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ABSTRACT

This paper describes the Reading Enhancement Across Disciplines (READ) workshops at Brookdale Community College, New Jersey. The READ workshops focus on practical strategies for faculty across the disciplines to use in order to enhance the level of students' interaction with both written and oral discourse. The author of this report argues that frequent quizzes regarding assigned reading help the students and the instructors to clarify goals and assess progress. The paper suggests that instructors establish students' prior knowledge at the outset. Critical thinking skills should then be developed. An exercise suggested here consists of students writing out a "who, what, when, where, how, and why" in relation to a classroom topic, followed by group work in which students expand their summaries. These summaries make information easier to recall. Students also need to see the relevance of their learning. The author argues that students can create a real-world application for what they learn in any class. The paper offers guidelines for creating a small group evaluation form for students in order to help the instructor determine how productive their group work is. Finally, the paper also contains an English-as-a-Second-Language (ESL) reading rating sheet that can be adapted for most courses, as well as an exam evaluation form. (NB)

Faculty Strategies for Content Reading

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Introduction

In response to a recurring concern among the Brookdale Community College faculty that students have difficulty interacting with texts, the reading department faculty developed a series of workshops. These READ (Reading Enhancement Across Disciplines) workshops focused on practical strategies for the faculty to use in order to enhance the level of students' interaction with both written and oral discourse. The participants in the workshop had a lack of formal training in the field of literacy instruction and they were concerned about students experiencing difficulties understanding their assigned readings. The participants ranged from beginning instructors to experienced professors and represented a cross section of disciplines.

At the first workshop we asked the participants to respond to the following questions concerning content reading.

1. In addition to their texts, what types of readings are assigned?
2. What relationship is made between assigned readings and class activities?
3. Are students expected to read the assignments prior to class?
4. Does the professor provide an outline or overview of the lecture?
5. Are the lectures organized inductively or deductively?
6. Are students required to write papers outside of class?
7. What type of tests will be given?
8. What criteria are used to evaluate students' essays or other written work?

The answers to these questions demonstrated the diverse nature of reading in college courses. The amount of reading assigned, presence or absence of class discussion,

writing assignments, and exam requirements all vary across the curriculum. What didn't vary was the problem students have interacting with the text.

During one of the workshops a student panel offered the workshop participants first hand comments concerning college reading assignments. The students, who were all high achieving students, represented a cross section of courses. A few of their comments follow:

"The lectures cover the important stuff, so why read the book?" (History student)

"The book is boring and I have trouble following it." (Economics student)

"I like the class discussions and they help me understand the concepts, so why read the book first?" (Biology student)

"I will only read the book if I think there is going to be a quiz!" (Business student)

It is interesting to note that when one student made a comment, the others quickly agreed. The conflicting assumptions of faculty and students regarding college reading and learning responsibilities were discussed and as a result of the discussions, a variety of classroom techniques were suggested to the participants.

Responses to Students' Comments

The student's comment about boredom is common among students who tend to lack motivation. Two researchers, Shuman (1989) and Lowman (1991) feel that motivated students are those who feel accepted and encouraged within a positive classroom atmosphere. They feel that instructors should strengthen teaching practices that encourage more intrinsic motivation to learn.

We suggested instructors clearly outline the reading requirements at the beginning of each class. This should include suggestions of how students might make connections to their readings and the amount of time students should spend on their readings. We suggested varying the types and the length of the assigned readings.

When students felt there would be a quiz on the readings, they were more likely to complete the assignments. We recommended that a writing assignment accompany every reading assignment. We suggested short quizzes for accountability purposes. Tests are an effective way to define the goals of the course. According to McKeachie, Pintrich, Lin and Smith in *Classroom Assessment Techniques* by Angelo and Cross (1993), students concentrate on whatever they think will be on the test. No matter how clear instructors are about the "big picture," students won't see it unless assessment measures point them to it. Frequent quizzes help the students and the instructors clarify goals and assess progress while there is time to make changes based on the student feedback.

Before instructors can implement new strategies, they must reflect on their beliefs about how students learn. Paris and Ayres (1994) suggest three concepts. First, students need to be actively involved in constructing meaning according to their experiences. Students need a way to link new information with existing knowledge. Second, students need to develop intellectually, emotionally, and socially through the use of language in new and different ways. Critical thinking should be a primary focus. Third, students need to interact and communicate with others in a variety of diverse settings. Small group discussions provide opportunities for students to speak with confidence regarding their ideas and to challenge opposing ideas. It is up to the instructor to facilitate these

discussions rather than direct them. An instructor might use a classroom debate for this purpose.

