

Self-monitoring is an important component of self-regulated learning. Students need to be able to engage in self-monitoring in order to regulate their own learning, and faculty can help students learn how to self-monitor.

Self-Monitoring During Collegiate Studying: An Invaluable Tool for Academic Self-Regulation

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A primary goal of education from kindergarten through graduate school is to foster independent, self-motivated, self-regulated thinkers and learners. Today's information-rich environment can be a huge resource for students who are able to seek information from diverse sources, think critically about what they find, and select and integrate knowledge. The question is how students can become such proactive, resourceful learners.

Teachers know self-regulated academic learners when they see them—these students are interested in the subject matter; well-prepared; and ready with comments, questions, ideas, and insights; they are problem finders and problem solvers, unafraid to fail or to admit they do not understand, driven to rectify failure and to construct understanding. Identifying such students is relatively easy; the challenge is to develop a self-regulated approach to learning among those who do not already use that approach.

Instructors differ in their views of how such development occurs. Some assume that students' level of self-regulation is determined by their age and personality; others treat self-regulation as an idiosyncratic set of skills that each student must develop personally as he or she goes through school; still others assume that a common set of self-regulatory skills exists but are unsure of how to instill these skills. Recent research (for example, Zimmerman and Martinez-Pons, 1986, 1988; Pintrich and De Groot, 1990; Schunk and Zimmerman,

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1994) has shown that a common set of self-regulatory skills does exist, that these skills are highly predictive of students' academic success, and that these skills can be taught.

This chapter focuses on self-monitoring, a fundamental subprocess of self-regulation. Academic self-monitoring refers to students' efforts to observe themselves as they evaluate information about specific personal processes or actions that affect their learning and achievement in school. From this information, students can assess their progress and make necessary changes to ensure goal attainment. Self-monitoring can serve as a tool for self-improvement by enabling students to direct their attention, to set and adjust their goals, and to guide their course of learning more effectively (Bandura, 1986; Corno, 1989).

A commitment to academic success at the college level places special demands on students because feedback from instructors is often limited to a few written assignments and tests during the semester. Under these circumstances, the consequences of failure are high. Students who are not self-monitors, that is, who cannot monitor their own academic learning and performance accurately on a daily basis, are at a great disadvantage. High school preparation for such independent learning is often very limited, and many students find it difficult to survive in college. This situation has led to implementation of learning-to-learn or mentoring courses at some universities (Weinstein, Stone, and Hanson, 1993). Instructors who teach self-regulated learning skills as part of their regular class assignments can also assist poorly prepared students.

This chapter provides an account of the self-monitoring process within collegiate contexts and describes how faculty can use self-monitoring to help students increase their level of academic self-regulation. We have organized this chapter on the basis of questions commonly asked about self-monitoring. Our answers are drawn from highly regarded theories and from research findings about academic self-monitoring. Thus, we provide both broad understanding and detailed knowledge of the self-monitoring process for college students and faculty.

What Is Self-Monitoring?

Self-monitoring has been defined lexically as, "the process of discriminating target behaviors and related events" (Kirschenbaum, 1984, p. 165), and as, "deliberate attention to some aspect of one's behavior" (Schunk, 1983, p. 89). Its primary purpose is to facilitate personal improvement and behavioral change. Self-monitoring requires one to attend selectively to specific actions or cognitive processes, to distinguish them from other actions or processes, and to discriminate their outcomes. Compared to informal self-monitoring, which involves casual observation or spontaneous reflection, formal self-monitoring involves systematic observations and judgments that reflect not only the present activity but also historical events (personal and contextual) leading up to and accompanying the activity. The specific information garnered

through self-monitoring can then be utilized to evaluate personal progress, to discern patterns of causality, to initiate strategies or interventions aimed at modifying or redirecting the action, and to set realistic performance standards (Bandura, 1986).

In operational performance terms, self-monitoring usually involves keeping a physical record of one's academic performance (written logs, wrist-counter tallies, and audio- or videotape recordings for example). Such records can provide information about the quality and the outcomes of a student's academic performance. For reading assignments, for example, students can record in a daily journal such performance aspects as time spent, number of pages read, level of comprehension achieved, or resulting test grades.

Why Is Self-Monitoring Important?

