

Meeting the Needs of Rural Students Through Distance Advising: The Role of Transfer Guides in Three Measures of Student Success

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Articulation guides for students transferring between Northwest Community College in Powell, Wyoming and Montana State University-Billings are described. The articulation agreement between the two institutions includes course information and supportive advising for transfer students. We hypothesized that use of the guides would help students weather transfer shock better than those transfer students from community colleges where no guides had been available. The groups' declines in grade-point average (GPA) after transfer, recovery of GPA, and persistence were compared. It was found that the severity of transfer shock and the extent of recovery of GPA were not significantly related to the use of the transfer guides, but ability to persist to graduation was positively related. The format of the transfer guides and corresponding advising activities are detailed. Implications for students and administrators are also discussed.

Increasingly, students seeking a secondary education eschew the traditional route to a college degree, and for myriad reasons including convenience and cost, elect to begin their education careers at a 2-year or community college (Breneman, 1983; Kintzer, 1973; Knoell & Medsker, 1964). Many plan a transfer to a 4-year institution for degree completion. The academic performances of these students remain a concern for all involved in the transfer process.

The many adjustments that students make to a new institution after transfer are a partial explanation for *transfer shock*. Well-documented and thoroughly studied, transfer shock is generally referred to as a drop in GPA (grade-point average) during the semester following a change of colleges (Hills, 1965). In her meta-analysis on the subject, Diaz (1992) found that 79% of the 62 included studies reported transfer shock among community college transfer students. It appears to be universal, affecting many students to varying degrees regardless of major, educational level, academic ability, age, or geographic location (Keeley & House, 1993).

While a common occurrence, transfer shock does not appear to be severe in most cases. The majority of GPA changes in Diaz's (1992) review involved one-half of a grade point or less, which most stu-

dents who persevered recovered before graduation (64% of transfer students who continued to graduation recovered completely or nearly completely, and an additional 34% recovered partially). Only students whose GPAs were initially quite low were seriously impacted with transfer shock (Britton, 1969; Dennison & Jones, 1970; Gold, 1972; Keeley & House, 1993).

Why should a slight, usually temporary drop in GPA be of concern to the majority of students? A student who is unprepared for transfer shock may be more likely to become discouraged and to abandon his or her efforts at achieving a 4-year degree. This has obvious negative consequences for the student and is of concern to administrators in a time when enrollment and retention rates are emphasized as a measure of an institution's performance. Most researchers examining GPA declines and recoveries include in their subject pools only those students who persist until graduation. There is a dearth of information regarding the students who are unable to weather the effects of transfer shock and who drop out of college before obtaining a 4-year degree.

These issues are relevant at Montana State University-Billings. Located in Montana's largest community, MSU-Billings serves a sparsely populated geographic area in eastern Montana and northern Wyoming. There are several 2-year colleges in remote locations from which students transfer to the university. In addition to adjusting to an education system that is larger and more structured than their home institutions, many of these transfer students have to overcome cultural differences, make strenuous commutes, and juggle family and work responsibilities. As much of a concern as GPAs is whether students are able to persist until graduation.

To address these issues, the College of Education and Human Services at Montana State University-Billings created transfer guides for students at several regional colleges. Designed with input from faculty at each institution, the guides contain information about the process of transferring to MSU-Billings as an education major. The content of the guides is as follows:

Title page. The names and logos of both MSU-Billings and the community college for

which the guide was designed are featured with the title "Transfer Guide for Elementary Education Majors."

Letter of welcome. The Dean of the College of Education and Human Services at MSU-Billings welcomes students, acknowledges factors that can make a transfer stressful and confusing, explains the purpose of the transfer guide, and encourages students to seek advising. (1 page)

Introduction to the teacher education program. The structure and purpose of the teacher education model at MSU-Billings are detailed in a written narrative. (2 pages)

Transfer worksheets. One of the most important parts of the guides, these worksheets list courses required for an elementary education degree from MSU-Billings with space to record grades and the date on which each course is completed. In a column next to each MSU-Billings course, the equivalent community college class is listed so that students may easily determine courses that will transfer to fulfill 4-year degree requirements. In a box at the bottom of page 7, students are informed of requirements for an Associate of Arts degree from the community college. (3 pages)

Admission to the teacher education program. This page includes an explanation of requirements for admission to the MSU-Billings teacher education program. (1 page)

Checklist for admission to the teacher education program. The requirements for admission are presented in checklist form to help students assess their progress. (1 page)

Transfer student checklist. Students are provided with a checklist for each of the four estimated semesters before transfer and for the first two semesters after transfer. Checklist items include "meet with (name of community college) advisor and with MSU-Billings advisor," "apply for admission to MSU-Billings," "apply for financial aid," "apply for graduation from (name of community college)," and "attend transfer student orientation and register for classes." (By following the time line, students can complete paperwork well in advance of the transfer

semester, receive transfer advising as early as the first semester at the community college, and register at the same time as their MSU-Billings peers. They may also find it easier to coordinate requests for paperwork from the offices of admission, financial aid, and the registrar at MSU-Billings and may be more likely to submit the appropriate forms in a timely manner.) (2 pages)