Strategies for Classroom Use

By using a few minutes of class time to assess students' prior knowledge and understanding of the topic to be covered in class, the instructor will be able to gauge how well the content is being learned. For the students, assessing prior knowledge provides a preview of what will be covered in the class and a review of what they already know about the topic. This strategy can be accomplished by preparing two or three open-ended questions that will probe the students' existing knowledge of the concept to be discussed. The questions need to be carefully phrased using vocabulary familiar to the course. Students should be directed to answer the questions in two or three sentences. These should not be graded. At the next class, instructors should explain how the information would influence what the instructor does as the teacher and how it should affect what the student does as a learner. This background knowledge probe will not only provide students with knowledge of the topic, but it will also give insight into their skills in communicating what they know.

Frequently, however, the existence of prior knowledge may be more of an obstacle than the absence of prior knowledge. Most college professors know from experience that it is more difficult for students to unlearn incorrect knowledge than to master new knowledge. Professors can benefit by discovering early what preconceptions and misconceptions students have which will interfere with learning in a particular course. This can be accomplished by identifying some of the most troublesome common misconceptions or preconceptions students bring to the course. To accomplish this task,

the professor could create a questionnaire to elicit information about students' ideas and beliefs in the course. The responses can be categorized by type of misconception or preconception and the students can discuss the responses in groups. The discussion groups should arrive at reasonable explanations or justifications for the misconceptions or preconceptions. Later in the semester, the same questionnaire can be readministered to examine the changes.

The following, from Angelo and Cross (1993), is an example from a biology professor who developed a questionnaire to uncover incorrect ideas and beliefs about how diseases such as gonorrhea, syphilis, hepatitis, and AIDS are transmitted. A sample statement was, "Most of those now infected with the AIDS virus became infected through homosexual activities or intravenous drug use." Students were to circle one of the following answers:

'I am absolutely certain this is true.'

'I am pretty sure it is true.'

'I have no idea whether it is true or false.'

'I am pretty sure it is false.'

'I am absolutely certain it is false.'

After class, the professor looked at the responses and discovered that most of his students had incorrect notions or were unsure about the issue. Knowing what the common misconceptions were, the professor altered his teaching strategies to respond to the needs of the group.

Students will be reassured when they learn that they are not alone in being mistaken or unclear about their own ideas. According to Angelo and Cross (1993) when

students recognize and question their own knowledge, beliefs, and attitudes, they gain a measure of control over their own thinking. By incorporating this strategy into a class, professors will be guiding students toward self-knowledge and self-awareness.

Once background knowledge is established, students need to develop their critical thinking skills. The one-sentence summary, as mentioned by Angelo and Cross (1993), enables instructors to discover how creatively and completely students can summarize information on a given topic. This technique can be adapted for many courses. The range could cover from summing up historical events to explaining chemical reactions and mechanical processes. The instructor provides students with a topic which was recently studied and asks students to write the "who, what, when, where, how, and why" in relation to the topic. At a later date students could work in groups to expand their summaries. This technique would provide the students an opportunity to discuss the complex concepts with their peers in a non-threatening environment. Once the information is summarized, it is easier to recall.

This strategy has been particularly effective in nursing programs where students were asked to explain the five steps in the nursing process: assessing, diagnosing, planning, implementing, and evaluating. After the students had been assigned a chapter on this topic as homework, the instructor asked the students to summarize each step in one sentence. The students who could not complete this task needed to revisit their texts and make appointments with their instructor.

Part of critical thinking is students' responses to ethical dilemmas. Students need to identify, clarify, and connect their values by responding to course-related issues and problems that they will encounter. As they respond, they learn more about their values

and the ways in which their values effect everyday decisions. Professors need to focus on one ethical issue at a time by creating questions that require students to take a stand on the dilemma and to justify that position. After students have written their individual responses, small group discussions could follow. The discussions will help the students who resist expressing their thoughts. Students could also write responses to the dilemma from two different viewpoints. This would allow the students to practice ethical reasoning skills on realistic problems and to get feedback on their responses. Ethical dilemmas could arise in most courses, but they are discussed at length in education, law, business management, philosophy, and nursing textbooks. Angelo and Cross (1993) state that when faculty learn what students' values are in relation to important ethical questions, they are better able to help students explore and rethink those issues and develop ethical reasoning skills.

