Urban community college students have many needs. A program that teaches them how to regulate and control their behavior, cognition, and affect can be a particularly important resource for them.

Expanding the Volitional Resources of Urban Community College Students

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Over the past three decades, community colleges have responded to calls to admit underserved segments of the U.S. population—including minorities, immigrants, women, adults, and individuals with high school equivalency certificates, among others. Thus, community colleges have come to serve as the entry point into higher education for students who have historically been excluded. The current diversity of the community college student population is indicated by 1990 data from the American Association of Community Colleges (1993):

Forty-two percent of African American, 52 percent of American Indian, 38 percent of Asian American, 55 percent of Hispanic, 37 percent of white, and 19 percent of nonresident alien students in higher education attended community colleges.
Thirty-seven percent of community college students are twenty-five years of age or older.
Fifty-eight percent of community college students are women.
Sixty-four percent of community college students attend college on a part-time basis.

Although this increased diversity is to be lauded, at the same time, a more diverse student body presents numerous academic challenges. One report

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concerning the academic preparation of students in community colleges reveals that in the 1980s, the American College Testing program mean standard score for all college students was above 18 on a scale ranging from 1 to 36. The mean standard score was below 16 for community college enrollees (Alkin, 1992). As increasing numbers of U.S. community colleges have opened their doors to all students with high school credentials or the equivalent, many eager students have enrolled (Cross, 1976). Upon entry to postsecondary institutions, they often experience learning difficulty and may have trouble in coursework. One possible factor in this typically downward spiral of events may be students' limited exposure to effective strategies for managing learning-related effort (that is, self- and resource management). Community college students may therefore benefit from assistance in how to protect their intentions to learn in the face of difficult tasks and competing intentions or other distractions.

In a survey at one large urban community college (Trawick, 1990), many students reported that they had worked quite diligently to attain the status of high school graduate. To do so, many attended numerous remedial courses. Others were involved in life events that had made it difficult to attain this status and/or had been told that they probably would not graduate from high school. Additionally, students sometimes verbalized unclear notions of effort. For example, some reported that they often "intended" to study, but never "got around to it." A variation of this effort formula was verbalized as, "I'll have to try harder," but the exact actions involved in increased effort were often less specified. In response to the question, "What exactly will you do more of (or differently) to improve your grades?" students tended to describe a global idea of effort akin to a notion of willpower, and to communicate a belief that sheer persistence and "showing up" would lead to academic success.

From the perspectives of some faculty, students reportedly engaged in "ineffective" effort. They set unrealistic deadlines for completing make-up assignments or procrastinated and turned in assignments done hastily. Again, the concern was voiced by the faculty that community college students may be uncertain about the relationship between their behavior and their academic success.

In academic situations, effort management or volitional resources can be used to build learning skills gradually and to control or refocus the anxious responses that often accompany thwarted intellectual efforts (Zimmerman and Schunk, 1989; Corno, 1993). Rather than providing opportunities for effort-management skills to develop, however, traditional college coursework generally assumes the presence of such skills or predispositions. Community college students may receive little advice on how to study or to negotiate the particular demands of college. If volitional resources could be enhanced in students who choose to pursue a college education but have little precollegiate preparation, they might then be able to pass rather than fail their early courses and to derive the accomplishments they seek. How a community college might help students expand their volitional resources with respect to academic work is the major issue in this chapter.

Volition and Academic Self-Regulation

Recent research has addressed similarities between modern conceptions of volition and the processes of academic self-regulation (see, for example, Corno, 1993; Kuhl, 1985). Self-regulation is generally defined to include the goal-protecting and resource-management processes known as volitional control *along with* motivational factors such as goal setting, success expectations, and deep levels of cognitive involvement in learning (Schunk and Zimmerman, 1994; Zimmerman and Schunk, 1989). Work by Zimmerman and Martinez-Pons (1988) and Pintrich and colleagues (Pintrich, 1990; Pintrich and De Groot, 1990), in particular, has examined a range of cognitive, motivational, and volitional strategies reported by students in correlational studies. This research suggests that different aspects of expressed strategy play important roles in academic achievement. Efficacy or high expectations for success and other motivational factors aid students in goal setting and in increased goal-related effort. Volitional control and goal-related cognition help students to maintain such efforts in the face of difficulty and other sources of distraction.

