish you recreations of my vision.*

It is likely that they will still have difficulty even though all of them have now seen the VISION. It is still not a "shared vision."

10. Once the group has been through the entire process, discuss ways to identify and solve the problems they encountered. Be sure to talk about feelings as well as processes.

Vision Quest
Communicating the Effective Model

The Red Robin School District has been experiencing several problems for the first time in the 50-year history of the district.

♦ The scores on standardized tests are dropping.

♦ Fewer students are taking the SAT/ACT or planning to attend post secondary institutions.

♦ Teachers report that their students are less interested in learning.

♦ Administrators are concerned about the number of negative encounters they have had with parents and community members.

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Vision Quest
Communicating the Effective Model

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IV. Reflection: Developing Reflective Practice

Introduction

In order for educators to *make sense* of factors that impact classroom instruction, they must be able to process information that comes from multiple sources. Since teachers tend to work in isolation, they generally accept those things that readily fit with their existing knowledge and discard those that do not. The reflective process brings these factors into an open forum that encourages the teacher to confront these elements rather than avoid them. When teachers meet in sessions utilizing inquiry and reflective strategies, they examine their teaching and the beliefs and assumptions that underlie their practice. They identify dilemmas, tensions, inconsistencies, and contradictions within their practice. By collecting and using data about their concerns and issues, teachers are able to make decisions that bring about improved learning. It is an intense process that pushes the individual to question his or her belief system in order to become a more effective practitioner.

It takes time and energy for teachers to become more reflective practitioners. Opportunities for reflection can be designed in many formats. The combination of dialogue, journal writing, interactive activities and simulations in this collection provide a framework of tools to assist teachers in becoming more reflective about their practice. The process can be helped greatly by gaining the support of administrators who also value collaboration. They can provide an atmosphere of support for study groups, joint planning and problem solving, peer coaching, and interdisciplinary or team teaching. Even if an existing support system is not in place, it is still possible for teachers to bring positive change to their practice by engaging in a reflective process.

The study group can provide a supportive and collegial atmosphere that stimulates teachers to test new ideas and to consider alternative methodology. As individuals put their thoughts about issues of importance into words, they come to new understandings. In sharing these new understandings, they create a collaborative partnership with others in the study group. They gain new perspectives that will help them refine their practice.

Activities in this section:

- Introduction
- Activity 1: Using Teaching Cases
- Activity 2: Curriculum Spectrum
- Activity 3: Where Am I
- Activity 4: Observing As A Constructive Friend

Section IV. Reflection
Introduction

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Activity 1: Using Teaching Cases

Why do this activity?

Teaching cases present stories about teaching events and provide an opportunity for teachers to learn to look critically at teaching practice. Because the teacher in the case story is unknown to them, participants consider the issues raised by the case in an environment of inquiry that is safe. The use of teaching cases allows participants to "visit" a variety of classrooms and see practice from new perspectives. They can mentally explore and "try out" potential solutions, strategies, and courses of action without doing "harm" to anyone.

What should participants experience?

The participants engage in personal reflection and social interaction as they tackle problems together, listen to other points of view, and share experiences. Using the case story, they frame problems, analyze situations, and consider various alternatives. Through the dialogue about the teaching case, teachers consider their assumptions, beliefs, and values; learn to look for inconsistencies between theory and practice; and bring educational issues to the surface. Some cases allow teachers to uncover the reason or sense behind student behaviors and others focus on more specific areas such as pedagogical content knowledge.

Time Required

60–90 minutes

Materials

Handouts of a teaching case

Facilitation Guide

1. Give participants time to read the selected teaching case. The case might be given to the group members prior to the session, or time can be allowed in the beginning of the session for participants to read the material. [The case provided here does not include an extensive consideration of subject matter content, so is good for mixed groups.]

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2. A comfortable way to begin the dialogue is to have the participants list the facts in the case. Facts should be distinguished from assumptions, opinions, and issues. Some groups may want to make charts of the facts, assumptions, opinions, and issues they found in the case. There may be specific questions or issues raised by the case that the group wants to consider. These questions should be determined by the group rather than the facilitator.

3. Facilitate a dialogue by asking the group open-ended questions when it seems appropriate. The participants will generally engage in a lively dialogue because they easily identify with the teacher in the case story. The interaction in the group can be expected to be intense and often passionate. Some guiding or prompting questions could be used to bring more individuals into the conversation, to push participants to expand on their ideas, or to seek justification for ideas.

Background Information for the Facilitator

The selection of a case should be based on the interests of the group. Cases can be found in research articles, in books of teaching cases, books of teaching stories, and so on. The case provided here does not include an extensive consideration of subject matter content, so is good for mixed groups. If, on the other hand, the group of teachers were interested in teaching mathematics in middle school, a case about teaching fractions to seventh graders would be appropriate. Some cases have a central issue or dilemma that provide the focus for the dialogue. Others present a teaching and learning situation for analysis. Some question basic philosophical underpinnings of teaching or schooling.

The teaching case included here is from the following article: Hole, S. (1998). Teacher as rain dancer. *Harvard Educational Review, 68*, 413-421.

The notes are after work done by Carne Barnett at Far West Laboratory and Katherine Merseth and Joan Karp at the Harvard Mathematics Case Development Project.

Additional sources for cases for reflection:

Madfes, T. & Shulman, J.(eds.) (2000). *Dilemmas in professional devleopment: A case-based approach to improving practice.* San Francisco, CA: WestEd.

Mitman, A. & Lambert, V. (1992). Instructional Challenge: A casebook for middle grade educators. San Francisco, CA: WestEd.

Shulman, J., Lotan, R., & Whitcomb (eds.) (1998). *Groupwork in diverse classrooms: A casebook for educators.* New York, NY: Teachers College Press.

Shulman, J., Lotan, R., & Whitcomb (eds.) (1998*). Facilitator's guide to groupwork in diverse classrooms.* New York, NY: Teachers College Press.

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A Teaching Case: Mrs. Morris's Dilemma

Mrs. Morris's Dilemma by Simon Hole

From the beginning, I wasn't particularly happy about the newsletter project. It felt as if the parameters established by the advisors, that each fourth-grade class would have two reporters, could easily turn this into a project for "gifted" students, and I strongly object to the philosophy that only "bright kids" get to do special projects. So right away, I felt that the decision concerning who would represent our class would be a good place for us to practice the democratic process.

The students must have been especially sleepy Tuesday. When I called for them to sit in the circle, there was very little of the normal bustle and chatter. We were soon settled in on the floor, some cross-legged, some sprawled out. I began by explaining that we had another decision to make and that I would start by sharing everything I knew about a new schoolwide project. They would then have a chance to ask questions before deciding how they would choose two class reporters.

I think I did a fairly good job of presenting the project. I began to get more animated and the kids responded. They stopped picking at their shoestrings, leaned forward to catch the words of their classmates, and asked lots of questions: Who would be reading the newsletters? Where would the articles come from? How many pages would the newsletter have? Would it have jokes and artwork? I was especially excited when I saw Janeen "stand up" on her knees and wave her hand as if it were a flag in a Fourth of July parade. I called on her immediately, wondering what burning question would cause her to be so physically engaged.

"Mrs. Morris, can I be a reporter?"

I live in the same neighborhood as Janeen and I'm aware of how difficult her home life is. Her parents have been divorced for years and she has almost no contact with her father. I see her here in the classroom, acting out occasionally but mostly just not engaging in any of the activities. She often looks very sad and rarely volunteers to share her thoughts or feelings during

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class discussions. I've been trying to find something that would spark her interest, but we're six weeks into the school year, and so far nothing seems to hold her attention for more than a few moments.

So it was difficult for me. She's a bright girl. Her writing is among the best in the class, when I can get her to finish a piece. I'm desperate to find something that she can connect to, something that she can be excited about and that she wants to engage in. When I heard her ask to be chosen, I wanted to cry. It would have been perfect for her-a chance to be special and to shine not only in front of her classmates, but also the whole school.

At that point, I wanted so much to be able to start over, to tell the kids that I would be choosing the reporters. But I couldn't. We had worked too hard establishing the purpose and importance of the democratic process. I had already told them they would be involved in making this particular decision. I had to let them go through with the process they had decided on-discussing the criteria for a "good" reporter, making nominations, and voting.

And of course Janeen wasn't elected. She knew she wouldn't be. I could see her face fall as I explained again that the class would have to make the decision. I asked her about it afterwards, how she was feeling about the process we used and if her non-election hurt. She smiled, which I guess was a good sign, and said that it was okay, that the two who were going to be the class reporters would probably do a better job than she could have done, anyway. "Besides," she said, "it was a fair election."

As she walked off to lunch, shoulders rolled forward, feet shuffling over the dusty hallway tiles, I wondered how long it would be before something else might spark Janeen's interest. I think that she was right, it was a fair election, but was it fair that she didn't get a chance to participate in something that had sparked her interest?

Activity 2: Curriculum Spectrum

Why do this activity?

There are many ways of thinking about curriculum—as a list of what to cover, a course of study, a means of attaining educational goals, a story to tell, a document, what happens in classrooms, and so on. Most people have a fairly narrow view of curriculum, and this activity helps broaden that view as the group considers descriptions of some curricular units.

What should participants experience?

The participants read descriptions of curricular units from a variety of sources. They develop a spectrum (continuum) of curricular units based on attributes of quality ranging from higher to lower. In doing this task, they engage in reflective dialogue about the purposefulness and intentionality in curricular design and will broaden their views of curriculum.

Time Required

60–90 minutes

Materials

A set of handouts with descriptions of curricular units for each individual
Chart paper

Facilitation Guide

1. Engage the group in a dialogue about curriculum by asking questions such as

    What does the term "curriculum" mean to you?
    Where does curriculum come from?

2. Have the participants read the handout, note attributes of curriculum that they feel are valuable or desirable, and place them in some rank order from those they like the best to those they like the least.

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3. Participants then work in small groups to consider what attributes they think signify higher quality curriculum and lower quality curriculum from the point of view of student learning. Each small group can create its own criteria to use to evaluate the curricula described in the handout. Alternatively, each small group can present its criteria to the whole group and the whole group can come to a consensus on the attributes, developing a set of criteria for everyone to use.

4. Once the criteria have been identified, the small groups place the descriptions in order from higher to lower quality and record their results on a chart paper. The small groups can present their results and share their reasoning.

