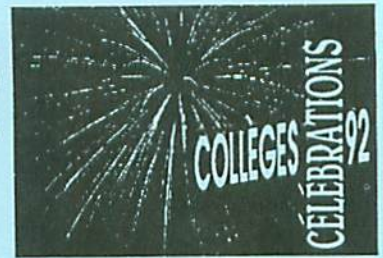


Actes du Congrès  
**COLLÈGES CÉLÉBRATIONS 92**  
Conference Proceedings



MONTRÉAL MAY 24 25 26 27 MAI 1992

**The Success-In-College Project :  
A Program to Increase Student Retention**

par

Susan KERWIN-BOUDREAU, Dianne BATEMAN  
et Yvon GEOFFROY  
Champlain Regional College  
(Québec)

*Atelier 2C23*

*Collèges  
créateurs d'avenir*

*Colleges  
creators of the future*



Association des collèges  
communautaires du Canada



Association québécoise de  
pédagogie collégiale

## The Success-In-College Project: A Program to Increase Student Retention

Susan Kerwin-Boudreau  
Dianne Bateman  
Yvon Geoffroy

Champlain Regional College, 900 Riverside Drive, St. Lambert, Quebec

This research was supported by FCAR and PAREA

### Objectives

The purpose of this study was to examine how academic underpreparedness contributes to student failure, and to assess the effectiveness of an interdisciplinary program designed to foster the intellectual abilities and learning skills needed to succeed in college. Failing Social Science students were given a special 15 week program which attempted to simultaneously teach course content and the academic skills required for college success. It was hypothesized that the students who received the treatment, when compared to a control group that did not, would show (a) significant improvement on posttest measures of reading skills, critical thinking skills, learning strategies and attitudes towards learning, (b) a higher overall average during the semester that they were registered in the project, (c) fewer course withdrawals and course failures, (d) a stronger academic persistence profile, that is, a higher probability of returning the following semester and registering for a full course load, and (e) increased self-esteem. This research was motivated by the belief that the intellectual skills and learning strategies needed for success in college could be taught through course content, and that the transfer of these skills would be facilitated when content teachers work collaboratively.

### Theoretical Framework

One of the greatest challenges facing college educators today is the need to accept and to educate a highly diversified student population who in many cases are unprepared academically for college level work. High attrition rates among these students have led to the necessity of implementing special programs where their specific needs to develop academically and intellectually are addressed. According to Noel & Levitz (1983), the rate of attrition among college freshmen in the United States is about one third, and these dropout rates have remained fairly constant since the mid 1970s. Moreover, Hoehn and Sayer (1989) report that only about 25% of American students who begin college actually receive a degree.

Dropout has become an increasingly serious problem within the Quebec collegial network. Noël (1988) reported that although 47% of the Quebec population between the ages of 17 and 19 attend Cegep, (Collèges d'enseignement général et professionnel) only 65% of these students finish their programs and receive their diplomas. A comparison of cohort samples from 1976-1982 (Ducharme, 1989) indicated that the rate of Cegep students receiving their diploma is slightly under 60%.

These high student attrition rates have been cause for much concern, and in the United States, several national reports including *A Nation at Risk* (1984) produced by the National Commission on Excellence in Education, and *Involvement in Learning* (1984) produced by the National Institute of Education have called for a reform of undergraduate education. In 1987, The Carnegie Foundation for the Advancement of Teaching issued a report produced by president Ernest Boyer entitled *College: The Undergraduate Experience in America*. This study urged institutions to abandon the "sink or swim" approach for freshmen and to initiate active efforts to help them succeed (Upcraft & Gardner, 1989). In Quebec, the 1988 report of the Conseil des Collèges listed two major goals: (1) to increase the chances of success for all college students, and (2) to renew and develop assistance to students experiencing academic difficulty.

Although CEGEP students arrive at college with a certain amount of background knowledge, many content areas are being studied for the first time. In addition, the problem solving strategies transferred from high school may not be appropriate for college learning tasks (Bateman, 1990; Weinstein & Mayer, 1986). Despite these constraints, college students are faced with academic tasks that require both extensive background knowledge and proper strategies for organizing that knowledge into a readily learnable mode. Students are expected to read critically.

write clearly, think logically and use learning strategies appropriately. The lack of adequate academic preparation for college has been documented in the research, particularly in the areas of reading, thinking, and the use of learning strategies (Noël, Levitz, & Saluri, 1985; Roueche, Baker, & Roueche, 1984; Weinstein, Goetz, & Alexander, 1988).

The basic premise of this study is that a lack of academic preparation, especially in the areas of reading, thinking, and the use of learning strategies, can seriously impede a student's chance for academic success. Specifically, this research maintains that when selected Social Science review board students, that is, students who have failed or abandoned half or more of their courses within one semester, (Regulation 33 of the Régime Pédagogique) are provided with a one-semester special curriculum that emphasizes the acquisition of background knowledge and the use of reading, thinking, and learning strategies, their chances of remaining in college will increase.

