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The Impact of Experience on College Students' Textbook Reading Practices

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This study investigated the changes that occur in college students' reading compliance and metacognitive reading strategies as they progress through college. Researchers were interested in determining differences in (a) how first and second year students read and use a text for understanding course material as compared to junior and senior level students and (b) the extent to which experience alone can produce increases in student reading compliance and the use of metacognitive reading strategies. Results to a 22-item questionnaire indicated that, students are increasingly reading more material and engaging in more metacognitive reading strategies as they progress through college, but that these overall increases do not reflect that of an active reader. These findings suggest that the college experience alone may not result in increases in metacognitive strategies suitable for students to engage in active reading and fully comprehend textbook material.

Many students entering college today lack the necessary skills to succeed. According to Manzo (2006), the first and second years of college should be spent on remedial work because students are often underprepared for the reading assigned and have insufficient reading strategies to fully comprehend material. Research by ACT Inc. (2004) further suggests that only 51% of students taking the ACT were prepared for reading at the college level. Despite these findings, many underprepared students enter college expecting to develop these reading skills with little to no remediation.

At the same time, many instructors assume that students have the necessary skills to achieve in college or will "learn by consumption" (McNamara, 2010). In fact many instructors have developed a "sink or swim" policy, assuming that students will either gain these necessary skills or drop out. Unfortunately, this is exactly what seems to be occurring. According to the US Census Bureau (2009), only 27.5% of 18-24 year olds in the United States have achieved a bachelor's degree or higher. It appears that while there are increases in college enrollment overall, the rate of college degree completion is declining. According to Bounds, Lovenheim, and Turner (2009), the main causes for the decline in college completion rates are students' lack of adequate preparation and a reduction of resources.

It is commonly assumed that college students are developing effective skills, but recent research studies question that assumption (McNamara, 2010; McMinn, Tabor, Trihub, Taylor, Dominguez, 2009; Fine & Fitzsimons, 2011). For example, McNamara (2010) suggested that students are not automatically learning the necessary reading skills to be successful in medical school and that instructors are ignoring students' need to "learn to learn." Other studies suggest that graduate students are not completing their reading assignments and that they also lack the necessary skills to comprehend textbook material (McMinn et al., 2009; Fine &Fitzsimmons, 2011). Despite this research, few studies have examined

changes in reading compliance and metacognitive reading strategies of college students as they progress through school. Studies examining compliance and metacognitive reading strategies in college students have focused on the first-year college student.

In an effort to determine the influence of experience, this study examined the differences that exist between first and second year students as compared to junior and senior level students, in terms of their reading compliance and use of metacognitive reading strategies. By using a self-report questionnaire, the frequency at which participants read assigned textbooks and the metacognitive reading strategies they utilized were examined. Results from this study will help instructors determine if students engage in more metacognitive reading strategies as a result of experience with college texts, and if reading instruction should be more uniformly employed across the curriculum at all levels.

Review of Relevant Literature

Reading Compliance

Nearly all college courses require a text, and most instructors expect students to read it as an integral part of the student's development and understanding of the course content. Although instructors vary in how they present the messages to students about the use and importance of the required course texts, a related issue is that too few undergraduates appear to be reading the assigned text using sophisticated metacognitive reading strategies. These more sophisticated metacognitive strategies, such as previews, questioning, and inference, require students to devote more time to textbook reading than would be necessary for a superficial reading. Studies examining reading compliance indicate that students devote very little time to textbook reading per week. For example, Clump, Bauer, and Bradley (2004) reported that the majority of college students spend less than three hours per week reading the text(s) required for a course. Other researchers have suggested that there is a downward trend in reading compliance, with more students reading the assigned text in 1981 than in 1997 (Burchfield & Sappington, 2000).

Sikorski, Rich, Saville, Buskist, Drogan, and Davis (2002) administered a survey to 439 Auburn University (AU) students and 739 Emporia State University (ESU) students to determine the use of textbooks among Introductory Psychology students. The survey consisted of 11 items inquiring about the purchase and use of introductory level college texts. Only 31% of the AU students reported purchasing a textbook for the course, while 91% of ESU students reported purchasing a textbook. AU students (32%) reported that they were able to borrow the book from a peer and did not need to purchase the text. Regarding the reading of these introductory textbooks, 82% of AU students and 78% of ESU students reported that they did not read their introductory textbooks or read it sparingly. On average, the majority of students from both universities spent less than three hours a week reading their textbooks. And only 11% of AU students and 21% of ESU students reported that they believed reading their textbook was not very important in determining their grade in the course. Additionally, because of the lack of student preparedness for class, instructors often find that students are not able to discuss assigned readings in class, which can lead to poor class discussions and an overall lack of participation (Sappington, Kinsey, & Munsayac, 2002).