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A. The Apple Unit

For two weeks every fall, all the 3rd grade classes participate in a unit on apples. The students engage in a variety of activities related to the topic. In language arts, they read *Johnny Appleseed* and view an illustrated filmstrip of the story. They each write a creative story involving an apple and then illustrate their stories using tempera paints. In art, students collect leaves from nearby crab apple trees and make a giant leaf print collage on the hallway bulletin board adjacent to the 3rd grade classrooms. The music teacher teaches the children songs about apples. In science, they use their senses to carefully observe and describe the characteristics of different types of apples. During mathematics, the teacher demonstrates how to "scale up" an applesauce recipe to make a quantity sufficient for all the 3rd graders.

A highlight of the unit is the field trip to a local apple orchard, where students watch cider being made and go on a hayride. The culminating unit activity is the 3rd grade apple festival, a celebration for which parent volunteers dress as apples and the children rotate through various activities at stations—making applesauce, competing in an apple "word search" contest, bobbing for apples, completing a math skill sheet containing word problems involving apples, and so on. The festival concludes with selected students reading their apple stories while the entire group enjoys candy apples prepared by the cafeteria staff.

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B. Landmarks in the Hundreds

An important part of students' mathematical work in the elementary grades is building an understanding of the base ten number system. This unit provides activities that develop knowledge about important *landmarks* in that system-numbers that are familiar landing places, that make for simple calculations, and to which other numbers can be related.

Because our number system is based on powers of ten, the numbers 10, 100, 1000, and their multiples are especially important landmarks. In solving real problems, people with well-developed number sense draw on their knowledge of these important landmarks. Think about how you would solve this problem, in your head, before you continue reading: If there are about 25 students in a class and 17 classes in our school, about how many students are there altogether?

Many people would use their knowledge that there are four 25's in every 100 to help them solve this problem mentally. Rather than multiplying 17 by 25, they will think something like this: "Four 25's in 100, eight in 200, 12, 16, that's 400, and one more 25 makes 425."

Knowledge about 10, 100, 1000, their multiples, and their factors is the basis of good number sense. As students learn about 100, how to take it apart into its factors, and how to use it to construct other numbers, they gain the knowledge they need to develop their own strategies to solve problems using quantities in the hundreds. They develop good estimation strategies and are less likely to make the kinds of errors that result from the use of faulty algorithms.

For example, a student who has developed knowledge about 20 and its relationship to 100, who has experience counting by 20's, and knows what the pattern of the multiples of 20 is like, would never make this common error:

$$\begin{array}{r} 440 \\ -\ 380 \\ \hline 140 \end{array}$$

Using a written subtraction algorithm—whether faulty or correct—is not a sensible approach to solving this problem. Rather, by inspecting the numbers and using knowledge of important landmarks in the number system, students should eventually be able to solve this problem mentally: "380 to 400 is 20, then 20, 40, two more 20's gets to 440, so that's three 20's. The answer is 60."

At the beginning of each investigation in this unit, the Mathematical Emphasis section tells you what is most important for students to learn about during that investigation. Many of these mathematical understandings and processes are difficult and complex. Students gradually learn more and more about each idea over many years of schooling. Individual students will begin and end the unit with different levels of knowledge and skill, but all will gain greater knowledge about 100 and multiples of 100 and develop strategies for solving problems involving these important numbers.

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C. What is the story of a plant?

The unit is arranged around the question: What is the story of a plant? The stages of development offer a context for beginning, middle, and end. The plant starts as a compact seed; expands into roots, stems, and leaves; contracts again into buds; expands again in the blossom; and contracts again in the fruit and seed. And the whole process goes on "happily forever after" as the seeds fall to the ground and the stages start anew. Questions and stories drive the unit. There might be a story of the sacrifice of the lower leaves, which die off as the plant sends the most refined juices to nourish the production of the fruit. Or in the sacrifice of producing fruit at all. What good is the green pepper for the plant? If a plant were interested in survival and propagation, would it design a pepper? Or a watermelon? Why should the apple tree put so much of its resources into producing apples, which do very little for the tree? Yes, its tastiness attracts birds to eat the seeds and spread them afar. But the apple seems an extravagant product for this function. The production of food gets to the genius of the plant. A plant doesn't need to go to the store to buy food; it can make its own. How does it do it? Does it make extra for us? The plant has many antagonists, so there are many other good stories of how it defends itself from the cold, heat, drought, shade, overcrowding, and gravity.

D. Science process skills—first grade

Day 1: Students put a pair of matching buttons in each box on a worksheet, trace around the buttons, color the buttons, and draw dots to show the holes.

Day 2: Students draw a picture of an animal that moves by walking, swimming, crawling, or flying.

Day 3: Students use their fingers to estimate how long each line on worksheet is.

Day 4: Students place the strips that are the same length in the same box on a worksheet and glue them down in the box.

Day 5: Students put squares that are the same color in the same column on a grid, glue them down, and count the squares in each column.

Day 6: Students sort the stones into two groups and place them in the two circles on a worksheet. They trace around the stones, color them, and answer the questions: How are the stones in the two groups alike? How are they different?

Day 7: Students put their hand into a sock and describe how the object in the sock feels. They draw a picture of how they think the object looks.

Day 8: Students stretch a thin rubber band around the box and pluck it. They do the same with a thick rubber band. They put additional rubber bands of different sizes in the order from the highest to lowest sound they think the bands would make. They then test the rubber bands to see if their prediction was correct.

Day 9: Students make a model of a plant from the materials provided and label it.

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E. Human Migration

Objectives—The students will:
- come to understand in detail Baluchi nomadic life, comparing it to their own
- develop empathy with Iranian nomadic life styles, exercising fairmindedness
- identify complex factors of modern migratory patterns in the U.S.
- relate human migration to their personal lives and the future

The strategies used in the unit are noting significant similarities and differences; exercising fairmindedness; reading critically; clarifying or critiquing texts; refining generalizations and avoiding oversimplifications; practicing Socratic discussion; and clarifying and questioning beliefs, theories, or perspectives.

Generally the factors discussed in motivating migration are oversimplified, and traditional migration patterns, particularly in the U.S., are seen as simply going from bad economic situations to positive ones. The complexity of the issue is ignored completely. This traditional unit has been remodeled and has two focuses: the migratory patterns of nomads in traditional society, and modern migratory patterns that the children would be more familiar with.

As a Peace Corps volunteer in Iran, the teacher spent much time with the nomadic Baluchi tribes of southeastern Iran and Pakistan. She begins by showing movies and bringing in various artifacts of the Baluchis. Through discussion and demonstration, she clarifies their migratory pattern. She has the students examine and discuss how the life style limits their belongings and how it places certain controls on social patterns including marriage and the education of the children. The students examine in detail how the Baluchi life was similar to and different from their own. They examine some important values in our culture and compare them to how the Baluchis dealt with similar issues, including marriage and materialism or possessions. The teacher stresses that models of living and reality itself are complex and self-sufficient, showing how their ways and ours are different but one way is not good and another bad.

Once the students understand this aspect of the lesson, they act out or plan a nomadic life style. Considering the plight of the homeless might be helpful here if it does not confuse the issue. The children would figure out what it would feel like to be nomadic, what belongings they would choose, and what modes of transportation they could adopt. The goal here would be to have the students understand the lifestyle from the nomadic point of view.

The children critique the text and identify some of the assumptions the text makes. The process of identifying assumptions continues on to the second part of this lesson plan considering modern migratory patterns. Particularly we would explore the movement from rural living to urban living.

The unit concludes with a Socratic discussion of why people leave Lone Pine (their town) to move to various urban settings.

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F. Unit on Writing Reports on the Computer

Focus

When using words alone to describe a mechanical operation, individuals sometimes are unable to translate these words into a visual picture in their minds. The reverse is also true; individuals are sometimes unable to translate visual pictures into words. However, through the use of computer technology, it is possible to easily combine the visual images and words to help convey meaning.

Description of Process

In this unit, students use the computer to create a report. Rather doing a how-to paper on using the computer or doing practice activities, students develop a complete document in a word processing program in which they insert clip art or pictures to assist them in making their report more attractive and complete. They learn to use several programs in this unit.

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G. Citizenship Unit

The Smalltown Elementary campus has redefined the thematic units their teachers use on this K-4 campus. The teachers have chosen a topic of study for each six-week period. Since they are very aware of the violence that seems to be growing more and more prevalent on small town campuses, they have decided that one of their themes for the year needs to be citizenship.

In order for the students to understand this concept, they have decided to focus on the heritage of the nation. To this end, each class will study important figures from early American history, reenact note worthy events, read texts that portray good citizenry, and create replicas of machinery used at the time.

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H. Shakespeare Study

Many times students feel that Shakespeare does not connect with their lives. Mary Jane Teacher from Large High School in Large Town, USA has designed a unit that she feels will engage the students in the learning.

She wants to engage the students in the learning, and she knows that they are unable to read the text very well because of the language of Shakespeare. Therefore, she has bought audio tapes for a *Midsummer Night's Dream* and plans to play those tapes and have the students read along. At the end of each act, she will be asking the students to write a reflective writing about which character the student thinks is most like her or himself. She will also be giving daily test to check for comprehension. At the end of the play reading and after the unit test, she has gained permission from her principal to have a Midsummer feast. The students will make Renaissance-like decorations, dress in costumes, and eat foods that might have been served in Renaissance England.

I. Bit by Bit—Building it Together

At Laurel Wood School, first grade students learned from the construction process as they observed from their classroom in an adjacent portable building while their new school was being built. "Bit by Bit—Building it Together" became the year long theme through which students observed and learned about construction.

Starting with design and planning, students developed scale drawings of their bedrooms with the help of their parents. Later, they produced blueprints in their classroom. Soon the first grade room was filled with an array of building materials—wooden blocks, Legos, Tinkertoys, and toothpicks—as students constructed their own designs. Next they studied rocks and soil and experimented with core sampling. Then, while the soundproofing was being installed in the new school, they explored the properties of sound. Finally, as the building was being landscaped, the first graders learned about plants.

Language arts was also woven into the theme. After reading *The Three Little Pigs*, the children made models comparing houses made of straw, sticks, and bricks. *Mike Mulligan and His Steam Shovel* served as a springboard for students to write and illustrate their impressions of the construction process.

