DOCUMENT RESUME

ED 414 828 HE 030 811

AUTHOR Gaddis, Marcus D.; Elliott, Terry
TITLE An Alternative Pedagogical Approach to Teaching At-Risk and Underachieving Upper-Level Accounting Students.
PUB DATE 1997-00-00
NOTE 12p.; Paper presented at the University of Kentucky Teaching/Learning Conference (Ashland, KY, October 11, 1997).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *Accounting; *Advanced Courses; Business Administration Education; College Instruction; *College Students; *High Risk Students; Higher Education; *Independent Study; Learning Motivation; Metacognition; Problem Solving; *Self Efficacy; *Underachievement; Undergraduate Study
IDENTIFIERS Morehead State University KY

ABSTRACT

Ways to enhance learning by both at-risk and underachieving students in upper-level accounting courses were studied at Morehead State University (Kentucky), based on the concepts of metacognition, self-regulated learning, and self-efficacy. It was hypothesized that students experience self-regulated learning when they reproduce problem solutions using strategies and solutions taught in class. Self-regulated learning involves setting realistic goals, employing strategies to achieve the goals, closely monitoring their attainment, and evaluating one's thinking. Students who did not achieve their desired outcome on the first exam could earn extra credit by attending a monitored session and retrying accounting problems that had previously been taught in class. Grades on first and second exams for students in this study were compared to those of nonparticipants for both cost accounting and intermediate accounting courses. The six cost accounting students in the study increased their average exam score, while 20 nonparticipants experienced a decline. The 10 intermediate accounting students in the study also improved in their second exam scores, while the 16 nonparticipants showed no measurable change in exam scores. (SW)

AN ALTERNATIVE PEDAGOGICAL APPROACH TO TEACHING AT-RISK AND UNDERACHIEVING UPPER-LEVEL ACCOUNTING STUDENTS

Marcus D. Gaddis, Ph.D
Assistant Professor of Accounting
UPO 621
College of Business
Morehead State University
Morehead, KY 40351
Email: m.gaddis@morehead-st.edu
Telephone: 606-783-2131

Terry Elliott, MBA, CPA
Assistant Professor of Accounting
College of Business
Morehead State University
Morehead, KY 40351
Email: t.elliott@morehead-st.edu
Telephone: 606-327-1777

Presented at the University of Kentucky Teaching/Learning Conference
Fall 1997

An Alternative Pedagogical Approach to Teaching At-Risk and Underachieving Upper Level Accounting Students

Students with broadly varying backgrounds and abilities are attracted to accounting courses at Morehead State University. Some are academically well prepared and seemingly possess endless motivation. Among the May, 1997, graduating class, two accounting majors were accepted into colleges of law and one was accepted into dental school. Such students seem to enjoy the rigor required of accounting majors and experience little difficulty with the complexity of coursework or exams.

Unfortunately, many students who take accounting courses at MSU are not so well prepared. Some experience great difficulty with upper level accounting classes. A broad spectrum of intelligence and motivation level is represented by the individuals in this latter group. A common quality is a lack of learning techniques necessary to excel in accounting.

Both the President of MSU and the College of Business recognize the need to provide quality education to students at every level of the spectrum. The Mission Statement of the College of Business recognizes the need "to enhance economic development of the region by raising educational levels". President Eaglin has

stated, "Ability, motivation, and personal situations are but some of the conditions that affect the potential learner". He further stated:

> "my premise is simple. Let's focus reform on enhancing success. Let's bring our best faculty together to develop methods to enhance learning. Let's develop reward systems for institutions, colleges, departments, and faculty who help students achieve success. Let's run under the assumption that if we accept a student into our institution, we will do everything in our power to aid in the success and achievement of that student".[1]

The policy to retain and teach all of the students of this region is made clear.

The MSU College of Business is currently in the midst of a major effort to attain AACSB accreditation. AACSB Standard S.1.c. states, "Retention policies for Baccalaureate students should be consistent with an objective of producing high quality graduates". Collectively, the University position and the AACSB Standard serve to create a genuine challenge for the Accounting Faculty. Means must be implemented to retain at-risk students and produce high quality graduates of all the students. Considering this circumstance, the authors have chosen to investigate ways to enhance learning by accounting students at MSU.

Classroom Learning Activities

A review of relevant literature includes studies of graduate students and gifted children. Useful insights can be gained from both. A study performed by Stephen

---

[1]Ronald G. Eaglin, "Let's Stop Fretting About 'Who's the Boss'", MOREHEAD STATEment, Fall/Winter 1996/97. P.2.