In an older study, Friedman and Wilson (1975) collected textbooks for a course prior to the first day of class and added glue seals throughout the text. Students in the course were then asked to pick up the textbooks and use them in the course. After final exams were completed, the researchers collected the textbooks and inspected them for glue seals that had been torn. Friedman and Wilson used the torn glue seals as a measure of reading compliance and found that the majority of students only read chapter summaries. Thus, students may not even purchase a text and may use it only in a limited fashion. When students do own the text, researchers suggest that psychology students, for example, read about 27% of the readings before coming to class and 70% of the material before an exam (Clump et al., 2004).

Metacognitive Strategies

In order to be successful at comprehending reading material, students must use metacognitive strategies while reading (Pressley, Ghatala, Woloshyn, & Pirie, 1990). Without metacognitive strategies, students would be unable to monitor comprehension and select strategies when they notice a failure in comprehension. Metacognitive strategies should be used in all phases of reading, including planning, reading, and evaluating. However, despite the fact that many college students consistently fail to use adequate metacognitive strategies while reading, instructors rarely spend time instructing students on the use of these metacognitive strategies that could support their learning. Baker and Anderson (1979) showed participants an inconsistent text and asked them to examine it sentence by sentence. Participants were found to be engaging in comprehension monitoring, but did not employ metacognitive strategies to fix their lack of comprehension. Despite having no time limit, less than 25% of college students asked to engage in metacognitive strategies, such as

analyzing inconsistencies in text, could identify all the inconsistencies within the text (Baker & Anderson, 1979).

The prevalence of metacognitive strategies, such as underlining, notetaking, outlining, summarizing, and self-questioning are rarely examined among college students. Studies of younger children (Bransford, Stein, Shelton, & Owing, 1980; Paris & Myers, 1981; Sullivan, 1978) find that there is a consistent lack of support for the use of metacognitive strategies. Armbruster, Echols, and Brown (1982) suggest these metacognitive strategies are a late developing skill, but it is unclear approximately when these strategies develop. Without this research, instructors are unaware of when they can expect college students to fully comprehend textbook material.

The reviewed research suggests that college students are not always reading their texts and, when they are, are not doing so in a manner that would facilitate comprehension and course topic knowledge, i.e., they are not using metacognitive reading strategies. Due to the decline in graduation rates and the increasing concern among employers and post-graduate faculty about student comprehension, there is a growing need to determine how reading compliance and metacognitive reading strategies change due to experience in college. This study aims to address that gap, by investigating college students' self-reporting of textbook reading in relation to the following questions: (a) how often are college students reading the text?; (b) what metacognitive reading strategies do college students utilize?; and (c) what differences in reading compliance and metacognitive reading strategies exist between first and second year students and junior and senior level students?

Method

Participants

There were 210 participants in this study, who were undergraduate students from two small mid-south universities enrolled in either an introductory course in psychology or an upper-level course in learning theories. First year students composed 48% of the group. The mean GPA was 3.0 (*SD = .57*) and the mean ACT (self-reported) was 21.5 (*SD = 4.02*). For both courses, the text was listed as required in the course syllabus.

Instrument

Each participant completed the College Students' Reading Survey (CSRS) during the middle of the semester. This survey is comprised of revised questions from The College Textbook Survey developed by Sikorski, Saville, Buskist, Oksana, and Davis (2002) and Reading in this Course from The Teaching Professor (2001). The instrument consisted of 22 items: (a) 6 demographic and background questions and (b) 16 items which asked about students' reading practices and related perceptions to using the course text. For the purposes of this report, six items were eliminated due to confusion in the directions. Items formats consisted of short answer items, rank ordered items, and Likert-scale items. Responses for the Likert-scale items were made on a 5-point scale from "not at all important" to "very important." The survey consisted of the following items:

- What grade do you expect to receive in this course?
- Did you have the textbook for this course? Why or Why not?
- If you have a textbook for this course, how many hours do you spend per week reading it?
- If you wish to receive a good grade in this course, how useful is reading the textbook?
- What do you do to perform successfully in a course?
- What pedagogical aids are most useful in studying for an exam?
- When do you do the assigned reading?
- What activities do you engage in while you read the textbook?
- Do you see a relationship between the material presented in class and the material covered in the book?
- In college courses what should the instructor do to help you understand the material?