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Activity 3: Where Am I?

Why do this activity?

This activity is designed to make teachers aware of how they see themselves and creates an opportunity for them to become aware of their personal needs and aspirations.

This activity may be done multiple times.

What should participants experience?

Through the visual representation created in this activity, they translate their thoughts into concrete images that symbolize their concept of self in relation to their educational environment. These images become a method for generating self awareness.

Time Required

60 minutes

Materials

Chart paper
Markers
Other craft items such as construction paper, yarn, glitter and so forth

Facilitation Guide

1. Ask each participant to freewrite about what they have discovered about their own practice. Use the following questions as a stimulus:

   What observation of your own practice causes you the most concern?
   **What makes you feel good about your teaching?**
   What have you discovered about your own practice?

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2. Give each participant a large sheet of paper.

3. Ask each participant to create a
    picture that illustrates:

    Where I am now as a teacher

    Where I am going as a teacher

    They may use pictures,
    metaphors, or words to show
    their thoughts. There is a
    sample to the right of a
    representation created by a
    teacher. Use the handout
    attached to help clarify
    directions for the teachers.
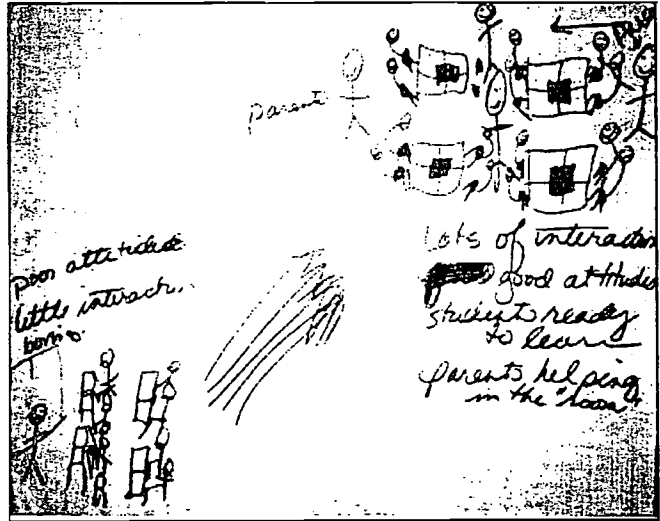
4. When drawings have been
    completed, ask participants
    to post them in the room.

5. Ask participants to talk about what they have depicted and why they have
    chosen to include the components.

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Where Am I?
Freewrite Question

- **What observation of your own practice causes you the most concern?**

- **What makes you feel good?**

- **What have you discovered about your own practice?**

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Where Am I?

- Where I am now as a teacher?

- Where I am going as a teacher?

Use pictures, metaphors, words, or whatever to show your thoughts at this time about where you are and where you want to be as a teacher.

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Activity 4: Observing as a Constructive Friend

Why do this activity?

This activity creates a supportive process that encourages teachers to break down the isolation of the classroom by allowing teachers to work together collaboratively to assist each other in solving a specific problem.

Before beginning this activity, make sure that the participants feel comfortable with each other and with the idea. This activity can be threatening if the participants have not established trust.

What should participants experience?

As the participants take part in this activity, they will gain a new perspective about classroom practice. They will learn more about their own practice by receiving feedback about classroom activities from another teacher. Teachers gain a greater awareness of the effect of personal style and different method of instruction.

Time Required

Outside of the meeting time:
  an initial planning session of 30 minutes
  a classroom observation of 40 - 60 minutes
  a debriefing session of 30 minutes
During meeting time:
  45 - 60 minutes

Materials

1. Observation Handout
2. Observation Reflection Handout

Facilitation Guide

1. Explain the process of observation using the Observation Handout. Be sure to go through this handout with the participants. Once observer pairs are

identified allow them to make the final arrangements. Allow the participants to set a period of time to accomplish the observations. It is important to note that they may be uncomfortable with this process. Your encouragement will help this go much more effectively.

2. Ask each participant to create an Observation Reflection. Use the attached handout to help them form their reflections.

3. Once the observations have been completed, engage the group in a discussion about the observation process in a meeting. The following questions may help focus the discussion, but other questions may also be asked.

> **Did the observation and feedback assist you in making a decision on your classroom practice?**
>
> **Are there any changes that need to be made because of what you learned through the observation?**
>
> **Which part of the process was most valuable to your growth as a teacher?**

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Observation Handout

Observation is a tool for learning about teaching practice and receiving and giving support to colleagues. It is important to note that this is not an evaluative process to determine whether or not an individual is a "good" teacher, but, rather, a tool to assist another teacher by observing and collecting data about a specific classroom practice the teacher being observed has identified. It is intended that these individuals work collaboratively on an aspect of the teacher's practice. The observed teacher gains data to assist in improving practice, while the observer develops a clearer understanding of his own practice by viewing the work of another.

For this process, each teacher will be involved in four steps:
➢ pre-observation dialogue,
➢ observation and collecting data,
➢ data report, and
➢ post observation dialogue.

Pre-observation Dialogue

Observation Plan
The teachers meet to discuss what they hope to accomplish.
▪ What data will be collected?
▪ What student actions or reactions will be recorded?
▪ Do both teachers feel that the information can be collected during the observation?
▪ How will the observer record the data?
▪ How will the observer provide feedback?
▪ When will the observation take place?

Observation Idea Example

A teacher has been trying a new questioning technique in the classroom. The teacher has not decided if it has helped involve more students or not.

Before she can decide if it is a useful technique, she needs to know if she is actually engaging more students by using this technique. She asks a colleague to come into her room and record her students' involvement. She wants the observer to note two things.
● How many students are engaged in the questioning activity?
● How many times does each student respond to the teacher's questions?

Sample Data Collection Strategies
● Every 5 minutes note how many students are engaged in the activity.
● Using a seating chart, note how many times each student responds to the teacher verbally.

Post-observation Conference
The pair discusses the information that the observer has collected. It is important to note that the observer is not evaluating or explaining what the observed teacher did—the observer is sharing the factual information with the observed teacher. The observer should let the observed teacher come to her/his own conclusions; however, it should not be a one sided conversation — it should be an interactive process, where both teachers learn from one another.

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Activity 4: Observing as a Constructive Friend

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The Observation Reflection

Write a reflection that addresses the following questions.

1. How did you feel as an observer?

2. How did you feel as the observee?

3. How did you negotiate what would be observed?

4. How were the data collected?

5. How were the data shared?

6. What impact did the data and the data discussion have on your practice?

7. Can you see yourself doing this again in the future? If yes, how and why. If no, why not?

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V. Improving Student Learning: Taking Action

Introduction

As teachers begin to reflect on their practice, they discover that curriculum, instruction, and assessment are linked and changing any one aspect impacts the others. With the introduction of standards by most states, educators have had to rethink both what they teach and the kinds of experiences students must have to reach the standards. As teachers make the connection between standards, their curriculum, and the needs of their students, standards can become a tool for developing a coherent curriculum.

But coherence does not automatically equate with quality. The teacher must begin to question the intentionality, or purposefulness, of their instructional choices and strategies. By developing an understanding of how children learn, teachers can make intentional choices about the design and implementation of a standards-based curriculum that will result in improved, quality student learning.

However, it is not enough for an individual teacher to create coherence within her classroom. Students pass through many classrooms in their educational journey—frequently with different structures, requirements, and expectations from year to year. In order for students to have a coherent educational experience throughout their school career, teachers within a building and within feeder patterns in a district must create common expectations for quality work.

Teachers can begin the process of establishing consistent ideas of quality within a school by collecting, analyzing, and reflecting on student work both within and across grade levels. The dialogues that occur help identify commonly held criteria for quality and lead to establishing consistent expectations across the school. Identifying important learning at each grade level and aligning them across grades can create a sequential, quality educational experience for students. This process can also become a part of an ongoing conversations among all members of the school community, including parents and students, that revolves around learning goals, assessments, and instructional strategies that promote student learning.

Activities in this section:

- Introduction
- Activity 1: Determining Expectations for Learners
- Activity 2: Defining Quality Work
- Activity 3: Clapping Hands

Activity 1: Determining Expectations for Learning

Why do this activity?

Improving student learning rests with the classroom teacher's ability to create more meaningful, coherent learning experiences. Being thoughtful about what is important for students to learn, establishing the criteria for demonstrating mastery, and planning carefully crafted experiences that enable students to develop understanding result from teachers having opportunities to dialogue, study, and reflect on teaching and learning with their colleagues.

What should participants experience?

This activity enables participants to explore standards or expectations for student learning that define the curriculum, allows an examination of the scope and sequence of the curriculum their students experience, and illustrates the importance of clearly communicating criteria for demonstrating mastery, leading to improved student performance.

Time Required

60–75 minutes for four or more sessions.

Materials

Handout of "Assessment Principles"
State standards and district curriculum documents
Chart paper and markers or overhead transparencies and pens
Rick Stiggins' Classification of Achievement Targets

Facilitation Guide

First Session:

1. Ask the group to brainstorm answers to the following question:

    Why do we use assessment

    Record responses on chart paper or overhead transparency.

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[Responses might include: provide feedback about the student mastery of a task; provide feedback about how the students were at mastering a task; provide a powerful learning experience for students; inform the district about the quality of their inservice programs, etc.]

2. Distribute the "Assessment Principles" cards and ask individuals to review each of the statements and answer the following questions:

Which principles affirm your own beliefs about assessment?

Are there any that challenge your beliefs or experiences? What are your concerns?

How might each principle influence your actions and decision making in the classroom?

3. In groups of three, participants share their answers to the above questions. The group should rank order the statements from most agreement to least agreement. (Allow 30 minutes)

4. A member of each group summarizes their discussion and records the top three statements they agree with on an overhead or chart paper. (Allow 15 minutes)

5. Identify issues or concerns that the whole group would like to spend more time resolving by asking for responses to the following questions:

Is there consensus or variation in the principles seen as most important?

Are there principles that challenge the group's beliefs or experiences? What about the principle is objectionable?

What changes or adjustments might you make in your assessment practice as a result of this discussion?

Second Session:

1. Have participants bring state standards or district curriculum documents for a content area they are interested in examining. There should be at least two members in a team examining the same content area and it may be helpful to have all members examine a single content focus. For example, many states and districts have literacy standards that apply across all grade levels and content areas.

