Journal of Construction Education Spring 2000, Vol. 5, No. 1, pp. 57-63

# Managing and Motivating Students' Performance in the University Classroom

Marla Hall University of Cincinnati Cincinnati, Ohio

The paper will discuss key factors involved in managing and motivating the performance of university students. Some of the common problem areas will be outlined (attendance, in-class participation, completing work on time, quality of work) and potential solutions will be discussed. The ideas presented are backed by decades of research conducted in the field of behavior analysis, have been applied in a wide variety of settings, and have been used with individuals of all ages and backgrounds. Specific techniques that can be used in Construction Science courses will be described and data supporting the effectiveness of some of the techniques will be presented.

Keywords: Motivate, Manage, Performance, Learning, Students, Classroom

#### Introduction

To say that a person is motivated to do something is simply to say that the person has a reason to be doing that activity. People are motivated to do the things they do because doing those activities pays off for them in some way. The pay-off can be in something the individual gains (like praise, appreciation, a sense of satisfaction, promotions, points, money, etc.) or the pay-off can be that the individual is able to avoid something undesirable (e.g. reprimands, criticism, demotions, suspensions, etc.)(Skinner, 1968, Daniels, 1989).

Many people are what we call "self-motivated". These are people who are able to find and enjoy their own rewards in doing their work. In essence these are people who have learned to recognize their accomplishments and who are able to enjoy the feelings of satisfaction that accompany their achievements (Skinner 1953, Skinner 1968, Kazdin, 1980). Overall, they have little need for motivation to be provided from others.

Other people, those whom we think of as being "lazy" or unwilling to work, show, by their lack of work or their lack of enthusiasm for the work, that they are not internally motivated. They perhaps have not experienced many successes and, thus, they have not learned to relish their successes. These are individuals whose motivation comes mostly from others. Further, their payoffs are probably most frequently avoidance pay-offs. They do the things they do in order to avoid the criticism, complaints, reprimands that they frequently receive from others (Mager & Pipe, 1970, Skinner 1968, Skinner 1974).

All people, at times, experience conflict over having more than one thing that they need or want to do at the same time. In those situations, the individuals eventually make a choice to do one

activity. When they do this, the activity they choose is the one they are most motivated to do. They choose the activity that has the biggest or most significant pay-off.

Classroom performance is motivated in the same way that any other behavior is motivated. Whatever it is that each student does in the classroom, pays off for the individual student in some way. Whether the student sleeps or actively participates in discussion, that is what the student is motivated to do.

Every class is also comprised of both self-motivated students and students who appear to be lacking in motivation. Casual observation leads to a belief that those students who we think are self-motivated are students who are motivated by learning, by completing objectives and by achieving high scores and grades. Students who appear to lack in motivation do not enjoy the same satisfaction from these consequences. They also do not obtain these pay-offs very frequently, and probably do whatever academic activities they do simply to avoid failing individual assignments and to avoid failing the course.

Students also quite frequently have competing demands on their time. They must choose to do one activity over another. Choice is a complex act determined by many factors (Pierce & Epling, 1983). Relative to the classroom situation, students have daily choices. They choose whether or not to come to class at all; they choose whether to show up on time; they choose whether or not to participate in discussions; they choose whether or not to take notes, etc. Many activities that take place outside of the classroom also affect the classroom performance. For example, the amount and the type of studying that students do influences their scores on assignments and tests as well as their willingness and ability to take part in discussions. Thus, in order to perform well in the classroom, students must also be motivated to work on their academics outside the classroom.

The primary role of a professor could be viewed as one of 'managing learning'. In other management positions, to be highly effective, the manager must be successful at motivating the performances of those she or he manages (Daniels, 1989, Daniels, 1994, Mager, 1970). Thus, it follows that professors can and should make efforts to motivate their students. If professors make it pay off for their students to engage in the activities that the professors believe are important to learning, the professors can, minimally, influence some of the choices that students make. Professors can increase the likelihood that students choose the learning activities over whatever other activities are competing for the students' time. Further, if students are engaging in more learning activities, they are likely to be learning more. This can be a pay-off for both the students and the professors.

For professors to effectively manage learning in their classrooms they must do at least three things. First, they must identify the activities that they want their students to be doing, both within the classroom and in their out of class studying. Professors should select activities that not only put the students in contact with the information to be learned, but which also result in the student thinking about and interacting with the new material. Second, professors need to motivate students to do those activities; they must set up pay-offs for the students to do those activities that the professor has deemed important. Third, the professors must track students'

performance to see if the techniques they are using are, in fact, working. Doing these things should result in more students learning, and learning more effectively (Daniels, 1994).

The remainder of this paper will discuss learning activities, performance management, and motivation strategies that have been implemented in my courses. The rationale for selecting certain learning activities will be outlined, specific motivational tactics used to manage student learning will be described, and the effects of using those tactics will be discussed.