Results and Discussion

Textbook Reading

The first item on the CSRS asked the students if they owned the text for the course. A total of 89% indicated that they did own the book. For the 11% who reported not owning the course text, the following reasons were given: 22 reported they could not afford the text; 1 thought passing the course was possible without the text; and 4 reported that they needed only lecture notes. The next question asked the students to report how many hours were spent each week reading the text for the present course. The mean numbers of hours reported for the total group was 1.88 hours, (*SD = 1.95*). For the first year students, the mean hours per week was given as 1.54 (*SD = 1.98*). The junior and senior level students reported 2.21 hours (*SD = 1.90*), which was not a statistically significant difference. Additionally, first year students were more likely to report spending no hours each week reading the course text. For the total group of students, 95% reported reading their text less than 4 hours per week.

The next question asked: "If you wish to receive a "good" grade in this course, how useful is reading the textbook?" Responses were made on a 5-point scale from "not at all important" to "very important." The total group mean was 3.72, indicating that the students felt the text was "sort of important" to "important." However, for the first year students, the mean was 3.53 (*SD* = *.98*) and for the junior and senior level students it was 3.90 (*SD* = *.91*), which indicates that there was a statistically significant difference between these groups (*t = -2.80, p = .006*). The junior and senior level students not only perceived the text as more important and integral to course success, but also devoted more time each week in reading the text. In a later item, 66% agreed that the text they were using for the class was well organized, and 52% thought it was easy to understand.

Students were also asked to indicate the instructor's activities in the course that review the value of reading the text. The results indicated that only 73% reported their instructors presented information from the text, while 71% indicated that their instructors encouraged them to read the text. Thus, instructor practices may have been sending out a conflicting message to students about the value of the text.

Reading Compliance

Students were asked the following question: "If you read your textbook for this course, when do you typically do the assigned reading?" A very large number, 74%, indicated that they do not read before they come to class, and 60% indicated that they do not read after the material has been presented or lectured on during class. Sixty-five percent indicated they read when they are studying for an exam. Slightly over 14% indicated that they do not read the text at all. Comparing differences among first and second year students and junior and senior level students indicated a slightly different pattern. Both groups reported a similar pattern for whether or not they read before a class: approximately 25% in each group indicated that they read before a class. However, there was a difference between the first and second year students and junior and senior level students' perceptions of when they were likely to read a text: choices involved (a) reading after a lecture or (b) studying for an exam. Juniors and seniors were much more likely to indicate that they did read the text after a lecture and when they were studying for an exam. However, these differences were not statistically significant.

Textbook Study Practices

Students were asked to indicate which kinds of activities they engaged in when they did the assigned reading (see Table 1). Overall, students reported very little activity that might support their reading. The most common activity reported was underlining or highlighting important terms, with a fairly large number of junior and senior level students (73%) reporting they used that technique. There was also a statistically significant difference between the reported use of underlining among the 2 groups (*t* = 2.87, *p* = .005*). Another important strategy that was more frequently cited by the junior and senior level students was associating the material with previously learned material, with 49% indicating that they use the strategy. This was also statistically significant (*t* = 2.66, *p* = .008*).

Table 1

Textbook Reading Practices

Activity	Freshmen			Upper Level			Total
	M	*DS*	*%*	*M*	*DS*	*%*	
Underlining important terms.	1.44	.50	56	1.25	.56 *	73	65%
Write notes or questions in text.	1.73	.45	27	1.61	.49	39	33%
Outline the chapters.	1.82	.39	18	1.78	.42	22	20%
Associate the material with previously learned information.	1.66	.48	34	1.47	.54	49	42%
Look for answers to questions of interest to you.	1.72	.45	28	1.69	.48	28	28%
Do not use any of these activities.	1.92	.27	8	1.92	.34	5	6%
Do not do the assigned reading.	1.81	.39	13	1.88	.35	7	10%

*Statistically significant difference at the .05 level or less.