2. Have participants select a single strand or major concept to examine across grade levels and content areas. Participants determine how skills are developed. Ask them to create a visual to share with the rest of the group. (Allow 45 minutes)

3. Each group presents their exploration to the group. Allow time for discussion after each presentation.

4. If it does not come out of the presentations and discussion, ask participants if there was confusion or disagreement about the meaning of individual standards or learning objectives during the small group examination. There will probably be disagreements reported. Follow up by asking how these differences could impact students as they move from teacher to teacher.

Third Session:

1. In groups of two or more as determined by participants, each group identifies a concept or skill that they will examine, teach to their students, and assess before the next meeting. It will be most effective if teams are composed of members from different grade levels as well as the same grade level.

2. Participants work together to develop the statements about the concept or skill that communicates how students demonstrate mastery and then review the work of other groups.

3. Discuss the kinds of learning that the statements represent. Ask participants to classify their learning statements according to Stiggins classifications. Rick Stiggins, with the Assessment Institute, Portland, Oregon, developed the following classification system:

   ➤ **Master Factual and Procedural Knowledge**
   ➤ **Use Knowledge to Reason and Solve Problems**
   ➤ **Demonstrate Mastery of Specific Skills**
   ➤ **Create Quality Products**
   ➤ **Acquire Positive Affect/Dispositions**

   Do the statements the participants created represent the various categories? Would including all types be desirable or appropriate?

4. Ask participants if they would like to modify their statements.

5. Group members will implement the learning statements with their class before the next group meeting and bring samples of student work to analyze with the group.

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Fourth Session:

1. Ask group members to reflect on the success of their instructional efforts. Allow 5–10 minutes for individuals to reflect and write their responses. This will help them prepare for sharing student work samples.

2. Working in the same small groups as the previous session, have each member share their experience. Group members review student work and answer the following questions about the learning experiences and assessment.

   Was the identified learning important for students to know and be able to do?

   Did the statement include criteria for determining quality student work?

   Were students provided with experiences that allowed them to reach the learning objective?

   Did the assessment allow students to demonstrate mastery?

   What did you learn about the students and the learning experience from reviewing the student work?

3. Ask the various small groups to share insights they gained from reviewing student work.

Background Information for the Facilitator

There will probably be some members who did not achieve their desired outcome from this activity. It will be beneficial to repeat this process for several iterations in order for members to feel comfortable with this design process. If study group members have not previously shared and reviewed student work, bringing in work samples from outside sources might help them transition into this potentially threatening personal review. For directions and sample student work see Sorting Student Work, Activity 2.1 in *Improving Classroom Assessment: A Toolkit for Professional Developers (Toolkit98)* or online at www.nwrel.org/eval/toolkit98.

Determining Expectations for Learning

Why do we use assessments?

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Determining Expectations for Learning

Which principles affirm your own beliefs about assessment?

Are there any that challenge your beliefs or experiences? What are your concerns?

How might each principle influence your actions and decision making in the classroom?

Determining Expectations for Learning

Rick Stiggins Classifications of Learning Tasks

➢ Master Factual and Procedural Knowledge

➢ Use Knowledge to Reason and Solve Problems

➢ Demonstrate Mastery of Specific Skills

➢ Create Quality Products

➢ Acquire Positive Affect/Dispositions

Transparency

Determining Expectations for Learning

Was the identified learning important for students to know and be able to do?

Did the statement include criteria for determining quality student work?

Were students provided with experiences that allowed them to reach the learning objective?

Did the assessment allow students to demonstrate mastery?

What did you learn about the students and the learning experience from reviewing the student work?

Activity 2: Defining Quality Work

Why do this activity?

Improving student learning rests with the classroom teacher's ability to create more meaningful, coherent learning experiences. By clearly identifying the learning target or objective, identifying how a student will demonstrate mastery, and planning carefully crafted experiences, students are more likely to be successful learners.

What should participants experience?

Participants examine student work to identify characteristics of quality that they can use to evaluate their students' work. They will analyze the relationship of clearly defined learning targets or goals, student learning experiences, and appropriate assessments.

Time Required

60–90 minutes

Materials

Student work samples (Camping Trip)
State standards and district curriculum documents
Chart paper and markers or overhead transparencies and pens

Facilitation Guide

1. Explain the purposes of this activity, stressing the importance of being able to clearly articulate the knowledge and skills expected of students at each grade level.

   - This activity models a strategy for designing instruction that leads to student success in reaching learning targets or goals.
   - It enables teachers across grade levels to clarify state and district expectations for student learning and to establish consensus about what quality student work looks like at different grade levels.

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Activity 2: Defining Quality Work

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2. Have participants work in small groups (2–3). Pass out a set of student work for each person. Participants complete the task individually. [If participants are already familiar with examining student work they may want to do this activity with work from their students.]

> *Sort the student responses into three groups. Think in terms of high, medium, low or inadequate, sufficient, exemplary, or any other designations that seem appropriate.*

[If participants refer to the process as assigning grades then the activity has the added benefit of clarifying the connection between grades and characteristics of student work that earn the grade, removing some of the subjectivity from grading.]

> *As you sort the student work, record the reasons why you assigned a piece of work to that group on the Record Sheet for Sorting Student Work. Express reasons in specific, easily understood language that has meaning for students and parents*

Examples of typical comments for the samples are:

High: I can tell exactly what the student did at every step. Concise and to the point. Correct answer. Logical and sequential. Good explanation. Appropriate use of pictures, diagrams, and symbols. Sequencing was purposeful. Evidence that the answer was checked for reasonableness.

Medium: Right idea, but computational errors. Forgot a step, but the rest is O.K. Didn't go far enough. Didn't clarify. One has to make some inferences about student thinking. Doesn't show all the steps. Used correct data, but incorrect process.

Low: I couldn't follow the sequence. The answer doesn't look reasonable. Used wrong numbers. Used the wrong process. Mixed processes. Shooting in the dark. Illogical. Unclear. No explanation of answer. I had to make a lot of inferences as to what the student did. I was confused by the explanation.

---

3 After rating the samples individually, members of each group arrive at their solution to the problem. Ask one group to share their solution with the whole group, allowing questions or alternative solutions from other groups. Discuss concerns expressed about the task.

4. Circulate among groups and remind participants that putting the papers in the "right" group isn't as important as the reasons why they chose to put it in a particular group. Specific comments are more useful than generalities ("the student started out well, but seemed to get lost in the middle," rather than "logical"). Challenge participants to think beyond general educational terminology such as "voice," which students don't understand when used in this context.

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5. When most groups have completed the process of sorting, elicit and summarize their comments in the three categories on an overhead or chart paper. Write comments exactly as given, if possible. If you must rephrase to avoid recording something misleading, be sure to ask if you have captured the idea accurately. Continue to challenge participants to clarify meanings in language that students can understand.

6. Explain that the process up to this point has been **holistic**. There are various criteria given for placing an item in one of the three categories but only one grade or designation was given for a piece of work. Usually the process of recording the lists will result in someone saying, "I had trouble placing this paper in one stack or the other because it was strong on communication but contained an error in computation." In order to (a) have a profile of student strengths and weaknesses, (b) help students discuss their own work, and (c) divide a performance into teachable segments that students can more easily master, teachers would evaluate student work using an **analytical trait scoring system**, focusing on discrete criteria within broad categories of skills.

   [Groups interested in delving more deeply into the design and use of assessment alternatives should refer to the resource mentioned below.]

7. Ask the group to compare their list of valued features to those identified in their district curriculum. Ask, "What similarities do you find?" This should help participants to see that

   • content standards are represented in the daily work of students, and
   • the content standards represent what they already value in student learning

   Stress the importance of alignment or consistency between their criteria, their curriculum, and the way learning goals are assessed.

8. Review the steps of the activity with the group. This process is useful for identifying models of student work for particular grade levels and content areas. The group may want to specify particular kinds of work they want to collect to begin establishing models of quality work. These models will provide students with concrete examples of the quality of work expected of them.

   1. Identify the learning goal or target—what the student should know and be able to do.
   2. Determine how students will demonstrate mastery of the skill or knowledge.
   3. Specify the criteria that will be used to evaluate the quality of the work.
   4. Design learning experiences that will result in students successfully completing the assessment task.

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Adapted from <u>Sorting Student Work, Activity 2.1</u>, in *Improving Classroom Assessment: A Toolkit for Professional Developers (Toolkit98).*

<u>Background Information for the Facilitator</u>

There will probably be some members who did not achieve their desired outcome from this activity. It will be beneficial to repeat this process for several iterations in order for members to feel comfortable with this design process. If study group members have not previously shared and reviewed student work, bringing in work samples from outside sources might help them transition into this potentially threatening personal review. For directions and sample student work see <u>Sorting Student Work, Activity 2.1</u> in *Improving Classroom Assessment: A Toolkit for Professional Developers (Toolkit98)* or online at www.nwrel.org/eval/toolkit98.

Student Work Sample

Sample 1

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

If. 12.5 liters are needed for 5 people for 7 day well then 45 liters will be needed for three days for 8 people because for 1 person it was 1.5 which all together equaled 12.5 for 1 day. for 8 people to go on a 7 day trip you'd have to bring 45 liters.

Sample 2

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.
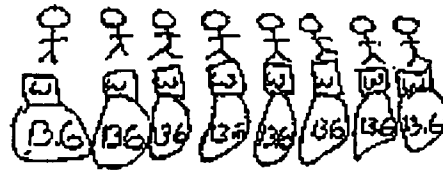
$$\begin{array}{r} 12.5 \\ 3 \\ +\ 8 \\ \hline 13.2 \end{array}$$

liters of water 13.6 for 8 people to bring camping for 3 days

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Student Work Sample

Sample 3

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer. 60 Liters

I came up with that by getting how much 1 person needed Then how much 8 people needed that was 20 and then I multaplied that by three for three days and came up with sixty

Sample 4

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer. 20. liters for 8 people one day 2.5 for each person

$$12.5 \div 5 = 2.5$$

$$12.5 + 2.5 = 15.0$$
$$15.0 + 2.5 = 17.5$$
$$17.5 + 2.5 = 20.0$$

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Student Work Sample

Sample 5

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

$$2.5 \text{ liters/person}$$
$$5\,\overline{)12.5 \text{ liters}}$$

$$2.5 \text{ l/person}$$
$$\times\ 8 \text{ people}$$
$$\overline{20 \text{ liters/day}}$$

$$20 \text{ liters/day}$$
$$\times\ 3 \text{ days}$$
$$\overline{60 \text{ liters in all}}$$

I divided 12.5 liters ÷ 5 people = 2.5 liters/person.
I did that so that I could take 2.5 liters × 8 people
= 20 liters/day. Now I need to multiply 20 liters/day
× 3 days = 60 liters to last the whole camping
trip. 60 Liters in all.

