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## ABSTRACT

This paper describes an academic assistance program designed to help ethnic minority students adjust to the demands of university life and succeed both academically and personally. The Excel program has three major components: a two-semester, two-credit core seminar; weekly instructional support groups; and peer led tutorial/discussion groups. The results of the first 2 years of the program are presented in which 62 at-risk Excel students had their performance compared to other minority and majority freshmen at Washington State University. These comparison studies show the Excel students performed significantly better than other students from minority groups and equal to or better than majority students. The lessons from this experience indicate that minority students on majority campuses need to be both challenged and encouraged to compete academically with their majority peers as well as to develop and pursue their own goals. The program's results are discussed in terms of the variables that appear to affect minority student success at large universities. The appendix provides the grading procedures for two psychology classes. Contains 22 references. (GLR)

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Excel: An intensive and structured program of advising and academic support to assist minority freshmen to succeed at a large state university

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Running head: ADVISING AND ACADEMIC SUPPORT

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### Abstract

It is a consistent observation that minority students graduate at much lower rates than majority students at our large state colleges and universities. The Excel program was designed to assist ethnic minority students adjust to the demands of university life and succeed both academically and personally. The program has three major components: a two semester two credit core seminar, weekly instructional support groups, and peer led tutorial/discussion groups. The results of the first two years of the program were evaluated in a number of studies comparing the performance of the Excel students to other minority and majority freshmen at the university. In all comparisons the Excel students were found to have performed significantly better than other minority groups and equal to or better than majority students. The results are discussed in terms of the variables that appear to affect minority student success at large universities.

**KEY WORDS:** minority, freshmen, advising, academics, achievement

Excel: An intensive and structured program of advising and academic support to assist minority freshmen to succeed at a large state university.

A major academic and social problem facing our colleges and universities is the low graduation rates for ethnic minority students. With the exception of some Asian/Pacific American groups, minority students nationwide graduate at approximately half the rate of their white counterparts. Similarly, in the past decade, the percentages of African Americans, Hispanic, and American Indian citizens attending and graduating from our institutions of higher education has declined (Allen, 1988; American Council on Education, 1988). Many researchers believe a component of the problem involves long-standing explicit and implicit institutional racism that will need to be dealt with in an organizational or structural fashion. This will, of course, be a long-term undertaking. There are, however, a number of things that can be done immediately to assist minority students to meet the challenges they face on large state university campuses until long-term inequities are resolved.

As with most social problems, the factors involved are complex and multifaceted. These issues need to be carefully analyzed and programs designed to systematically deal with each in turn. Failure to proceed in a scientifically sound fashion will result in incomplete and ineffective programs. The variables affecting any student's performance at a college or university can be divided into two broad categories: student characteristics and institutional characteristics.

There must be a reasonable fit between the student's background, expectations, and abilities and the institution's structure and processes for positive outcomes to occur (Tinto, 1987). Until recently, the primary approach to improving the retention and graduation rates of ethnic minority students has been to provide study skills classes and developmental/remedial courses. Such programs tended to focus on a single aspect of the problem from a deficit model of performance. The major assumption was that if the deficit was eliminated, the student would then do well. Unfortunately, as most reviews have noted, these programs have been generally ineffective (e.g. Harney, Brigham & Sanders, 1986; Richardson & Skinner, 1990).

It now seems clear that multi-component programs involving changes in institutional structures and procedures, as well as student adjustments to the demands of a new environment, will be required to deal with the challenges of minority education. The question then becomes: What specific procedures should be instituted in this effort? Our approach to answering this question is based on behavior analysis (Cantania & Brigham, 1979; Skinner, 1957). Behavior analysis focuses on the basic objective aspects of the situation or problem to analyze what behaviors are now occurring, what behaviors need to occur, and what conditions in the current environment need to change to facilitate the new behaviors.