Self-regulated learning research as promoted by Zimmerman (1989) embraces a social-cognitive perspective based on the work of Bandura (1977, 1986). This perspective differs from theories of volitional control in its emphasis on planning or decision-making processes rather than postdecisional implementation or follow-through (see Corno and Kanfer, 1993). Thus, although most existing work on self-regulated learning begins to put volition into relation with motivation, it has not done enough to address the growing understanding that motivation tells only part of the story in academic learning and performance.

Students differ in such motivational factors as self-confidence in their own abilities, and such factors exert demonstrable influence on both motivated behavior and performance (Schunk, 1991). But many students who appear confident of their capabilities and who do work hard in school still perform poorly. Our experience suggests that the *kinds* of efforts such students make tend to be ineffective or unsustained, and that their conceptions of *how* to put forth effort related to schoolwork belie an understanding of the most relevant variables. Thus, helping students become literate about schooling ought also to help them establish productive work patterns that may be sustained when necessary (Corno, 1989b).

The significant body of research that exists on cognitive strategies in educational psychology (for example, Pressley and Levin, 1983) can be related to strategy research based on theories of volition and social cognition. A recurring result in studies of strategy induction with students is the difficulty of obtaining transfer; students who learn strategies during training do not automatically apply them in subsequent schoolwork (Pressley, Borkowski, and Schneider, 1989). When transfer does occur, it seems to be fostered by attention to issues of self-regulation and control during training or instruction (Dole, Duffy, Roehler, and Pearson, 1991; Paris and Winograd, 1990). Thus, new iterations

of strategy research may need to give more weight to volitional strategies as potential vehicles for facilitating the application of other strategies.

Six volitional strategies identified by Kuhl (1985) have been applied by Corno (1989a, 1993) to academic situations. Figure 5.1 presents Kuhl's taxonomy adapted for purposes of the present discussion, as well as a definition and an example of a hypothetical student response to illustrate each category. Covert volitional control involves using basic metacognitive strategies for selectively attending to, encoding, and processing relevant information, as well as using motivation and emotion control strategies to promote intended actions. Overt volitional control involves managing task situations along with social aspects of the academic environment. Such strategies are hypothesized to assist individuals in accomplishing academic tasks when they are confronted with personal and environmental distractions. These strategies have a long research history in studies of cognitive-behavior modification (for example, Meichenbaum, 1977), and their concrete nature makes them relatively easy to use. The covert strategies, in contrast, are abstract and require more complex, internal reflection. (The strategies in Figure 5.1 pertaining to encoding control and information-processing control were not taught during the volitional enhancement program described in this chapter, due to institutional constraints.)

Thus, modern social-constructivist theory (Bandura, 1986; Vygotsky, 1962) centrally acknowledges the contribution of social interaction to human thought and behavior as well as the influence of cognition (including thoughts, beliefs, and perceptions) on human motivation and behavior. Self-regulation is viewed as socially influenced and cognitively mediated. The acquisition of self-regulation strategies derives from a gradual process in which a student's knowledge about self-as-learner becomes internalized through a combination of experiences involving instructors' teaching and modeling and the student's own use of internal speech to guide behavior, of self-observation, of opportunities to receive feedback about his or her performance, and of practice. Intervention programs directed at one or more of three purposes—improving volitional or self-regulation strategies in clinical populations (Meichenbaum, 1972, 1977), instructing college students using participant-modeling procedures (Shapiro, 1988), and offering learning strategies instruction (Collins and others, 1981; Weinstein and Underwood, 1985)—have all reported positive outcomes based on the use of such experiences (see Weinstein and Mayer, 1986, for a review). The program described in this chapter involves all three purposes.

Volitional Enhancement Program

The volitional enhancement program we developed for use with community college students consisted of four seventy-minute group sessions led by an instructor, one session during each week of a four-week period. It provided instruction and practice in monitoring and controlling both external and internal aspects of students' learning environments. In this program, the external aspects

Figure 5.1. Categories, Definitions, and Examples of Volitional Strategies

I. Covert processes of self-control

A. Cognition control: managing the cognitive aspects of a task

1. Attention control

Definition: statements indicating student efforts to give selective attention to task-relevant information

Example: "I'll try to make myself concentrate more on the work than letting my mind wander off somewhere else."