Sample 6

$$12.5 \text{ litters}$$
$$\times\ 2$$
$$\overline{25.0 \text{ litters}}$$
$$\times\ 8 \text{ people}$$
$$\overline{200.0 \text{ litters}}$$
$$\times\ 3 \text{ days}$$
$$\overline{600.0 \text{ litters}}$$
are needed for 8 people for 3 days

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Sample 7

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

Sample 8

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Sample 9

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

2.5 lieters of water apiece

5 people 12.5 lieters of water for a group of 5 people

2.5 lieters each of water

8 people

20 lieters of water needs to be token at 2.5 lieters each

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Student Work Sample

Sample 10

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

```
   12.5
 X  2  more people
  ____
   25,

 X  2X  more days
  ____
   50
```

info!
much 12.5

8 people   3 days

First e gathered some important info. 5 peopl for one day was 12.5 e add two people by timing to equel 25, then e times it by two again for the day. e new that one day was all ready counted 50 liters

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Sample 11

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer.

8 = 3

12.5
  5
―――
  2.5
x 4
―――
  10
+50
―――
 60
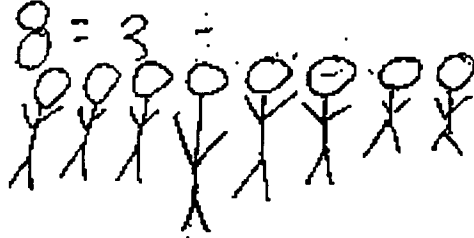
Sample 12

14. A group of 8 people are all going camping for three days and need to carry their own water. They read in a guide book that 12.5 liters are needed for a party of 5 people for 1 day. Based on the guide book, what is the minimum amount of water the 8 people should carry all together?

Explain your answer. They can bring enough water for 5 people for 6 days which 75 liters which should be enough

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Activity 3: Clapping Hands

Why do this activity?

This powerful role-play allows participants to experience the impact of being judged when the neither the task nor expectations for performance are clear. The group recognizes the importance of words and actions—or lack of words—on students. This activity helps participants to identify guidelines for high quality assessment.

What should participants experience?

Participants will move through an evaluative process, gain a personal insight into the ramifications of feedback given to students, and recognize when feedback accelerates or inhibits learning.

Time Required

60 minutes.

Materials

- A single copy of the Clapping Hands Certificate (Handout)
- The script cards (card masters located in Appendix)
- Score grid (Transparency)

Facilitation Guide

Facilitation Notation: For this particular activity, overplaying the seriousness of the script will add to the experience.

- Before beginning this activity arrange the room so that chairs are placed in a semi-circle at the front of the room, as the drawing illustrates.
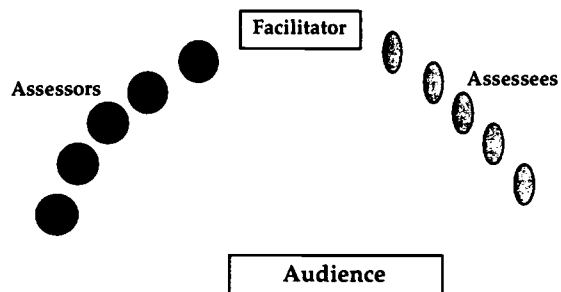
- Use the script that follows. You

will find a copy of the script on cards in the Appendix. You may also use the score grid to track the scores for each assessee during the activity.

Script

All of you are involved in a simulation activity. I'm going to ask you to volunteer to play different roles and ask you to do certain things. As you volunteer, please take the seat I indicate in the front of the room (You will need 5 assessors to fill the "assessor" chairs and 5 assessees to fill the "assessee" chairs).

Assessees will be given a simple task. They are to do this task to the best of their ability. Assessors will evaluate the quality of the performance of the assessees as I request.

(Addressing Assessee # 1 and using that person's name*)* **(Give no verbal or non-verbal feedback, other than what is written.)**
> *(Name), please stand and clap for us.*
> (person claps)
> *Thank you, (name). Please sit down.*

(Addressing Assessee # 2 and using that person's name) **(Designate a "hall monitor" to ask assessees to come back into the room when asked and to ensure that the assessee can't hear the discussion.)**
> (Name), *please stand and clap for us.*
> (person claps)
> (Name), *please leave the room and come only back when you are asked.*

(Person is escorted from the room.)
> *Assessors please assess* (name)'s *clapping on a scale of 1-5, with 1 being the lowest and 5 being highest.*
> *Please tell me your scores.*

Facilitator records each assessor's score, adds the total score and reports it to the panel. **Ask the participant to return, but give NO feedback.)**

(Addressing Assessee # 3 using that person's name)
> (Name), *please clap for us.*
> (person claps)
> (Name), *please leave the room and return when you are called.*

(Person is escorted from the room.)
> *Assessors please assess* (name)'s *clapping on a scale of 1-5, with 1 being the lowest and 5 being highest.*
> *Please tell me your scores.*

Facilitator records each raters score, adds the total score and reports it to the panel. Ask the participant to return.)
> (Name), *you got a score of _____, I hope you find this information useful.* **(Do not give any other feedback.)**

(Addressing Assessee # 4 and using that person's name)

(Name), *please clap for us.*
(person claps)
(Name), *please leave the room and return when called.*
(Person is escorted from the room.)

(After the assessee leaves the room, turn to the assessors:

> *I have good news and bad news. The good news is that I have heard from the International Clapping Institute. As you know, that organization is developing the international standards for clapping that all our students must meet by the year 2000. They have begun a handbook on how to conduct the assessment. From now on they want us to assess all clapping performances on three traits — volume, appropriateness, and creativity.*

> *The bad news is that they haven't finished the handbook, so I really can't give any more guidance than that. We just have to do the best we can. So, from now on we'll assess performance on each of the three traits, where 1 is low and 5 is high. Please rate the clapping presentation you have just seen on this basis. Please tell me your scores.*

(Have each assessor submit scores for the assessee. Average the scores for each trait and prepare the Clapping Institute Award Certificate with the person's name. Ask the assessee to come back, give that person the certificate, and shake hands.)

> (Name), *here are your scores. I hope you find them useful.* (**Do not provide any other feedback.**)

(Addressing Assessee # 5 and using that person's name)
> (Name), *tell me about your previous clapping experience. In what kinds of situations do you find yourself clapping?*
> *You've obviously had some experience clapping. What do you feel are your strengths as a clapper?*
> *Is there anything about your clapping you would like to improve? Anything you'd like the panel to give feedback on?*
> *Is there any guidance that you'd like the assessors to give you?*
> (You may add other questions or comments if they seem appropriate.)

(Say to the assessors.)
> *You're the experts on clapping; that's why you are here. Is there anything you want* (name) *to know that you'll be looking for when s/he claps?*
> *Do you want to discuss the criteria given to us by the Clapping Institute?*
> *Is there anything you want* (name) *to know that is important to being effective? Anything in particular you'll be looking for in the clap?*

>> (You may add other questions or comments if they seem
>> appropriate.)

> (Say to the assessee.)
>> *Would you like to describe the setting in which you'd use the clap you are*
>> *about to demonstrate?*
>> *What do you want to accomplish with this clap?*
>> *Are you ready?*
>> (Name), *please clap for us.*
>> (person claps)
>> (Name), *Do you want to leave the room or stay? Do you want feedback*
>> *verbally, numerically, or both?* (Provide feedback as requested.)

- Use all of or part of the following questions to generate discussion about this
  activity.

  To the assessees,
  What thoughts or feelings did you have?
  How did you feel as we came down the line and other people got different
      kinds of preparation or feedback?
  How did you feel about getting no preparation or feedback?
  How did you feel when you were asked to leave the room?
  How did you feel about the feedback or lack of feedback you received?

  To the assessors,
  How did you feel about the different rating "systems"?
  How did you feel about having no criteria?
  Since you had no criteria, how did you create a ranking score?

  To all assessors and assessees in the role-play,
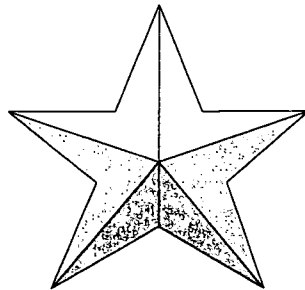 **How did you feel during this role-play?**
  Would any of you like to clap again?

  To the audience,
  How did you feel during this role-play?

International

Clapping Hands
Institute

Award

Certificate For

_____

Signed/Date

_____

Clapping Hands Score Grid

	Assessee 1	Assessee 2	Assessee 3	Assessee 4	Assessee 5
Assessor 1					
Assessor 2					
Assessor 3					
Assessor 4					
Assessor 5					

Activity 1.5, Improving Classroom Assessment Toolkit

VI. Appendix

- Facilitation Helps
    - Contemporary Theories of Learning
    - Reflective Writing/Journals
    - Reviewing Student Work
    - Strategies to Use With Text
- Bibliography
    - Resource List
- Activity Cards Masters
    - Constructing a Story
    - Who Killed Professional Development
    - Assessment Principles
   - Clapping Hands

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Contemporary Theories of Learning

Traditional	Students learn a prescribed body of knowledge through memorization, with knowledge viewed as true and unchanging. Strategies for learning focus on the teacher as the source of knowledge and students as recipients.
Behavioral	Learning takes place when knowledge is broken down into smaller pieces and students are rewarded for successful performance. Direct teaching strategies dominate, based on the belief that student behavior can be measured, diagnosed, and predicted. The aim is to calibrate behavior to achieve set learning objectives and goals.
Grouping/ Tracking	Based on behavioral theory, students are characterized as differing widely in ability, necessitating homogeneous groupings where similar students are given the same learning "treatment." Teaching efforts are aimed at moving students to higher-level groups, although in practice group placement tends to remain fixed. Variations in teaching strategies and learning activities are based on the perceived ability level of students.
Learning/ School Effectiveness	Students learn when the curricular goals are clearly delineated and when teaching and assessment methods are aligned with the curriculum. Time spent engaged in active learning is correlated with achievement. The underlying assumptions draw from behavioral theory. Student esteem is believed to be enhanced by academic outcomes which are fostered by teachers holding high expectations for academic performance. A core belief is that all students can learn.
Communities of Learners	Student learning is enhanced when students work cooperatively and share knowledge. The process of learning is valued as highly as the content, and students are rewarded for cooperative behaviors. Students and their teachers learn together, with group skills and interdependence emphasized. The teacher's role changes from presenter to facilitator of knowledge. Classroom environment is seen as interrelated to how students learn and how teachers teach. Student ability is believed to be not an innate quality but part of the educational context.
Constructivist Learning	Based on assumptions from community of learners theory, students construct meaning from personal values, beliefs, and experiences. The development of personal schemas and the ability to reflect on one's experiences are key theoretical principles. It is believed that knowledge exists within the learner. The social nature of learning is emphasized; shared inquiry is a central activity. Multiple outcomes are expected and encouraged, with assessment integral to the process.

