✸ INNOVATION ABSTRACTS

Using Spreadsheets to Inform and Motivate

In teaching basic psychology courses, I have found that creating a spreadsheet of students' grades is an effective means of teaching psychology, stimulating student motivation and self-awareness, and developing analytical skills.

Information Spreadsheet

The spreadsheet includes the student's identification number (ID) and a banner of activities, including tests, essays, class attendance, and projects. Copies of the spreadsheet are distributed to the students after each test and classroom activity. As the semester progresses, the grade for each activity is recorded in individual cells of the spreadsheet. The computer is set to add each grade and determine a current total score for each student. The list of student ID numbers is then rank-ordered by the accumulated points.

I make a preliminary determination of the number of points the students will need to earn the grade of A, B, C, or D. I then explain that the cut-off for each grade is preliminary and final determination for the grade in the course will be made during the performance analysis session conducted on the last day of the course.

Grades that Inform and Motivate

The purpose of sharing the scores and the accumulated points earned for each test and task is to inform, but it has a greater influence. By printing and distributing the spreadsheet after each activity, the students have an ongoing, objective record which allows them to track their performance during the course. This track record displays not only the event and each student's performance, but provokes students to compare their previous performance with current performance and the performance of the entire class.

Once the comparison is made, I encourage them to think about the factors that have influenced their performance. I do not focus on the grade as an end point, but rather as information about learning techniques. Once students analyze their grades, they can move on to determine what techniques in their study habits are most effective and what factors in their lives are influencing their learning. They are encouraged to

think about the consequences of their in-class behaviors as well as their study routines, habits, and conflicting responsibilities. Being able to track their performance on the spreadsheet gives students objective evidence that will motivate them to modify their own goals and study routines—focusing on the effects that their jobs, their social lives, and their study habits have on their academic performance.

I also inform the students that these data are critical pieces of evidence to be used in determining what learning techniques are most effective for them. Furthermore, I encourage them to determine how much effort they must expend to earn the grade they want. I encourage them to ask themselves, "What will I have to *change* to earn the grade of B?" The students learn to interpret the points they have earned for their grades to motivate additional hours of study, different study techniques, reassessment of their priorities, and analysis of the competitive realities of the college situation. During the semester, as the spreadsheet cells are filled, students are encouraged to analyze their performances—in essence, to learn how to learn.

Students Share the Spreadsheet

Students are encouraged to compare their performances with those of their classmates. I suggest that they share and discuss in groups their individual study techniques and the success or failure of those methods. This helps to form alliances between classmates so that they can continue to compare and review their work throughout the course. This collaboration assists students in the process of their personal discovery and in gaining an awareness of individual differences. Comparing spreadsheet data encourages self-reflection, data analysis, and performance appraisal.

This focus on individual student's learning enhances cooperative learning. The students are encouraged *to ask why* each performance occurred, *to learn how to ask why* each performance occurred, and *to learn to ask how* classmates prepared for a test.

Student-Teacher Relations

Seven or eight measurements are taken during the semester, and students begin to develop an objective

orientation to the classroom; the process creates a true learning and teaching environment. The students realize that the grades reported on the spreadsheet speak for themselves. The spreadsheet reduces potential conflict between teacher and student; dissatisfied students can review the grade data alone and then objectively compare performances, study habits, sources of reward, and personal situations with those of their classmates.

Conclusion

Ultimately, the spreadsheet focuses the individual student's and the class's attention on what has been learned. At the end of the course, I ask students if they are different and, if so, how they are different from the first day of class. Routinely sharing the spreadsheet with students encourages their self-awareness, enhances the process of learning how to study, and moves them toward a higher level of maturity.

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Building a Multicultural Library

A multicultural library became our summer project when the Community College of Denver's Program Review Committee suggested we begin a small lending library in our Basic Skills Lab. Many students use the main campus library in downtown Denver, but our campus is several miles from that site and some students do not have cars.

With a minigrant from the Teaching/Learning Center, I decided to purchase books and videos to begin developing a library which would celebrate the diversity of our students. Our small library contained mostly nonfiction books intended for faculty, but we wanted to encourage students to read and needed books on a number of reading levels that would appeal to their interests. Our idea was to expand our original library for use by both staff and students.

The Cultural Diversity Committee agreed to help choose the books and videos. Titles were gleaned from many sources: a language arts conference presentation on Latino literature, literary magazines, newspaper articles, book reviews, and the committee members' own favorite books and videos. We met at the Tattered Cover Bookstore on a Friday afternoon to purchase books.

When we arrived at the bookstore, each of us headed in a different direction and met later to review the books we had chosen. As a basic skills teacher, I favored fiction books that were appealing and easy to read. Vocational teachers wanted some nonfiction books suitable for research reports. We were able to agree on both types, and we purchased more than 60 books, many by well-known authors such as Maya Angelou, Carlos Fuentes, Forrest Carver, Amy Tan, and Rudolfo Anaya. We reserved the remaining funds for purchasing videos on another day.

I inserted library pockets and cards in each book and placed them in the Basic Skills Lab. The instructors there took charge of the check-out procedures. Now we introduce students to the library as they begin classes, and we distribute a list of the books and videos to faculty members and urge them to encourage students to use the library as they work on their assignments.

We hope to achieve two goals with our small multicultural library. The first is to begin the process of creating a full on-site library for our students. The second is to build a community among faculty and students as we read about and begin to understand our differences.

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