Rodriguez confirms a common belief about classroom learning activities. Using graduate students as subjects, Rodriguez asked the subjects to consider a variety of classroom learning activities including problem solving, case studies, lecture, and small group work. Problem solving and case studies were chosen to be most effective as learning tools of the ten activities considered. The subjects indicated that problem solving and case studies were the most motivating and further indicated a notable preference for more of these as classroom learning activities. Rodriguez observes, "Findings will guide the author in developing instrumental strategies that incorporate activities that are both motivating and effective".[2]

Rodriguez further states:

> It is interesting to note that while subjects found lectures to be unmotivating and ineffective, this type of activity is the one they most frequently encountered in their graduate courses. It seems safe to say, further, that lecturing is not an ideal means of furthering knowledge construction by students.[3]

Extensive use of case studies is not practical considering the vast quantity of material that must be covered in undergraduate accounting courses. However, students' preference for more problem solving activities is certainly convenient for

---

[2]Stephen Rodriguez, "What Motivates Graduate Students? A Descriptive Study" Proceedings of Selected Research and Development Presentations at the Convention of the Associations for Educational Communications and Technology, Sponsored by the Research Theory Division, New Orleans, LA, 1993. P.4.

[3]Ibid., P. 4

accounting faculty.

Rodriguez's study confirms a preference frequently expressed by students at MSU - Accounting faculty should minimize the use of lecture and maximize the use of chalk. This was stated in very practical terms by an accounting student from the state of New York in the Spring of 1997. "Let the chalk do the talk". The authors concur. Problem solving appears to the most effective classroom activity for motivating and teaching accounting students at MSU.

High Achievers Lend Insight

Given the classroom context of guiding students with a variety of academic histories to success, the authors are led to one specific question: What learning techniques are practiced by high achievers that can be utilized by others to possibly influence their academic pursuit? The literature again offers insight.

According to Manning, Glasner, *et al*, recent researchers have reported "Gifted learners employ metacognitive and self regulated learning strategies more regularly and successfully than non-gifted children".[4] Further research has found evidence that underachieving gifted learners may possess less developed metacognitive/self regulative skills than high achievers and that "the quality of

---

[4]Brenda Manning, Sandra Glasner, *et al*, "The Self-Regulated Learning Asect of Metacognition", Vol. 18, Roeper Review, February 1, 1996, p. 1.

metacognition during the initial learning tasks is directly related to the quality of the final performance or exceptional performance".[5] Metacognition is defined as "awareness and regulation of ones own thinking process".[6] The importance of metacognition to this study is in the self regulation aspect.

Manning, Glasner, *et al* defined self regulated learning as "Setting realistic goals, employing strategies to achieve the goals, closely monitoring their attainment and evaluating ones own thinking"[7]. Further, "one of the goals of self regulated learning is to become so proficient at a learning task that the task performance becomes automatic, resulting in a diminished need for conscious mental awareness, monitoring, and regulation or metacognition".[8]

An individual quality that affects self regulation is self-efficacy. According to Schunk, self-efficacy is described as, "personal beliefs about one's capabilities to learn or perform skills at designated levels". Schunk continues:

> "Learners require information to appraise self-efficacy from their accomplishments, vicarious experiences, forms of persuasion, and physiological reactions. Self-efficacy can influence self regulation: Students who feel efficacious about learning choose to engage in tasks,

---

[5]Ibid., p.1.

[6]Ibid., p.2.

[7]Ibid., p.2.

[8]Ibid., p.2.

select effective strategies, expend effort, and persist when difficulties are encountered. In turn, these self regulatory activities can affect self-efficacy. As students work on tasks they observe their performances, compare them with their goals, and judge and evaluate their progress. Positive judgments and evaluations enhance self-efficacy and motivation."[9]

Goals and self evaluation are necessary for self regulation. Schunk explains,

"Goals provide standards against which people compare their performances. Goals motivate and inform people about their capabilities. When students adopt a goal they may experience a sense of efficacy for attaining it, which motivates them to engage in appropriate activities, attend to instruction, persist, and expend effort. Students' initial self-efficacy is substantiated as they observe their goal progress because perceptions of progress convey their becoming skillful. Self-efficacy sustains motivation and leads learners to establish new goals when they master their present ones.

...Goals that incorporate specific performance standards, are close at hand and are moderately difficult, are more likely to enhance performance than goals that are general, extend into the distance future, or are perceived as very easy or overly difficult."[10]

Persistence, as described by Gayer, Harvey, *et al* is "the individual's skills for overcoming obstacles and persevering in seeking solutions to problems despite adverse circumstances."[11] These authors explain:

---

[9] Dale Schunk, "Goal and Self Evaluative Influences During Children's Mathematical Skill Acquisition", American Educational Research Association, Washington, D. C., Purdue University, Lafayette, Indiana, Department of Education, 1994. p. 2.

[10] Ibid. P.2.