Based on extensive discussions with minority students, counselors, faculty and administrators, our analysis of the current situation at the university revealed a number of response patterns that may contribute to minority student

failure. First, most minority students here are less involved in the full range of the university's social, cultural and academic life. Minority students seldom seek academic advising and tend to receive poorer advice when they do. Similarly, they have fewer contacts with their instructors outside the classroom and find them less satisfactory than their white peers. Minority students are also less likely to seek academic help from either instructors or peers but rather try to struggle through on their own. Finally, minority students are often unprepared to compete in the academic culture of the classroom. Consequently, minority students often find themselves in academic difficulty and fail before they have a real opportunity to develop or display their potential (Report of the President's Commission, 1991). This state of affairs is not unique to Washington State University and seems to generally hold for minority students at majority institutions across the country (Fiske, 1988; Richardson & Skinner, 1990; Skinner & Richardson, 1988; Wilson & Justiz, 1988).

Since the late sixties, a wide variety of tutorial, advising and counseling services and programs have been available for at-risk and deficient students at Washington State University. The low graduation rates and general faculty and administration dissatisfaction with the situation suggested that a much more proactive program was required. The strategy and components of the program were selected on the basis of our previous research with at-risk students (Harney, Brigham & Sanders, 1986) and related studies conducted at other universities (e.g. Corona & Keitel, 1985; Heinman & Slomianko, 1986; Robin, Martello Foxx, &

Archable, 1977).

Harney et al. (1986) demonstrated that a highly structured program emphasizing class attendance, notetaking, and systematic monitoring could significantly increase the academic success of at-risk freshman student athletes. A major component of the program was a mandatory daily study table. Such a procedure did not appear to be appropriate for the present effort. Rather, it was decided to use a required core course as the method for maintaining regular contact with the students while providing basic instruction and advising. Another factor in successful programs has been increasing students' self-control or self-management skills in relation to academic tasks (Kirschenbaum, Malett, Humphrey, & Tomaken, 1982). These skills could also be taught in the core course. An additional variable that has received support in the research literature is increased cooperative learning through the use of peer-lead discussion groups. The primary model for the discussion groups comes from Treisman's work on improving minority students' performance in mathematics (Watkins, 1989). Similar research in psychology and related fields has also produced very positive results (Brigham, 1990; Fantuzzo, Riggio, Connelly, & Dimeff, 1989; Lidren et al., 1991; Radebaugh & Kazemek, 1989). Finally, based on Tinto's (1987) review of the literature on leaving college, it was felt that involving faculty and staff from the Division of Minority affairs would enhance student motivation and persistence. These then were the major concepts considered in the design of Excel.

In its current form, Excel has three major academic components: a two

semester two-credit core course, instructional support groups, and peer tutorial/discussion groups. The course focuses on advising, academic skills enhancement, self-management, and monitoring of academic progress and problems. The course also provides a peer group where students share common experiences and provide social support. A second less obvious function of the core course is to encourage student participation in class discussions. Each class section is small and taught in a style that requires each student to present and defend ideas in discussions. The instructional support groups are used to practice, review and evaluate specific academic skills. The last academic component consists of small peer tutorial groups organized around a common course. The group tutor is usually a minority student with advanced standing and strong academic credentials. The discussion groups are not only for the students to study together in the "formal" session but also to encourage them to form their own study groups. Finally, because social/cultural variables play an important role in a student's adjustment and persistence at a university, Excel involves the University's minority counselors as an integral part of the program. In summary, Excel was designed to be a proactive, empirically and behaviorally based intervention to challenge and assist minority students to achieve academic and personal success at the university. The long range objectives of the research project were to systematically measure the impact of the procedures, modify them when appropriate and develop an effective program that would become a permanent component of the university's academic assistance efforts.



Although Excel was not designed as an experiment per se, data were carefully collected in order to evaluate the performance of the students participating in the program and the effectiveness of the various program components. It was the case, however, that variations in the patterns of program participation produced what may be called three quasi-experiments. They will be described in the results section.

## **METHOD: YEAR I**

### **Fall Semester**

#### *Subjects*

Although Excel was initially intended to exclusively serve freshmen, a delay in funding the project made it difficult to recruit participants. As a consequence, it was decided to offer program services to any minority undergraduate who wished to participate. At the beginning of the third week of the semester, 63 students had enrolled in three sections of the two-credit Excel seminar. Of that number, 30 were freshmen considered at risk because of low high school GPAs and SAT scores, 15 were regularly enrolled freshmen, and 18 were academically deficient sophomores and juniors.