Student support services. Students receive descriptions of and instructions for contacting the MSU-Billings offices of Multicultural Student Services and Student Opportunity Services, which sponsor a variety of academic and social support programs. (1 page)

Answers to commonly asked questions. Common issues of concern are addressed to transfer students in a question-and-answer format. Answers are provided for questions such as, "Do I have to earn an AA [Associate of Arts] before I can transfer?" "How well do transfer students do academically at MSU-Billings?" "Is there a maximum number of credits that I can transfer?" "How long will it take me to finish my degree?" "Does MSU-Billings provide day care?" "Will I be able to get a job?" and other questions specific to the teacher education program. (3 pages)

Frequently dialed numbers. This is a list of telephone and fax numbers of various departments at both the community college and at MSU-Billings. (1 page)

After advisors and faculty members approved the final guide copy for each community college, MSU-Billings and community college deans of instruction signed a formal articulation agreement and released press announcements to local newspapers. The academic advisors from both the community college and MSU-Billings offer the transfer guides to all potential transfer students, and staff in the community college advising center display copies for student use.

As part of a maintenance plan, the academic advisor from the College of Education and Human Services at MSU-Billings makes frequent visits (at least one per semester) to community colleges where transfer guides are in use. During visits, the advisor discusses curriculum changes and other issues with faculty members and maintains contact with students who are considering a transfer. In this way, students receive early and accurate information

about the receiving institution, and the guides become a tool rather than a substitute for advising. This ongoing interaction is a vital part of the supportive atmosphere established by articulation agreements.

After transfer guides had been in use at one community college for over 5 years, we tested their effectiveness. It was hoped that use of the articulation agreements and corresponding advising services had helped transfer students successfully complete 4-year degrees. We hypothesized that these individuals would experience less of a posttransfer drop in GPA than students who had no access to such services, would recover GPAs more thoroughly, and would be more likely to persist at MSU-Billings until graduation.

Method

We formed three groups of students majoring in elementary education who transferred to MSU-Billings from 1985 to 1995. The first group, "NWC 1985-1989" ($n = 24$) was composed of students from Northwest College, a 2-year college in Powell, Wyoming, who transferred between 1985 and 1989, prior to transfer guide development. The second, "NWC 1990-1995" ($n = 44$) included students who transferred from Northwest College between 1990 and 1995, after the transfer guides had been developed and were in common use at the college. The third group, "Other 1990-1995" ($n = 59$) was composed of students who transferred between 1990 and 1995 from other regional community colleges, which were comparable to Northwest College in size and demographics, but where transfer guides had not been used.

To be included in the sample, a student must have a) transferred from Northwest College or another

regional community college within the designated time frame, b) had no more than one semester away from college prior to transfer, and c) completed at least one full regular-year term at MSU-Billings. Criterion b) was applied to control for the influence of maturation on pretransfer and posttransfer GPA comparisons. With criterion c), we excluded from the study students who took only a few summer classes at MSU-Billings to supplement their work at other institutions.

We examined the transcripts of all students who met the criteria for inclusion and who had been assigned to one of the three groups. The difference between the cumulative pretransfer GPA and the GPA of the first semester after transfer was recorded as the *magnitude of effect*. Persistence (or lack thereof) was determined by examining classes from Spring term 1995. If the student had completed a degree or was making progress toward degree completion, he or she was considered to have persisted. If the student discontinued studies before obtaining a degree, he or she did not persist. The final cumulative GPAs of those students who graduated were recorded to check for recovery.

Results

We compared the mean pretransfer and first semester posttransfer GPAs of the three groups (see Table 1). Using a two-tailed t test for independent samples, we determined that there existed no significant ($\alpha < 0.05$) differences between pretransfer GPAs of the groups. GPA could not explain subsequent differences in academic performance (see Table 2). Further, no differences in first semester posttransfer grades were found.