# **Selecting Performance Activities**

If we, as professors, defined the primary goal of our teaching endeavors, we would likely agree that our main purpose is to enhance the skills of our students in such a way that they can do things upon leaving our courses that they could not do when they entered our courses.

We want students not just to gain some knowledge, but to be able to apply their knowledge. This is true whether we are teaching technical courses within Construction Science, or we are teaching courses such as Psychology which are included in baccalaureate curricula to ensure that students receive a broad, well-rounded education. There are many activities that professors can include in their course requirements that will make the application of the course content more likely. Further, there are many activities that professors can include which will help in developing desirable learning habits and work habits that are ancillary skills that will benefit the individual in the long run. Below are several of the course requirements included in my courses and a discussion of their potential value.

### Discussion Question

Discussion questions are defined as primarily "How?" or "Why?" type questions that provoke or at least promote discussion of the relevance, importance, or validity of concepts. Discussion questions that are geared toward this type of thinking move students away from simply memorizing concept definitions. They move students into thinking about whether or how they may be able to use this new idea.

# **Concept Summaries**

These summaries are not intended to be general chapter summaries that hit the highlights of the chapter. Instead, students are to select single concepts from a chapter and then discuss/explain the one concept in depth. Students are discouraged from copying information directly from the text and are encouraged to explain their understanding of the concept and to relate examples that help clarify the concept. This is another activity designed to discourage rote memorization and to encourage an understanding of the concept.

### Examples

One way of enhancing the application of new concepts and ideas is to get students to relate the concepts to their life experiences. Very often, students have either already experienced situations

that illustrate or are indicative of the idea, or they can think of situations that they are likely to encounter in which they will be able to apply the concept. Having students describe personal experiences that illustrate concepts is likely to get the students to relate to the specific concept in the example. Also, the requirement is likely to prompt students to think about examples as they are reading or listening to lectures in which other concepts are presented.

# Synopsis Papers

Synopsis papers are one page discussions in which the student summarizes the concept, analyzes the concept and discusses its relevance or importance, and illustrates the concept with a personal example. Since the analysis needs to be well thought out, the synopsis papers are relatively challenging learning activities, and thus, are used only in upper division courses. Writing the papers not only enhances the students' knowledge and ability to apply the concept, but also enhances critical thinking and written communication skills.

# Study Questions/Answers

Self-quizzing techniques are recommended widely as an effective study method. Thinking in terms of questions and answers not only addresses course content, but encourages a problem solving approach to learning and likely enhances problem solving abilities. Students are required to write challenging, integrative questions that fall into one of three categories: compare/contrast, exemplification, or explanation questions. Compare/contrast questions must be answered with direct statements about how two concepts are similar and how they are different. Exemplification questions involve relating a personal (workplace) experience that illustrates the concept. Explanation questions must be answered with thorough summaries of the concept identified. All of these question types are designed to get students relate new concepts to other concepts and/or to personal experience such that students may better understand and apply the new concepts. The study question/answer tasks that are included in my courses are included as a self-quizzing tool, and also, they are typically used as a class quiz/discussion instrument in oral quizzes.

# Oral Quizzes

The study questions/answers described above are used in conjunction with oral quizzes. This exercise is set up more as a learning event than as an evaluation process, although each student does receive a score for the quiz. The quiz is structured such that each student asks at least one of his or her questions and each student has at least one opportunity to answer or respond to another student's question. The result of this exercise is that students interact with one another in discussing the answers to the questions. Also, because many questions involve examples, students are exposed to other illustrations and applications of the concept in addition to the examples or uses they may have thought of individually.

# Participation

In order to get students involved more in thinking about the material being presented in class, a participation requirement is also included as a course requirement. On a weekly basis, each student must ask, answer, and/or discuss questions over the material being covered. This helps to

keep students mentally present and helps to keep them relating to the information being presented or discussed.

## Attendance/Promptness

Two ancillary habits that are emphasized in my class are attending class regularly and being prompt in arriving to class. If students are to get the most out of in-class lectures or discussions, they must be present in class and not simply rely on notes that others take. Also, important announcements and clarifications typically occur during the first five minutes of class, thus making it beneficial for the student to be present. Further, employers frequently complain about employees who are routinely tardy or who frequently miss work. Establishing appropriate habits in college may help to decrease this problem in other settings.

# **On-time Assignments**

Again, in an effort to establish good work habits, a strong 'on-time' policy is implemented for all assignments. Students are required to turn in assignments at the beginning of the class hour on the day it is due. The due time is set at the beginning of the class hour in order to reduce the likelihood that students will try to do their assignments in class or that they will skip class in order to complete their assignment by the end of class.

# **Performance Management and Motivation**

In an effort to motivate students to complete the course requirements, points and verbal comments are used extensively. Students earn points for every requirement. They earn points for attending class and for being on time for class; they earn points for speaking in class; and they earn points for each homework assignment that they turn in. Students also receive scores on tests and quizzes, but the tests are actually de-emphasized relative to the learning exercise requirements. Also, extensive written comments are provided on all written assignments. Comments emphasize what students did correctly and an effort is made to point out at least one thing that each student did well on each assignment. In addition, corrective or directive feedback is given so that students are alerted to what to work on when completing future assignments.