Self-monitoring enhances learning in many fundamental ways. First, it focuses students' attention on a limited number of responses. When a student focuses on too many responses, no benefits are attained (Shapiro, 1984). Without a selective focus, a student usually cannot isolate the source of error, confusion, or inefficiency. So a selective focus facilitates an analysis of the student's role in any ongoing activity (Bandura, 1986). Second, self-monitoring helps students discriminate between effective and ineffective performance (Thoresen and Mahoney, 1974). For example, a student experiencing reading comprehension problems might discover from recording and graphing her reading sessions that she typically reads late at night and does not recall important details from the text very well at this hour. Third, self-monitoring often reveals the inadequacy of a learning strategy and prompts the student to find a more suitable one (Pressley and Ghatala, 1990). For example, the same student might elect to use a self-questioning strategy to improve her recall of important details.

Fourth, self-monitoring can also enhance management and use of study time (Zimmerman, Greenberg, and Weinstein, 1994). For example, time logs might reveal that the student did not budget sufficient time for reading course material in an earlier part of the day. Finally, self-monitoring fosters reflective thinking (Bandura, 1986). It can lead to better organization of one's knowledge, more accurate self-judgments, and more effective planning and goal setting for future efforts to learn (Lan, 1994; Zimmerman and Bandura, 1994). For example, monitoring reading behavior, especially during the beginning stages of a semester, can help a student plan and organize subsequent reading sessions, evaluate the effectiveness of new reading strategies, and decide on future course selections. Thus, self-recording can provide the impetus for changing a learning strategy and the basis for selecting and evaluating future courses of action. The type of personal change that can occur is often determined by which aspect of performance is selected for self-recording. This is called the reactivity effect (Shapiro, 1984). For example, recording one's reading time typically increases reading speed, whereas recording one's degree of comprehension can have the opposite effect because it prompts more rereading.

In addition to its impact on learning, self-monitoring can affect motivation.

If poorly motivated students are taught to self-monitor their performance properly, the resultant feedback can reveal unexpected progress, which in turn increases their perceptions of self-efficacy, outcome expectations, and goal setting and, ultimately, their overt motivation (Bandura, 1986; Zimmerman, 1989). For example, while monitoring their reading comprehension, pessimistic students might learn they are able to answer more summary questions than they anticipated. Such discoveries will raise their perceptions of efficacy for reading. Schunk (1983) found that students who self-monitored displayed greater self-efficacy, motivation, and achievement.

What Are the Main Psychological Components of Self-Monitoring?

There is considerable agreement about the overt features of self-monitoring, but theorists differ in their descriptions of various covert psychological dimensions. Information-processing theorists (for example, Miller, Galanter, and Pribrum, 1960; Carver and Scheier, 1981) view self-monitoring within a cybernetic system consisting of four stages: sensory environmental input (perception), comparison with a standard, corrective behavior, and behavioral outcome. Information about the effectiveness of an individual's current activity enters the system as a perception and is compared with a standard or goal. If the standard is met, no further actions are necessary. If a discrepancy between the input and standard is detected, the individual must act to reduce the discrepancy. From a cybernetic processing perspective, self-monitoring provides relevant information to the individual for making self-regulatory decisions.

In contrast to this emphasis on covert decision making, cognitive-behavioral theorists (Karoly and Kanfer, 1982; Shapiro and Kratochwill, 1988; Thoresen and Mahoney, 1974) emphasize the need for overt forms of self-monitoring, such as self-recording, as tools for adapting both covert cognitions and overt behavior to environmental conditions. They also emphasize the importance of self-monitoring environmental stimuli and outcomes. In response to the resulting feedback, two forms of overt adaptation are used: stimulus control and response control. Stimulus control involves efforts to avoid or manage problem situations (avoiding studying in a noisy fraternity house for example), and response control involves rewarding oneself for daily achievements (taking coffee breaks after completing assigned readings for example). Much of the work by cognitive-behaviorists has been directed at individuals with severe learning problems, such as hyperactivity, anxiety, writing blocks, and academic procrastination.

Distinct from both information-processing and cognitive-behavioral theorists, metacognitivists (for example, Flavell, 1979; Schraw, 1994) conceive of self-monitoring in terms of meta-awareness and meta-control of knowledge and of cognitive experiences and strategies. Experiences of meta-awareness, such as a student's realization that he does not understand text material he is reading, are expected to increase that student's willingness to make strategic changes. His initial awareness of personal ineffectiveness

should, in turn, increase his focus on self-monitoring of the task and behavior sources. Metacognitive researchers have examined self-monitoring of such primary cognitive processes as attention, memory, reading comprehension, and communication.

