Tutoring Practices That Promote Cognitive and Affective Development

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Tutoring is an essential component of developmental education. While the most obvious purpose of tutoring is to help students learn material, a more subtle but equally important purpose is to enable students to become self-directed learners (Hartman, 1990). By this definition, tutoring must be a collaborative process in which tutors guide students toward ownership of their own learning.

Students seek tutoring in order to supplement their experience in the classroom. Consequently, the tutor's role is significantly different from the classroom teacher's: rather than deliver the curriculum, the tutor oversees the student's process of understanding and reasoning (Barrows, 1988). The tutor is in a unique position to do this because of his or her special access to students' individual thoughts and feeling in a nonjudgmental situation.

The purpose of this article is to present a model for the tutorial process that helps promote cognitive and affective development. The model consists of the following elements: dialogue, development of metacognitive skills, response to affective needs, and re-education about the learning process. This model can be used both to guide the tutoring process and as a frame-work for tutor training.

Dialogue

Dialogue in tutoring is not a technique so much as an orientation toward the tutoring process, seeing it as a joint participation in learning. Studies of the tutoring process have shown it to be more effective when students take an active role than when they merely listen to the tutor (Maxwell, 1991). A fundamental element of this dialogue is active listening: research has demonstrated that instructors who listen with genuine interest, asking questions about students' underlying thought processes, discover a great deal about students' conceptions as well as their misconceptions and are better able to address their learning needs (Easley & Zwoyer, 1975).

Active listening has many benefits. It encourages students to participate actively rather than depend on the tutor; it helps the tutor to differentiate what the student really understands from what is merely being repeated; it enables the tutor to detect difficulties the student is afraid to express directly, including beliefs, attitudes, and feelings about learning; it allows the tutor to understand the reasoning behind students' errors; and it communicates a respect for student's intelligence that they too rarely experience (Brown & Burton, 1978; Easley & Zwoyer, 1975; UCLA Office of Instructional Development, 1986).

The key to effective dialogue is, as noted, a genuine interest in understanding students' thinking. This interest will suggest questions that tutors can ask that will draw students out to explain their understanding in their own words, to identify what they do not understand, and to express their attitudes and expectations about learning. With this information, tutors can tailor instruction to meeting individual needs in ways that classroom teachers may be unable to do.

Development of Metacognitive Skills

Metacognition refers to the executive-level thinking processes that students use to be aware of, to monitor, and to control their own learning (Baker & Brown, 1984).

This includes being aware of what one already knows; reflecting on the learning task and what knowledge and skills it requires; formulating and testing hypotheses; realizing when one is confused and taking steps to clarify that confusion; strategic knowledge – knowing not only *what* information is relevant, but *when* and *why*, and *how* to use it; and drawing conclusions (Barrows, 1988; Hartman, 1990; Paris & Myers, 1981; Schoenfeld, 1987). These are the skills that enable a student to be an active rather than a passive learner.

A metacognitive learner engages in constant self-questioning, such as: What is the point of this task? What do I already know? What additional information do I need? How do these ideas fit together? Did I leave anything out? Are there other ways to look at this? Have I accomplished what I set out to do? (Barrows, 1988). Unfortunately, developmental students often lack the knowledge of how to engage in this internal dialogue. The tutor's role, then, is to be the students' "metacognitive conscience" (Barrows, 1988), asking these questions for the student in order to develop his or her awareness and analytic processes. With enough practice in hearing and answering the tutor's questions, students eventually begin to ask themselves the same questions and to monitor their own learning (Barrow, 1988; Schuette, 1990). Tutoring for metacognitive development relies not only on factual questions but also on inferential questions that encourage students to think about the implications of the material, chosen according to the student's level of

understanding and readiness for independent work (Schoenfeld, 1987; Swanson, 1990).