Although points and verbal comments do not seem like "big" pay offs, they are effective for several reasons. First, students know exactly how to earn points in that the course syllabus details the requirements and the point system. Second, students receive the points and comments frequently. Most students earn points every class period. Third, students generally receive points immediately after doing the course requirement (e.g. immediately after arriving to class, immediately after speaking in class). Written comments are also personalized since they are written directly on the students' assignments and they are specific as to what was done well or what corrections need to be made. Because students receive the points and comments reliably, the pay-off is more apparent. Students experience these consequences, these pay-offs, weekly, if not daily. Thus, because they are more aware of the pay-offs, the students are more directly and more strongly motivated by these seemingly trivial consequences.

The overall course grade is also a motivator in that it is the ultimate pay-off for the work the student puts in during the quarter. However, the course grade is really too 'distant' to have much of an effect on daily learning. Giving points and comments daily allows students to have a sense of their current course grade and their progress throughout the duration of the course. Also, the points earned for assignments, attendance, and participation generally comprise around 70 percent of the points allotted to the course. Most students learn very quickly that in order to earn a good grade in the course, or in order to avoid a poor grade, they must complete the routine weekly requirements. This generally results in students forming a more regular and consistent habit of studying and preparing their course work.

#### **Evaluation**

The performance of students in class and on their assignments suggests that the learning activities and the point system are having the intended effects. Attendance (and promptness) rates in all of my classes are very high, generally above 85%, and sometimes averaging above 90%. Approximately 85% of the routine assignments are also turned in on time and generally over 90% of the larger project assignments are turned in on time. These completion rates are as good as, if not higher than, the rates of students taking scheduled, in-class quizzes. The quality of the work turned in also is generally high. Specific criteria, which are detailed in the syllabi and in handouts, are used to evaluate each type of assignment. Students who turn in the assignments on time generally average above 80% when graded based on the assignment criteria. These rates all indicate the value of both the assignments and the corresponding point system.

Although it is extremely difficult, nearly impossible, to evaluate the long term effects of using these techniques, there are some anecdotal data that suggest that the learning activities are having the intended effect, at least with some students. In casual conversation, several students have commented on how they have used concepts/ideas at work, with their kids, at home, etc. Further, former students have commented on how they have used concepts learned in my courses in other courses and on the job. Students have also followed up course work with independent study projects in which they applied techniques learned in the courses. Further, former students have sought my advice or assistance in using concepts and techniques in their post-graduate jobs.

#### Conclusion

We could enjoy a lengthy debate on whether or not professors should have to motivate their students to do the things the students ought to be doing anyway. Quite possibly the general consensus would be, "No, professors shouldn't HAVE to motivate their students." However, whether or not we should "have to" is not really the issue. The fact is that many students are not self-motivated, or at least are not motivated enough to put much effort into their learning. There are not enough pay-offs for them to attend class, or to do their assignments, at least not enough relative to the pay-offs for the other things competing for their time. Knowing this, it seems that we have two choices. One alternative is to take a somewhat evolutionary, "survival of the fittest" approach and let all of those who lack the motivation and/or the skills just fall by the wayside. The other option is to take a more revolutionary approach, provide some direct intervention, and

perhaps change the future for some individuals who have potential, but not the history to drive them to succeed.

Perhaps professors shouldn't have to motivate their students, but the reality is that professors CAN motivate their students. By making it directly, frequently, and immediately pay off for students to do the things professors want them to do, professors can alter the choices that students make and ultimately alter what and how students learn. Further, many students may learn how to motivate themselves from observing the professors and from experiencing the successes in completing what they were motivated to do. Instead of making people more reliant upon others for their motivation, using motivation to help others succeed tends to lead to less dependence upon others. Success and accomplishment, themselves, become the pay-offs.

# References

Daniels, A. C. (1989). *Performance management*. Tucker, GA: Performance Management Publications.

Daniels, A.C. (1994). Bringing out the best in people. New York: McGraw-Hill.

Kazdin, A. E. (1980). Behavior Modification in Applied Settings. Homewood: The Dorsey Press.

Mager, R.F. and Pipe, P. (1970). *Analyzing performance problems*. Belmont: Fearon Pitman Publishers, Inc.

Pierce, W. D. and Epling, W.F. (1983). Choice, matching, and human behavior: A review of the literature. *The Behavior Analyst*, 6, 57-76.

Skinner, B.F. (1953). Science and human Behavior. New York: Macmillan Publishing Co., Inc.

Skinner, B.F. (1968). The technology of teaching. New York: Appleton-Century-Crofts.

Skinner, B.F. (1974). About behaviorism. New York: Random House.