

1-1-2002

Comparison of academic statistics of two-year college transfer and native fisheries and wildlife students at the university of Missouri

Janice E. Faaborg

Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia

Joshua J. Millspaugh

Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia

Mark R. Ryan

Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia

Follow this and additional works at: <http://digitalcommons.usu.edu/nrei>

Recommended Citation

Faaborg, Janice E.; Millspaugh, Joshua J.; and Ryan, Mark R. (2002) "Comparison of academic statistics of two-year college transfer and native fisheries and wildlife students at the university of Missouri," *Natural Resources and Environmental Issues*: Vol. 9, Article 45. Available at: <http://digitalcommons.usu.edu/nrei/vol9/iss1/45>

This Article is brought to you for free and open access by the Quinney Natural Resources Research Library, S.J. and Jessie E. at DigitalCommons@USU. It has been accepted for inclusion in Natural Resources and Environmental Issues by an authorized administrator of DigitalCommons@USU. For more information, please contact becky.thoms@usu.edu.



COMPARISON OF ACADEMIC STATISTICS OF TWO-YEAR COLLEGE TRANSFER AND NATIVE FISHERIES AND WILDLIFE STUDENTS AT THE UNIVERSITY OF MISSOURI

Janice E. Faaborg,¹ Joshua J. Millspaugh,² and Mark R. Ryan³

¹Academic Advisor, Department of Fisheries and Wildlife Sciences, University of Missouri, 302 ANBR, Columbia, MO 65211-7240. Tel.: 573-882-9422; fax: 573-884-5070; e-mail: FaaborgJE@missouri.edu

²Assistant Professor, Department of Fisheries and Wildlife Sciences, University of Missouri, 302 ANBR, Columbia, MO 65211-7240. Tel.: 573-882-9423; fax: 573-884-5070; e-mail: MillspaughJ@missouri.edu

³Professor, Department of Fisheries and Wildlife Sciences, University of Missouri, 302 ANBR, Columbia, MO 65211-7240. Tel.: 573-882-9425; fax: 573-884-5070; e-mail: RyanMR@missouri.edu

ABSTRACT: As an increasing number of high school graduates take advantage of less-stringent economic and entrance requirements offered through two-year colleges, concern is mounting at the University of Missouri (MU) and other major universities about the ability of two-year college transfer students to compete in advanced, preprofessional curricula such as Fisheries and Wildlife. We assessed the validity of this concern by examining the academic histories of two-year college transfer students ($n = 21$), students transferring into our department from another MU program ($n = 23$), and students who had enrolled in Fisheries and Wildlife Sciences (FW) as freshmen ($n = 56$). Two-year college transfer students were less likely to complete the degree program in Fisheries and Wildlife than native students or transfer students from another department at MU. Students transferring to MU from two-year colleges had lower overall grade-point averages (GPA) at graduation and lower GPAs in advanced professional courses than native or other MU transfers. At graduation, both two-year college and MU transfers had taken substantially more credit hours than native FW students. For students wishing to complete a B.S. degree in Fisheries and Wildlife, the decision to begin their studies at two-year colleges might have academic and career costs; furthermore, anticipated reduction in economic costs may not be realized as hours required to graduate mount.

INTRODUCTION

In the Department of Fisheries and Wildlife Sciences at the University of Missouri (MU), the proportion of undergraduate majors who have transferred into the program from a two-year college has increased notably in recent years. In Missouri, high school students choose to begin their college experience at two-year institutions largely for two reasons: economics and academic qualifications. Tuition (per credit hour) is lower at two-year colleges than at MU; therefore students, and their parents, assume that the overall cost of higher education will be less if they enroll for the first 1-2 years at two-year colleges. Because MU has “selective” enrollment, based largely on ACT (or SAT) scores, not all students qualify for admission directly out of high school. However, if those students enroll for at least one semester at an accredited two-year college (usually with open enrollment) and earn passing grades, they may transfer to MU without limitation.

