An Empirical Study of Degree Completion Patterns

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To plan and implement effective strategies for retention and expedient degree completion, data about the trends that currently exist within a particular program must be available for analysis. This article describes the process used to collect and analyze data on degree completion for 149 graduates of the Health Administration Program at Eastern Michigan University (EMU) between 1993 and 1997. Differences between students enrolled exclusively at EMU and transfer students are presented. The article also includes a description of strategies that have been implemented to improve retention and efficient degree completion for health administration majors.

Background

The Health Administration Program at Eastern Michigan University (EMU) was established in 1979. It is one of three programs in the Department of Associated Health Professions (DAHP): Health Administration, Clinical Laboratory Sciences, and Occupational Therapy. DAHP is one of four departments housed in the College of Health and Human Services (Nursing; Social Work; and Human, Environmental, and Consumer Resources). The college is one of five within the university. EMU is located in the town of Ypsilanti in southeastern Michigan. Over 23,000 undergraduate and graduate students attend EMU. The majority of the students commute to campus and many work either part- or full-time.

A goal of the EMU and the Health and Human Services College has been to implement systematic methods to both retain students and facilitate their timely progression to graduation. However, no explicit or focused information about the characteristics of the students in the Health Administration Program or their patterns of enrollment and program completion rates were available. A systematic study was needed to support or refute the general impressions of the Health Administration faculty about the majors and graduates of the program.

Many unknowns needed to be addressed. What was the percentage of transfer versus native students (those who initially enrolled and exclusively attended EMU)? How long does the average student take to complete the program? Are transfer students at a disadvantage in timely completion of the program? What is the range and average number of credits completed at the time of graduation? This paper presents the results of the empirical study conducted on graduates from the EMU Health Administration Program.

Description and Methods

The purpose of this study was twofold: a) to obtain a better understanding of the similarities and differences between transfer and native students majoring in health administration at EMU and b) to develop a database to assist in the assessment and continuous improvement of the Health Administration Program. This information could then be used to guide curriculum development and planning and aid in the development of a retention and marketing plan. This research was exploratory and retrospective.

The following initial question prompted this study: How many credit hours do health administration majors take by the time they graduate from EMU? This is a very important question because the answer has implications for student retention as well as students' efficient progression toward degree completion. Through informal discussions with the four program faculty members, the following faculty perceptions were revealed:

1. Most graduates complete more than 124 credits to obtain their degrees. (EMU requires a minimum of 124 credits for a baccalaureate degree.)

2. A majority of students in the Health Administration Program are transfer students.

3. Transfer students attempt and complete more credits hours to obtain their degree than do native students.

We examined the computerized academic records of all individuals (149) who graduated from the Health Administration Program between winter (second) semester 1993 and winter semester 1997. The data were obtained from the EMU Interactive Student Information System (ISIS), an electronic information system used for academic advising, academic records, and other administrative purposes.

For this 4-year period, data were collected on the following variables:

1. Attempted Credit Hours includes all credit hours attempted by students at EMU, including not only courses that were repeated and courses for which either a passing or failing grade were received, but also incomplete courses, and courses from which the student withdrew.

2. Completed Credit Hours includes all credit hours completed at EMU plus hours transferred from other colleges. Only courses with a grade of C or higher will transfer to EMU from other colleges. Courses taken at EMU include any course completed for which a grade was awarded, including a failing grade and repeated courses. The number of hours completed is a subset of the number of hours attempted.

3. Transfer/Native Student Status indicates if the student transferred to EMU or has attended EMU exclusively.

4. Years to Graduate indicates the number of years that the student took to graduate from EMU. The initial year is the year when the student first enrolled at EMU (no distinction was made between native and transfer student), while the final year is the year when the student completed the degree.

5. Completion of an Associate Degree indicates if the transfer student completed an associate degree before transferring to EMU.

6. Number of Credit Hours Transferred indicates the number of credit hours that the student was able to transfer to EMU.

7. Demographics denotes a set of variables that includes the student's age at the time of initial enrollment at EMU, the student's ethnic origin or race, and the student's gender.

