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ABSTRACT

Research has shown that tasks of intermediate difficulty generally elicit the greatest efforts on the part of students. For this reason, teachers are advised that the use of moderate goal setting is one of the most effective means of ensuring favorable vocational outcomes. The general paradigm of achieving vocational success through moderate goal setting is as follows: analyze industrial and personnel needs; determine terminal objectives (by questioning and observing behavior); formulate and present enabling objectives (using the techniques of task analysis and linear programming); and assess student performance (by administering criterion-referenced tests). Although some critics of the behaviorist approach believe that this approach delegates educators to the role of mere classroom managers, practice has shown that the objectivity of the behaviorist approach lends support to the high degree of professionalism required if educators are to achieve desired vocational outcomes successfully. (MN)



A BEHAVIORIST STRATEGY TO IMPROVE VOCATIONAL OUTCOMES BY PROMOTING MODERATE GOAL SETTING

bу

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INTRODUCTION

Teachers are often confronted with the dilemma of presenting instruction that is neither boring nor too difficult. The dilemma of balancing task difficulty was addressed by Weiner, Heckhausen, Meyer, and Cook (1977:113) when they concluded, based upon empirical investigations, that "tasks of intermediate difficulty are most likely to elicit effort attributions which increase motivation."

McClelland's (1973:10) statement that moderate goal setting "is distinctly preferable to setting goals either too high or too low, which leads more often to failure", recognized the need for balance in view of task difficulty. In later work, McClelland (1985:814) stated "the moderate challenge incentive seems to affect the performance of all people to some degree" even though it is recognized that there are differences in incentive among individuals. differences in incentive among individuals and the criteria that contribute to those differences have led McClelland to suggest that, for those who need to determine motivation, subjects and others should be asked and behavior should be observed to determine the many criteria that result in motivation (Bjorkquist, 1982:113). Otherwise, motivation might be seen as "but one set of elements in the web of factors determining behaviors" (Ball, 1977:3).



PROCEDURES

The method of assessing motivation and the corollary setting of moderate goals, in view of McClelland's suggestion of determining motivation by asking and observing and the finding that "motivation is most aroused at tasks of intermediate difficulty, where the probability of success approximates .50" (Weiner, Heckhausen, Meyer, and Cook, 1977:113), will be addressed from a behaviorist perspective. The general paradigm of achieving vocational success through moderate goal setting is:

- 1. Analyze Industrial and Personal Needs
- 2. Determine Terminal Objectives
- 3. Formulate and Present Enabling Objectives
- 4. Assess Student Performance

The constant reminder when following this attempt to maximize the use of moderate goal setting is that, when there is a 50 percent probability of success, motivation will be at its highest level.

Analyze Industrial and Personal Needs

Federal mandate requires the collaboration of both industry and vocational education. The role of industry is to provide expertise regarding policy formulation and evaluation and to recommend policy revision when required (Phipps, 1980:134). It is recognized that vocational education has, as a dual purpose, the mission of serving "people needs" by



"making accessible to everyone education that will increase individual options and enhance opportunities for occupational choice and satisfaction" (Moss, 1983:73). It is the responsibility of vocational educators, therefore, to balance both industrial and personal needs when developing instruction.

Determine Terminal Objectives

McClelland's suggestion of determining what motivates people both by questioning and observing behavior provides a framework for assessing terminal objectives. Bower and Hilgard (1981:538) described the role of terminal behavior task analysis when they stated

Implicit in the push for stating educational goals in behavioral terms is the requirement that the educator analyze the criterion task . . . into the elementary behavioral components and note how they are organized. This leads, in turn, to assessing the child's initial repertoire and designing an educational program to teach the several components of the criterion skill.

Formulate and Present Enabling Objectives

Task analysis and, subsequently, the determination of terminal objectives leads to the formulation of "elementary behavioral components"—the enabling objectives. This is done by following the behaviorist position that complex terminal behavior can in turn be reduced to its component parts. Instruction of a complex terminal behavior is best achieved, therefore, by teaching the many component behaviors in the form of a hierarchy. This approach toward instruction is described by Bower and Hilgard (1981:539) as shaping,



where "fundamental skills are taught first because, according to task analysis, other parts of the criterion competency depend on these."