In 1993 the State of Missouri’s Outstanding Schools Act initiated the A+ Program, a school-improvement initiative designed to bring schools up to a higher standard and decrease the dropout rate. Students attending schools that meet “A+” standards who (1) maintain a 2.5 GPA; (2) have a 95% attendance record; (3) complete 50+ hours of unpaid tutoring or mentoring; (4) adhere to a no drugs and alcohol policy; and (5) maintain a 2.5 GPA at their chosen technical school or two-year college will be awarded two years of free tuition at those institutions. While the initial intent was to target schools and students who were at risk, the unintended effect is that highly qualified students are opting for the two-year college route because of perceived economic savings. Since 1997, more than 19,000 Missouri students have qualified for the A+ Program.

As the number of two-year college transfers to the Department of Fisheries and Wildlife Sciences at MU increased, we became increasingly concerned that students entering the program from two-year colleges might not be adequately prepared. As advisors and instructors, we observed anecdotal evidence that suggested these students showed weaker academic achievement (including academic dismissal or inability to compete for graduate

school opportunities) and/or required more time to complete the B.S. degree, thus negating the economic benefits of beginning at a two-year institution.

To quantify these concerns we examined the academic records of all students enrolled in our program since 1999 to assess their graduation rate, their overall performance (GPA at graduation), the likelihood of academic probation or suspension, their academic performance in advanced, professional courses, and total credits at graduation.

METHODS

We assessed the academic histories of two-year college transfer students ($n = 21$), students transferring into our department from another MU program ($n = 23$), and students who had enrolled in Fisheries and Wildlife Sciences (FW) as freshmen ($n = 56$). We recorded whether each student graduated, the number of transfer credits, the number of years at MU, the cumulative grade-point average (GPA) at graduation (for two-year college transfers, GPAs reflect only grades at MU), total number of college credits, and the GPA in advanced, professional concentration courses. Professional concentration courses included general ecology and animal population dynamics (required of all our majors), and 6 courses from among the following: mammalogy, ornithology, wildlife techniques, wildlife conservation, urban wildlife management, waterfowl biology and management, limnology, ichthyology, fishery techniques, fisheries management, and water quality.

RESULTS

Although two-year college transfers completed a mean of 60 credit hours prior to enrolling in our program (Figure 1), a majority of them did not complete an Associate's degree. A cursory examination of their transfer credits suggests that many did not select courses at the two-year institution solely with the purpose of meeting the requirements of our program. Most two-year transfers took courses that would not replace required General Education or Departmental Major requirements.

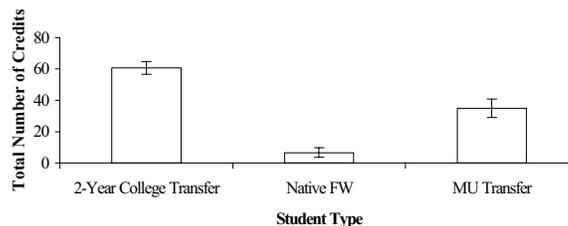


Figure 1. Mean number of credits transferred into the Department of Fisheries and Wildlife Sciences Department from students who were transfers from two-year colleges, freshmen enrollees (native FW), and transfer students from within MU. Small number of credits for native students are due to college credits earned while attending high school.

Freshmen enrollees in FW completed their 125-hour degree requirements in an average of about 4.5 years, whereas two-year college transfers required between 5.5 and 6 years (including the 2+ years prior to enrolling at MU), and MU transfers took over 6 years to graduate (Figure 2). MU freshmen enrollees graduated with GPAs just below 3.0, significantly higher than that of two-year (~2.4) or MU transfer (~2.7) students (Figure 3). Grade trends in advanced, professional courses were almost identical to overall GPAs for each student category (Figure 4).