2. Encoding control

Definition: statements indicating student efforts to act as if some parts of the task are more important to understand and act upon than others

Example: "I'd go over the test and see where I made mistakes ... go over that same test that I just had. I go over my notes, make sure I know what's going to be on the test."

3. Information-processing control

Definition: statements indicating student efforts to engage in parsimony of information processing and to apply stop rules for information processing: specifically, efforts to quickly assess steps needed to perform a task and get down to business, efforts to avoid using strategies that overtax the information-processing system, or efforts to elect a time-out from the task for a brief period as a way of regrouping and refreshing themselves

Example: "If I'm really tired, then the first thing I would think of is getting maybe an hour or two of sleep and then go to [the task], because then I'm able to concentrate better."

B. Emotion control: managing the affective aspects of a task

Definition: statements indicating student efforts to manage the affective aspects of a task and to control potentially debilitating states of worry or anxiety

Example: "And I said, 'Now, sit down, try to relax.'"

C. Motivation control: managing the expectancy aspects of a task

1. Incentive escalation

Definition: statements indicating student efforts to focus on imagined or realistic positive or negative consequences, including self-reward or self-punishment

Example: "I have to pass [the test]; if I don't pass it, I'm not going to pass the class. I'll probably have to repeat it again or get an F, which I don't want to go on my record."

2. Attribution/self-reinforcement

Definition: statements indicating student efforts to provide self-reinforcement and reassurance

Example: "Sometimes I get it, and I congratulate myself."

Figure 5.1. *(continued)*

3. Self-instruction

   Definition: statements indicating student efforts to "tell" themselves necessary acts or steps to accomplishing a task

   Example: "Let's try to think about this."

II. Overt processes of self-control

A. Environmental control

1. Task control

   Definition: statements indicating student efforts to streamline or simplify a task or to determine how and when a task is to be completed

   Example: "[I] get all the necessary materials that I need: books, dictionary, whatever it takes."

2. Setting control

   Definition: statements indicating student efforts to determine or arrange where a task is to be completed

   Example: "I'll try to get in a quiet place by myself."

B. Control of others in the task situation

1. Peer control

   Definition: statements indicating student efforts to use peers as resources or to arrange situations so that friends do not detract from educational goals

   Example: "[I might ask] if she can get tickets another day, or [say], '... If you're my friend, you would understand that I can't go with you,' or you know, 'If you would like to take somebody else.'"

2. Teacher control/assistance

   Definition: statements indicating student efforts to obtain special assistance from teachers

   Example: "[I would] ask the teacher if I can do it another day."

were discussed first, following the hypothesis that these more concrete strategies are easier to learn and can be building blocks for the internal strategies.

The first session concerned the task situation—when and where students study and the necessary materials for effective, uninterrupted studying. The second session involved becoming aware of and developing strategies for managing distractions in the home environment. The third session concerned learning to monitor one's own attention during academic pursuits. The fourth session involved maintaining a suitable state of mind for learning by controlling one's attention, negative emotions, and self-defeating motivational patterns. (A forty-page outline and supplementary materials describing this intervention are available from Trawick, who conducted a formal evaluation of this program; see Trawick, 1990.)

Procedures. The techniques used to present the volitional enhancement program include:

Instructional presentations, exercises, and activities to stimulate discussion and elicit students' thoughts about volitional management and control of their academic efforts in class and during homework.
Self-monitoring (record keeping) to enhance awareness of study behavior.
Student-developed positive self-statements that students could repeat prior to, during, and following specific academic situations to cope with self-defeating thoughts and behavior and to encourage themselves.
Modeling and role-playing of coping strategies.
Feedback from the instructor and from students' peers on assignments.

Session One: Control of Task and Setting. The first session taught students the overt strategies for task and setting control (see Figure 5.1). In very concrete ways, we focused on the optimal times to study, the characteristics of an appropriate place to study, and what materials must be at hand prior to the implementation of other, more traditional, study skills. This topic recognized that many urban community college students live in noisy and unspacious environments in which it is often hard to study and in which appropriate study conditions are difficult to create. Students reported, for example, that the volume of distractions they encountered in trying to study at home was considerable and that they were not always aware of how ineffective it is to study when other activities occur at the same time.