Finally, social-cognitive theorists (Bandura, 1991; Schunk, 1989; Zimmerman, 1990) stress the importance and interdependence of all three major forms of self-monitoring: cognitive, behavioral, and environmental. Cognitive as well as external sources of information should be monitored and used to self-regulate learning and performance. Social-cognitive researchers have adopted the overt self-recording methods of the cognitive-behaviorists along with the decisional feedback loop favored by information-processing theorists. However, they describe this loop in terms of the processes of self-observation, self-judgment, and self-reaction, which correspond to the sensor, comparator, and corrective behavior components of an information-processing feedback model. The self-judgment and self-reaction subprocesses correspond also to meta-awareness and meta-control processes identified by metacognitive theorists. Thus, a student engaged in a reading task can monitor where she reads (environmental), how fast she reads (behavioral), and how well she comprehends the material (cognitive). The three sources of information reciprocally influence one other. For example, self-observation of reading comprehension can influence the student's judgments and reactions concerning reading speed and location. Similarly, where the student chooses to read can influence both reading speed and comprehension.

When Should Students Self-Monitor?

College students informally monitor many of their daily activities to some degree (for example, work productivity, procrastination, social conversations, eating habits). Formal self-monitoring, which involves systematic planning and overt record keeping, is seldom necessary if the task is easy, unimportant, or routine. To formally self-monitor such activities would be an unnecessary burden and, in some cases, could even be counterproductive (Zimmerman, 1994). However, when the student encounters a novel or difficult task or when a routine task suddenly becomes problematic (for example, the student does not understand a passage in a book), formal self-monitoring can guide personal adjustment, as we noted in the case of the student experiencing reading comprehension difficulties.

Formal self-monitoring can be especially useful in comprehending new reading material or acquiring new skills, such as material or skills in courses outside the student's college major. In more familiar curricular areas, informal self-monitoring may suffice, but it must be accurate enough to ensure that formal self-monitoring will be activated at the appropriate time, such as upon encountering a difficult textbook. For example, an English student might realize from casual observation that he is having difficulty making sense of the works of an unfamiliar author. Finding that he is unable to solve the problem using such informal strategies as reading more slowly or trying to increase his

concentration, the student decides to formally monitor his reading by keeping a record of important events, characters, and themes. Ultimately, then, formal self-monitoring should be strategically planned and implemented on the basis of contextual cues and informal self-monitoring.

On What Does Self-Monitoring Depend?

In terms of cognitive processes essential to self-monitoring, students must first be able to discern and interpret subtle changes in their functioning. For example, there is evidence (Ellis, 1994) that speakers of a nonstandard variety of English who cannot discriminate reliably among their own word pronunciations will not profit optimally from self-monitoring in a speech laboratory. Second, students must be motivated by perceived academic benefits in order to invest the additional effort to self-monitor (Pressley and Ghatala, 1990). Such motivation has many cognitive sources, such as a person's goals, outcome expectations, and self-efficacy perceptions. If students do not believe that self-monitoring will be effective or that they are competent to do it, they will not self-monitor. Third, students must know metacognitively when and how to use formal monitoring (Paris and Byrnes, 1989). They must be aware when their informal monitoring is not sufficient.

The effectiveness of students' self-monitoring also depends on cognitive reactions to observed environmental outcomes (Kirschenbaum, 1984). If positive outcomes are revealed, students' sense of efficacy will increase and will sustain further self-monitoring (Bandura, in press; Zimmerman, in press). However, if negative outcomes are observed, students' sense of self-efficacy will diminish, undermining continued self-monitoring. There are ways, however, to increase positive cognitive interpretations of outcomes. First, asking learners to record positive forms of outcomes instead of negative ones can pay dividends (Nelson, Hay, and Carstens, 1977). For example, it is more effective for students to keep a record of successfully resisted distractions during studying than to record lapses in concentration. Second, cognitively accentuating the positive implications of adverse outcomes can also be beneficial. For example, attributing students' errors to an incorrect strategy choice will sustain self-efficacy better than attributing the errors to low ability (Zimmerman and Martinez-Pons, 1992). Thus, although observed task outcomes affect students' willingness to continue self-monitoring, the impact of these outcomes depends on intervening cognitive attributions and perceptions of self-efficacy.

What Are Some Problems in Self-Monitoring?

Problems can arise, first, when college students avoid formal self-monitoring because of inaccurate self-efficacy beliefs, for example, neglecting self-testing due to overestimations of preparedness for an exam; second, when students use the wrong standards to judge self-monitored outcomes, for example, relying on a friend's opinion rather than the instructor's guidelines as the standard

for judging the quality of an essay; and third, when students react to outcomes in a negative rather than a positive fashion, for example, becoming despondent over an instructor's critical comments on an early draft of an essay rather than using the comments constructively to edit and improve the essay.

