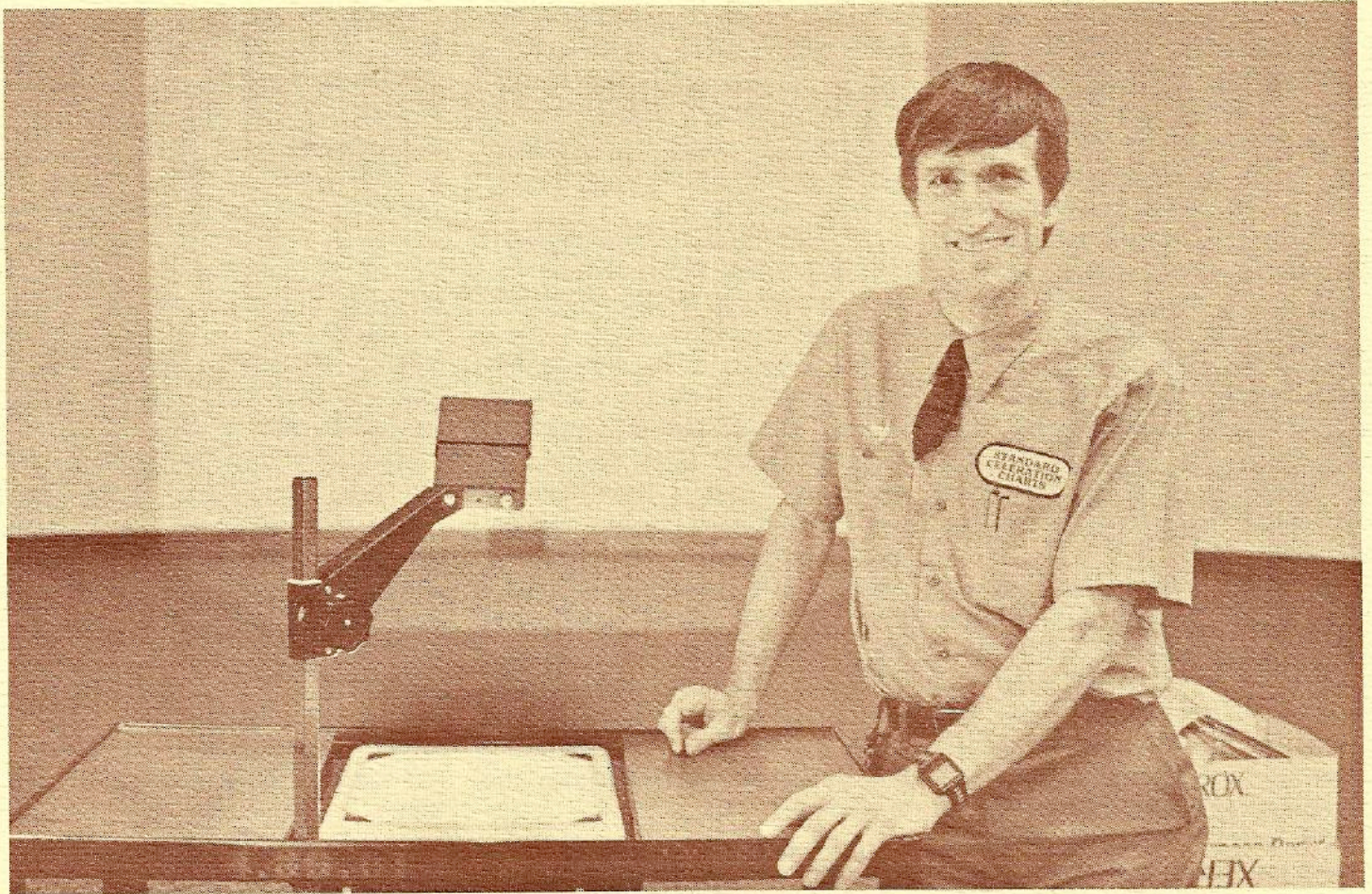


PSYCHOLOGY PROF STUDIES "TEACHING TECHNOLOGY"



A quick glance at his "Player's Guide" for General Psychology warns you to expect something unusual from Dr. Stephen Graf, professor of psychology. This syllabus invites students to look at this class as a team, of which Graf is the "coach" who would like to see everyone earn an A. More importantly, however, he encourages students to try—without the fear of failure.