To prompt consideration of the importance of establishing an appropriate study environment, we discussed characteristics of the places in which students were currently studying. The focus was on concrete characteristics and conditions, such as noise level, temperature, and light. Also, we pointed out that conditions within the students themselves, such as tiredness, thirst, hunger, or comfort, may impact effective study. New thoughts and alternative strategies often then emerge in discussion, and many of these can be implemented in students' lives. Such strategies include taking a short nap before starting to study when one is too tired to study effectively at the moment; not eating a heavy meal before studying because it tends to make one sleepy; rearranging a study schedule to include going to the library after classes rather than going home; and enlisting baby-sitting trade-offs with new college friends to establish effective extended study periods.

Real-life constraints require further exploration and examination. It may be impossible to find an ideal study place, since the characteristics of this place are an individual matter, and spirited discussions often ensue regarding what constitutes an ideal study place. (For example, does music assist or distract students? If it assists, what kind of music, if any, might at least limit the potential for distraction from studying?) The discussions enable students to better specify the conditions over which they have control that may promote academic performance and to acquire new alternatives for establishing effective

study conditions. Students are taught to be responsible not only for noticing whether they are in a conducive environment for study but also for getting themselves into such an environment.

Session Two: Control of Others in the Task Situation. The second session taught students strategies for controlling other people in their lives (see Figure 5.1). It addressed students' need to garner support from the significant others in their lives—their children, parents, friends, and other loved ones. For many students, the idea of going to college is a relatively recent one, and the influence of friends and loved ones must be examined explicitly in the context of the new life possibilities they see for themselves and their families. Research has documented the discontinuity that sometimes exists between the home and school environments of many urban community college students, particularly regarding academic effort (Weis, 1985). Some students have revealed that they come to college to get away from their relatives and friends who do not support their educational strivings; in such cases, significant others function more as distractions than as sources of support. In addressing this topic, we tried to help students find ways to communicate to loved ones that the students' education is important, and to introduce students to strategies for keeping loved ones from distracting them. Students began an explicit examination of the extent to which relationships with loved ones must be preserved, even as they acquired the skills, habits, and attitudes that have the potential to give them independence from these loved ones over time.

To introduce this content, we presented students with situations in which they knew they had to study (for an exam or a project for example) but then received a social call from a friend saying that the correct answer on a radio program has resulted in free tickets to a "can't miss" entertainment opportunity. Students were then asked to list the responses they could make to this "best friend" to express their renewed conviction to implement their intended plans to study. These statements were shared with group members with the goal of developing new alternatives: asking, for example, "Is it truly imperative for you even to answer the telephone?" Students then practiced their scenarios in small groups and received feedback from their peers and the instructor.

Session Three: Self-Monitoring to Control Attention. Session three taught the strategy of self-monitoring (see Figure 5.1) as a technique for remaining on task during academic work. The session was designed to raise students' awareness of lapses in concentration during academic tasks. To prompt awareness of their personal experiences of "mind-wandering" or daydreaming, students shared instances when they had been reading an academic assignment and suddenly stopped because they realized they were unaware of the previous content. Self-monitoring was then described as a way to keep concentration high by recognizing when other thoughts were intruding. These internal distracting thoughts, including competing academic and personal responsibilities, were compared to the external distractions (outside noises, poor lighting, social invitations, and so on) discussed in the first and second sessions.

Distracting thoughts students had experienced in the recent past were placed on the blackboard with the goal of demonstrating the notion that some distracting thoughts must be handled immediately for successful study to occur (for example, calling a doctor for the results of a child's x-ray), that other thoughts may be handled through time-management procedures (for examples, making up shopping lists and setting aside specific time for shopping), and that a great deal of time is wasted because of mind-wandering. The discussion and activities were summarized by pointing out that it is necessary for students to learn as much as possible about a situation they desire to change.

A self-monitoring assignment was introduced as a way for students to begin to practice becoming aware of their thoughts during study—to "watch" themselves—in preparation for learning a technique in the next session to control these thoughts. In the self-monitoring assignment, students were asked to keep a record sheet beside them as they worked and to place a tally on the sheet each time a distracting thought interfered with ongoing study efforts, to categorize the thoughts at the end of the study session, and to indicate what they learned about their study patterns.