Self-efficacy beliefs that are too optimistic can undermine students' perceptions of the need for formal self-monitoring and can foster a casual approach to studying (Ghatala, Levin, Foorsman, and Pressley, 1989). Self-efficacy beliefs that are pessimistic can lead to half-hearted, poorly monitored attempts at learning or to task avoidance. If instructors establish a structured monitoring system for formally assessing knowledge and studying practices (as described later in this chapter), inaccurate self-efficacy beliefs can be exposed at a point in the learning process when students can correct them without suffering the irreversible consequences of failing grades or falling too far behind to catch up. Such systems can be designed to address individual learning problems and styles and to encourage students to self-adjust or regulate their own learning efforts (Zimmerman, 1989).

Problems also arise when students use ineffective standards for making self-judgments. Information about one's performance is constructive only to the extent that it is monitored with respect to an appropriate standard. The path to hopelessness and failure is marked often by unrealistic expectations for progress. In collegiate settings, academic standards typically are determined by the instructor. Research has shown that clear, specific standards for grading can serve as effective outcome goals of learning (Schunk, 1990). To achieve them, however, most students must set proximal personal standards to motivate their learning, manage their time, and guide their progress. Temporal proximal standards are advantageous because they provide an immediate basis for self-monitoring, a finding that brings to mind Lord Chesterfield's advice to his son in 1747: "I recommend to you to take care of the minutes for hours will take care of themselves" (Shannon, 1994, p. C8).

Students' inappropriate reactions to self-judgments can also cause problems. According to information-processing theories, the purpose of a feedback loop is to reduce discrepancies between an ongoing activity and a standard (either self- or situationally imposed) for that activity. Continued striving depends on negative feedback, that is, failure to reach the intended goal. Once the standard is met, many students may react by discontinuing their efforts to learn. This form of self-control has been termed negative because of its dependence on a negative view of feedback. However, when feedback is used to set new goals or choose new strategies, its self-control function becomes positive. That is, the feedback from monitoring need not be self-limiting but can be self-expanding, if students interpret its implications properly. Recently, social-cognitive researchers (Zimmerman and Bandura, 1994) have demonstrated the positive control function of self-evaluative feedback on college students' goal setting in a writing course.

Thus, certain problems associated with self-monitoring can be avoided if students self-observe at appropriate times, if they learn to set and readjust their

standards effectively, and if they react to personal outcomes in a strategically positive way.

Do Students Need to Learn to Self-Monitor?

Effective academic self-monitoring is an acquired skill. When children enter elementary school, they do not make accurate self-evaluations of competence relative to classmates on academic tasks (Ghatala, 1986; Pressley and Ghatala, 1990), and their self-judgments of academic skill are inflated compared to their teachers' judgments (Nicholls, 1979). By the fifth grade, students can evaluate their relative academic competence with reasonable accuracy, and their self-judgments of academic competence correlate with their teachers' judgments (Nicholls, 1978; Stipek and Hoffman, 1989). There is evidence that structured testing experiences and teacher feedback during the elementary school years improve the accuracy of students' self-judgments of academic competence (Rosenholtz and Simpson, 1984). However, when formal testing criteria are not available, even older students are quite inaccurate when judging the quality of their own academic performance (Ghatala, Levin, Foorsman, and Pressley, 1989). Fortunately, students' self-evaluative capability can be enhanced through formal self-monitoring experiences (Lan, 1994).

Formal self-monitoring systems are planned and structured efforts to report the incidence of specific responses and keep easily interpreted records. Because novice learners lack detailed knowledge of the components of a mastery level of the skill they are learning, they must rely on personal uninformed estimates of progress, that is, vague feelings of knowing or doing better. In contrast, experts who know the key covert and overt components of the skill develop formal systems for self-monitoring. The selective focus and organized structure of formal self-monitoring instruments can be of particular benefit to novices because this focus and structure helps them to self-evaluate and self-regulate their learning through the eyes of an expert. For example, novices can be taught to define a vague awareness of "knowing" a reading assignment in more objective terms—perhaps "knowing" is being able to list the main points from memory after reading text passages. This list can then be checked against the text for accuracy and completeness, and the results can be recorded and compared with earlier efforts. In this way, subtle covert subprocesses can be self-regulated once they are redefined in terms of overt activities or behaviors. This kind of formal criterion of comprehension is more objective and helpful than informal personal impressions.