#### *Procedures*

The seminar was taught by a Master's level academic counselor with 10 years experience working with academically at-risk students. The counselor also served as the academic advisor for the students participating in the program. She was assisted by two graduate students, one from the English Department and the

other from Mathematics. Both graduate assistants had previous experience teaching introductory classes. In addition to the instructors, the four minority counselors from the Division of Minority Affairs also periodically participated in the seminars. The counselors all had Master's degrees and considerable experience in their areas. They were able to provide insight into the minority experience at WSU and information about the services and opportunities available at each counseling center.

Each seminar section met twice a week for 50-minute class sessions. The seminar focused on behavioral self-management skills (e.g. selected chapters from Brigham, 1989 and Watson and Tharp 1985), effective note taking and test preparation procedures (Harney, et al., 1986), and academic and social survival skills. Each week the students turned in a written assignment that involved some aspect of a concept or procedure taught the previous week.

In addition to the class sessions, each student participated in a required one and a half hour study group meeting each week. The study groups were lead by the teaching assistants and functioned to review and practice procedures presented in the seminar, review and evaluate work done in other courses, and provide tutorial assistance when appropriate. Because of the careful monitoring of academic progress, it was also possible to refer students to the Student Advising and Learning Center and the Writing Laboratory for additional assistance. Finally, the students met individually with the counselor approximately four times over the semester for academic advising.

## Spring Semester

### *Subjects*

For the second semester, 62 students were enrolled in three sections of the Excel seminar. The 30 at-risk students continued in the program, but others chose not to participate in the second semester program. Their places were taken by 15 minority freshmen who had academic problems their first semester and 17 students with advanced standing who were academically deficient.

### *Procedures*

The 15 new freshmen were placed in a single section and taught the material from the first semester program. The focus of the second semester seminar for the continuing students was on critical thinking, problem solving, reading techniques, and academic planning. As a project, each student researched a possible major, met with an advisor from that department or program and developed a plan of course work that would lead to a degree.

Two other changes were made in the program for the second semester. The minority counselors did not believe that they had the time to regularly attend the seminar sessions; so that component was eliminated. Instead, to facilitate involvement in minority social and cultural activities, students met with their minority counselor twice over the semester. The second change was the introduction of discussion groups. The discussion groups were to be small (four to six students), organized around a common course, and lead by a minority student with advanced standing and good academic credentials. Because of a lack of

common courses and schedule conflicts, these turned out to be very difficult to organize. As a consequence, less than half of the students participated in the discussion groups in any meaningful fashion.

### RESULTS: YEAR I

As noted earlier, the patterns of student participation produced three quasi experiments. The first involved the 30 freshmen who participated in Excel both semesters and a nonequivalent control group of 17 other minority freshmen who were not referred to Excel and completed both semesters at the university. Clearly, these students do not constitute a "true" control group in that they were not randomly assigned to an alternative treatment rather they were assigned to other university assistance programs because the university had not identified them for us. They further differed from the Excel students in that as a group they had a significantly higher mean admission index number (AIN). The AIN is a composite score based on the student's high school GPA and SAT scores. Students with AINs of 30 and below must go through a special process to be admitted to the university. The Excel group had a mean AIN of 28.7 (SD = 18.1) while the mean AIN for the nonequivalent control group was 44 (SD = 16.5). A test for unequal ns revealed a significant difference between the AIN scores of the two groups ( $T = 2.13$ ,  $df = 28$   $P < .05$ ).

Although the non-Excel group did enter the university with superior academic credentials, they were similar in terms of ethnicity and gender. Further, they all participated in some form of university academic or counseling

support program. As a consequence, their performance does provide a rough standard for evaluating the performance of the Excel students.

The 30 Excel students achieved a mean cumulative grade point average for the year of 2.10 (SD = .53). A total of 10 students achieved a cumulative grade point average of less than 2.00 and were academically deficient for the year. (A cumulative grade point average of 2.00 or greater is required for a student to graduate from the university. Students with less than a 2.00 must be reinstated before they can enroll for the classes the next semester.) In comparison, the mean cumulative grade point average achieved by the 17 non-Excel students was 1.275 (SD = .42) and 13 were academically deficient for the year. A t test for unequal ns was used to evaluate these two performances ( $T = 5.62$   $df = 28$   $P < .001$ ). These results in relation to the students' AIN scores are presented in Figure 1.