Students were also asked: "What do you see as the relationship between the material presented in class and the material covered in the book?" (see Table 2). Juniors and seniors appeared to have a much clearer understanding of how a text should function. For example, they felt much more strongly about how the lecture was related to the text both in terms of how the text adds to the lecture and how the lecture is supplemented by the information in the text. The juniors and seniors were also more likely to see that the text material was related to what was occurring in class (i.e., 77%, t =3.65, p = .00), that it was elaborated on in class (53% vs 39%; t = 2.51, p = .01), and that it added more detail to what the instructor says (66% vs 49%, t = 2.78, p = .01). These three variables were statistically significant. The last three questions inquired about students' expectations of how an instructor should link text and lecture. Interestingly, over 90% of both groups thought the instructor should lecture on all material that will be on the test, which would seem to question the ability to apply the information, and also question the need for a text. In contrast, over a third of the participants felt that the instructor should cover the important information from the textbook and expect students to read the remaining material. Only 10% thought that the instructor should use outside sources for lectures and leave the textbook reading to the student.

Reading Comprehension Monitoring and Metacognition

Another important area for understanding how students use their texts is the practices they employ that lead to effective understanding of the text material as they are reading. Several questions were asked that required the students to answer questions about their strategies, which involve (a) information processing of the text, (b) self-monitoring strategies, and (c) text learning strategies. These questions and their responses are presented here in Tables 3-5, along with percentages of checked responses given.

For the information processing strategies, half of the participants indicated that they were aware of necessary prior knowledge, and 37% indicated that they did try to distinguish between information they did and did not know. One key activity, anticipating how to use knowledge from the textbook, showed that the juniors and seniors were more likely to report using that activity (37%) than first year students (23%), which was a statistically significant difference (t = 2.44 , p = .02*). Few participants attempted to revise or extend their knowledge based on what they were reading, and only 42% indicated that they attempted to evaluate what they were reading. Half of the students said they did attempt to draw on prior knowledge, although there was not a statistically significant difference between the groups. Nearly 16%

Table 2

Class and Textbook Relationship

Activity	Freshmen			Upper Level			Total
	M	*DS*	*%*	*M*	*DS*	*%*	
Text disagrees with what teacher says in class.	1.90	.30	10	1.94	.28	5	7%
Text supplies examples; instructor presents theory.	1.59	.49	41	1.58	.53	38	39%
Material in the text is not discussed in class.	1.89	.31	11	1.91	.35	6	8%
Material in the text is repeated in class.	1.47	.50	54	1.23	.42*	77	66%
Text adds more detail to what the instructor says.	1.51	.50	49	1.32	.49*	66	57%
Material in the text is elaborated on in class.	1.61	.49	39	1.44	.53*	53	46%
Instructor should lecture on all material that will be on the test.	1.07	.26	93	1.10	.30	90	91%
Instructor should cover the most important information in the lecture and ask students to read.	1.65	.48	35	1.56	.52	42	39%
Instructor should lecture on sources outside the textbook and ask students to read on his or her own time.	1.88	.33	12	1.89	.34	9	10%

*Statistically significant difference at the .05 level or less.

indicated they did not read the text for the given course.

Table 4 presents data on how the students reported various self-monitoring practices as they were reading. Juniors and seniors were more likely to report the use of self-monitoring practices, although none of these differences were statistically significant. Juniors and seniors were more likely to search out information relevant to goals. Over 40% of both groups indicated that they would search out meaning of words and they were also more likely to indicate they use their strengths when reading. Both groups reported moderate use of visualization (about 50%).

Finally, Table 5 presents data on what text learning strategies were reported by these students. On each item (with the exception of "not reading"), juniors and seniors were more likely to report use of the strategy, particularly writing questions and rereading the text. Three of these variables were statistically significant. For the variable of writing questions, 28% of the upperclass students reported using the strategy, while only 14% of the first year students did (t = 2.67, p = .008*). For underlining, 38% of the upperclass students used the strategy as opposed to 29% (t = 2.35, p = .02*) of first year students. For re-reading in order to remember, 46% of the upperclass students reported that strategy use while only 32% of the first year students did (t = 2.57, p = .01*). This data suggests that first year students are less familiar with the use and importance of such strategies, but with increasing experience as a college student, the value and resultant use of these strategies becomes more obvious.