Formal self-monitoring systems also involve organizing learning tasks so that feedback is directly interpretable. For example, when textbook chapters vary greatly in page length, as they often do, reading tasks need to be segmented into nearly equal units before performance on one unit can be compared with that on other units. Chapters of varying length can be broken into page or paragraph units so that increases in reading speed across units will reflect growing skill and not merely shorter chapters. Many other collegiate assignments, such as writing or translating text from a foreign language, also

have heterogeneous features, such as varying task length and difficulty, that must be "unitized" before useful feedback can be obtained. In this way, formal self-monitoring systems enable students with limited experience to self-observe, self-judge, and self-react to their learning in more expert fashion.

How Can Self-Monitoring Be Enhanced?

College students interested in incorporating self-monitoring into their studying should use a systematic approach (Kirschenbaum, 1984; Watson and Sharp, 1993). First, they must decide whether self-monitoring is necessary: Do they need to change or improve some aspect of their approach to academic learning, such as study skills, reading comprehension, or test anxiety? Second, they must determine what to monitor, which involves specifying a problem area and the behaviors associated with that problem. Third, students must decide on a means for monitoring the behavior, such as a wrist-counter or a log for recording. Finally, they must decide how to evaluate and react to the information gathered through self-monitoring.

As an illustration of the process, consider the example of a first-year student in an introductory history course with a voluminous reading list and weekly discussion groups. He may trace his difficulty in comprehending text chapters to an inability to answer questions in the discussion session or to describe a chapter in his own words. Having recognized there is a problem (step 1), he decides to monitor his reading behavior (step 2). He plans to keep a record of when and where he reads a chapter, how long he takes to read it, and how confident he feels about understanding the material after reading it (step 3). This initial monitoring exercise will provide him with baseline information regarding the nature and effectiveness of his reading (Shapiro and Kratochwill, 1988). He will then evaluate his current reading behavior in light of the monitoring information and decide on steps to take to improve his comprehension (step 4). For example, he may decide to use a highlighting pen to identify key points. Once an improvement strategy is initiated, he will self-monitor its implementation and effectiveness. If comprehension improves, he is likely to continue to use the strategy.

A recent study shows how a structured learning task can enhance college students' self-monitoring and achievement in a statistics course. Lan, Bradley, and Parr (1994) designed a monitoring protocol containing a list of the main statistical concepts covered in the text and lectures and a list of studying activities (lecture, text assignments, discussion, and tutoring) for mastering the material. For each method of studying, students in the self-monitoring group recorded the number of times they engaged in it, the amount of time they spent on it, and their perceived efficacy of using it for each statistical concept. The researchers found that students in the self-monitoring group performed significantly better on four course exams than a control group and than a third group that monitored the instructor's presentation of the material.

The salient feature of the self-monitoring condition was the presence of specific definitions of the concepts to be learned. By recording their method

of studying each concept, students received continuing feedback about their own study activities, the time devoted to each, and their perceived efficacy in solving problems related to the concept. From this feedback, students could decide whether to review a concept, seek additional help, or classify the concept as having been mastered. The following student comments indicate the value of the self-monitoring protocol to the students: "Good tool to evaluate myself in understanding materials; also helps identify areas that I need to clarify"; "The protocols helped me realize what I didn't understand and how I could study to learn it more effectively" (Lan, Bradley, and Parr, 1994). Clearly, these college students perceived the academic importance of structured self-monitoring in providing interpretable feedback.

Teaching the Four Phases of Self-Monitoring

Self-monitoring skills can be taught in four phases: (1) *baseline self-monitoring*: students collect initial data about the academic activity in question; (2) *structured self-monitoring*: students self-observe according to a structured monitoring protocol prepared for the course by the instructor; (3) *independent self-monitoring*: students adapt the course-related self-monitoring protocol to their own individual needs; (4) *self-regulated self-monitoring*: students develop monitoring protocols for other academic activities on their own.

Baseline Self-Monitoring. In a history class, for example, an instructor might initiate the first phase of self-monitoring by asking students to keep a journal of their regular reading activities. Each time they read material for the class, students record their start and finish times, the number of pages read, the location and environmental conditions (for example, noise level and distractions), a simple measure of their perceptions of efficacy for comprehension (ranking themselves, on a scale of 1 to 5, from "did not understand" to "understood completely"), and any additional comments. This recording should take no more than five minutes after each reading episode. The journal then becomes a baseline that students can use to set goals for improving their reading. Instructors should model correct use of this reading journal in class and should encourage students to look for patterns in their reading behavior that might facilitate or hamper comprehension.