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Insert Figure 1 about here  
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The pattern of academic achievement was further analyzed by classifying students as either in good standing or deficient. The resulting distribution, 20 Excel students in good standing and 10 deficient was compared to the 4 non-Excel students in good standing and 13 deficient using a chi square test and found to be significantly different ( $X^2 = 4.24$   $df = 1$   $P < .05$ ).

The second study consisted of an ex post facto within subjects design involving 30 regularly enrolled freshman minority students who participated in

Excel for only one of the two semesters. Thus, it is possible to compare these students' academic achievement in Excel to their achievement when they were not participating as a measure of the effects of Excel.

The mean grade-point averages of these students for their two semesters were 2.57 (SD = .58) in Excel and 2.08 (SD = .71) out of Excel. A t test for correlated means was used to compare these two grade-point averages ( $t = 3.54$   $df = 29$   $P < .002$ ).

There were also differences in the pattern of academic standing. When participating in Excel, 25 students were in good standing and 5 deficient as compared to 16 students in good standing and 14 deficient when they did not participate in Excel. These differences were analyzed using a chi square test ( $X^2 = 6.12$   $df = 1$   $P < .05$ ).

Study 3 involved 35 non-freshman minority students who were referred to the program for either the fall or spring semesters because of a history of academic deficiency. As a consequence, these students also participated in Excel for only one semester, producing a within-subjects quasi-experimental design. Again, their performance while in Excel can be compared with that when not in Excel as a measure of the effectiveness of Excel.

During the semester these students participated in Excel, they earned a mean GPA of 2.12 (SD = .39), and when they were not in Excel they earned a mean GPA of 1.75 (SD = .54). A t test for correlated means was used to compare these two performances ( $t = 3.31$   $df = 34$   $P < .004$ ).

The students were also compared in terms of deficiency rates for their Excel and non Excel semesters. When participating in Excel, 13 students were deficient and 22 in good standing, but 21 were deficient and 14 in good standing when they did not participate in Excel. Again, these patterns were analyzed using a chi square test ( $X^2 = 3.66$   $df = 1$   $P < .10$ ) and the differences were found to be non-significant.

## METHOD: YEAR II

### Fall Semester

#### *Subjects and Procedures*

For the 1990-91 academic year several changes were made in the basic Excel program. These changes were made on the basis of experience with the program during the first year and designed to make the program more effective. First, because of the difficulties experienced having deficient students with advanced standing in the program, it was decided to work exclusively with first semester freshmen. To this end, 56 first-semester freshmen (42 were considered at risk because of low high school GPAs and SAT scores) participated in the program. Another major change was that additional instructors were recruited from interested and committed groups in order to strengthen the teaching staff and reduce the instructor to student ratio. As a consequence, in addition to the academic counselor, three Ph.D. faculty members volunteered to help teach the Excel seminar. The lead minority recruiter for the university also assisted in the program.

In the first year, the students' lack of a course in common other than the Excel seminar made it difficult to discuss specific academic problems or make assignments relevant to all the students. Therefore, the next major change was to organize the discussion groups around a single course. This made it possible to better integrate discussion group activities with the instruction in the core seminar. Fall semester, the discussion groups were part of a section of Introductory Psychology where the enrollment was approximately 60% minority students and 40% majority students. This section of the psychology course was modified to include required discussion sections, unit study guides, and pretests that had to be passed at the 90% level before students could take the in-class examination (Brigham, 1990). The discussion groups focused on cooperative completion of course study guides and organizing outside study groups. Finally, the Instructional support groups were primarily focused on informal writing using simple essays or diary entries. All other procedures remained essentially the same.

### **Spring Semester**

#### *Subjects and Procedures*

For the spring semester, 17 regularly admitted minority freshmen who were academically deficient the fall semester were added to the program. They were enrolled in single sections of the Excel seminar and Introductory Psychology. Thus, their program was basically a replication of the fall semester activities.