### **Method**

At Champlain Regional College, St. Lambert, a special curriculum of five courses including English, Psychology, Political Science, Humanities, and Physical Education was developed. The students remained together as an intact group for these five courses, which were designed to provide students with the background knowledge and learning strategies that would allow them to experience success in college. In addition, a weekly group meeting with a counselor was included to promote group cohesiveness and to provide students with information on goal setting and career choices.

The study was carried out using a quasi-experimental nonrandomized control-group pretest-posttest design (Isaac & Michael, 1981). The dependent variables included measures of reading (The Nelson-Denny Reading Test), critical thinking (Watson Glaser Critical Thinking Appraisal), study habits and attitudes (Survey of Study Habits and Attitudes), learning strategies (Learning and Study Strategies Inventory), self-esteem (Coopersmith Inventory), and academic achievement (term averages). The independent variable was treatment group (experimental or control). A quasi-experimental design was used because the research was carried out in an educational setting which typically involves fixed conditions (Cook & Campbell, 1979).

### **Data Source**

The experimental group included one group of Social Science review board students in the Fall 1990 semester ( $n=26$ ), and one group in the Winter 1991 semester ( $n=30$ ). All of these students were interviewed by at least two members of the team and expressed a desire to join the project. The combined experimental group consisted of 29 female and 27 male subjects ranging in age from 17 to 20. At the time of the beginning of the project, most students were 17 years old (36%) or 18 years old (36%). The overall mean age was 18.32.

The control group included one group of Social Science review board students in the Fall 1990 semester ( $n=15$ ), and one group in the Winter semester ( $n=24$ ). The combined control groups consisted of 13 female and 26 male subjects ranging in age from 17 to 21. The overall mean age was 18.63. The lower number of control group subjects was due to the limited number of review board students who were readmitted with a full course load.

### **Results and Conclusions**

Results show that both the experimental and the control groups improved their reading and increased their awareness of how to learn during the 15 week semester. The improvement in knowledge of learning strategies was significantly higher for the experimental group. Despite the improvement in these two areas, neither group showed significant gains in general academic achievement nor in self-esteem.

The results on the Nelson-Denny Reading Test show that both the experimental and control group students had difficulty selecting relevant information, noting the relationship between ideas, making inferences, and drawing conclusions. However, both groups made significant improvement in comprehension during the semester, confirming previous research which suggests that comprehension can be taught and does improve during CEGEP (Bateman, 1990).

The results on the LASSI and the SSHA support the belief that learning strategies can be taught through course content. The experimental group demonstrated a greater awareness than the control group on the Selecting Main Ideas, Study Aids, Self Testing, and Anxiety scales. The improved ability to select main ideas and use study aids and self testing techniques may have reduced the anxiety of students in the experimental group regarding their own ability, intelligence, or likelihood of success. Their score on the Anxiety scale indicated that they were better able to attend to the learning task as opposed to focusing on their own anxieties.

The experimental group also showed significant improvement on the Test Strategies, Attitude, and Motivation scales. The reduction in the experimental group's level of anxiety might have been influenced by their increased awareness on how to prepare for and take tests as reflected on the Test Strategies scale. Their significant improvement on the Attitude scale over time and in contrast to the control group indicates that the experimental students became more goal oriented regarding their education, developed a more positive attitude toward college, and a greater sense of control over their academic lives. Their improvement on the Motivation scale indicates an increased awareness that success in college requires keeping up with assignments and being prepared.

Both the experimental group and the control group improved significantly on the Time Management, Concentration, and Information Processing scales. These results suggest that during the 15 week semester, students in both groups became more aware of how to manage their time, how to focus on their school work, and how to think, reason, and organize knowledge in a meaningful way. The results on the LASSI were further supported by the experimental group's significant increase in study habits as measured on the SSHA.

The results on the Nelson-Denny Reading Test, the LASSI, and the SSHA support current thinking in cognitive psychology that inadequately prepared students can be shown how to become independent learners, and can learn the competencies that successful students use (Bransford, Sherwood, Vye, & Rieser, 1986; Brown, Campione, & Day, 1981; Brown & Day, 1983; Haller, Child & Walberg, 1988; Palinscar & Brown, 1984; Weinstein, 1988). It seems, then, that many students have not yet developed the unique reading skills and learning strategies required for learning in college and that college is an appropriate place to develop them.

The experimental group's increased awareness about the use of learning strategies was not reflected in their general academic achievement; neither the experimental nor the control group demonstrated a significant improvement in course grades or overall term averages. Gadzella and Williamson (1984) attest to the strong relationship that exists between good study habits and academic achievement. However, research conducted at Champlain College (Kerwin-Boudreau, 1985) did not find a positive relationship between the two. The experimental group's improvement in the LASSI and SSHA might reflect more of a knowledge of which study skills they should be using, as opposed to which skills they are actually using in their courses. In fact, it might be that while students are in the process of acquiring new learning strategies, educators cannot expect the impact of these strategies on their academic achievement and self-esteem to be immediately apparent. Similarly, students may need time to practise the newly acquired skills in order to integrate them into their daily study routines.

