

Factors pertaining to academic probation of engineering students: A case study

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ABSTRACT

Ensuring normal progression of students is of paramount importance due to its financial implications in a higher education institution. An indicator that reflects how well an institution is doing in this respect is in the number of students on probation. This study was conducted through a survey to determine the underlying factors that lead to academic probation by the students in order to help in recommending remedial measures. As a case study, the survey was carried out on students in the College of Engineering at Sultan Qaboos University (Oman) who were on academic probation by the end of fall semester. This study has revealed that failure in basic science courses is a major contributing factor. Other factors are the students' poor study habits, inability to concentrate and lack of academic advising in some cases. Recommended remedial measures include establishing drop-in centers to provide individual tutoring, and an advising unit in each department. A course on study skills and time management is recommended for all new students.

Keywords: educational policy, educational administration, academic probation, student advising, drop-in centre, orientation centre

Nomenclature

CGPA : Cumulative Grade Point Average

GPA : Grade Point Average

GEDS : General Education Diploma Students

SQU : Sultan Qaboos University

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I. INTRODUCTION

The number of engineering students at Sultan Qaboos University who are on academic probation has recently been on the rise. To determine the underlying factors that lead to academic probation, and help decide remedial actions, a survey was carried out on students in the College of Engineering who were on academic probation by the end of the Fall semester. According to the Sultan Qaboos University (SQU) Academic Regulations,¹ a student who achieves a minimum GPA of 2.0 on both semesters and CGPA (Cumulative GPA) may continue without interruption in his/her degree program. A student will be placed on academic probation when the CGPA falls below 2.0 or the CGPA is above 2.0 but the semester GPA is less than 1.0 or the CGPA is above 2.0 but the semester GPA has been below 2.0 for two consecutive semesters. In such cases (or under such conditions), a student is required to take remedial actions, which may include limiting the number of credit hours to 12 in the semester. A documented interview with the student advisor becomes mandatory before registering for the following semester. During the interview, various alternatives are considered; these include: reduction of course load (9 to 12 credits); postponement of a course to a subsequent semester; taking a course that might help raise the GPA - such as electives or study skills courses; referral to the Deanship of Student Affairs, Counseling Center, or Health Clinic. A student who fails to attain regular status in two consecutive semesters will be asked to withdraw from the University.

A number of studies have investigated some of the factors that may lead to probation status,²⁻⁷. There is considerable empirical research evidence in the literature that correlate academic advising and student retention as in Astin⁸, Cuseo⁹, and Noel¹⁰. Various statistical analysis based studies have been carried out to investigate the factors contributing to academic probation at SQU. One such study¹¹ considered all university students under probation during the academic years 1995, 1996, 1997 and 1998. The highest rates were observed in the Colleges of Science, Agriculture and Engineering indicating that inadequate English Language proficiency and lower percentages in General Education Diploma Students (GEDS) were among the underlying factors of probation.

These previous studies considered students from different colleges without looking at specificities of some colleges that may affect the performance of the students. New studies are therefore needed to further investigate these and other factors related to academic probation in the College of Engineering. The results of such a study would help academic advisors and policy makers to provide better advisory services.

II. THE QUESTIONNAIRE

A questionnaire was prepared and given to students in probation. Ninety-two students filled it out and returned it back. These consisted of 79 male students and 13 female students on probation.

The questionnaire included 52 questions pertaining to three categories: Preliminary Information, Academic Probation, Study Technique and Time Management.

Preliminary information

This section elicits information about the background of the student prior to joining SQU; the level of English, which is the language of instruction, at the time of joining SQU; the decision maker in selecting the major as well as the interest; lodging during the semester; and circumstances pertaining to the family of the student.

Academic probation

This section deals with knowledge of Academic probation at SQU; knowledge of computing the Cumulative Grade Point Average (CGPA); personal circumstances or health problems that might have led to probation; courses that have led to academic probation; and remedial actions to exit academic probation.

Study technique and time management

This section of the questionnaire covers difficulties faced in taking exams; family influence; and concentration during lectures.

III. RESULTS OF THE SURVEY

The first interesting observation is that although on academic probation, most students are committed to continue in the College of Engineering. This might be due to the fact that over 56% of them are studying in the College of Engineering based on their first choice, and 91% are interested in their current specialization, which 85% have chosen by themselves. Few of these students (< 30%) think a transfer to another program or college is an option to consider, and majority of them (70%) do not consider withdrawing from SQU.