The data were analyzed with SPSS v. 6.1 software. The descriptive statistics, frequency distributions, and contingency tables that describe these data are subsequently presented.

Results

Table 1 contains a summary of the descriptive statistics that highlight key variables examined in this study. The reader should keep in mind that to obtain a baccalaureate degree in Health Administration, an EMU Student must earn a minimum of 124 credit hours. Based on mean and median values, one can see that Health Administration majors completed an average of 6 to 10 more credit hours than the EMU minimum graduation requirement, on average attempted an additional 14 to 19 credits, and took from 4 to 6 years to graduate. The table also shows that more than one half of the students transferred from other universities, and very few transfer students came with a completed associate degree. Demographic information is also presented in the table. Outlier values were eliminated from the calculation of averages when including them made no difference in the resulting calculated values.

As evidenced in Table 1, the ranges for all of the variables suggested a significant level of variation in their value distribution. Therefore, we conducted simple frequency distributions and cross tabulations to unveil possible differences among groups in which relationships may be masked by mean statistics.

Table 2 presents a comparison of the percentage distributions for both native and transfer students by credit hours attempted and credit hours completed. While approximately two thirds of the students were able to graduate within 124–133 earned credits, the remaining one third accumulated between 134 and 173 credits before degree completion. The table also shows that the majority of the students attempted between 134 and 223 credits by the time they graduated. The data suggest that transfer students earned a larger number of credits than did native students to complete the program.

Other data not included in tables were interesting. Nonnative students transferred an average of 44 credits to EMU; 20% of them transferred between 60 and 99 credit hours. The mean of 44 credits was less than expected because faculty members thought a greater number of transfer students in the program would have completed an associate degree (approximately 60 credits).

When comparing means and medians, we found that native students took an average of 5.7 years (median = 5.0) to complete their degrees compared with an average of 5.6 years (median = 4.0) needed for transfer students to graduate. These transfer student data do not include the time students spent at community colleges or other universities before transferring to EMU. Because the majority of transfer students took between 1 and 2 years of course work before enrolling at EMU, we estimated, based

on the median, that transfer students took from 5 to 6 years to complete their college course work. We are confident about this estimate because one half of the transfer students completed 45 credit hours or more at the community college level. Approximately one fifth (19%) of native and transfer students took between 8 and 20 years to complete their degrees.

Discussion

Approximately two thirds of the students who graduated from the EMU Health Administration Program from 1993 through 1997 completed at least the required number of credit hours (124). However, the remaining one third of the graduates completed more than 133 credit hours by the time they finished their degrees. A majority of the students attempted a larger number of credit hours than necessary, making the progression toward graduation inefficient. Some graduates took many years to finish their degrees. This pattern was anticipated because 75% of the students in the program attended part-time.

Although the typical transfer student did not transfer an excessive number of credit hours, approximately one fifth transferred more than 60 credit hours. An important finding shows that transfer students attempt and complete more credit hours than native students do. This extra course load may be attributed in part to differences in course equivalencies among academic institutions, lack of accurate information and advising, student indecision about selecting a major, and personal lives that interfere with timely progression to graduation.

Based on anecdotal information and the review of an individual-student chronological listing of courses taken at EMU, we have also observed that, after transferring to EMU, some students took courses without clear goals for as long as 1 academic year. Some did not know that a Health Administration program is available at EMU. Because more than one half of students in the pro-

Table 1 Key variables for EMU Health Administration graduates, 1993–97

Variable	*N*	Mean	Median	*SD*	Range	%
No. completed credit hours at graduation	145	134.51	130	12.06	124–194	n.a.
No. attempted credit hours at graduation	145	142.97	138	16.61	124–222	n.a.
No. credit hours transferred	85	44.29	45	22.61	3–121	n.a.
No. of years to graduate from EMU	149	5.66	4	4.42	2–29	n.a.
Student age at point of admission to EMU	149	20.64	19	4.23	18–42	n.a.
Female	149	n.a.	n.a.	n.a.	n.a.	71
African American	149	n.a.	n.a.	n.a.	n.a.	23
Transfer student	149	n.a.	n.a.	n.a.	n.a.	57
Transfer student with associate degree	85	n.a.	n.a.	n.a.	n.a.	2

Note. n.a. means not applicable.