[11] Harvey Gayer, *et al*, "The ABC's of Persistence: Suggestions for Teachers to Improve Students Effort on Academic Tasks", Paper presented the Annual Convention at the National

"Individuals who attribute failure to lack of ability may see persistence on future assignments as futile. This is akin to a form of learned helplessness. In contrast, individuals who judge the unsustained effort accounting for failure may regard continued perseverance as essential in changing the results in their favor. Analogously, students who perceived themselves as competent will be more likely to accept challenging assignments than those who doubt their ability to perform. A lack of confidence may in fact blunt ability to learn by limiting students in their willingness to risk failure."[12]

Rationale for the Study

The objective of this pilot study is to determine whether certain tools are feasible for future endeavor to develop means to enable both at risk and underachieving gifted students to succeed in accounting classes. Manning, *et al* has explained the need for self regulation, which "requires setting realistic goals, employing strategies to achieve the goals, and closely monitoring their attainment and evaluating one's own thinking".[13] Once goals are achieved, students experience a sense of self-efficacy about their ability. This belief in one's ability to succeed leads to persistence. Persistence leads to more goals and greater effort.

The Pilot Study

The pilot study was performed in three sections of upper level accounting

---

Association of School Psychologists, Seattle, March 1994, p.1.

[12]Ibid., p.2.

[13]Manning, p.4.

classes. Students who did not achieve their desired outcome on the first exam (in classes with three equally weighted exams) were given an opportunity to earn extra credit. Each of the three exams related to text material that was covered through brief lectures and 17 to 19 homework problems that were fully explained and presented on a chalkboard by the professor. The students were invited to sit in a monitored room with clean textbook and notepad (no notes or aids except acquired skills) and generate solutions to each of the problems. (Note that each problem had previously been solved and explained by the professor.) Students could try as many times as necessary to complete any given problem and any number of problems could solved on any given occasion.

Assumptions

The major assumption in this study is that the defining qualities of self regulation - setting realistic goals, employing strategies to achieve the goals, closely monitoring their attainment, and evaluating one's thinking - are experienced by students when they reproduce problem solutions using strategies and solutions that were taught in class. In addition, the authors assumed that both at-risk and underachieving students participated equally in the experiment.

Preliminary Results

The most significant improvement occurred on the second exam for both Cost

and Intermediate Accounting. The six students in Cost Accounting I who participated in the pilot study increased their average score by 11.2 points, while the twenty non-participants experienced a 10.68 point decline. (Of the eight students that made A's on the first exam, only four made A's on the second exam.) The degree of difficulty in Cost Accounting I increased from the first exam to the second exam. Conversely, the degree of difficulty on the final exam decreased from the second exam and both groups experienced improved averages. The ten participants in Intermediate Accounting II experienced a 8.8 point increase from the first to the second exam. The sixteen non-participants show no measurable change in their exam scores. Similar to Cost Accounting, the degree of difficulty on the third Intermediate exam decreased and the average score for both groups increased.

Conclusions

The Authors conclude that the results of this pilot study support further research into this pedagogical method. Consequently, the method will be implemented in the Fall of 1997 and Spring of 1998 semesters. A more rigorous analysis will be available in the Summer of 1998.

Bibliography

Eaglin, Ronald G. "Let's Stop Fretting About 'Who's the Boss'"; MOREHEAD STATEment. Fall/Winter 1996/97. p2.

Gayer, Harvey *et al.* "The ABC's of Persistence: Suggestions for Teachers to Improve Students Effort on Academic Tasks". (Paper Presented at the Annual Convention at the National Association of School Psychologists, Seattle, March 1994)

Manning, Brenda - Glasner, Sandra, *et al.* "The Self-Regulated Learning Aspect of Metacognition. A Component of Gifted Education." Vol. 18, Roeper Review, (02-01-1996): pp 217.

Rodriguez, Stephen. "What Motivates Graduate Students? A Descriptive Study. Proceedings of Selected Research and Development Presentations at the Convention of the Association for Educational Communications and Technology Sponsored by the Research and Theory Division". New Orleans, LA 1993.

Schunk, Dale. "Goal and Self Evaluative Influences During Children's Mathematical Skill Acquisition". American Educational Research Association. Washington D.C. Purdue University, Lafayette, Indiana; Department of Education. 1994.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: An Alternative Pedagogical Approach To Teaching At-Risk And Underachieving Upper-Level Accounting Students	
Author(s): Marcus D. Gaddis & Terry Elliott	
Corporate Source:	Publication Date: Fall 1997

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

	The sample sticker shown below will be affixed to all **Level 1** documents	The sample sticker shown below will be affixed to all **Level 2** documents	
☐ Check here **For Level 1 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	☑ Check here **For Level 2 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.
	Level 1	**Level 2**	

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at **Level 1**.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here→ please	Signature: Marcus D. Gaddis	Printed Name/Position/Title: Marcus D. Gaddis Assistant Professor of Accounting	
	Organization/Address: UPO 621 College of Business Morehead State University Morehead, KY 40351	Telephone: 606-783-2131	FAX: 606-783-5025
		E-Mail Address: m.gaddis@morehead-st.edu	Date: 11/14/97

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Jonathan Kelly
ERIC Clearinghouse for
Community Colleges
3051 Moore Hall
Box 951521
Los Angeles, CA 90095-1521

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

Teaching/Learning Conference
October 10-11
Ashland, Kentucky