Forty of the 56 Excel students from the fall semester continued in the



program for the spring. The remaining 16 students were assigned to specially selected advisors in their areas of interest. They also continued to receive some additional counseling and/or support from Excel.

One major change in the spring program from the previous year was that discussion groups were organized around a history course, History 111: American Civilization since 1865. The instructor for the course is considered an excellent teacher having won a number of major awards for his teaching. The discussion groups were all lead by an advanced graduate student from the History Department. A second major modification was the introduction of a faculty mentoring program developed by the Division of Minority Affairs. This program paired students with well established tenured faculty members from the student's identified area of interest; the program was made available to all minority freshmen irrespective of their participation in Excel.

### **RESULTS: YEAR II**

For the fall semester 1990, the 56 Excel students achieved a mean GPA for the semester of 2.76 while completing a mean of 12.3 credits. Only 8 of the 56 students were academically deficient for the semester (14.2%). In comparison, there were 2068 majority freshmen who completed the fall semester at Washington State University. Three hundred and thirty-two of these freshmen were academically deficient for the semester (16.05%). Thus, functionally there was no difference between the performance of the minority Excel students and their majority peers. Usually the observance of no difference is considered to be a

negative result. However, given that 42 of the Excel students were admitted to the university under alternative procedures and historically would be expected to be academically deficient, their achievement is quite impressive. Further, it was not the case that their performance reflected a general improvement in minority student achievement because regularly admitted minority students continued to show a high level of deficiency (approximately 35%).

The results for the spring semester, and cumulatively for the year, are equally positive. The students achieved a spring GPA of 2.56 and for the year their cumulative mean GPA was 2.62 (SD = .59). Only 6 of the 56 original Excel students were academically deficient for the year (10.7%). Historically, approximately 15% of the majority freshmen are deficient at the end of their first year. Again, it would appear that both regularly and specially admitted minority students participating in Excel did as well or better than their majority peers.

Similarly, 13 of the 17 students who joined Excel for the spring semester improved their academic performance over their fall semester. Their fall semester mean GPA was 1.49 (SD = .31) while the spring mean GPA was 2.22 (SD = .44). A t test for correlated means indicated this was a statistically significant improvement ( $t = -3.41$   $df = 16$   $P < .004$ ). For the fall semester, 15 of the 17 students were academically deficient while only 4 were deficient at the end of their semester in Excel. In contrast, 12 students with similar academic problems who chose not to participate in Excel continued to have difficulties in the spring term. They achieved a mean GPA for the spring semester of 1.71 (SD = .57). A t

test for unequal Ns was used to compare these two performances ( $t = 2.49$   $df = 27$   $P < .05$ ).

Finally, a survey given to the Excel students at the end of the spring semester produced 85% positive comments. Students expressed general satisfaction with Excel and their freshman year experiences at WSU. A single student reported that he found Excel to be "a complete waste of time."

#### FOLLOW-UP DATA

At this point, we have follow-up data on 161 students who participated in the Excel program during the period covered in this paper. These students fall into three groups: 66 freshmen who participated during the 1989-90 academic year, 39 deficient advanced-standing students also in the program 1989-90 and 56 freshmen from the 1990-91 academic year. Retention rates and academic progress information for these groups are presented in Table 4.

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As it can be seen from these data, a high percentage of Excel students have been retained at the University and are doing well academically. These retention rates are somewhat higher than those found for majority students at the University. Over the past 10 years, the first year retention rate for majority students has ranged from 70.4% to 82.3% while the second and third years has been right around 65%. In contrast, for the 1988-89 academic year, 52 minority

students were specially admitted to the University but only 52% returned and over 50% of this group was academically deficient.

A similar picture is emerging in regard to probable graduation rates. Based on analyses of student credit hours and cumulative grade point averages, estimates were made of probable five- or six-year graduation rates for the three groups. The University's official five-year graduation figures for the freshman class entering fall 1987 are 30.19% for all minority freshmen and 50.93 for all freshmen. The estimated five-year graduation rate for the Excel class of 1989-90 (credits > 90 and GPA > 2.00) is 54% and that of the 1990-91 class (credits > 75 and GPA > 2.00) is 64%. The 61% estimate for the non-freshman deficient group is given on a six year basis because a number of second and third year students who participated have yet to graduate but persist in their efforts and seem likely to eventually graduate.