From: Walker, D., & Lambert, L. (1995). Learning and leading theory: A century in the making. In L. Lambert et al. (Eds.), The constructivist leader (pp. 1-27). New York: Teachers College Press.

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Reflective Writing/Journals

Shared journals serve three purposes. First, they are a tool to assist participants to become more reflective. Second, they create a record of thought for reflection over time. Finally, they assist in the analysis of the impact of study group participation on a teachers' practice. Journal or reflective writing used in combination with

Reflective Model
Study Groups (Collegial Process) **➜** Improved Practice (Reflective Process) **+** Journals (Internal Process)

the study group process can lead to a heightened degree of reflectivity about classroom practice. Journal writing also engages participants in the use of multiple modalities: tactile manipulation, visual cues and concrete representations. Writing is more than a tool to illustrate what is learned. It is also a process for learning and an effective sense-making strategy.
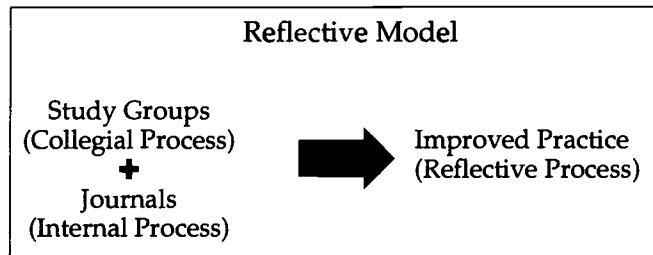
The reflective quality in journal writing develops over time and may not be evident in initial attempts. Writers pass through various stages of reflectivity. Their early entries are generally in a reporting style where they recount events. However, as trust develops, participants will begin to use the process to "think" through issues. Using a format that allows writers to receive immediate written or verbal feedback can increase the reflective quality. If email is available, it is a great tool to expedite the process of sharing journal entries.

Reflective writing may not be readily accepted by or easy for participants. They may find translating abstract thoughts into concrete patterns is an arduous task. In the beginning they be more concerned with doing it right rather than using it as a reflective tool. However, study group participants testify to the importance of engaging in personal writing. Providing positive feedback to shared writing is important in encouraging their efforts. Participants need to be moved past the fear before the tool can be useful for them or the facilitator.

Suggestions in deciding the best way to use journals

1. Use an open-ended prompt that allows them room to negotiate meaning. You may want to determine your prompts before you begin the session.

2. Negotiate with the group on when they will turn in journals (i. e. after the meeting, in the next week , etc.)

3. Give feedback that praises an issue or concept the writer included in the journal, connects the ideas to a second issue and asks the writer to think deeper on the issue.

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Reviewing Student Work

1. Presenter describes the student learning

    - Standard addressed

    - Student performance expected

2. Group asks clarifying questions

3. Group examines student work samples

4. Group provides feedback

    - Insights into student thinking

    - Questions about the task

    - Other ideas for assessing the target

5. Reflections from the presenter

    - Insights about student work

    - Insights about instructional strategies

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Strategies to Use with Text

Introduction

As educators begin to visualize changes in their practice, they also question old beliefs. Many times they need more information about a specific topic or process. Journal articles are an excellent source for both awareness and specific information. The strategies listed below provide effective ways to use text in the study group.

These strategies also promote the concept of dialogue. Each is a way to frame a dialogic session. It is recommended that these strategies be done in conjunction with other activities.

Materials

In the Appendix, there are suggested articles for study groups to use; however, these strategies may be used with any text material.

Strategies

1. Ask the group to read an article that is appropriate to their thinking or needs at the time.

2. Use one of the following techniques to involve the participants in an interactive investigation or general discussion of the article. This list is not exhaustive, but it does provide varied strategies to engage participants.

- **Circle the Wagons** — Involve the participants in a simple discussion circle where all members face each other and talk. It is important that there are no obstacles (desks, tables, chairs) between any members of the group. It is not uncommon, particularly in teacher groups, for participants to sit in rows every time they hold a discussion. When you change the configuration of the seating, you change the dynamics of the group.
  Time Required — Reading time plus 30 - 45 minutes.

- **Mapping for Understanding** — Ask them to map their understanding of the new information as it applies to their classrooms. Mappings are flow charts and are sometimes called clusterings or webbings. Providing colored markers, construction paper and other additional materials will add to the participants' interest.
  Time Required — Reading time plus 60 - 90 minutes.

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- **Discussion Hosts** — Ask individuals to "host" a small round table discussion about the article that has been read. There should be 4 to 5 participants to the round table. "Groups" of people would move through several "hosts" in a given period of time. It would be a good extension to the mapping technique. As a further modification, it is possible to do this for multiple articles at the same time. Each "host" facilitates a discussion on a different article.

    Time Required — Reading time plus 30 - 45 minutes.

- **I Talk-You Listen/You Talk-I Listen** —Divide the group in half. Arrange the chairs so that the two halves face one another. Ask one row of participants to talk to the other row about what they have learned from the material for 3 - 5 minutes. Note – the roles are definitive, the talking row talks; the listening row listens. It is a one way exchange of information. At the end of the 3 - 5 minutes, ask one row to move down one seat. Then reverse the talker and listener rows — the talkers become listeners; the listeners become talkers. Continue this process 5 - 7 times. At the end, ask individuals to share important learnings. This final "release" is a good time to use Circle the Wagons.

    Time Required — Reading time plus 60 - 90 minutes.

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Resource List

Possible Journal Articles for Study Group Participants

Dempster, F. N. (1993). Exposing ours students to less should help them learn more. *Phi Delta Kappan, 74,* 433-437.

Fullen, M. (1998, April). Breaking the bonds of dependency. *Educational Leadership,* 6-10.

Lambert, Linda. (1998) How to build leadership capacity. *Educational Leadership, 55*(7), 17-19.

Paul, A. M. (1998, January/February). Do parents really matter? *Psychology Today,* 46+.

Plomin, R. & DeFries, J. C. (1998, May). The genetics of cognitive abilities and disabilities. *Scientific American,* 62-69.

Pogrow, S. (1990, January). Challenging at-risk students: Findings from the HOTS program. *Phi Delta Kappan,* 389-397.

Prawat, R. S. (1992, May). Teacher's beliefs about teaching and learning: A constructivist perspective. *American Journal of Education,* 354-395.

Principled Practice In Mathematics and Science Education. (1997, Fall). Volume 1, Number 2.

Raywid, M. A. (1993). Finding time for collaboration. *Educational Leadership, 51*(1), 30-34.

Throne, J. (1994). Living with the pendulum: The complex world of teaching. Harvard Educational Review, 64(2), 195-208.

Watts, M. & Pope, M. (1989). Thinking about thinking, learning about learning: Constructivism in physics education. *Physics Education, 24,* 326-331.

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Biobilographical Sources for Grounding PIC Approach to Study Groups

Birchak, B., Connor, C., Crawford, K. M., Kahn, L. H., Kaser, S., Turner, S., &Short, K. G. (1998). *Teacher study groups: Building community through dialogue and reflection.* Urbana, IL: National Council of Teachers of English.

Brooks, J. G. &Brooks, M. G. (1993). *In search of understanding: The case for constructivits classrooms.* Alexandria, VA: Association of Supervision and Curriculum Development.

Egan, K. (1986). *Teaching as story telling an alternative approach to teaching and curriculum in the elementary school.* Chicago, IL: University of Chicago Press.

Murphy, C. (1995). Whole-faculty study groups: Doing the seemingly undoable. *Jouornal of Staff Development, 16(3),* 37-44.

Murphy, C. (1997). Finding time for faculties to study together. *Journal of Staff Development, 18(3),* 29-32.

Palmer, P. J. (1998). *The courage to teach.* San Francisco, CA: Jossey-Bass Publishers.

Sagor, R. (1992). *How to conduct collaborative action research.* Alexandria, VA: Association for Supervision and Curriculum Development.

Wiggins, G. & McTighe, J. (1998). *Understanding by design.* Alexandria, VA; Association for Supervision and Curriculum Development.

Garmston, R. & Wellman, B. (1999). *The adaptive school: A sourcebook for developing collaborative groups.* Norwood, MA: Christophre-Gordon Publishers, Inc.

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Constructing A Story
Activity Cards

It is recommended that the activity cards be duplicated on heavy cardstock and laminated before cutting apart if you will use the activity with multiple groups. A set is needed for each small group (four or fewer participants).

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He sat there watching her and smiled. He thought, I'm going to eat this child. Compared with her old Grandmamma She's going to taste like caviar.

But because his status outside society had freed him from slavish adherence to linear, Western-style thought, the Wolf knew of a quicker route to Grandma's house.

Daze worry on-forger-nut ladle gull's lest warts. Oil ofer sodden, caking offer carvers an sprinkling otter bet, disk hoard-hoarded woof lipped own pore Ladle Rat Rotten Hut an garbled erupt.

Snow half-caked the lattice and she opened it to look into the garden. It was a white night of moon and snow; the blizzard whirled round the gaunt, gray beasts who squatted on their haunches among the rows of winter cabbage, pointing their sharp snouts to the moon and howling as if their hearts would break. Ten wolves; twenty wolves—so many wolves she could not count them, howling in concert as if demented or deranged. Their eyes reflected the light from the kitchen and shone like a hundred candles.