As problem solvers students need to employ their reasoning skills and become aware of how they solve problems rather than just arrive at the correct answer. They need to keep track of the steps they take to solve problems, and they need to be able to explain these steps in writing. When the instructors review the students' writing, they gain insight to the students' thinking processes and problem solving strategies. Most students do not have experience reflecting on their own problem solving processes, so a clear example should be given in class. This assessment technique can be used as a regular part of homework or it can be used in class as a small group activity. When used as a small group activity, students would explain their solution processes step by step. This would allow the students who have difficulties mastering this skill to obtain an understanding of the problem in a congenial atmosphere. Documenting problem

solutions is especially useful in quantitative courses such as accounting, algebra, microeconomics, computer programming and statistics. The following example, from Angelo and Cross (1993), is from an algebra class:

An algebra instructor wanted to assess her students' approaches to solving quadratic equations. She assigned three problems and promised to give students homework credit for complete responses. She directed her students to spend no more than one hour working out the problems and documenting the solutions. After reading the responses, she realized that there were three groups in the class: those who answered at least two problems correctly and documented their solutions well; those who answered at least two problems correctly, but documented their steps poorly; and those who clearly misunderstood the solution process and got most or all answers wrong. These responses convinced the instructor to spend another session on quadratic equations, focusing on making the solution process explicit.

Another strategy used to analyze information is a pro and con chart. This is a quick way to assess whether students can see more than one side to an issue. It forces students to go beyond their first reaction and be objective with the reading. They will also be able to state which arguments they find most persuasive or troubling. An example, from Angelo and Cross (1993), from a business management professor follows:

"After reading a short case outlining the financial situation of a two-career couple, quickly list the potential costs and benefits to these two individuals when filing their income taxes jointly. You should come up with at least three costs and three benefits." When students have completed their pro and con charts, they could use this information as a basis for an organized essay assignment.

After students have heard or read about an important principle, theory, or procedure, they need to apply it to the real world. As they are thinking about this application of the new concept, they are also connecting it to prior knowledge. The students should see the relevance of what they are learning. The instructor simply asks students to write down a real world application for what they have just learned. This strategy can be used in any course. The first example was used in an economics course and the second was used in a physics course. Both are from Angelo and Cross (1993).

"Gresham's law basically states that 'good money drives out bad.' Give at least one contemporary application of Gresham's law to something other than money."

"In his *Principia*, Sir Isaac Newton set forth, among many other important ideas, his Third Law, the heart of which is 'To every action there is always opposed an equal reaction.' Give three applications of Newton's Third Law to everyday life around the house."

The instructor will be able to tell immediately whether the applications are accurate and how useful they are. The instructor should encourage students to keep a journal of applications in their notebooks. At the end of each class session, students should write possible applications for what was discussed in class. When students realize that theories and applications discussed in the class have real world applications, their interest and motivation to learn increases. As a side benefit, the instructor gains a new source of application examples to be used in future classes.

In some lecture or demonstration classes the professor needs immediate feedback as to whether students are grasping the concept or procedure being introduced before she can proceed with the next step. Angelo and Cross (1993) suggest a "punctuated lecture"

strategy to obtain this information. Students begin listening to a lecture or demonstration and after a portion of the presentation has been completed, the professor stops. Students reflect on their behavior during the presentation. For example, were they actively engaged in listening and writing important points or were they not focused at all? Then they write down what they have learned and they submit this to the professor in the form of anonymous notes. This focuses students' attention on how they are processing or failing to process information and how their behavior is influencing that processing. Both the instructor and the students learn what may be distracting.

This strategy works best when the material to be covered in the lecture can be divided into ten or twenty minute segments. The professor needs to decide in advance where she will "punctuate" the lecture and schedule the time to complete the technique. The students should not be warned about the "punctuation." The professor should explain that the students would have a brief opportunity to reflect on their learning behaviors. The professor needs to set time limits for the reflecting and the writing.

Many of the strategies suggested in this paper involve cooperative and collaborative learning experiences. By evaluating the effectiveness of these experiences, professors will be able to detect student conflicts early, before they affect group dynamics. Students will learn that there are advantages and disadvantages to working in groups. This assessment can be completed by the group in class or out of class. A brief evaluation form such as the example below from Angelo and Cross will accomplish this.

Sample Group Work Evaluation Form

1. Overall, how effectively did your group work together on this assignment?

   Poorly Adequately Well Extremely well

2. Out of the five group members, how many actively participated most of the time?

   None One Two Three Four All five

3. Out of the five group members, how many were fully prepared for the activity?

   None One Two Three Four All five

4. Give one example of something you learned from the group that you probably wouldn't have learned working alone.
5. Give one example of something the group members learned from you that they wouldn't have learned otherwise.
6. Suggest one change the group could make to improve its performance.