Linear programming, the orderly presentation of instructional material where learning is shaped by continually reinforcing correct responses, is selected as the most appropriate means of providing instruction for moderate goal setting. Students will experience regular reinforcement and, therefore, maximize their potential to learn.

Assess Student Performance

The use of criterion-referenced assessment will provide students a measure of their accomplishments where only their proficiency against predetermined criteria of accomplishment is considered. McClelland (1973:7), questioning the validity of tests that measure "intelligence", stated, "the best testing is criterion sampling" and continued, in support of criterion-referenced evaluation

If you want to know how well a person can drive a car (the criterion), sample his ability to do so by giving him a driver's test. Do not give him a paper-and-pencil test for following directions, a general intelligence test, etc.

CONCLUSION AND RECOMMENDATIONS

It has been empirically demonstrated by investigations conducted by Wainer, Heckhausen, Meyer, and Cook (1977:112) that, in regard to moderate goal setting and its effect on motivation and later performance, "the greatest elicitation



of beliefs in effort as an outcome determinant, and the place where subjects state they should try hardest to maximize gain, is at tasks of intermediate difficulty." It was concluded that efforts are the highest when the probability of success is 50 percent. The relationship of that finding to moderate goal setting is that objectives should neither be presented as too hard (impossible to achieve) nor too easy (not worthy of effort).

It is suggested that vocational educators should not only be aware of the relationship of goal setting to achievement, but the applications of that relationship should be put into practice. Efforts must be made to present instruction in an orderly manner that neither overwhelms nor bores students. Additionally, instruction must be presented such that reinforcement is continual. Well designed curricular material, based upon linear programming, would help achieve that goal.

It is recognized that the use of linear programming as a means of presenting instruction has been questioned from the perspective of student interest. Specifically, Bower and Hilgard (1981:567) raised that concern by stating

Perhaps the greatest complaint against programmed textbooks, or programs for machines, is that ultimately they are very slow moving, repetitively dull, and boring to bright students. Students taught only with the program feel a real need for contact with a human teacher who will answer questions, help clarify the goals of the course or its organization, and so on.

However, it has never been suggested that objective assessment of industrial and personal needs, task analysis,



formulation of enabling objectives, linear programming, or other activities associated with a behaviorist approach toward learning delegates educators to the role of mere classroom managers. On the contrary, an objective approach toward learning only lends support to the high degree of professionalism required by educators so that outcomes may be successfully achieved.



REFERENCES

- Ball, Samuel. Motivation in Education. New York: Academic Press, Inc., 1977.
- Bjorkquist, David C. <u>Supervision in Vocational Education:</u>

 <u>Management of Human Resources.</u> Boston: Allyn and
 Bacon, Inc., 1982.
- Bower, Gordon H., and Ernest R. Hilgard. <u>Theories of Learning</u>. 5th ed. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1981.
- McClelland, David C. "How Motives, Skills, and Values Determine What People Do." American Psychologist, 40:812-825. July, 1985.
- McClelland, David C. "Testing for Competence Rather Than for Intelligence'." American Psychologist, 28:1-14.

 January, 1973.
- Moss, Jerome, Jr. "Is Vocational Education Ready for Collaboration?" In Collaboration: Vocational Education and the Private Sector. Eds. James Hannemann, Donald F. Averill, Lillian B. Bates, and B. Lamont Carter. Arlington, Virginia: American Vocational Association, Inc., 1983.
- Phipps, Lloyd J. Handbook on Agricultural Education in Public Schools. 4th ed. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1980.
- Weiner, Bernard, Heinz Heckhausen, Wulf-Uwe Meyer, and Ruth E. Cook. "Casual Ascriptions and Achievement Behavior: A Conceptual Analysis of Effort and Reanalysis of Locus of Control." In Learning and Instruction. Ed. Merlin C. Wittrock. Berkeley, California: McCutchan Publishing Corporation, 1977.

