The purpose of this study was to compare the academic performance of three student groups within the University of Missouri-Columbia's (MU) undergraduate teacher education program for two cohorts of students. The first cohort totaled 132 students who graduated in 2002. One hundred eight of these students were native/first-time freshmen, 5 were community college transfer students, and 19 were four-year college transfer students. The second set consisted of 112 students who graduated by May 2003. Eighty-seven of this cohort were native students, 7 were community college transfer students, and 18 were four-year college transfers. Sixty-four percent of the native students in the first cohort, and 76% of those in the second cohort had taken dual credit courses at a community college while in high school. The study demonstrated that in each of the two student sets, community college transfer students performed at approximately the same level academically as did the native students. This is useful evidence for those seeking to develop teacher education articulation agreements with individual community colleges in Missouri. Scrutiny of community college students' records gave no indication as to why they did so well. The authors recommend conducting similar studies over several years. (Contains 13 references.) (NB)
Comparing the academic performance of community college transfer and native students at a four-year institution is a mainstay of research on community college transfer students. Koos (1925/1970) conducted one of the earliest studies of transfer when he examined the academic performance of 95 junior college graduates from 19 junior colleges to 13 universities and six four-year colleges. The tradition of examining community college transfer performance continues into the 21st century as witness a recent issue of Community College Journal of Research and Practice, which includes the article “Academic Performance of Community College Transfer Students and ‘Native’ Students at a Large State University” (Glass & Harrington, 2002), and the Fall 2002 issue of the Journal of Applied Research in the Community College, which contains the article “Assessing Transfer and First-Time Freshman Student Performance” (Porter, 2002).

Generally, these studies examine community college transfer students’ grade point average (gpa) at the end of their first semester at the four-year institution, often for evidence of transfer shock and then compare students’ cumulative gpa with those of native students. Studies vary in their results, but typically community college transfer students experience a drop in their first semester four-year gpa as compared to the exit gpa from the community college (e.g., Diaz, 1992; Glass & Harrington, 2002; Karpis, 1992), tend to graduate with grade point averages similar to those of native students (e.g., Solomon, 2001; Townsend & Barnes, 2001), but are less apt to graduate (e.g., Anglin, Davis, & Mooradian, 1995).

Less typically, the academic performance and educational attainment of four-year college transfer students has been studied. Using Cooperative Institutional Research Program (CIRP) data from 1971 and 1980 surveys, Kocher and Pascarella’s (1990) national study of Caucasian and African-American four-year college students who began college in 1971 and then transferred to another four-year college found “significant negative direct and total effects on educational [degree] attainment” (p. 171) for the students, although the effects were stronger for the African-American students than the Caucasian. Additionally, there was “a significant negative indirect effect for all groups” (p. 173) upon occupational status attained by 1980, and negative effects on income for Caucasian males and African-American females. While the data for this study are quite old, the findings of the deleterious effects of transfer among four-year colleges suggest that transfer itself, not transfer from the two-year sector to the four-year sector, may negatively affect educational attainment and consequent occupational status and income.

A study that supports the idea that the sector from which one transfers does not affect educational attainment is Beckenstein’s (1992) single-institution study of two-year and four-year college transfer students who had previously participated in special programs for underprepared students. The author did not find any significant differences...
in the students’ persistence to graduation at the receiving institution, where they also participated in a program for underprepared students.

This single-institution study includes both two-year and four-year college transfers and compares their academic performance to native students at a four-year school, but expands previous transfer studies by including a new measure of academic performance besides GPA: successful initial completion of two required portfolios for students in a teacher education program.

The Role of Portfolios in Undergraduate Teacher Education

As part of the late twentieth century’s accountability movement in higher education, institutions and programs have been pressed to demonstrate what students are learning as opposed to what teachers are teaching. In teacher education, some programs, concerned with performance assessment, began in the 1990s to ask or even require their students to develop portfolios demonstrating their ability to meet specified standards for teacher education programs (Anderson & DeMeulle, 1998). Just as individual programs moved to this requirement, so too have many states. Teacher education candidates are now required to have a portfolio on file with the institution that recommends them for state certification. The portfolio is designed to address students’ ability to meet the state’s standards for performance outcomes for teachers. Students must provide evidence to demonstrate the required knowledge, skills, and dispositions in given areas such as human development and diversity.

The undergraduate teacher education program at the University of Missouri-Columbia, a large, selective Research Extensive university, moved to portfolio requirements during the last few years. The current undergraduate teacher education program is divided into four phases, three of which occur while the student is enrolled at the institution. Since spring 1998 students have been required to develop a mid-level preparation portfolio at the end of the first phase of the program (Phase I) and since spring 2000 to develop a senior-year portfolio to be completed as a requirement for state certification and to conclude Phase III of the program (when students graduate).