We employed the same test of significance in an examination of the magnitude of effect. Our hypoth-

Table 1 Comparison of Pretransfer and Posttransfer Grade Point Averages

Transfer Group	Pretransfer Cumulative GPA	Initial Post-Transfer Semester GPA	Transfer Effect (Post-Pre) GPA
NWC Transfers 1990-1995 ($n = 44$)	3.06 ($SD = 0.52$)	2.97 ($SD = 0.76$)	-0.09 ($SD = 0.29$)
NWC Transfers 1985-1989 ($n = 24$)	3.03 ($SD = 0.58$)	2.86 ($SD = 0.97$)	-0.17 ($SD = 0.60$)
Other Transfers 1990-1995 ($n = 59$)	2.92 ($SD = 0.49$)	2.72 ($SD = 0.82$)	-0.20 ($SD = 0.51$)

Table 2 *t* values for GPA comparisons

Comparison Groups	Pretransfer Cumulative GPA	Initial Posttransfer Semester	Transfer Effect
NWC Transfers 1990-1995			
vs. NWC Transfers 1985-1989	$t = 0.22^{ns}$ $df = 66$	$t = 0.51^{ns}$ $df = 66$	$t = 0.75^{ns}$ $df = 66$
NWC Transfers 1990-1995			
vs. Other Transfers 1990-1995	$t = 1.40^{ns}$ $df = 101$	$t = 0.67^{ns}$ $df = 101$	$t = 1.29^{ns}$ $df = 101$

Note. ns denotes no significant difference at $p < 0.05$.

Table 3 Measures of GPA Recovery for Graduating Transfer Students

Graduates by Transfer Group	Pretransfer Cumulative GPA	Graduation Cumulative GPA	Difference (Recovery)
NWC Transfers 1990-1995 ($n = 9$)	3.26 ($SD = 0.39$)	3.40 ($SD = 0.32$)	+0.14 ($SD = 0.16$)
NWC Transfers 1985-1989 ($n = 13$)	3.21 ($SD = 0.60$)	3.35 ($SD = 0.42$)	+0.14 ($SD = 0.26$)
Other Transfers 1990-1995 ($n = 13$)	3.15 ($SD = 0.37$)	3.27 ($SD = 0.28$)	+0.12 ($SD = 0.22$)

esis that students who had used transfer guides prior to attending MSU-Billings would experience less of a GPA drop than other transfer students is not supported by the data. While all three groups experienced declines in the pretransfer and posttransfer GPA, there is no significant difference among the three groups in magnitude of decrease (see Table 2). Intense advising and support throughout a transfer does not seem to ameliorate the effects of changing colleges on GPA.

To test recovery, we analyzed the difference between the pretransfer cumulative GPA and the cumulative GPA at the time of graduation (see Table 3). A two-tailed *t* test for independent samples revealed no significant differences in the measure of recovery (see Table 4). Consistent with the body of research on the subject, those students who persisted tended to obtain GPAs that were nearly as high or higher than those they earned at the community college. Apparently assistance they received prior to transfer was of no relative significance. This data demonstrate the importance of helping students to

persevere so that they have the opportunity to recover their GPAs and to reach full academic potential at the transfer institution. The question becomes one of persistence: Do transfer guides and the accompanying support system help students to persevere to graduation?

A chi-square analysis of persistence rates revealed persistence-to-graduation as the primary contribution of transfer guides and advising to the academic success of the Northwest College students. A significantly greater percentage of students who had transfer guides and pretransfer advising had graduated or were continuing to work toward a degree at the time of this study (see Table 5 and Table 6). The hypothesis that the use of transfer guides positively influences students' abilities to persist is supported by the analysis.

Discussion

The results of this study are consistent with the large body of research that indicates that most stu-

Table 4 *t* Values for GPA Comparisons on GPA Variables

Comparison Groups	Pretransfer Cumulative GPA	Graduation Cumulative GPA	GPA Recovery
NWC Transfers 1990-1995			
vs. 1985-1989	$t = 0.22^{ns}$ $df = 20$	$t = 0.30^{ns}$ $df = 20$	$t = 0.00^{ns}$ $df = 20$
NWC Transfers 1990-1995			
vs. Other Transfers 1990-1995	$t = 0.67^{ns}$ $df = 20$	$t = 1.02^{ns}$ $df = 20$	$t = 0.23^{ns}$ $df = 20$

Note. ns denotes no significant difference at $p < 0.05$.

Table 5 Summary of Persistence Within Transfer Groups

Group	Persisted	Did Not Persist	%Persisted
NWC Transfers 1990-1995 ($n = 44$)	35	9	80
NWC Transfers 1985-1989 ($n = 24$)	13	11	54
Other Transfers 1990-1995 ($n = 59$)	34	25	58

dents who transfer from a 2-year to a 4-year institution will experience transfer shock. Since most students' GPAs will recover in time, students should be encouraged to graduate. This study shows that the implementation of transfer guides may help students persist.