Session Four: Motivational Control. Session four taught the covert strategies for controlling students' attention, negative emotions, and self-defeating motivational patterns (see Figure 5.1). This involved showing students how to recover from lapses in attention and to turn negative, self-defeating emotions and motivational patterns ("I'll never understand this material") into positive ones ("I'll succeed if I just do my work every day"). A strategy that has been called, from various perspectives, self-verbalization (Meichenbaum, 1972), positive self-talk, and internal dialogue (Vygotsky, 1962) was used to introduce the fourth session. This strategy, which we called self-coaching (Collins and others, 1981), was intended to help students learn to control their personal resources of attention, concentration, and motivation.

One self-coaching activity used the example of a baseball game. In a situation in which all attention is riveted on the pitcher and batter in the ninth inning of a tied ball game, there is a great deal of noise that could be expected to distract them both. Also, athletes know that they do not always hit home runs and that they cannot allow one bad playing error to ruin the rest of their efforts. Like athletes in these situations, students can *learn* to use positive self-coaching to control their attention and emotions and to stay motivated to reach their goals. Students indicated the kinds of thoughts they have experienced when an assignment was very difficult or very dull or when they had performed poorly on an examination. Having positive self-statements or "scripts" ready in advance was suggested as helpful for various situations, including, for example, controlling attention during study sessions, concentrating when studies are dull or when it would be more enjoyable to be out with friends, and handling emotions when a low examination grade is received.

Students were then asked to develop personally meaningful positive self-statements that would motivate them when their academic responsibilities seemed overwhelming: for example, prior to or during an examination or a

presentation when they suddenly realized the importance of the endeavor or when anxiety threatened to unnerve them. A few statements written by the approximately sixty urban community college students who have completed the volitional enhancement program indicate their personal struggles: "If I don't get my work done now, I'll end up a bum." "I have to study hard so I can be a model mother to my daughter." "I have to prepare for exams way in advance to avoid being anxious." These personal statements were not openly shared; instead, students were encouraged to keep them on 3 x 5 cards and to use the cards as anchors when academic requirements seemed overwhelming, when their concentration dropped, or when anxiety threatened to disrupt intended academic plans.

Student Comments

As part of the formal evaluation of this program, a semistructured interview was administered to ten students to elicit their comments and reactions. More than half reported that participation in the program represented the first time in their academic careers that they had given real thought to the process of applying effort towards schoolwork and studying. One student, J.B., was typical in making this response: "I never really realized how I was studying or even thought about how I was studying. . . . I would just study. [I never thought about] where I was studying, how much noise— . . . so it helped me a lot."

Other students indicated that prior to the program, they had been aware that there were relatively more and less efficient ways to study but that they had never made it a point to put these methods into practice. For example, M.S. said: "You know the habits and everything; you know them, but you're just—you're not conscious of them, and you're not putting them into practice or anything. . . . So you're not . . . using them as a tool."

Of the ten students interviewed, eight spontaneously mentioned that the most important changes resulting from the program were concerned with gaining control over their study environment. One example of the concrete nature of the changes students attributed to the program is that five of the ten students interviewed stated that they had made changes in handling distractions from siblings, friends, and spouses. R.M. stated:

> One of the most helpful things was to remind myself how to deal with certain situations. For example, . . . I have told my friends that I am in school, but . . . I did that without thinking in the future, you know. And now I have the fresh idea in my mind why I did that, . . . so I can now have an answer more easily than before. . . . Probably if somebody calls, maybe to invite me to a concert, I can be very clear—I mean, not being rude or anything like that, but I can be very clear. I can get to the point and try just to switch that situation to something different, . . . for example, to invite them to do something the next day as an alternative.

A more covert focus that these students commented on was training in the use of self-coaching strategies. Six of the ten students made reference to the work done on self-coaching as a way of "disciplining" themselves to study. J.S. felt that instruction in self-coaching was the most important part of the intervention:

> I learned to tell myself that my education is more important than anything else. . . . So you know that you have this goal that you have to reach, and you know that . . . unless you try you won't get it. There are times when . . . I'm thinking about something else or I don't feel good . . . but I know that I have to [study] because that time is precious. I say, "If you miss it, that's it. It won't come back." And I say, "Let's go back [and study]." I know that I have to do it, and I learned to tell myself, this is important, and I'm going to do it now.