## DISCUSSION

It is, too early to draw definitive conclusions regarding the effectiveness of the Excel procedures. Nonetheless, the results of the first two years proved encouraging. We believe that the performance of the freshmen in Excel strongly suggest that a highly structured and aggressively proactive multi-component program can make a difference.

In analyzing any multi-component program, it is tempting to speculate about the relative importance of each component. At this point, we have no basis for doing so, and it is our feeling that each in its own way contributes to the

students' development. Nonetheless, it will be important to conduct research that will allow for the empirical analyses of the various aspects of the program. A limiting factor in the case of Excel which is both a service and a research program is the institutional demands to use the "best" guess procedures and treat everyone the same. However, we have been able to conduct a number of small experiments on variations in procedures which will be reported at a later date.

Although a strong case can be made for each component of the program, it appears that the overall pattern of student behavior, encouraged and facilitated by the program, is the crucial factor rather than the specific procedures per se. In particular, from our observations the active participation of students in the classroom and the broader university community is a key set of behaviors. Excel encourages the development of student involvement with the small core seminar where individual participation is required and positively reinforced, the introductory psychology discussion groups where individual participation is again required within the context of a more diverse student population and the minority counselors who facilitate student participation in the university's cultural life. In these activities and the specific assignments, the students develop important academic skills and the self-confidence to compete with their majority peers. Finally, success within the context of Excel helps the students gain the motivation to work hard and persist in their efforts.

The lessons from our experience with Excel to date seem clear. Minority students on majority campuses need to be both challenged and encouraged to

compete academically with their majority peers as well as to develop and pursue their own goals. In order for a student to do so, the college or university must provide an environment that delivers good advice, timely assistance, and social and cultural support. We believe as a program Excel does those things.

Lest early enthusiasm overwhelm the reality of the problem, at least two notes of caution are appropriate here. First, Excel has only involved a relatively small number of students to this point. The program has also been staffed by a committed and dedicated group of people. For Excel to be of any real significance, it must be demonstrated that the procedures are effective with large numbers of students and a "regular" staff. In regard to numbers of students, we do have some evidence from the fall of 1991 term. Although these data have yet to be fully analyzed, the descriptive results were again positive. The mean GPA for the 106 students participating in Excel was 2.51 while 20% of them were deficient. This is a slight increase in deficiencies, but it is significantly below the historical range for this group of students and similar to that of majority regularly admitted students. Thus, the approximate doubling of the size did not appear to be disruptive of the program.

The second caution has to do with long-term outcomes. Although a successful freshman year is important in increasing a student's chance of eventual graduation, it does not guarantee it. Achieving the goal of high retention and graduation rates for minority students may require systematic assistance programs beyond the freshman year. The follow-up data are very encouraging in

this regard. Although we have encouraged Excel students to continue their association with the program and its staff at this point extensive procedures have not been put in place to further support their efforts. Nonetheless, they are doing very well in comparison to their majority peers. Again, we believe much of this success is due to the student participation and campus involvement the program engenders. We will, however, continue to follow our students and analyze their patterns of success to determine if additional assistance is needed in identifiable cases.

Our plans for the immediate future are to expand the scope of Excel to involve more regularly admitted minority students and at-risk majority students as well as at-risk minority students. Further, as Richardson and Skinner (1990) have noted, the involvement of a broad base of university faculty appears to be very important for the long-term success of a program such as Excel. As a consequence, we hope to eventually include faculty from all areas of the university in the program. Finally, Excel has now become a permanent part of the University's academic support program serving 100 to 150 freshmen a year. We have, however, resisted the concomitant pressure to freeze the current program in place and will continue to collect data, make systematic changes and evaluate their effects.

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The minority student mentoring program was developed by Aaron Haskins and Stephen Sneed. Information concerning this program can be obtained by writing to the Division of Minority Affairs, Washington State University, Pullman, WA 99164-2328.