Table 3

Information Processing Strategies

Activity (As I am reading . . .)	Freshmen			Upper Level			Total
	M	*DS*	*%*	*M*	*DS*	*%*	
I evaluate the text to determine whether it contributes to my knowledge/understanding of the subject.	1.61	.49	39	1.52	.52	46	42%
I anticipate how I will use the knowledge that I have gained from reading the text.	1.77	.42	23	1.61	.51*	37	30%
I try to draw on my knowledge of the topic to help me understand what I am reading.	1.53	.50	47	1.47	.50	53	50%
I reconsider and revise my background knowledge about the topic, based on the text.	1.86	.35	14	1.79	.43	19	17%
I reconsider and revise my prior questions about the topic, based on the text.	1.88	.33	12	1.83	.42	13	13%
I reconsider other possible interpretations to determine whether I understand the text.	1.80	.40	20	1.71	.46	29	25%
I distinguish between information that I already know and new information.	1.66	.48	34	1.57	.53	39	37%
I try to infer information that is not directly stated in the text.	1.83	.38	17	1.77	.46	19	18%
I do not do the assigned reading for this class.	1.79	.41	21	1.85	.41	11	16%

*Statistically significant difference at the .05 level or less.

Summary and Conclusions

Many college students do not read their course texts or do not read them on a timely basis. College students are also not effectively using reading comprehension monitoring and metacognitive strategies in their reading. In general, there is a trend for juniors and seniors to be more diligent in their reading practices, which may indicate that experience plays a role in shaping these practices. However, these differences are minor and the college experience alone may not result in the necessary skills students need to be academically successful. Instead, explicit instruction in reading comprehension and metacognitive reading strategies may be advantageous for students at all levels.

This study supports the findings of earlier researchers that report how little time college students devote to reading their college texts. Clump et al. (2004) found that students spend less than 3 hours per week reading. This study found similar results, with 95% of all of these students reporting reading less than 4 hours a week for the course. While instructors could partly be at fault for the messages they send regarding the usefulness of the text, too many of these students seem unaware of how the text – and its comprehension – plays a vital role in academic success. Furthermore, while there is little research on how reading compliance and self-monitoring changes with increasing college experience, more experienced students (i.e., juniors and seniors) are more likely to employ effective strategies in information processing and text learning. They are also more likely to see how a text augments an instructor's presentations or the course itself. However, despite these differences, these students reported far less activity with these strategies than should be necessary for a more comprehensive understanding of the material.

The information in this study also indicates the need for instructors to become more cognizant of the messages they are conveying to students about the importance of the textbook, particularly if it is a required purchase for the course. In order to help students understand the textbook's importance, instructors should include reading policies in their syllabi and discuss how the information in the textbook supplements the course lectures. This may be especially beneficial for undergraduates who lack experience in college courses. As stated in prior research (Burchfield & Sappingrton, 2000; Connor-Gree, 2000; Culver, 2008; Ruscio, 2001), weekly quizzing and reading guides may be similarly beneficial to ensure student compliance with reading.

Differences in the reading compliance and reading strategies in first and second year students and junior and senior level students should also be noted by instructors. According to Orlando, Caverly, Swetnam, and Flippo (1989), students might be assigned over 2400 pages of reading per semester. With these challenging amounts of reading, all college educators should be aware of differences that exist between the first year students and the college junior/senior. As previously noted, juniors and seniors do appear to engage in more metacognitive reading strategies as compared to the first year student, but their strategies are often less sophisticated in nature and, in turn, can result in surface level reading. With this in mind, instructors should consider textbooks and reading materials with readability levels that are suitable for students, and consider implementing pedagogical tools within their college course in order to build metacognitive reading skills wherever and whenever possible.

Recent research by Culver (2008), McNamara (2010), and Roberts and Klamen (2010) indicates that instructing both undergraduates

Table 4

Self-Monitoring Strategies

Activity (As I am reading . . .)	Freshmen			Upper Level			Total
	M	*DS*	*%*	*M*	*DS*	*%*	
I evaluate whether what I am reading is relevant to my reading goals.	1.68	.47	32	1.63	.50	35	38%
I search out information relevant to my reading goals.	1.77	.49	25	1.81	2.02	34	30%
I anticipate information that will be presented later in the text.	1.77	.42	23	1.74	.48	22	22%
I try to determine the meaning of unknown words that seem critical to the meaning of the text.	1.58	.50	42	1.54	.50	46	44%
I check whether I had anticipated the current information.	1.85	.36	15	1.87	.36	11	13%
I exploit my personal strengths in order to better understand the text.	1.72	.45	28	1.61	.53	35	31%
I visualize descriptions to better understand the text.	1.53	.50	47	1.49	.52	50	48%
I note how hard or easy a text is to read.	1.74	.44	26	1.80	.45	17	21%
I do not read the assigned material.	1.82	.30	18	1.86	.37	12	15%

*Statistically significant difference at the .05 level or less.

and graduate students on the importance of active reading skills and implementing pedagogical aids within the classroom to enhance active reading skills. Two recent empirically developed aids are Reader's Guides (RG) and Self Explanation Reading Training (SERT).