"Aren't you forgetting something?" Red Riding Hood bravely shouted. "You must request my permission before proceeding to a new level of intimacy!"

"You know, my dear, it isn't safe for a little girl to walk through these woods alone."

The Wolf could not take any more of these specist slurs, and, in a reaction appropriate for his accustomed milieu, he leaped out of bed, grabbed Little Red Riding Hood, and opened his jaws so wide that she could see her poor Grandmother cowering in his belly.

Many people believed that the forest was a foreboding and dangerous place, but Red Riding Hood knew that this was an irrational fear based on cultural paradigms instilled by a patriarchal society that regarded the natural world as an exploitable resource, and hence believed the natural predators were in fact intolerable competitors.

"And what do you think you're doing?" asked Red Riding Hood... "Bursting in here like a Neanderthal, trusting your weapon to do your thinking for you!"

"Sexist! Speciesist! How dare you assume that womyn and wolves can't solve their own problems without a man's help!"

When she heard Red Riding Hood's speech, Grandma jumped out of the Wolf's mouth, took the woodchopper-person's axe, and cut his head off.

After this ordeal, Red Riding Hood, Grandma, and the Wolf felt a certain commonality or purpose. They decided to set up an alternative household based on mutual respect and cooperation, and they lived together in the woods happily ever after.

And everyone lived happily every after.

The End.

Realizing his grave mistake, the public health research wolf turned to run. But the Junkman grabbed the wolf by the tail and made him eat his words. The public health research wolf choked on his own junk science.

About this time Grandfather, who, being a Boy Scout, was *always* prepared, had been carrying his Swiss Army knife, cut his ropes and Grandmothers and marched upstairs. He laid into Francois again... swearing loudly how he would sue him till the cows came home. Francois, not having been able to say his prepared lines, and quite upset from Gilda's bouncing on his stomach, shook her off and began huffing and puffing up a storm. Quite a wind ensued and everyone became entangled in miscellaneous shirts, knick-knacks, pieces of glass from the windows, and Grandmother had a sneezing fit from the dust, when in walked the third little pig, dressed up in black suit and bowler, and carrying a bowler, just like a lawyer should.

Inner ladle wile, Ladle Rat Rotten Hut a raft attar cordage, an ranker dough ball "Comb ink, sweat hard," setter wicket woof, disgracing is verse. Ladle Rat Rotten Hut entity bet-rum and stud buyer groin-murder's bet.

"O Grammar!" crater ladle gull historically, "Water bag icer gut! A nervous sausage bag ice!"

"Battered lucky chew whiff sweat hard," setter bloat-Thursday woof, wetter wicket small honors phase.

"O Grammar, water bag noise! A nervous sore suture anomolous prognosis!"

"Battered small your whiff, doling," whiskered dole woof, ants mouse worse waddling.

"O Grammar, water bag mouser gut! A nervous sore suture bag mouse!"

She had approached no nearer than twenty-five feet from the bed when she saw that it was not her grandmother but the wolf, for even in a night-cap a wolf does not look any more like your grand-mother than the Metro-Goldwyn lion looks like Calvin Coolidge. So the little girl took an automatic out of her basket and shot the wolf dead.

And *Wolfie* wailed, "That's not enough!
I haven't yet begun to feel
That I have had a decent meal!"
He ran around the kitchen yelping,
"I've *got* to have a second helping!"

"No I think I'm the real victim, here," said the woodchopper. "I've been dealing with my anger since I saw her picking those protected flowers earlier. And now I'm going to have such a trauma. Do you have any aspirin?"

"And what do you think you're doing?" cried Little Red Riding Hood. "If I let you help me now, I would be expressing a lack of confidence in my own abilities, which would lead to poor self esteem and lower achievement scores on college entrance exams."

"Grandma, I have brought you some fat-free, sodium-free snacks to salute you in your role of a wise and nurturing matriarch."

...the Wolf said softly, "Come closer, child, so that I might see you."

Red Riding Hood said, "Oh, I forgot you are as optically challenged as a bat. Grandma, what big eyes you have!"

"They have seen much, and forgiven much, my dear."

"Grandma, what a big nose you have--only relatively, of course, and certainly attractive in its own way."

"It has smelled much, and forgiven much, my dear."

"Grandma, what big teeth you have!"

The Wolf said, "I am happy with who I am and what I am"

...He grabbed Red Riding Hood in his claws...Red Riding Hood screamed, not out of alarm at the Wolf's apparent tendency toward cross-dressing, but because of his willful invasion of her personal space.

It is midwinter and the robin, the friend of man, sits on the handle of the gardener's spade and sings. It is the worst time of all the year for wolves, but this strong minded child insists she will go off through the wood. She is quite sure the wild beasts cannot harm her ... she lays a carving knife in the basket her mother has packed with cheeses... bottle of harsh liquor... a batch of flat oat cakes ...a pot or two of jam. The flaxen haired girl will take these delicious gifts to a reclusive grandmother so old the burden of her years is crushing her to death. Granny lives two hours' trudge through the winter woods, the child wraps herself up in her thick shawl...she steps into her stout wooden shoes, she is dressed and ready and it is Christmas Eve. The malign door of the solstice still swings upon its hinges, but she has been too much loved ever to feel scared.

When Grandma opened it, she saw
The sharp white teeth, the horrid grin,
And Wolfie said, "May I come in?"
Poor Grandmamma was terrified,
"He's going to eat me up!" she cried.
And she was absolutely right.
He ate her up in one big bite.

"P'raps you misunderstood me, eh?" Francois said with those smiling faces that say "I'm not really the nice guy my refined tone suggests." "I said I'd like to lighten your load a bit. How 'bout we start with one of those nice pastries there?"

"But mother, aren't you oppressing me by ordering me to do this?"

She replied, "Some healthful snacks for my grandmother, who is certainly capable of taking care of herself as a mature adult."

"S'cuse me, mademoiselle, I couldn't help but noticing that you have been carrying some absolutely scrumptious smelling pastries and fruits and I was wondering if I could help ease your load a bit. (You didn't think he was threatening to *eat* her did you? What kind of barbarians do you think wolves [especially French ones] are, anyway?) Grandmother's house is a long way, and I wouldn't want your arm to fall off between here and there. She'd be *so* upset, you know."

"How are you, Little Red Riding Hood?" he said.

"I'm fine, thank you, Wolf."

"And where are you going so early?"

"To visit my sick grandmother."

"What are you carrying in that basket?"

"I'm taking cake and wine to help her get well."

"But, Little Red Riding Hood, where does your grandmother live?"

"About fifteen minutes from here, under three large oak trees. You know the place."

It is winter and cold weather. In this region of mountains and forest, there is now nothing for the wolves to eat. Goats and sheep are locked up in the brye, the deer departed from the remaining pasturage on the southern slopes—wolves grow lean and famished. There is so little flesh on them that you could count the starveling ribs through their pelts, . . . those slavering jaws; the lolling tongue; the rime of saliva on the grizzled chops–of all the teeming perils of the night and the forest, ghosts, hob goblins, ogres that grill babies upon gridirons, witches that fatten their captives in cages for cannibal tables, the wolf is worst, for he cannot listen to reason.

Red Riding Hood said, "I find your sexist remark offensive in the extreme, but I will ignore it because of your traditional status as an outcast from society, the stress of which has caused you to develop your own, entirely valid worldview. Now, if you'll excuse me, I must be on my way."

Once upon a time there was a dear little girl who was loved by everyone who knew her. Her grandmother loved her most of all, and she could never do enough for the child. She gave her a cape made of red velvet, and it looked so sweet that the little girl never wanted to wear anything else. So everyone began to call her Little Red Riding Hood.

Who Killed Professional Development

It is recommended that the activity cards be duplicated on heavy cardstock and laminated before cutting apart if you will use the activity with multiple groups. A set is needed for each small group (four or fewer participants).

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Who Killed Professional Development? Cards   *SEDL, 2000*

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Malcolm Mandate In The State Legislature With Smoke & Mirrors

Malcolm Mandate wears a three piece suit, a silk tie, and a monogrammed handkerchief in his pocket. He looks professionally groomed (somewhat like a show poodle). He carries a leather briefcase loaded with printouts of test scores and the phone numbers of influential lobbyists. He has never been a teacher but has a degree in business education from a mail order college and an uncle who contributes heavily to a state senator. Malcolm writes mandates for the schools in his state. He just wrote a new mandate reallocating money from the state lottery to staff development and the "new money" represents a 75% decrease from last year's funding. He is easily swayed by the media. He has never spent an entire day in a school but drives by one on his way to work. Malcolm is being hailed as an advocate for education. Those who have met him describe him as sinister. Some have even gone so far as to call him Evil.

Dr. Didactic, The Superintendent, In The Office With A Full Franklin Planner.

Dr. Didactic has good intentions to appoint a staff development committee for the district. But there is never a good time for the group to meet. So, staff development is always a last minute phone call to the university or to a colleague who can come and talk on something. Time is the element that keeps Dr. Didactic from investing any real effort in staff development.

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Vera Veteran In The Teachers Lounge With Her Venomous Advice?

Vera has been around the school since dirt. She firmly believes that if staff ignores all staff development and new ideas, things will be just fine. She has taken it upon herself to mentor new teachers. She advises them to just close their doors and teach. Because she offered them her help, they came to depend on her and soon believe most of what she tells them. She does not like teaming or advisory and has convinced most of the newcomers to stand their ground with the administration and they wouldn't have to do anything new. She volunteers to be on school committees so that she can voice her veteran opinion early and squelch any opposition or changes before they are proposed to the entire staff. She rarely comes to staff meetings because she has more important things to do.

Noah Message In The Auditorium With A Long Drawn Out Speech To The Staff About Absolutely Nothing Of Relevance.

At one time, Noah was a Middle School Principal and had implemented teaming with moderate success. While his school had never been exceptional and had never truly been a Middle School, Noah was available on the day his old friend called and said they needed a speaker for their inservice. Noah has been retired for ten years and has forgotten most of what really happened. But to oblige an old friend, he talked to the teachers anyway. While most of them slept in the hot auditorium, Noah droned on about nothing in particular. His joke was even one everyone had heard before. The staff decided not to pursue Middle School.