To receive a passing grade on the mid-level preparation portfolio, students must not only have an adequate portfolio but also make an oral presentation regarding the portfolio’s content to a panel of reviewers, who are teacher educators from K-12, education, community colleges, and the university. Senior-year portfolios are reviewed by a team of evaluators, including university faculty and external graders, but no oral presentation is required. On both portfolios students could receive an initial “pass” grade even if one or two of the standards needed to be revised. Students who do not initially receive a passing grade on their senior portfolio must rework it until it merits a passing grade. Otherwise, they will not be recommended for state certification but they will still graduate with a Bachelor of Science in Education (BSED).

Purpose

The purpose of this study was to compare the academic performance of three student groups within the University of Missouri-Columbia’s (MU) undergraduate
teacher education program for two cohorts of students. Academic performance was defined in terms of the following dependent variables: (1) initial performance on the mid-level preparation portfolio (pass/fail), (2) initial performance on the senior-year portfolio (pass/fail), and (3) cumulative grade point average (gpa) at end of senior year/point of graduation. Thus this gpa would include courses taken by transfer students at their previous institutions. The independent variable was the status of the student (community college transfer student, four-year college transfer student, or native student).

Method

The population for this study was two sets or cohorts of students. The first set, labeled hereafter as Student Set 1, totaled 132 students who had completed their mid-level preparation portfolio by spring 2000, initially passed their senior-year certification portfolio in spring 2002, and graduated in May 2002: 108 native/first-time freshman students, 5 community college transfer students (including three with A.A. degrees), and 19 four-year college transfer students. The second set, hereafter labeled as Student Set 2, totaled 112 students who had completed their mid-level preparation portfolio by Spring 2001, initially passed their senior-year portfolio in spring 2003, and graduated by May 2003: 87 native students, 7 community college transfer students (including 2 with A.A. degrees), and 18 four-year college transfer students. Thus the total population for the study was 243 students.

Initially the number of students in the groups of community college transfers and four-year college transfers was ascertained by looking at student records where the student self-identified as community college or four-year college transfers. However, an examination of student transcripts revealed different numbers. In other words, students’ self-identification of their academic background did not match the background displayed on their transcripts. The researchers decided to use the transcripts as the basis for classifying in which of the three groups students would be placed.

Findings

Dual Credit and Incidental Course Work Patterns of Enrollment

Transcript analysis revealed not only whether students were native to MU or were transfer students, but also revealed whether native students had taken dual credit courses while in high school and whether any students had participated in "incidental course work" (Adelman, 2003) at other institutions, i.e., concurrently enrolled at another college while also enrolled at the university and/or had enrolled at another institution during summer school.

Taking college-level courses while in high school and receiving both college and high school credit for them (dual credit courses) was a common practice among the students whose first college after high school was MU. Among the 108 native students in Student Set 1, 69 (64%) had taken one or more dual credit courses. Of the 112 native students in Student Set 2, 66 (76%) had taken one or more dual credit courses. Since the
transcripts did not usually indicate the high school graduation date of transfer students, it was not possible to ascertain with certainty if these students had taken dual credit courses.

Enrollment in summer school at an institution other than MU was somewhat common. In Student Set 1 47 (36%) of the students had taken at least one summer school course at another college or university after matriculating at the university: 41 (38%) of native students, 1 (20%) of two-year college transfers, and 5 (26%) four-year transfers. Of these students, 38 or 29% of all students in Student Set 1 had taken a summer course at a community college In Student Set 2, 43 (38%) of the 112 students had enrolled in summer school at another institution, including 35 (40%) of native students, 2 (28%) of two-year transfers, and 6 (33%) of four-year transfers. Of these 43 students, 31 (72%) had enrolled in summer school at a community college; in other words, 28% of those in Student Set 2 had attended summer school at a community college after matriculating at the university. In short, 90 (37%) of the 244 students in the study went to summer school elsewhere, including 69 (28%) who enrolled in a community college.

Students were far less apt to have concurrently enrolled in two institutions during a semester. In Student Set 1 only 19 (14%) had done so: 17 (16%) native students, 1 (20%) two-year college transfer, and 1 (05%) four-year college transfer. In Student Set 2, 14 (12%) had concurrently enrolled: 12 (14%) of native students, 1 (17%) of two-year transfers, and 1 (05%) of four-year transfers. Concurrent enrollment were more likely to occur at four-year institutions: only 13 (10%) of those in SS1 concurrently enrolled at a community college and only 4 (03%) of those in SS2, for a total of 17 (07%) of students in both sets.

Few students both concurrently enrolled and attended summer school: only 8 (06%) of the students in SS1 and 6 (05%) of the students in SS2. In other words, a total of 14 (06%) students in the study did both.

Mid-level Preparation Portfolio

In both student sets, initial pass rates differed by type of student. In Student Set 1, the initial pass rate was 40.7 % for native students, 40 % for community college transfer students, and 21.1% for four-year college transfer students. In Student Set 2, the initial pass rates increased for native and four-year college transfer students but declined for community college transfers: 44.8% for native students, 42.9% for community college transfers, and 50% for four-year college transfers.

Senior-Year Portfolio

As with the mid-level preparation portfolio, the initial pass rates on the senior-year portfolio differed by type of student. For Student Set 1 (May 03 graduates) the pass rate was 61.1% for native students; 60% for community college transfer students, and 61.4% for four-year college transfer students. For Student Set 2 (May 03 graduates), the pass rate was 27.6% for native students, 28.6% for two-year college transfers, and 38.9% for four-year college transfers.