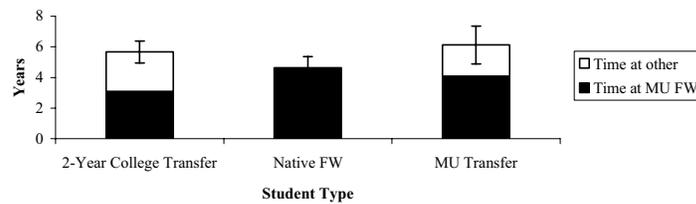


Figure 2. Mean number of years to graduation for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees (native FW), and transfer students from within MU.

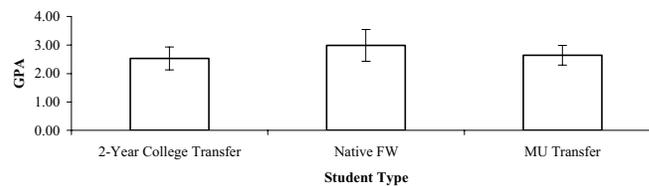


Figure 3. Grade-point averages (GPAs), at graduation, for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

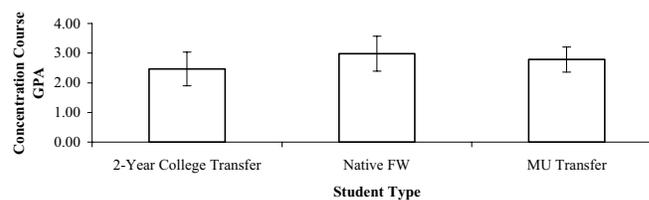


Figure 4. Grade-point averages (GPAs) in advanced, professional concentration courses for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

Only about 50% of two-year college transfers graduated with a degree in Fisheries and Wildlife, whereas the graduation rate for freshmen enrollees and MU transfers was between 60% and 65% (Figure 5). Those transfer students from two-year colleges or from MU, who completed their degrees, did so with a mean of approximately 150 total credits (125 minimum-credit requirement in FW) (Figure 6). Freshmen enrollees had a mean of just over 130 credits at graduation. Approximately 65% of two-year transfer students were placed on probation or suspended at some point in their careers at MU and slightly more than 30% were eventually dismissed from the university for academic reasons (Figures 5 and 7).

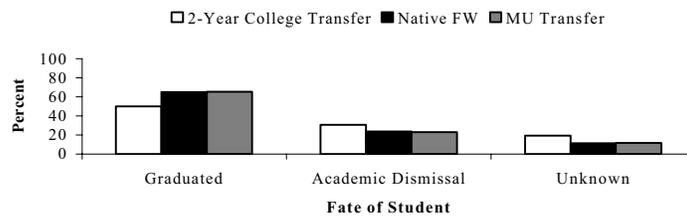


Figure 5. Academic fates of Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

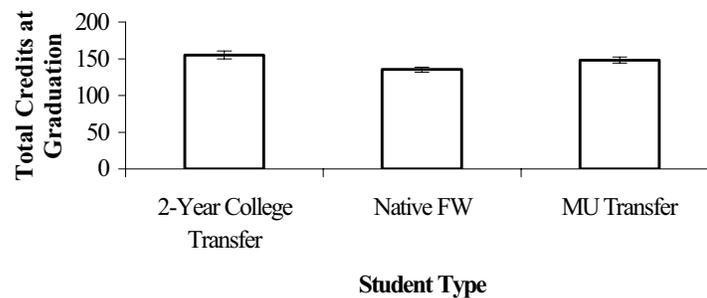


Figure 6. Total credits earned at graduation for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

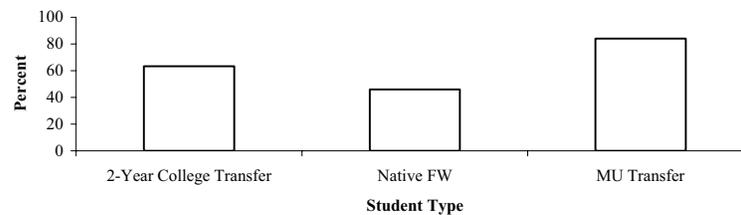


Figure 7. Percent of students placed on academic probation or suspension for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