Research on student needs and articulation agreements confirms the advantageous use of the general format of the MSU-Billings and Northwest College guide. Information given to students should be in the form of written course equivalency guides and articulation agreements (American Council on Education, 1990). The MSU-Billings agreements with community colleges specify assignment of credit, as recommended by Knoell and Medsker (1965), rather than a vague acceptance of classes. Because ready and early access to articulation information improves students' transfer experiences (Bowles, 1985), they are encouraged to use the conveniently formatted guides as early as their first

Table 6 Chi-square Comparison of Persistence Rates by Transfer Group

Comparison Groups	Chi-square Value
NWC Transfers 1990-1995	
vs. NWC Transfers 1985-1989	4.815*
NWC Transfers 1990-1995	
vs. Other Transfers 1990-1995	5.46*

Note. * $p < 0.05$ ($\chi^2 \geq 3.841$, $df = 1$)

semester at the community college. As Kintzer (1981) emphasized, dissemination of information is essential; the guides are not valuable if they are not accessible.

Bowles (1985) and Cejda (1994) suggested that articulation agreements are more effective when developed and implemented by individuals at both institutions at the departmental and central administrative levels, including those who will be using the guides most frequently. We have met this objective by creating transfer guides through collaborative effort between and within both colleges. Students are reassured by the perceived cooperation and permanency of relations between the institutions.

Complaints of transfer students often include difficulty scheduling courses for the first semester after transfer (Kintzer, 1973) and advisors' lack of availability. Montana State University-Billings has attempted to address these concerns by including in the transfer-guide support plan early and frequent

opportunities for student advising. By the time students transfer, they have met with the College of Education and Human Services advisor three to four times during advisor visits to their community college. Building rapport in this manner has helped students feel more comfortable in asking for assistance during and after the transfer semester and has contributed to a seamless transfer. We have also experimented with registering students for classes at MSU-Billings early in their last semester at their community colleges. Using the Internet to access records, we are able to register students during advising sessions at the sending institutions. Students save themselves a trip to Billings and leave the sessions with a printed schedule of their courses for the following semester. Many have commented positively about the convenience of this procedure.

Student retention and success are concerns of all involved in the transfer process from a 2- to a 4-year institution. By creating transfer guides with useful information presented in an accessible format, by making the guides readily available, and by offering competent advising throughout the transfer process, college faculty and staff can positively impact a student's ability to persist to graduation.

References

- American Council on Education. (1990). *Good practices in education: Report from a survey conducted by the American Association of Community and Junior Colleges and the National Center for Academic Achievement and Transfer*. New York: Ford Foundation. (ERIC Document Reproduction Service No. ED 324 044).
- Bowles, D. J. and Others. (1985). *Bridging the gap: A case study of cooperative strategies to improve the transfer experience*. Chicago: American Association for Higher Education. (ERIC Document Reproduction Service No. ED 261 570).
- Breneman, D. W. (1983). The coming enrollment crisis. Focusing on the figures. *Change*, 15, 14-19.
- Britton, R. B. (1969). *The first semester academic performance of urban junior college transfer students to Columbia vs. two urban campuses of the University of Missouri*. Columbia, MO: EPDA Institute for Advanced Study in Student Personnel Work in Junior Colleges and Technical Institutes. (ERIC Document Reproduction Service No. ED 043 331).
- Cejda, B. D. (1994). Reducing transfer shock through faculty collaboration: A case study. *Community College Journal of Research and Practice*, 18, 189-199.
- Dennison, J. D. & Jones, G. (1970). *A long range study of the subsequent performance and degree attainment of students who transferred from Vancouver Community College to the University of British Columbia from 1966-1969*. Vancouver, BC: Vancouver City College. (ERIC Document Reproduction Service No. ED 037 217).
- Diaz, P. E. (1992). Effects of transfer on academic performance of community college students at the four-year institution. *Community/Junior College Quarterly*, 16, 279-291.
- Gold, B. K. (1972). *Academic performance of LACC transfers to UCLA through the special services program, 1971-1972*. Los Angeles: Los Angeles City College. (ERIC Document Reproduction Service No. ED 067 089).
- Hills, J. R. (1965). Transfer shock: The academic performance of the junior college transfer. *Journal of Experimental Education*, 33(3), 201-215.
- Keeley, E. J., III & House, J. D. (1993). *Transfer shock revisited: A longitudinal study of transfer academic performance*. Chicago: Association of Institutional Research. (ERIC Document Reproduction Service No. ED 357 774).
- Kintzer, F. C. (1973). *The transfer student dimension of articulation*. Warrenton, VA: Arlie House Conference on College Transfer. (ERIC Document Reproduction Service No. ED 088 408).
- Kintzer, F. C. (1981). *Articulation/transfer agreements: Alternative approaches*. Washington, DC: American Council of Education. (ERIC Document Reproduction Service No. ED 202 439).
- Knoell, D. M. & Medsker, L. L. (1964). *Articulation between two-year and four-year colleges*. Berkeley, CA: Center for the Study of Higher Education. (ERIC Document Reproduction Service No. ED 003 327).
- Knoell, D. M. & Medsker, L. L. (1965). *From junior to senior college—a national study of the transfer student*. Washington, DC: American Council on Education. (ERIC Document Reproduction Service No. ED 013 632).

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