Structured Self-Monitoring. The importance of operational definitions is addressed in the second phase, structured self-monitoring. The instructor helps students objectify their self-monitoring by providing better behavioral definitions. Abstruse statements, such as "I understand Chapter Six," might be recast in behavioral form, such as "Can I provide a brief summary?" "Can I list the five most important points?" "Can I write a critique of the chapter?" "Can I lead a discussion on the main theme of the chapter?" "Do my important points coincide with other students' and with the instructor's?" Answering behavioral questions such as these compels students to replace vague notions of knowing the material with more precise ones.

Thus, by teaching the specific form of self-monitoring, the instructor can

better guide students' cognitive activities during studying. In a class on twentieth-century Argentine history, for example, the instructor might want students to focus on important themes in each reading assignment, to generate critical questions, and to be able to discuss course material in terms of a set of organizing questions. Figure 2.1 shows a possible structured protocol for a reading assignment covering the relationship between President Juan Perón and the Argentine labor unions and the role of the Argentine military in national politics.

For the instructor of this course, comprehension is defined in terms of students' ability to write a summary and generate relevant questions. The self-monitoring protocol clarifies comprehension activities, establishes implicit comprehension goals, and provides immediate feedback on the reading activity. Instructors should provide a clear rationale for the selection of the themes on such a protocol, so that students can take over the self-monitoring process in the next stage. (Of course, the protocol format can be revised depending on course demands and student needs.)

Independent Self-Monitoring. Students are not fully independent in their learning as long as their self-monitoring remains dependent on an instructor's directions. Thus, while it serves important academic goals, the structured protocol is, more importantly, a means to achieving independent self-monitoring, the third phase of self-regulatory development (Zimmerman and Bonner, in press). The history class instructor, for example, might find that after three weeks of utilizing different versions of the structured protocol, most students are ready to develop the protocol for the next textbook chapter on their own. Students should determine the most important themes, based on criteria previously modeled by the instructor, and then they should prepare and complete a protocol based on these themes. Self-monitoring becomes fully independent when students can develop and use the reading protocol on their own.

Self-Regulated Self-Monitoring. To facilitate the self-regulated use of self-monitoring skills, the history instructor might ask students to develop personal protocols for self-monitoring of other learning activities, such as test preparation or essay writing. The hallmark of this fourth phase of self-monitoring is students' capability to generalize and transfer the general principles of performance structuring to new areas of academic expertise.

Conclusion

Self-monitoring is an indispensable aid because it not only uncovers areas of weakness in learning, it compels the learner to focus on whether or not his or her current learning methods are beneficial. Although self-monitoring will help learners regardless of their ability level, the instructor must take into consideration students' knowledge of the material and strategies, their existing goals and goal-setting skills, and their perceptions of self-efficacy for learning course materials. The self-monitoring system must be structured to increase accuracy,

**Figure 2.1. A Structured Protocol for a
Twentieth-Century Argentine History Course**

Week of _____ Reading Assignment _____

Reading schedule:
Date/Time Location Pages Comment

Important Themes:

1. Perón and labor unions in Argentina:

- a. Located in text _____
- b. Read _____
- c. Highlighted _____
- d. Took notes _____
- e. Discussed with classmate _____

Comprehension Level:

1	2	3	4	5
Did not understand				Understood completely

Brief Summary:

Critical Questions:

2. Military involvement in Argentine politics:

- a. Located in text _____
- b. Read _____
- c. Highlighted _____
- d. Took notes _____
- e. Discussed with classmate _____

Comprehension Level:

1	2	3	4	5
Did not understand				Understood completely

Brief Summary:

Critical Questions:

to foster interpretations of results that indicate personal growth, and to replace inadequate learning strategies with better ones. When this occurs, students' perceptions of their self-efficacy will grow, and their motivation for continued learning will be sustained.

One note of caution should be sounded here, however. Self-monitoring must be integrated within a larger framework of self-regulatory skill. Unless self-monitoring leads to more effective goal setting, to greater awareness of the power of using learning strategies, or to better planning and use of an individual's time, its effects will be short lived. It is when self-monitoring plays an integral role in the use of other self-regulatory skills that students will experience a significant sense of empowerment and will reap the benefits of superior academic achievement.

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