Cognitive Coaching:
A Strategy
For Reflective Teaching

By Arthur Costa and Robert Garmston

Cognitive Coaching is a marriage of the professional experiences of Art Costa and Bob Garmston. Art had been working with a supervision model long before we came together in the early 1980s. Art's background was in cognition and intellectual development, having studied with Jean Piaget, Jerome Bruner, Hilda Taba, J. Richard Suchman, Reuven Feuerstein, and others. Bob's background was parallel, having also been influenced by Suchman, and by Caleb Gattegno, Fritz Perls, Carl Rogers, Abraham Maslow, and most recently, John Ginder. Cognitive Coaching is a blend of our two perspectives.

Assumptions

Cognitive Coaching is based upon some fundamental beliefs about teaching and human growth and learning. We believe that all human beings are capable of change, that we continue to grow cognitively throughout our lifetime and that we all possess a vast reservoir of untapped potential.

We believe that teaching cannot be reduced to a formula or a recipe. There is an enormous amount of information today about specific instructional behaviors which produce certain student learnings. In such process-product research studies, however, there were always certain "outlier" teachers who did not use these behaviors but obtained good results in student learning. Still other teachers who did use all the behaviors produced poor results. Thus, while we have knowledge about teaching, we do not have certainty about teaching.

Another fundamental assumption is that a teacher's observable classroom performance is based upon internal, invisible skills-thought processes that drive the overt skills of teaching. We subscribe to Shavelson's (1973) proposition that the basic teaching behavior is

decision making, and we build our assumptions on the research of Peterson and Clarke (1986), who describe a four-phase cycle of instructional decision making in which teachers engage before, during, and after classroom instruction. The first phase comprises all the thought processes which teachers perform prior to classroom instruction—the planning phase. The second includes those mental functions preformed during the teaching act—the interactive phase. The third is the reflective phase in which teachers look back to compare, analyze, and evaluate the decisions that were made during the planning and teaching phases. Finally, there is an application phase in which teachers abstract from what has been learned during their own critical self-reflection and then project those learnings to future lessons. They then cycle back to the planning phase.

A fourth assumption is that enlightened, skillful colleagues can significantly enhance (mediate) a teacher's cognitive processes and therefore the teacher's perceptions and decisions which produce the resulting teaching behaviors.

Goals

Cognitive coaches keep clearly in mind three major goals or outcomes of employing this process: trust, learning, and autonomy.

The first goal is trust—trust in the process, trust in each other, and trust in the environment. Both parties in the coaching relationship need to trust and respect each other, realizing that neither person needs to be "fixed." Coaches believe that people have the inner resources to achieve excellence. Increasingly, they place their faith in the coaching process. As the coach and teacher work together in a non-threatening relationship, they realize the intent of this process is to grow intellectually, to learn more about learning, and to mutually increase their capacity for self-improvement. Cognitive coaches work toward long-range gains rather than fixing a lesson immediately. Occasionally, with a new teacher, it may be necessary to save the lesson, but that is not generally what we are after. Another aspect of trust is in the school environment. The culture of the workplace often signals norms and values which may be more influential on teacher performance than are teacher training, staff development, or coaching (Frymier 1987). Thus, the effective coach is also interested in creating, monitoring, and maintaining a stimulating, mediational, and cooperative environment deliberately designed to enhance continued intellectual growth.

A second goal is learning. We believe that all learning requires an engagement of and a transformation of the minds. To learn anything well—a golf swing, a poem, a new computer program, or a different way of teaching—all require thought. Coaches, therefore, are skillful in engaging the teacher's intellect, in maintaining the teacher's access to his or her higher cognitive functions, and in employing tools and strategies which will enhance teachers' perceptions and expand their frames of reference.

The third, and most profound of the goals, is that of developing cognitive autonomy. We give coaches and teachers a mental coaching map: a protocol of specific objectives for the pre-conference and post-conference. Once they have internalized that map, they can be totally present with each other. Coaches can then use their relationship skills, knowing that trust and rapport in the relationship is paramount if the teacher is to be able to think. As a result of cognitive coaching over time, our intent is to develop teachers' ability to self-monitor, to self-analyze, and to self-evaluate. Indeed, the ultimate purpose of Cognitive Coaching is to modify teachers' capacities to modify themselves.

Coaching Competencies

To accomplish these goals, five non-judgmental mediational competencies of the coach are required. The coach must remain non-judgmental throughout the coaching process so that people can think without fear of being judged. When people feel judged, their thinking shuts down.

