

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

PERFORMANCE IN THE CAPSTONE BUSINESS COURSE: WHAT IS THE EFFECT OF PEDAGOGY, LEARNING STYLES, AND STUDENT MOTIVATION?

Ralph F. Catalanello and Christine L. Scheck
Northern Illinois University

ABSTRACT

This paper assesses the effect of two individual characteristics on student performance--learning styles and student motivation--in an undergraduate capstone course. We propose that the course design which involves individual and group case analysis as well as a complex business simulation will dampen the effects of these individual characteristics on student performance. It is further posited each learning style leads to different levels of motivation, which in turn impact performance. Results indicate that learning styles impact performance only in the case of assimilators and convergers with respect to motivation.

INTRODUCTION

This paper focuses on the impact of student motivation and learning styles on student performance in a capstone business policy course. Learning styles is part of an individual's cognitive structure and refers to the pattern of behavior and performance by which an individual approaches educational experiences [Sims, Veres, and Shake, 1989]. Student motivation is defined as those psychological processes which cause arousal, direction, and persistence of voluntary actions within a classroom setting [Laughlin, 1976; Mitchell, 1982]. It is suggested student motivation has a significant affect on student outcomes [Laughlin, 1976]. One's motivation to study within a class affects his/her performance. Motivation precedes any performance, positive or negative. This relationship has been supported elsewhere [cf., Butler and Nisan, 1986; Howard and Maxwell, 1980; Keon and Willoughby, 1981].

A capstone policy course often involves case analysis, business simulations, group exercises, oral presentations, as well as the traditional subject-related content material. Given the diversity of these assignments, one might expect students with differing learning styles to experience some learning opportunities congruent with their preferred style and thus positively influence their class performance.

METHOD

Sample

One hundred and six undergraduate students enrolled in four different sections of the required capstone management course in a large midwestern university participated in this study. A questionnaire was completed by each student during the first week of the semester. Standardized verbal instructions were given to each class.

Operational Measures

Learning Styles. Kolb's revised LSI (II) was utilized to measure the degree to which individuals display one of four learning styles (i.e., divergers, convergers, accommodators,

and assimilators). From the sample, 16 students were classified as Divergers, 33 Convergers, 19 Accommodators, and 38 Assimilators

Motivation. Vroom's [1964] behavioral choice model of expectancy theory was used to assess motivation. The scale utilized included measures of valence, instrumentality, and expectancy and had been used elsewhere (Webster, et al., 1987).

Class Performance. Class performance was measured for each student by obtaining the total points received in the course.

RESULTS

Regression analysis used to investigate the relationship between student motivation and class performance while controlling for learning style found some statistical significance. Student motivation was found to be significantly related to the performance of assimilators and convergers. The performance of assimilators was significant with an R of .13 (F 5.81, p (.05). The performance of convergers was also significant with an R of .11 (F 3.87, p (.05).

DISCUSSION AND CONCLUSION

The purpose of this study was to assess the impact of student motivation levels and preferred learning styles on class performance. The findings suggest student motivation within specific learning styles can be influenced to lead to better class performance. For example, assimilators and convergers were both highly motivated within the present course setting and thus motivation positively impacted class performance. Perhaps this can be explained since both styles have abstract conceptualization as a dominant learning ability. Abstract conceptualization concerns learning by systematic planning and the development of theory to solve problems. It is interesting to note the business policy course emphasizes the need for conceptual skills. The topics presented in a policy course help students develop and refine their conceptual skills [Wheelen and Hunger, 1989]. Thus, those students with abstract conceptualization as a dominant learning ability possibly have an advantage over others, which impacts their motivation level. Unfortunately, there were several drawbacks to the chosen sample, which may have limited the present findings. First, average grade distribution for all sections of this course normally fall within a B (i.e., above average) range. This gives little variance in the dependent variable of interest. Secondly, the sample size available for use in the present study resulted in small cell sizes for each learning style classification. Finally, the debate continues over the reliability and validity of learning style measures [Sims et al., 1989; Highhouse and Doverspike, 1987]. Future studies should be done to address these issues and correct for possible limitations.