The RG (see Appendix A) is a guide that students complete while reading their textbook material (Culver, 2008). The RG is listed as an assignment that must be completed for all chapters that are covered in a course. With the use of the guide, students are instructed to engage in metacognitive strategies while reading the course material. The RG requires little to no instruction and can be easily implemented into any college course. Due to its nature, students are pleased with the RG and comment that the RG helps them to better understand their reading material. Grading the RG is particularly easy and requires little time and effort. This strategy makes reading the textbook mandatory and also holds students accountable for their reading.

Roberts and Klamen (2010) encourage instructors to use The Self Explanation Reading Training (SERT), which is empirically designed to improve the reading skills of high/low knowledge readers and high/low skill readers in college. SERT is supported by online tutorials that allow students to engage in deliberate practice with feedback. This tool could be easily implemented in one's course to give students the opportunity to build more skillful reading skills. More information on SERT can be found at http://academic.research.microsoft.com/Publication/3733786/sert-self-explanation-reading-training.

The present study examined how metacognitive reading strategies and reading compliance change based on the college experience. Although experience alone produced slight increases in reading compliance and metacognitive reading strategies, students are generally not acquiring the necessary skills to develop a comprehensive understanding of textbook material. Addressing this need is perhaps even more urgent given the declines in graduation rates and the recent reports of a mismatch between the reading skills and strategies new employees bring to the workplace and the increasingly stringent literacy demands of those workplaces. Instruction on active reading strategies and techniques to encourage reading should be implemented across the curriculum and all levels of instruction.

Table 5

Text Learning Strategies

Activity (As I am reading . . .)	Freshmen			Upper Level			Total
	M	*DS*	*%*	*M*	*DS*	*%*	
I make notes when reading in order to remember the information.	1.64	.48	36	1.55	.50	43	40%
I underline and highlight important information in order to find it more easily later on.	1.48	.50	53	1.31	.50*	65	59%
I write questions and notes in the margins in order to better understand the text.	1.86	.35	14	1.71	.48*	28	21%
I try to underline when reading in order to remember the information.	1.71	.46	29	1.61	.51	38	33%
I read material more than once in order to remember the information.	1.68	.47	32	1.50	.54	46	39%
I reread the text when I am having difficulty comprehending.	1.53	.50	47	1.43	.50	57	52%
I do not read the assigned reading for this class.	1.82	.39	18	1.84	.41	12	15%

*Statistically significant difference at the .05 level or less.

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APPENDIX A

The Reader's Guide

Planning (Answer these questions *before* you begin reading)

1. What is the title of the chapter?
2. Name three questions you would like to have answered from this chapter?
3. What are the subheadings listed in this chapter?
4. For each subheading listed in question three, write one statement describing what you think the paragraph will discuss (based on the subheading).
5. What are the bold face words in this chapter?
6. Using questions 3 and 4, briefly put together an outline that effectively displays the organizational structure of this passage?
7. Skim each of the paragraphs, noting whether or not the paragraph will discuss what you predicted in question 4.

Reading (Answer these questions *while* you are reading)

8. While reading the chapter, underline any ideas you believe are important.
9. While reading the chapter, write the following symbols next the sentences as you feel they are necessary.
    ? = I have a question about this
    A = I agree with this
    D = I disagree with this
    ! = Interesting or important point
    C = Confusing
10. Write down two ideas from the text that you believe your instructor may put on a test.
11. Using the two ideas from question 10, write down any information you knew about these items before reading the passage.
12. Can the information from the chapter be easily associated with the information you knew about these items prior to reading the chapter? Yes or No?
13. While you are reading, write down the number of times you noticed that you experienced a failure in comprehending the material? What did you do about it?

Evaluate (Answer these questions *after* you have completed the reading)

14. Looking back to question 2, were the questions you asked answered by the chapter?
15. Give a brief summary of the chapter you just read.
16. Was summarizing the chapter difficult? Yes or No? Why?
17. Was your summary accurate? Return to the passage to determine your accuracy.
18. On a scale of 1 to 10 (1 = very inaccurate to 10 = very accurate) how would you rate your summary?