## References

- Allen, W.R. (1988). Improving black student access and achievement in higher education. Review of Higher Education, 11, 403-416.
- American Council on Education. (1988). Minorities in higher education: Seventh annual status report. Washington, DC: American Council on Education.
- Brigham, T.A. (1990, May). The use of study guides and peer tutors to improve the academic performance of college students. Paper presented at the Annual Meetings of the Association for Behavior Analysis, Nashville, TN.
- Brigham, T.A. (1989). Self-management for adolescents. NY: Guilford Press.
- Catania, A.C., & Brigham, T.A. (Eds.) (1979). The handbook of applied behavior analysis. New York: Irvington Publishers.
- Corona, L., & Keitel, B. (1985). ACCESS: Retaining underprepared college freshmen through coordinated instruction in literacy skills and general education. WPA: Writing Program Administration, 9, 51-58.
- Fantuzzo, J.W., Riggio, R., Connelly, S., & Dimeff, L.A. (1989). The effects of reciprocal peer tutoring on academic achievement and psychological adjustment: A component analysis. Journal of Educational Psychology, 81, 173-177.
- Fiske, E.B. (1988). The undergraduate Hispanic experience. Change, 20, 29-33.
- Harney, M., Brigham, T.A., & Sanders, M. (1986). Design and systematic evaluation of the freshman athlete scholastic training program. Journal of Counseling Psychology, 33, 454-461.

Heinman, M., & Slomianko, J. (1986). Critical thinking skills. Washington, DC: National Education Association.

Kirschenbaum, D.S., Malett, S.D., Humphrey, L.L., & Tomaken, A.J. (1982). Specificity of planning and the maintenance of self-control: A one year follow-up of a study improvement program. Behavior Therapy, 13, 232-240.

Lidren, D.M., Meier, S.E., & Brigham, T.A. (1991). The effects of minimal and maximal peer tutoring systems on the academic performance of college students. The Psychological Record, 41, 69-77.

Radebaugh, M.R., & Kazemek, F.E. (1989). Cooperative learning in college reading and study skills classes. Journal of Reading, 33, 414-418.

Richardson, R.C., & Skinner, E.F. (1990). Adapting to diversity. Journal of Higher Education, 61, 485-511.

Report of the President's Commission on the Status of Minorities. (1991).

Pullman, WA: Washington State University.

Robin, A., Martello, J., Foxx, R., & Archable, C. (1977). Teaching note-taking skills to underachieving college students. Journal of Educational Research, 71, 81-85.

Skinner, B.F. (1957). Verbal behavior. New York: Appleton-Century-Crofts, Inc.

Skinner, E.F., & Richardson, R.C. (1988). Making it in majority universities: The minority student perspective. Change, 20, 34-47.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.

Watkins, B.T. (1989 June 14). Berkeley Mathematician strives to help people get moving. The Chronicle of Higher Education, 35, A16-18.

Watson, D. & Tharp, R. (1985). Self-directed behavior. Belmont, CA: Brooks/Cole Publishing Company.

Wilson, R., & Justiz, M.J. (Fall 1987-Winter 1988). Minorities in higher education: Confronting a time bomb. Educational Record, 9-14.

Table 1: Academic progress of former Excel Students as of May, 1993

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 Freshman class entering fall 1989:

Entering class	65
Percentage retained	63%
Mean GPA of retained	2.47
Scheduled to graduate spring/summer 93	14
Likely to graduate spring/summer 94	21

## Percentage of class likely to graduate from

university after five years	54%
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## Non- freshman deficient students 1989:

Number participating	39
Percentage retained	74%
Mean GPA of retained	2.20
Graduate or scheduled to graduate spring/summer 93	15
Likely to graduate spring/summer 94	9
Percentage of group likely to graduate from the university after six years	61%

## Freshman class entering fall 1990:

Entering class	56
Percentage retained	87%

## Table 1 continued

Mean GPA of retained	2.50
Percentage academically deficient	18%
Number with 75 credits or more and GPA > 2.00	36
Percentage of class likely to graduate from the university after five years	64%

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## Figure Caption

Figure 1. The mean cumulative freshman year grade point average for the Excel and non-Excel groups related to their respective mean admission index number. The AIN is a composite score based on high school GPA and SAT score.