L.W. said that she learned to coach herself by reminding herself of the long-term benefits to be gained by studying now.

> I need to do better, . . . to look for the long term instead of the short term, where I want to be . . . a few years from now. . . . I have been in school before. This is my second opportunity. I want to make the best of my second chance. I'm more mature now, so I . . . just keep telling myself, "You're doing this for your best benefit in the long run.". . . Being out in the workforce, not having a college degree, you gotta stay at a certain place, and I don't want to stay there. I want to go above . . . thinking of my goals and self-coaching myself to go on for what I really want.

These comments indicate that urban community college students can be made increasingly knowledgeable about appropriate study environments and useful strategies for handling distractions as well as about self-monitoring and self-coaching with a short-term intensive volitional enhancement experience.

Program Issues and Perspectives

The kind of content used in the volitional enhancement program acknowledges that many urban community college students may be introduced to new possibilities not focal in their present reality. We are attempting to teach new behaviors, skills, and attitudes. The notion of who a student *could* become is central here. Students may have had limited access to or contact with models in their environment who routinely demonstrate the needed characteristics. Nonetheless, urban community college students can be led to draw upon the resources that they do have related to achievement opportunities and strivings (Cole and Scribner, 1974). This type of volitional enhancement program may be viewed as providing a competing environmental model for students whose current environments may not lend themselves to initiating or supporting particular models of learning and behavior. The program focuses on students'

needs to change their existing thoughts and behavior as well as on giving them specific new knowledge and thoughts (for example, the idea that they can formally monitor study time).

In keeping with the social-constructivist theory that provided the framework for the implementation of our program, it is important to remember that changing student thinking and behavior is a complex undertaking. Individual change occurs through a gradual process of internalizing knowledge over a period of time. Accordingly, a program that is longer in duration than four weeks, with shorter amounts of time per session and incorporated on a regular basis into the college curriculum, ought to facilitate specific self-management outcomes. The program process requires students to perceive themselves differently, to acquire a view of themselves as individuals who engage in volitional and self-management strategies and who follow through on schoolwork. As educators, we must acknowledge that it is easier for people to behave in comfortable, familiar ways than to change and that learning to stay engaged for long periods of time in the study endeavor will take time.

Moreover, it is important for us to remember that learning involves making errors. It is important for us, as professionals, to examine our view of error. We know from research that errors help students learn where to focus their academic effort (Dweck, 1986). Errors serve to specify the knowledge one already has as well as the knowledge and skills one has not yet mastered. But from students' perspective, an important concern at this stage in their academic careers may be to avoid the appearance of failure (Covington, 1985). Thus, for example, such behavior as ignoring errors, procrastinating, and setting unrealistic goals may be ways that students protect their own sense of self-worth. If one appears not to try, then it is *not possible* to fail (see Chapter Four).

Instructors need to assess the extent to which urban community college students have been appropriately prepared for instructional environments in which errors are viewed as a natural and normal part of the learning process. It seems important for students to learn to cope with errors and skillfully handle the negative feelings that accompany them. Similarly, opportunities that encourage students to access their own thinking processes (investigating, for example, *how* they choose response options on homework exercises or *how* they eliminate other response choices) help students become accustomed to thinking about their thinking.

Faculty development programs for college instructors might profitably incorporate instruction in such volitional process skills rather than focusing narrowly on instruction in content alone. This is consistent with other strategy-training research (for example, Pressley, Borkowski, and O'Sullivan, 1984), which suggests that durable strategy use requires an explicit connection between the instructional situation and the usefulness of the strategy. In the meantime, the difficulties that urban community college students display in the area of academic volitional control may help to explain the frustration experienced by teachers and students alike when their joint efforts are unsuccessful. These difficulties may explain how teachers can be correct in saying,

"I taught it" and students correct in saying, "I studied it," even after students are unable to demonstrate gains in learning on achievement tests. It is not that the students lack effort or "will." Their tenacious efforts to remain in school suggest otherwise. Rather, they may need to fine-tune their volitional resources to benefit from their prodigious efforts in the face of so many environmental and personal distractions.

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