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Ms. Peacock In The Classroom With Her Holier Than Thou Attitude?

Ms. Peacock never walked down the hallways of the school...she acknowledges her subjects as if she were the queen of teaching in her school. She needs no staff development because she was asked to present her ideas at a conference once and is now a self-recognized expert on all topics related to middle school. Whenever the principal asks that she join a committee or study group to offer her ideas, she acts insulted that she has to give up her time to do so. She belittles teachers who participate in strategic planning or study groups and assumes they do so because they just aren't as skilled as she. Visitors are not allowed in her classroom because it upsets the climate that she creates with her students. She has been known to stare daggers at anyone who dared come to her room while she is lecturing.

George Gridlock In The Cafe With An Ancient Schedule?

George Gridlock is the assistant principal in charge of scheduling. He firmly believes that the computerized scheduling program that he bought ten years ago can still do the job in the Middle School. Even though the staff wants a block schedule, he said it could not be done unless they eliminated band from the school day. He doesn't see how the program could enable teams have back to back classes or flex time. His major concern is that the lunchroom groups are not too large. When new schedules are suggested, he simply refutes them by saying they wouldn't work with his program.

Priscilla President In The Union Hall With The Contract

Prissy knows that most middle school teachers are just waiting to get a real job at the high school. The middle school staff wants to form study groups to look at better ways to organize their day and curriculum. Prissy reminds them that their workday is clearly defined. She tells them that IF they are meeting beyond the regular school day, they MUST be compensated. She also states that administrators just use these groups as a ploy to make teachers think that what they think counts. Prissy's motto is: "More pay. We're worth it; You'll pay it! How in the world can we ever make progress in the next negotiations if these teachers are willing to just give their time away."

Colonel Calendar In The Central office With A Crystal Ball?

Colonel Calendar has lived in the community for years and therefore knows or can visualize what everyone wants the school year to look like. Traditions must be preserved at the school and five-day weeks must be the norm. He schedules no staff development in the fall so that he saves Thanksgiving for families to take off and teachers to have inservice. Every afternoon before a major holiday, vacation, or spring break he generously assigns to staff development. There is no such thing as early release or late arrival because the bus drivers get upset if the schedules were changed.

Professor Plum In The Ivory Tower With An Ivy Vine.

Professor Plum firmly believes that his courses are so important they can only be taught in a room six feet from his campus office, Wednesdays at 3:00 pm. He is frequently heard to say, "If those schools want to know what I have learned, let them come to me." While his research base is sound and even interesting to middle school teachers, it is difficult for most of them to take his classes. When approached by a local school to offer an inservice, he felt that it would be cheapening his research to do so. He suggested that the teachers get together and read his articles. There probably wouldn't be any questions because he knew that he wrote with great clarity. Because of his connection with an uncle in a foundation, he continues to get money to do middle school research, but it is rarely disseminated to people who could use it. He believes that he is a middle school expert because he writes about middle schools and has a long publication record.

Sam Sarcasm In The Inservice Session With A Rolled Up Newspaper?

Sam is a social studies teacher for the seventh grade team and a wrestling coach. He has an attitude towards kids, school, and himself that make some of his colleagues cringe. Sam attends all staff development meetings with grade sheets to do, wrestling meets to schedule (so often he is late or leaves early), and a copy of *Wrestling World* magazine. Sam ridicules all ideas presented to the staff, refuses to participate in group discussions, and is rude to outside consultants. When "reading across the curriculum" was introduced Sam was heard to say, "I'm not about to teach these kids to read, that's what we have language arts teachers for. Besides, they learn to read in elementary school and that should be enough." Sam was a rude, crude, lewd, dude and frequently lets other teachers do their job and his too!

Betty Board member In The Boardroom With A Budget Axe?

Betty Board member firmly believes that when you hire a teacher, they have already been taught all they needed to know. She feels that spending money for staff development is frivolous and only leads to problems since the teachers will just want money to implement some new idea. Betty votes against all institutes, conferences, and early release days for teachers and administrators. She is heard to say at school board meetings.... "Let them go to summer school on their own money. The tax payers aren't paying hard earned money for teachers to have days off. They don't need to think that they will get credit for classes they take. How do we know that the classes are even useful. I've heard about those classes from that Professor Plum."

Principal Pointless In The Library With A Long List Of Minute Business Items And A Handheld Microphone?

Principal Pointless loves to use the microphone. She loves to talk over the intercom, which may explain why the morning advisory is always taken up by her morning announcements. Early release days, designated as staff development, are entirely taken up by administrative issues—which have little or nothing to do with instruction or staff development. Principal Pointless periodically invites someone in to speak to the staff on topics that leave the staff wondering why. When encouraged to bring in a teaming specialist, she decided that having been on a team once herself she would lead the session. The staff decided that teaming would be a bad idea. Principal Pointless is truly clueless when it comes to what her staff needs, but she has a friend on the school board.

Determining Expectations for Learning Assessment Principles Activity Cards

It is recommended that the activity cards be duplicated on heavy cardstock and laminated before cutting apart if you will use the activity more than once. A complete set is needed for each participant. Each of the nine different cards is on a separate sheet (4 per sheet) so that they may be duplicated on different colors of paper to facilitate identification during discussion. Each participant would then have a set consisting of one from each color.

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Learners need to find out
often how well they are
doing and teachers need to
find out how successfully
they are teaching. Therefore,
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The main purpose of assessment is to help students learn. When students are assessed well and given feedback about their performance, they find out what they learned successfully and what they have not. Any weaknesses can then be reduced.

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Assessment tasks should be
designed so that most children
in a group do well on most
tasks. This takes the threat out
of being assessed, and allows
children to be motivated to
learn by the regular experience
of success and praise.

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Design/selection of assessment tasks requires a clear idea of the curriculum objectives. Children should only be assessed on knowledge, skills and attitudes their teacher has given them opportunities to develop, and each task should be well within the capabilities of most students.

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The language of assessment must match the language of instruction. If not, then assessment produces unfair and invalid results. Children must be fluent in the language in which they are to be assessed and the level of language used must match their state of development.

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212

213

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Assessment should focus on each student's achievements, independently of how other students are doing. Constant comparison/competition with classmates can damage the self-esteem and self-confidence of many students.

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Clapping Hands

The activity cards be duplicated on heavy cardstock and laminated before cutting apart if you will use the activity with multiple groups. Participant names may be written on the cards with a marker and wiped off after each use. Many facilitators find this format easier to use than the running script contained in the facilitation guide.

218

1

All of you are involved in a simulation activity . I'm going to ask you to volunteer to play different roles and ask you to do certain things. As you volunteer, please take the seat I indicate at the front of the room (You will need 5 assessors to fill the "assessor" chairs and 5 assessees to fill the "assessee" chairs).

2

Assessees will be given a simple task. They are to do this task to the best of their ability.
Assessors will evaluate the quality of the performance of the assessees as I request.

3

(Addressing Assessee # 1 and using that person's name) (Give no verbal or non-verbal feedback, other than what is written.)
(Name), please stand and clap for us.
(person claps)
Thank you, (name). Please sit down.

4

(Addressing Assessee # 2 and using that person's name) (Designate a "hall monitor" to ask assessees to come back into the room when asked and to ensure that the assessee can't hear the discussion.)
(Name), please clap for us.
(person claps)
(Name), please leave the room and come back only when you are asked.

219

220

5

(Person is escorted from the room.)

Assessors please assess (name)'s clapping on a scale of 1-5, with 1 being the lowest and 5 being highest. Please tell me your scores.

Facilitator records each rater's score, totals all scores and reports it to the panel. **(Ask the participant to return, but give NO feedback.)**

6

(Addressing Assessee # 3, using that person's name)

(Name), please clap for us.

(person claps)

(Name), please leave the room and return when you are called.

(Person is escorted from the room.)

Assessors please assess (name)'s clapping on a scale of 1-5, with 1 being the lowest and 5 being highest. Please tell me your scores.

7

Facilitator records each rater's score, adds the total score and reports it to the panel. Ask the participant to return.

(Name), you got a score of _____. I hope you find this information useful. **(Do not give any other feedback.)**

8

(Addressing Assessee # 4 using that person's name)

(Name), please clap for us.

(person claps)

(Name), please leave the room and return when called.

(Person is escorted from the room.)

9

(After the assessee leaves the room, turn to the assessors:

I have good news and bad news. The good news is that I have heard from the International Clapping Institute. As you know, that organization is developing the international standards for clapping that all our students must meet by the year 2000. They have begun a handbook on how to conduct the assessment. From now on they want us to assess all clapping performances on three traits — volume, appropriateness, and creativity.

10

The bad news is that they haven't finished the handbook, so I really can't give any more guidance than that. We just have to do the best we can. So, from now on we'll assess performance on each of the three traits, where 1 is low and 5 is high. Please rate the clapping presentation you have just seen on this basis. Please tell me your scores.

11

(Have each assessor submit scores for the assessee. Average the scores for each trait and prepare the Clapping Institute Award Certificate with the person's name. Ask the assessee to come back, give that person the certificate, and shake hands.

(Name), *here are your scores. I hope you find them useful.* (**Do not provide any other feedback.**)

12

(Addressing Assessee # 5 using that person's name)
(Name), *tell me about your previous clapping experience. In what kinds of situations do you find yourself clapping?*
You've obviously had some experience clapping. What do you feel are your strengths as a clapper?
Is there anything in your clapping you would like to improve? Anything you'd like the panel to give feedback on?
Is there any guidance that you'd like the assessors to give you?
(You may add other questions or comments if they seem appropriate.)

13

(Say to the assessors.)

You're the experts on clapping; that's why you are here. Is there anything you want (name) to know that you'll be looking for when s/he claps?

Do you want to discuss the criteria given to us by the Clapping Institute?

Is there anything you want (name) to know is important to be effective? Anything in particular you'll be looking for in the clap?

(You may add other questions or comments if they seem appropriate.)

225

14

(Say to the assessee)

Would you like to describe the setting in which you'd use the clap you are about to demonstrate?

What do you want to accomplish with this clap?

Are you ready?

(Name), please clap for us.

(person claps)

(Name), Do you want to leave the room or stay? Do you want feedback verbally, numerically, or both? (Provide feedback as requested.)

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