Response to Affective Needs

Learning is not just a cognitive process, but an affective one as well. Students bring to tutoring not only their prior knowledge and intellectual skills but also their attitudes and expectations about the subject, about themselves in relation to it, and about the learning process (Gourgey, 1992; Hartman, 1990; Schoenfeld, 1987). Hence, tutors must learn to listen not only to students' thinking but to the emotional processes – often only indirectly expressed – that may coexist with and influence students' thinking. Such emotions may include anxiety, humiliation, fear of failure or fear of being judged as stupid. Tutors must realize that the appearance of dumbness or refusal to cooperate may mask fear, both of the subject and of the tutoring situations.

Helping students with affective difficulties is more a matter of how the tutor sees students and what the tutor communicates than a matter of techniques. The tutor must always see students as capable of learning, even when they do not see themselves that way and would like to convince the tutor not to expect to o much from them (Gourgey, 1992). Accordingly, the tutor must balance sympathetic listening to students' feelings with a refusal to share students' negative views of themselves and an expectation that students can successfully take responsibility for their own learning. For many students, learning is an emotionally risky process- one must admit ignorance, risk failure, and be willing to be changed in unpredictable ways. Tutors can help students feel safer by their friendliness and willingness to listen, and by their belief in the students' capability. Tutors can then gradually increase the level of difficulty and of students' active participation, while pointing out students' successes.

The techniques for metacognitive, self-directed learning can help not only to develop students' thinking but also enable them to see that they are capable of taking charge of their own learning; for many students, this discovery is

quite startling. Ultimately, the experience of their own success in the face of anxiety and low self-esteem is the only antidote to affective difficulties (McCombs & Whistler, 1989). The tutor's goals, then, should be to help students not only master the materials but to experience personal success as learners.

Reeducation About the Learning Process

Many developmental students hold unrealistic expectations about the learning process that erode their confidence and impede their progress. Three common beliefs are that learning is simply a function of how smart one is and how quickly one finds the correct answer; that learning means doing rather than understanding; and that making errors is a sign of stupidity (Brown & Burton, 1978; Gourgey, 1992; Schoenfeld, 1987). Students fail to appreciate the importance of intellectual struggle, incubation, and understanding ideas rather than just following procedures. They may hold unrealistic expectations about specific subjects as well, often assuming that mathematics consists of rote procedures rather than ideas for solving problems (Schoenfeld. 1987), or that writing is about grammatically correct text rather than communications (Williamson & Davis, 1987), or that sociology is about social work rather than about theories of social organizations (Rose, 1989). These faulty expectations may masquerade as difficulties with basic skills.

When students fail to live up to unrealistic expectations, they blame themselves rather than their mistaken beliefs. Giving up prematurely to avoid humiliation, the deprive themselves of the opportunity to learn how to reason out their own difficulties, and consequently of the discovery of their own capability.

Tutors can encourage students to examine their misconceptions about learning and how these affect their self-esteem and behavior as learners. To do this, tutors need to create a learning environment in which students are forced to confront the material from a different perspective. For example, tutors can

stress the clarification of written ideas rather than just grammar, or the logic of problem solving rather than just the use of formulas to calculate mathematical results (Schoenfeld, 21987; Williamson & Davis, 1987).

Equally important, tutors must help students to see errors not as signs of stupidity but as normal and necessary part of the exploration involved in learning, and as a source of information about their own thinking (Brown & Burton, 1978). Tutors need to communicate that learning is not about knowing the right answers immediately, but about confronting confusion and lack of knowledge and struggling with these until they are clarified (Barrows, 1988). With this orientation, tutors can redefine intelligence as involving reflection, thoughtful analysis, perseverance, and an openness to considering an issue from many angles. Thus, the most profound education that students can receive in tutoring is not about a specific subject but about understanding how to learn, and about their personal role in that process.

Tutoring is at its best when it focuses not only on a subject but on cognitive and affective issues in learning. Good tutoring can help students to do more than master material: it can help them to discover what the learning process is about so they can become lifelong learners.

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