On academic advising, only a minority of students (14%) admitted that they never follow advice of their academic advisor while 78% have sought help of their academic advisor, and 39% felt that it was not useful. The majority of the students (over 70%) stated that they need help to exit the probationary status and only 19% think they do not need help to exit probation, however, 76.5% have seen their advisor once or not at all while on probation. Around half of students do not know how to compute their CGPA. These figures, and the fact that one third of the students surveyed had no idea about academic probation, indicate a need to improve the advising system. An effective remedy could be that each department appoints a group of experienced advisors to help students on academic probation, instead of the current regime of having all faculty members participate as advisors.

Almost all students consider themselves either completely, or partially responsible for being on academic probation and about 30% do not tell their families about being on academic probation. Seminars or workshops about academic probation and how be successful in university are suggested. These are to be arranged by experienced faculty members and top senior students from different societies in order to provide the student with the necessary information.

Five different factors that may lead to academic probation were determined, namely, absenteeism, teaching methods, language of instruction, adapting to university life and mode of study. Exactly 41.3% indicated absenteeism and not studying is a contributing factor to being on academic probation. Different teaching methods at the university have been indicated by over 57% of respondents as a cause of difficulty in studying and 39% indicated the language of instruction, however only 25% think the study program/specialization is difficult. About 17% of students face difficulty in adapting to university life when not in their home environment. However, the majority (about 75%) find that it is difficult to adapt to the university mode of study. A small group (25%) suffers of ineffective study habits and most of them get involved with group study only sometimes.

The university does not provide on-campus accommodation to students living within 100 Km of the campus. These students either live in the family home or share accommodation off-campus with other students. The latter group represents 61% of students. It can be concluded that absenteeism and not studying correlate with living accommodation during semester.

Early years are the most critical when most probation students are in their third semester taking out-of-college courses (especially Math). This fact points to the importance of providing help early to students while they are taking basic science courses before they begin taking department courses.

Students, in general, tend to consult with each other more than with their instructors. It is helpful to consult with their colleagues; however their opinion should be supported by consultation of the academic advisor.

Semesters spent studying English help students get used to university life without the pressure of university courses. Around 18% of students under probation have started their credit programs without taking intensive English courses. It is important to note here that a large percentage (around 15%) of students admitted to Engineering are usually exempted from English. Thus, the proportion of students under probation who were exempted from English is greater than that of those who spent one semester or more studying English. A relatively light load and close monitoring by academic advisors is therefore recommended for these students during the first semester.

IV. CONCLUSIONS AND RECOMMENDATIONS

The results of this study revealed the different factors that may lead to academic probation in the College of Engineering.

1. One of the major factors is ineffective study habits. This is normally related to change from school to university environment. Effective study habits may be enhanced by taking a course on study skills and time management mandatory for new students. It is recommended to establish orientation centers, staffed by senior students, to help new students and answer their queries.

2. The outcome of this study has revealed that failure in basic science courses, particularly in mathematics courses, is a major contributing factor. Therefore, recommended remedial measures include establishing drop-in centers to provide assistance to students who need individual tutoring in these courses.
3. An additional factor is the advising system in the college. A majority of probation students did not seek help from their academic advisors as they thought their advice would not be helpful. To improve advising, establishment of an advising unit is proposed for each department to help resolve students' academic problems.

REFERENCES

- [1] SQU. *Sultan Qaboos University Academic Regulations*. SQU Press; 2005.
- [2] Altmaier EM, Rapport RJ, Seeman D. A needs assessment of liberal arts students on academic probations. *Journal of College Student Personal*. 1983;24(3):266–267.
- [3] Cooper-Bouchard CC. *A study of students on academic probations at the College of Bahamas*. Unpublished Doctor Dissertation, the University of Miami, 1991.
- [4] Fish LS, Blumberg P, Ledet AO. Student on academic probation: a family system analysis. *Journal of College Student Development*. 1989;30(4):373–374.
- [5] Linus UO. Is academic advising an 'academic exercise' or a pragmatic response to institutional commitment? - experience at a New Zealand university. Academic Advising Symposium, Sultan Qaboos University, Oman.
- [6] Thombs DL. Problem behavior and academic achievement among first-semester college freshmen. *Journal of College Student Development*. 1995;36(3):280–288.
- [7] Williams JM, Decker TW, Libassi A. The impact of stress management training on the academic performance of low-achieving college students. *Journal of College Student Personal*. 1983;24(6):491–494.
- [8] Astin AW. *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass; 1997.
- [9] Cuseo J. Academic advisement and student retention: empirical connections & systematic intervention. 2003, <http://www.brevard.edu/fyc/listserv/remarks/cuseorientation.htm>
- [10] Noel L, Levitz R, Saluri D. *Increasing student retention*. San Francisco: Jossey-Bass; 1985.
- [11] Moosa SM, Ibrahim AM. An Investigation of Academic Probation in Sultan Qaboos University. *Psychological and Educational Studies Series*. 2000;4:134–170.