Cumulative Grade Point Average
The cumulative or exit grade point average for those in Student Set 1 (May 2002 graduates) was as follows: 3.56 for native students, 3.60 for community college transfers, and 3.64 for four-year college transfers. For Student Set 2, (May 2003 graduates) the cumulative grade point average was 3.59 for native students, 3.40 for two-year college transfers and 3.53 for four-year college transfers. Application of ANOVA did not indicate any statistically significant differences in gpa at exit from the program for either set of students.

Conclusions and Implications for Institutional Research

The students' enrollment patterns at other institutions, either concurrently or during summer school, exemplify patterns found by Adelman (2003) in his most recent age-cohort study that used the NELS88 survey data of students who were eight-graders in 1988 and who were followed for 12 years. Their post high school educational patterns included extensive use of the community college, either for initial collegiate attendance or for "incidental course work" (p. 28) such as concurrent enrollment or summer school attendance. More specifically 15% of the four-year college students in the NELS88 study had incidental course work at community colleges during 1992-2000. The percentage in this study is much higher: 69 (28%) had enrolled in a community college summer school course and 14 (07%) had concurrently enrolled at a community college.

A probable reason for the extensive incidental course work is the heavy general education requirements in the teacher education program at MU. Students must take a minimum of 51 general education hours (a University requirement) and may well take additional hours if they did not initially choose the specific general education courses required for teacher education. Also, those students who switch to a teacher education program after majoring in another area usually find that a number of their courses don't count for the program, so they take summer school courses in their home town or concurrently enroll to gain the needed courses in a timely manner.

Adelman also examined the extent of dual credit or dual enrollment among students whose first collegiate experience was the community college. Dividing these students into three groups depending upon the extent of their enrollment in the community college, he found that the percentage of students earning dual credit ranged from 14.2 to 18.9% (p. 29). As with incidental course work at the community college, the percentage of this study's native university students who entered with dual credits was substantially higher. This may be because Missouri is one of the leading states in number of dual credit courses offered (Girardi & Stein, 2001). It may also be because high school students who plan to enroll at universities rather than community colleges after high school graduation are more likely to take dual credit courses.

Regarding the academic performance of the community college transfers, the study demonstrates that in each of the two student sets, community college transfers performed at approximately the same level academically as did the native students. The comparable performance of the community college transfers is useful evidence at the institutional level for those seeking to develop teacher education articulation agreements.
with individual community colleges in Missouri. It is also information that should be shared with teacher education faculty at Missouri's community colleges.

Also of interest is how well the four-year college students did: With the exception of these students' low performance on the mid-level preparation portfolio, four-year college transfer students slightly outperformed both native and two-year college students in the other pass rates. It appears that transfer students, whether two-year or four-year college transfers, do as well or better than native students in this University's undergraduate teacher education program.

Regarding future research, at the institutional level the study needs to be conducted over several years. When the researchers first ran the results for Student Set 1, they were elated to find how well the community college transfers had done on the initial pass rate for the mid-level preparation portfolio (almost equal to that of native students and much better than four-year college transfers). A scrutiny of these students' community college transcripts did not provide clues as to why these students had done so well. Therefore, a second set of students was examined to see if the same results would occur and they did. Native students and two-year college transfers had approximately the same level of performance on the mid-level preparation portfolio and the senior portfolio, and the differences in cumulative GPA were slight. Only by repeating the study for several years can the researchers know if the results of this study are typical or atypical.

While not germane to a comparison of the academic performance of transfer students to that of native students, the differing collective senior portfolio initial pass rates between SS1 and SS2 is glaring. All three student groups in SS2 had a much lower initial pass rate than did those in SS1. Program faculty need to determine if they changed their grading standards from one year to the next and decide on standards consistent across time.

Limitations of the study include it being a single-institution study, with consequent limited generalizability of findings beyond the specific teacher education program in the study. This study needs to be replicated at other institutions requiring portfolios in teacher education programs to see if community college transfer students' academic performance found in this study is typical or atypical. Another limitation is the small number of transfer students, particularly two-year college transfer students, in each student set.

References


Beckenstein, L. Success rate of transfer students enrolled in a program for the underprepared at a senior college. Journal of College Student Development, 33(1), 56-60.


I. DOCUMENT IDENTIFICATION:

Title: A Comparison of Transfer and Native Students' Academic Performance in a Teacher Education Program

Author(s): Barbara K. Townsend, Deborah Cass, & Robbie Scholer

Corporate Source: Paper presented at 2nd Biennial Transfer & Articulation Conference, Tampa, FL

Publication Date: July 2003

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Sample

Level 1

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Sample

Level 2A

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Sample

Level 2B

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided introduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Barbara Townsend, Professor
University of Missouri-Columbia
202 Hill Hall, Columbia, MO 65211

9/18/03

Telephone: 573-882-1040
FAX: 884-5714

Townsend@missouri.edu
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2003)