A higher proportion of MU transfers to our program had been placed on probation or suspended (over 80%), but only about 20% were dismissed (Figures 5 and 7). Most of the MU transfer students had been placed on probation prior to transferring into Fisheries and Wildlife. Approximately 45% of freshmen enrollees in FW received probation or suspension actions and about 20% were dismissed from the university (Figures 5 and 7). Because a graduate degree is widely regarded as the entry-level *professional* degree in Fisheries and Wildlife disciplines, and a 3.0 GPA is usually a minimum qualification for entry into a graduate program, we examined the proportion of our majors who earned at least a 3.0 at graduation. Approximately 50% of students who enrolled as freshmen in FW graduated with a 3.0 GPA, whereas only 15% (two-year) to 20% (MU) of transfer students earned a 3.0 GPA (Figure 8).

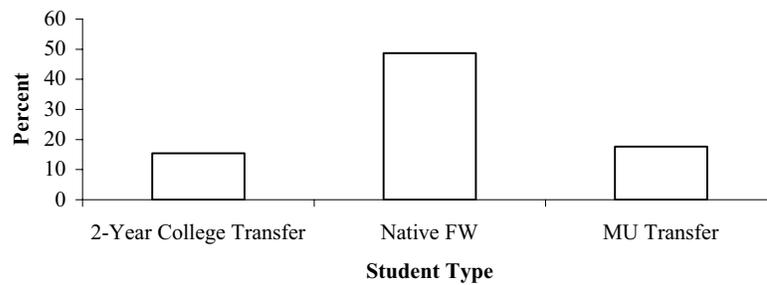


Figure 8. Percent of graduates earning at least a 3.0 grade-point average for Fisheries and Wildlife Sciences majors at the University of Missouri (MU) who were transfers from two-year colleges, freshmen enrollees, and transfer students from within MU.

DISCUSSION

Students who begin their academic careers at two-year institutions are at much greater risk of being dismissed and earning GPAs below 3.0 than freshmen enrollees in FW. Several factors may contribute to this situation. One possibility is that students who fail to qualify for entry into MU as freshmen do not improve their chances by taking a series of courses at a two-year college. It is likely that many have ACT scores substantially lower than freshmen enrollees at MU, as well as lower high school class rankings, the two standards used to determine qualification at MU. Another possibility is that the series of courses they choose to take do not academically prepare them for the level of coursework they face at MU. Workload expectations at MU also may exceed those of two-year colleges. Some students, academically successful at two-year colleges, may not be prepared for the greater academic expectations at MU.

Beyond academics and economics, personal/social factors may affect high school students' decisions to attend two-year colleges. Students from smaller or rural high schools may choose to avoid the large campus atmosphere at MU. Other students may simply wish to stay closer to home and families. These issues may still be operative when those individuals later transfer to MU (i.e., taking classes at a two-year college may not affect eventual socialization at MU). Any sense of social discomfort at MU may affect academic performances.

Unless students choosing two-year college pathways have already decided on their eventual major at MU, carefully selected courses to meet curriculum, and prepared themselves for a large campus experience (potentially farther from home), they may not realize economic savings. Many students assume that if they arrive at MU with 60 hours of credits, they only need 65 additional hours to graduate. Unfortunately that is rarely the case. Our data indicate that two-year college transfers into FW spend from 3-3.5 semesters at MU (versus 4.5 for freshmen enrollees). The cost of those 3-3.5 semesters at MU, plus the approximately 2 years at a two-year college would almost always exceed the cost of having enrolled at MU as a freshman.

Students who are academically qualified and reasonably sure of their interest in a FW degree would be better off enrolling as freshmen at MU. This would be particularly true for those students with strong, professional career interests in Fisheries and Wildlife. When economics makes this choice impossible, better communication between the four-year and two-year institutions is necessary to make the transition as efficient as possible.