"My interest," says Graf, "is in 'teaching technology.'" The foundation for his unique methods of instruction seems to stem from the basic question "What does it take to get everyone in a course to succeed?" The answer seems simpler than the task itself, and can be found in Graf's research—most of it related to some aspect of teaching. "What we're really

talking about is *learning* information, *mastering* information. To Graf this means learning with a capital L. "I think to really learn something, you need to do it over and over again," Graf says. "An all-nighter, a one-shot type of deal, is not going to produce much long-term retention of material."

The answer? First of all, Graf employs a few critical principles: feedback (both positive and corrective), and remediation. "You want students to know that they are doing a good job, if, in fact, they are," notes Dr. Graf. "You also want to let them know what mistakes they're making so they can correct them."

By using graphs to track the number of successes and failures each quarter, Graf has determined that there is a

correlation between success and his feedback/remediation methods. "What that tells me," he says, "is that students probably should have more than one opportunity to be tested on the same information so they really *know* what it is they're supposed to learn." Graf believes if a student is not given the opportunity to be tested again, "there's really no incentive to learn it—it's just water over the dam."

Students' grades are based on five different areas or categories of information, and a student must achieve an A in each category in order to receive an A for the course. "When that's made clear," says Graf, "what students have to do is strive for an A in each category. Then you are setting up a criterion for excellence rather than allowing for

mediocrity or failure.”

A major factor in Graf’s plan is criticism. But how does an instructor introduce criticism into an atmosphere of positive reinforcement? While corrective feedback is necessary, it’s very tough emotionally on the person receiving it. According to Graf, this is because “we have a history of attributing emotional response to poor results.” One of the areas he’s tried to work on is to get students to not be afraid to make mistakes, and to accept the mistakes they do make. He accomplishes this by rewarding students for their efforts. “I saw a parallel with history because all of the great discoverers met with a tremendous amount of resistance,” notes Graf. “Guys like Copernicus, Galileo, Newton—all of them were either stoned or poisoned or something, just for making a discovery. It seemed to me if you avoid criticism you’ll never

make any kind of discovery because you’ll never want to go against the grain.”

Because of the reluctance of people to volunteer answers in class, Graf has devised a system that encourages “trying.” Students who give “tries” receive just as much credit as those who give correct answers. “This allows feedback as to whether their answer is perfect or close or wrong—but we’re not going to call it *wrong*, Graf explains. “We’re going to call it a ‘try.’ ” This classroom situation attempts to alleviate the fear as well as reluctance to speak out in class. This is important to Graf because he sees this failure to respond as a carry-over to other aspects of people’s lives. “If a person is reluctant to speak out in class against the professor as the authority,” says Graf, “he will also probably be hesitant, for example, to speak out in a grocery or department store if he

receives bad merchandise. It’s a little bit of assertiveness training.”

Perhaps one of Graf’s greatest achievements as an instructor is his willingness to realize and act on students’ concerns. By distributing course evaluations several times throughout the quarter, Graf measures his own success as an instructor, and allows students to express fears or concerns they might not otherwise feel comfortable *telling* him. “You do find some concerns in the first couple of weeks in the quarter,” Graf notes. “You realize, ‘my gosh, why didn’t you see that, Graf?’ Of course that would be a concern from a person seeing it from that viewpoint.”

This kind of concern for students is a welcome change in education. But it is also the kind of concern you would expect from this “coach,” who views a student’s failure as his own.

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