

The New York Times

Copyright © 1990 The New York Times

NEW YORK, MONDAY, MARCH 5, 1990

50 cents beyond 75 —

How to Learn in College: Little Groups, Many Tests

By EDWARD B. FISKE

Some relatively simple changes in teaching methods can produce significant gains in learning for college students, according to a study made public yesterday by Harvard University.

The researchers reported that college students do their best in courses that include "frequent checkpoints" like quizzes, tests and oral exams.

They also thrive, the study reported, when they do at least some of their studying in small groups rather than logging long, solitary hours of study in a library.

"The widely held myth that college students prefer courses where they are left alone to work on their own with relatively few exams or papers is just that, a myth," Prof. Richard J. Light of the Graduate School of Education and the Kennedy School of Government, who directed the project, said in an interview.

Mid-Course Corrections

Jeremy Severeid, a sophomore who is majoring in history and government, said, "I had one class where we had papers due every three weeks. That meant we really had to have a handle on the material, and if we didn't, it showed immediately."

The researchers reported that faculty members also benefited from occasional feedback. They recommended that professors ask students to write a "one-minute paper" at the end of each teaching session describing "the big point you learned today" and

"the main unanswered question you still have."

"Such an exercise helps the student to focus on the central themes of the course and gives the faculty member the chance to make mid-course corrections in their teaching," Mr. Light said.

The findings grew out of Harvard Assessment Seminars, a project initiated three years ago by Harvard's president, Derek C. Bok, to promote more internal examination of teaching, advising and student life.

Organizing Their Thoughts

Noel Ignnatiev, an instructor in history and literature, said he tries to give his classes a short assignment every week. "When students have to write something — even if it's not graded — it compels them to organize their thoughts and take some responsibility for how the class goes," he said.

The first summary of the study, "The Harvard Assessment Seminars: Explorations With Students and Faculty about Teaching, Learning and Student Life," was made public yesterday.

Here are several other findings:

Students who devote a lot of time to intramural sports and other extracurricular activities have higher morale, but no lower grades than those who are less active. The only exception is members of varsity teams, who have slightly lower grade point aver-

Continued on Page B6, Column 3

Of Learning in College: Study Shows How Small Groups Do Better

Continued From Page A1

ages than non-athletes.

Contrary to widespread belief, faculty members are "willing, even eager" to use new technology like computers and videodisks, but their good intentions usually work only when professors are backed by an "expert" skilled in the use of technology in standard courses.

Men and women contrast sharply in how they study and what they expect from college. Two-thirds of the men in the study but less than a quarter of the women said they wanted academic advisers who "make concrete and directive suggestions," the researchers reported. By contrast, nearly three-quarters of the women but only 30 percent of the men value advisers who will "take the time to get to know me personally."

As Teaching Was Faulted

The researchers also reported that male students' overall satisfaction with college was closely tied to how well they did academically, while that of women was "influenced far more by personal relationships and by informal encounters and meetings with faculty and advisers."

The seminars were created at a time of growing public criticism of the quality of undergraduate teaching at American colleges and universities. Education authorities in at least one

state, Missouri, are requiring public universities to give tests of general knowledge to entering freshmen and to give similar follow-up tests to determine how much the students have learned.

The Harvard Assessment Seminars rejected the idea of trying to determine what students know in favor of determining the conditions under which students do the best work. Instead of what the students know, the professors want

Trying to learn what college students "know" is very difficult.

to know what makes the processes more effective. Trying to ascertain students' historical perspective and literary sensitivity, for instance, is difficult to measure at the college level, especially with standardized tests.

Participants split into eight subgroups to conduct research on such topics as how to improve classroom teaching. Interviews were held with a random sample of 365 Harvard undergraduates, and questionnaires and logs

were kept by students on how they spent their time.

More than 100 faculty members and administrators took part in the seminars, about half of them from Harvard and the rest from more than 20 other colleges.

The major overall finding, Mr. Light said, was that "small changes in teaching format can lead to significant gains for students."

The Courses They Like

The researchers reported that students have "remarkably clear and coherent ideas" about the courses that they like and respect. They like courses that are "academically demanding" but also offer frequent opportunities to revise and improve their work as they go along, the study said.

They learn best, it found, "when they have a chance to submit an early version of their work, get detailed feedback and criticism and then hand in a final version for a grade." Such an approach, the study said, is most readily applied in courses in which students write papers — but quizzes, tests, brief papers and oral examinations will also work.

The Smaller the Better

The report emphasized that a "quick turnaround" was imperative. "Receiving the same information two or three weeks later simply doesn't help as much," it stated.

The grades of students who studied alone were compared with those of students who studied in groups of four to six. Invariably, the researchers reported, "students who study in small groups do better than students studying alone."

For example, in Moral Reasoning 30, "Jesus and the Moral Life," Prof. Harvey Cox gives three lectures a week; he then divides students into sections of about 20 each for another meeting led by graduate students to discuss that week's readings. In 1988, he also offered students the option of attending sessions made up of five students who took turns leading the group with faculty members on hand.

The report said videotapes of the various sessions showed that students in relatively small groups spoke more often, asked more questions and were generally "more engaged" than those in the larger groups.

It was suggested that faculty members organize study groups. The researchers said that "students should think twice if they find themselves spending all their study time working alone."

"When lots of people are throwing out ideas, it helps you see different paths to a problem," said Sanjiv Kinkhabwala, a junior who is majoring in applied math. "In studying the humanities, I don't find it useful because I need to read things by myself to understand them."