A questionnaire was used to get written feedback from the students on their degree of satisfaction with the program, and on their attitudes toward knowledge and learning. This questionnaire was administered in the middle and at the end of each term. The following is a summary of responses to the questionnaire administered in May 1991. Respondents included 8 of the 14 students who completed the Fall 1990 semester and 26 of the students enrolled in the Winter 1991 semester.

In response to the question, "has your attitude toward knowledge and learning changed and if so how," 24 students reported that they take school much more seriously now and use learning strategies more. Four students said their was no significant change and one reported a negative change. Twenty credited the change in attitude to the project while four felt it was a result of their own increased maturity. The three best things cited about the project were (1) that the students stayed together in intact groups, (2) the teachers worked together, and (3) that they learned new ways to study. The three worst things about the project were (1) students felt more closely supervised by their teachers, (2) a perceived excessive workload, and (3) the emphasis placed on learning strategies at the expense of content knowledge.

### Educational Importance of Study

The educational importance of this study lies in the information it gives colleges educators in regard to student learning, faculty development, curriculum planning and teaching. It has helped to identify the competencies necessary for success in college and has provided a forum for teaching these competencies across the curriculum. In working together as a team, faculty increased their understanding of the ways students learn and develop, and moved away from teaching in isolation. The informal feedback from students indicates that a number of students became more committed to higher education while others realized that their aspirations lie elsewhere. Helping students become aware of the role they play in their own educational process is perhaps the most important consequence of this project.

### BIBLIOGRAPHY

- Bateman, D. (1990, March). A longitudinal study of the cognitive and affective development of Cegep students. Unpublished Ph.D. dissertation, McGill University, Montreal.
- Boyer, E. (1987). *College: The undergraduate experience in America*. Report of the Carnegie Foundation for the Advancement of Teaching. New York: Harper and Row.
- Bransford, J. D., Sherwood, R., Vye, N., & Rieser, J. (1986). Teaching thinking and problem solving. *American Psychologist*, 41, 1078-1089.
- Brown, A. L., Campione, J. C., & Day, J. D. (1981). Learning to learn: On training students to learn from texts. *Educational Researcher*, 10(2), 14-21.
- Brown, A. L., & Day, J. D. (1983). Macrorules for summarizing texts: The development of expertise. *Journal of Verbal Learning and Verbal Behavior*, 22(1), 1-14.
- Ducharme, R. (1989, 29 mai). *L'intégration des nouvelles étudiantes et des nouveaux étudiants: Problématique et interventions (version finale)*. Montréal: Fédération des Cegeps.
- Gadzella, B. M., & Williamson, J. D. (1984). Study skills, self-concept and academic achievement. *Psychological Reports*, 54, 923-929.
- Haller, E. P., Child, D. A., & Walberg, H. J. (1988). Can comprehension be taught? A quantitative synthesis of "metacognitive" studies. *Educational Researcher*, 17(9), 5-8.
- Hoehn, L., & Sayer, J. (1989). *Keys to college success*. CA: Mayfield Publishing Co.
- Isaac, S., & Michael, W. B. (1981). *Handbook in research and evaluation*, 2nd ed. San Diego, CA: Edits Publishers.
- Kerwin-Boudreau, S. (1985, June). *The effects of the Psychology of Learning course on student's pre-vs post-test scores on study habits, study attitudes, locus of control, and self-concept and on their study time and overall grade average*. Champlain Regional College, St.Lambert, Québec.
- National Commission on Excellence in Education. (1984). *A nation at risk: The imperative for educational reform*. Washington, D.C.: National Commission on Excellence in Education.
- National Institute of Education. (1984). *Involvement in learning: Realizing the potential of American higher education*. Washington, D.C.: U.S. Department of Education.
- Noël, A. (1988). *CEGEP and college education in Québec*. Québec: Les Publications du Québec.
- Noël, R., & Levitz, R. (1983). *National dropout study*. Iowa City, IA: American College Testing Program, National Centre for Achievement of Educational Practices.

- Noël, L., Levitz, R., & Saluri, D. (Eds.) (1985). *Increasing student retention*. San Francisco, CA: Jossey Bass.
- Palinscar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and monitoring activities. *Cognition and Instruction*, *1*, 117-175.
- Roueche, T., Baker, G., & Roueche, S. (1984). *College responses to low-achieving students: A national study*. San Diego, CA: Harcourt Brace Jovanovich.
- Upcraft, J. L., Gardner, J. N. (1989). *The freshman year experience*. San Francisco, CA: Jossey-Bass.
- Weinstein, C. F. (1988). Why knowing about how to learn is not enough. *Journal of College Reading and Learning*, *21*, 48-56.
- Weinstein, C. F., Goetz, E., & Alexander, P. (Eds.) (1988). *Learning and study strategies*. New York: Academic Press.
- Weinstein, C. F., & Mayer, R. F. (1986). The teaching of learning strategies. In M. C. Wittrock (Ed.), *Handbook of research on teaching*, 3rd ed. (pp.255-296). New York: MacMillan.