## Appendix A

**Psychology 100****Grading procedures**

Your performance in this class will be evaluated in three areas: weekly in class assignments and SALC homework, class projects and involvement in other university programs.

Each week you will be given at least one written class assignment covering that week's topic. The assignments will be used for class discussion and graded as either acceptable or unacceptable (3 pts. or 0 pts.). If you miss an assignment, you will have one week from the time the assignment is due to make it up. Should your work be unacceptable, you will have one week from the time it is returned in class to rewrite and return it for re-evaluation. There will be 15 in-class assignments of this sort for a total of 45 points.

In addition to the regular in-class assignments, you will have specific "homework" assignments to be completed in the Student Advising and Learning Center. These assignments will be coordinated through the Instructional Supports Groups that will be organized in the second week of class. There will be 13 assignments worth one point each, and you will be expected to complete at least 10 of them. If you complete more than 10, these will count as extra credit points.

There will be three larger class projects worth 10 points each and graded from 0 to 10. The projects consist of one three page analytical paper where you will be asked to state and logically defend a position on some controversial issue, a detailed objective self-monitoring report on all of your activities over a two week period, and a goal setting and attainment exercise.

Finally, because involvement in university activities outside class has been shown to be important in student satisfaction, persistence and overall academic performance, you are assigned the task of becoming a member of and active participant in a recognized campus organization such as Me.Ch.A., ASWSU, YWCA, etc. A list of groups will be handed out in class. This assignment is worth 10 points. A one page report on your participation will be due the last week of class. To earn the full 10 points, you must put a significant amount of effort into the group or organization. Attending a meeting or two will result in only minimal points.

Over the course of the semester, you will also have an opportunity to earn up to five bonus points for attending university events such as plays, concerts, and lectures. You will be asked to briefly summarize the event to earn the extra credit.



## Grading schedule

Total points possible 100 plus a maximum of 8 extra credit points.

A	94-100	C+	76-78	F	59 and below
A-	90-93	C	70-75		
B+	88-89	C-	67-69		
B	82-87	D+	64-66		
B-	79-81	D	60-64		

## Appendix B

## Psychology 101

**Grading procedures**

Your performance in this class will be evaluated in three areas: weekly in-class assignments and discussion group work, class projects and involvement in other university programs.

Each week you will be given at least one in-class graded assignment related to that week's topic. The assignments will be either written and used for class discussion or specific in class presentations. All assignments will be graded as either acceptable or unacceptable (3 pts. or 0 pts.). If you miss a written assignment, you will have one week from the time the assignment is due to make it up. Should your work be unacceptable, you will have one week from the time it is returned in class to rewrite and return it for re-evaluation. It will not be possible to make up a missed in-class presentation unless your absence was excused. Then an alternative written assignment will be substituted. There will be 15 in-class assignments of this sort for a total of 45 points.

In addition to the regular in-class assignments, you will have specific "homework" assignments to be completed in the Student Advising and Learning Center. These assignments will be coordinated through the Discussion Groups that will be

organized in the second week of class. There will be 18 assignments worth one point each, and you will be expected to complete at least 15 of them. If you complete more than 10, these will count as extra credit points.

There will be two larger class projects worth 10 points and 15 points respectively. They will be graded from 0 to 10 or 15 depending on the quality of your work. The 10 point project will be a four page research paper on a topic relevant to your proposed major. For the second 15 point project, you will develop a detailed plan for your academic, personal and professional development over the next two years.

Finally, there are a wide variety of workshops offered each semester by university departments and programs such as the student counseling center, career services, the division of minority affairs, etc. You will be asked to select and attend two workshops from a list provided in class. After you attend the workshop, you will write a brief report (1 to 2 pages) on the session and what you learned. Each report will be graded from 0 to 5.

Over the course of the semester, you will also have an opportunity to earn up to five bonus points for attending university events such as plays, concerts, and lectures. You will be asked to briefly summarize the event to earn the extra credit.

## Grading schedule

Total points possible 100 plus a maximum of 8 extra credit points.

A	94-100	C+	76-78	F	59 and below
A-	90-93	C	70-75		
B+	88-89	C-	67-69		
B	82-87	D+	64-66		
B-	79-81	D	60-63		

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