Table 2 Percentage distributions of credit hours attempted and completed for native and transfer students of the EMU Health Administration Program, 1993–97

	Attempted Hours			Completed Hours		
Credit Hours Category	Total	Native	Transfer	Total	Native	Transfer
124–133	37.9	40.6	35.8	62.1	76.2	51.2
134–143	20.7	28.1	14.8	15.9	11.1	19.5
144–153	16.6	9.4	22.2	13.8	9.5	17.1
154–163	12.4	9.4	14.8	5.4	3.2	7.3
164–173	6.9	6.2	7.5	2.1	0	3.7
174–183	4.1	4.7	3.7	0	0	0
184–193	0	0	0	0	0	0
194–203	0.7	0	1.2	0.7	0	1.2
204–213	0	0	0	0	0	0
214–223	0.7	1.6	0	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note. $N = 145$.

gram are transfer students, one of the implications of these findings is that program strategies should be focused on interventions directed at improving the transition of transfer students to EMU.

Current Strategies and Future Plans

The initiatives developed by DAHP to increase student retention in response to the study's findings are as follows:

1. All declared majors were assigned to a health administration faculty advisor for proactive advising with students who may be experiencing difficulty in classes, have irregular class attendance, or have stopped coming to class. In addition, students are encouraged to seek advising at least once each term.

2. The department works with the EMU Admission Office to encourage interested students to see the department advisor for specific program information. The Health Administration Program collaborates with the University Admissions Office by attending recruitment fairs and developing advising and informational materials for transfer students from community colleges.

3. DAHP collaborates with EMU Academic Advising to direct potential students to the DAHP. DAHP faculty members have developed a solid relationship with the staff at the Academic Advising Center, who are aware of DAHP offerings and opportunities, especially those for transfer applicants.

4. Department personnel have developed articulation agreements with the community colleges that provide the largest percentage of transfer students to the program. DAHP personnel have identified potential feeder programs and established agreements that will attract students to the program after completion of their associate degrees. Under these agreements, a significant portion of the student's specialty courses (for example, radiography, health information technology) is credited toward the Health Administration degree. These agreements will accelerate degree completion.

5. Develop and implement a tracking system to monitor the retention and progress of students in the program. We plan to develop a system to track students throughout the program. An example of how we intend to do this is that during the winter semester, students who withdrew from courses will be contacted by the program director and interviewed to determine student reasons for dropping courses. Based on student responses, program administrators hope to modify the DAHP to encourage student retention in class. Courses that are particularly critical for the successful progression of the student in the program, such as a prerequisite course for upper-level health administration courses, will be scrutinized most closely.

Concluding Remarks

The data presented in this paper suggest that the majority of students graduating from the EMU Health Administration Program between 1993 and 1997 took between 4 to 6 years to complete their degrees once enrolled at EMU. More significant, a considerable subgroup of this student population took an extremely long time to finish their degrees. In general, graduates attempted and completed a large number of credit hours, well beyond the graduation requirement. Students that transferred to EMU from community colleges constituted the more pronounced group following this trend. We discovered that, contrary to faculty member impressions, most of the transfer students did not obtain their associate degrees before transferring to EMU. Transfer students also took longer to complete their degrees at EMU than did native students.

These findings are especially important because the majority of graduates at EMU were transfer students. The longer the student takes to complete a degree, the greater the risk of losing that student (higher attrition). As a result DAHP needs to develop interventions to increase student retention and to reduce the length of time that students take to complete their degrees. Particularly, the University and Program must improve academic advising for transfer students to allow for efficient and effective student progression to graduation.

Reference

SPSS [computer software]. Chicago, IL: SPSS.

Authors' Note

Dr. Roberto E. Torres Zeno is a full professor and Director of the Health Administration Program at Eastern Michigan University. His primary areas of interest include strategic planning, medical technology assessment, indigent health care, health

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