It is most important that individual responses remain anonymous if professors expect honest answers. When the evaluations are discussed in class, groups could suggest solutions to the concerns mentioned in their assessments.

After trying every strategy imaginable to increase students' content reading skills, it is appropriate to ask students to evaluate their assigned readings. Professors need to know how interesting, motivating, clear, and useful their assigned readings are from the students' point of view. This can be accomplished by using a reading rating sheet. One developed by an ESL instructor is mentioned here which is easily adaptable for most courses.

Reading rating sheet for ESL

1. Title of the reading
2. How useful was it to you in improving your vocabulary and reading skills?

3. How interesting was the reading to you?
4. Would you recommend it to a friend? Why or why not?
5. What did you learn that you want to be sure to remember?

Having students evaluate their assigned readings, will reinforce the value of reading as a lifelong learning skill. This technique also demonstrates to students that faculty value their opinions. The format can be adapted to rate other course materials such as videotapes, films, and courseware.

At the beginning of this paper I quoted the student who said he would read assignments only if he thought there would be a quiz. That same student now has an opportunity to evaluate and give input to quizzes. He is excited about learning, and he is proud to offer opinions about quizzes. By having students give specific reactions to quizzes, professors can examine what students think they are learning from the exams and make changes to make the tests more effective.

Angelo and Cross offer the following example from a child development class.

Exam Evaluation Form

In the past two weeks, you have taken two different types of weekly tests; one multiple choice and one fill-in, short answer type. Please answer the following questions about those tests as specifically as possible.

1. Did you feel that one type of test was a fairer assessment of your learning than the other? If so, please explain.
2. Did you enjoy doing one test more than the other? If so, why? Was it the content or the form that you enjoyed?

3. Did you learn more from one type of test than from the other? If so, what is it about the test that accounts for that?
4. Which type of test would you prefer as your weekly test during the rest of the semester? Why?

The central focus of this analysis should be on discovering what students are or are not learning from the test. Sometimes students will try to sneak in comments concerning the grading of the test. These comments need to be separated from those that are addressing the fairness of the test. The exam evaluations focus on exams and tests as learning exercises. When students are asked to evaluate their final exam, they may not be as motivated as they were with earlier evaluations because their comments will not directly benefit them. They do, however, have a vested interest in evaluating the weekly quizzes. Students feel valued when asked their opinions about the evaluation process. This is a "win-win" strategy because students will read when they expect a quiz on the material, and they are thrilled to be a part of the "quiz-making" process.

Conclusion

The strategies for content reading offered in this paper go from the beginning of the semester through final exams. They are meant to be starting points that will stimulate professors to design their own assessment techniques that would provide feedback appropriate to their disciplines, their teaching goals, and their students' goals. I know that the number one complaint about these strategies is the amount of time they take to administer, thus taking time away from the traditional lecture. I think time spent other than lecturing is time well spent. Hopefully, these strategies and other similar ones will provide community college students multiple opportunities to reason through complex

questions, teach them how to analyze and assess their reasoning, and hold them responsible for their learning.

Vincent Tinto(1990), a noted researcher in this field, said, "The secret of effective retention lies in the development of effective educational communities which actively involve students in the learning process." By using strategies involving students as opposed to straight lectures, faculty have seen better attendance and higher course completion rates. These lead to greater student retention which is one of the indicators of success for community colleges.

References

Angelo, Thomas A. and Cross K. Patricia. (1993). *Classroom Assessment Techniques.* San Francisco: Jossey-Bass.

Chase, Nancy D., Gibson, Sandra U., and Carson, Joan G. (1994). An Examination of Reading Demands Across Four College Courses, *Journal of Developmental Education*, 18: 10-16.

Clack, Donna, Dixon, Shirley, and Short, Ida. (2000). Classroom Strategies for at-risk students, *The Michigan Community College Journal*, 6: 69-75.

Maaka, Margaret J. and Ward, Shr M. (2000). Content Area Reading in Community College Classrooms, *Community College Journal of Research and Practice*, 24: 107-125.

Paris, S.G. and Ayres, L.R. (1994). *Becoming reflective students and teachers with portfolios and authentic assessment,* Washington, D.C.: American Psychological Association.

Tinto, V. (1990) "Education and the Principles of Effective Retention." A speech given to the faculty and staff of Fullerton College, Fullerton, Calif., Aug. 17, 1990.

Wambach, Catherine A. (1998). Reading and Writing Expectations at a Research University, *Journal of Developmental Education*, 22: 22-26.

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