The first ability is posing carefully constructed questions intended to challenge the teacher's intellect. The second process is paraphrasing. According to Carl Rogers, the paraphrase is probably the single most important communication tool and yet the most underused. Paraphrasing communicates that "I am attempting to understand you, therefore I value you." Because it conveys such powerful empathy, its use permits deep and tenacious probing.

The third is the skill of probing for specificity, clarity, elaboration, and precision: "Which students specifically?" or "What criteria will you be using to assess the accuracy of student responses?" or "What else were you considering when you reorganized the assignment?" for example. Probing invites and promotes deeper, more detailed thinking that results in greater consciousness and more analytical, productive decision making.

Coaching Skills 4 HO.1.3

The fourth skill is using silence. As we know, wait time has been found by Mary Budd Rowe (1986) and others to be a significant linguistic tool leading to more creative and reflective thinking.

A fifth competency is that of collecting data and presenting it objectively. Skillful coaches assist the teacher in designing strategies, or they draw from their own repertoire of data-gathering techniques relevant to the teacher. The coach and teacher can then examine the data in literal and non-judgmental way (Costa, D'Arcangelo, Garmston, and Zimmerman 1988).

Thus, the cognitive coaching process is much like a Socratic dialogue. The better thinkers coaches are, the more capable they are of producing and stimulating thinking in others.

The Cognitive Coaching Process

Cognitive Coaching is a model used for supervision or peer coaching. It is equally appropriate for administrators, department chairs, resource teachers, mentors or peers: anyone in a helping relationship. It is not evaluative. As a supervisory process, it is very close to the original clinical supervision model developed by Anderson and Goldhammer (1969) and Cogan (1973). Their intent, which has been distorted in some recent "clinical supervision" models, was to provide a collegial relationship that supports teachers in becoming critically self-reflective about their work. We have simply overlayed their process with a "cognitive," developmental dimension.

Cognitive Coaching includes a pre-conference, a lesson observation, and a post-conference. Thus, the format of the coach's role is compatible with the four phases of thought that effective teachers (or any competent, thoughtful problem solvers for that matter) perform.

We attach great importance to the pre-conference. Without it, teachers are more likely to be anxious about the observation, and coaches will lack the teacher's valuable guidance for their data collection. A second, more compelling reason for the pre-conference is that we believe planning is the most important of all the instructional thought processes. The quality of the plan affects the quality of all that follows. One critical mental process during planning is to identify lesson outcomes and literally envision what students will be doing during the lesson that will indicate whether or not they have achieved those objectives. Effective teachers, like winning athletes, mentally rehearse what they will be doing to produce desired results prior to performance (Garfield 1986).

In the pre-conference the coach invites the teacher to elaborate on the learning goals and to describe how the teacher will ascertain, during the lesson, whether students are learning. This may be difficult for some teachers who conceive the judgment of students' learning to be determined at a later time, when a test is given. Our assertion is that by then it's too late. The teacher needs to monitor the cues indicating student success during the lesson. Skillful coaching assists the teacher in imagining, elaborating, and devising strategies to monitor such formative cues from students.

The teacher is asked about his or her instructional strategies for reaching these outcomes. In addition, the coach asks what he or she should pay attention to and collect data about in the lesson that will support the teacher's growth. The coach does this by becoming another set of eyes for the teacher and a mediator of the teacher's processing of his or her own teaching experience.

During the lesson itself the coach collects only that data the teacher requested during the pre-conference. Such observations may focus on student performance indicating goal achievement, on-task behavior, or a particular student's problem behavior. The coach may also be requested to collect data about techniques which teachers are striving to perfect: wait time, questioning strategies, proximity, movement, clarity of directions, etc.

The post-conference is frequently begun with an open-ended question such as, "How do you feel the lesson went?" We say "frequently" because, while coaches have certain conferencing objectives they intend to meet, the dialogue is more individualized and Socratic than it is a recipe. An open invitation allows the teacher to decide how he or she will enter this conversation and begin self-assessment. The next question may be something like, "What are you recalling from the lesson that's leading you to those inferences?" This question focuses on another important cognitive function of teaching—monitoring and recalling what happened during a lesson. This differs from some coaching systems in which the coach simply feeds back what was observed and recorded on a taped script. Because the ultimate goal of Cognitive Coaching is self-modification, teachers need to develop the ability to monitor their own and their students' behaviors and to recall what happened in the lesson. Data collection is fundamental to their self-analysis and self-coaching. Processing the data from the lesson enables teachers to reconstruct and analyze what went on while they were teaching to make the teaching experience intelligible.

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