Improving First-Generation, Low-Income Student Retention in Higher Education: Examining the Persistence of Role-Mastery based Advising and Telementoring Intervention Effects

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Executive Summary

In this study we have examined the persistence of positive effects of participating in a successful one-year mentoring intervention, the Students First Mentoring Program (SFMP), among low-income first generation freshmen over the two years following program participation. The current study examined the academic performance and experiences of the 2006-2007 SFMP cohort, along with those of two comparison groups of students over the 2007-2008 and 2008-2009 academic years. In addition, through a series of in-depth interviews, we explored the ways in which participating in Students First affected first generation students' experiences navigating the university. We are particularly interested in learning more about under-explored issues relating to the utility of mentoring programs for first-generation student success, including:

• *program duration*: can a targeted one-year mentoring program provide positive effects?

• *using technology to deliver mentoring support:* Is it possible to utilize technology – particularly on-line resources – to provide positive effects?

• *persistence of effects:* Do the benefits of participating in a one-year mentoring program continue beyond the time the student spends in the program?

Based on this research we have established that:

1. *A targeted one year mentoring program can successfully impact low-income, first generation college students' academic success (retention, gpa, yearly average credits earned)*

The Student First intervention positively impacted first generation, low-income freshmen's transition to and success at Portland State University. While previous research would suggest that first-generation students are not likely to perform at the level of their peers from more-educated families, here that is clearly not the case. The program year data shows that participating in SFMP resulted in first-generation freshmen demonstrating higher yearly retention rates, average gpa, and average number of credits completed successfully than

students from the All Freshmen group, along with higher yearly average gpa, and average number of credits earned rates than Comparison freshmen group students.

2. *Program year expertise development is associated with the superior academic performance of first generation students who participated in the SFMP intervention.*

Analyses of program year qualitative data establishes that participating in the program is associated with the development of issue adjustment schemas as well as a shift to the experienced-based advanced beginner level of student expertise, both of which should be associated with better quality decision-making and subsequent academic success.

3. *On-line delivery of mentoring support services can be as effective as a combination of on-line and in-person mentoring for first generation students during the year they participate in the program.*

While on-line mentoring only (OLM) students demonstrated higher retention rates, and on-line plus in-person mentoring (OLMP) students demonstrated slightly higher gpas and yearly average credit earned rates during the program year, both proved effective in providing mentoring support for first generation students. It appears that the content of the SFMP intervention, rather than the mode in which that content was delivered, was the key factor in promoting first generation students success.

post-program participation

4. *The positive effects of SFMP participation in regards to all three indicators of academic success (retention, gpa, yearly average credits earned) continued through the first year post program participation, and the positive effects on retention continued through the second post program participation year.*

SFMP students' performances in regards to all three measures actually improved from program year levels in the first year after program participation. The post-participation year #1 data lends support for the "platform" scenario. The extra capital

acquired through SFMP during the program year, seems to provide a platform from which the first generation students continued to out-perform their more educated peers.

However the year 2 post-participation data paints a slightly different picture. The gains in retention rates for the SFMP students in post-participation year #1 continued, but both comparison groups narrowed the gap, and actually pulled ahead of the SFMP students' average yearly gpa and credits earned rates. The year #2 post-participation data supports more of a regression towards a mean value scenario, with both the All freshmen and comparison group freshmen students improving their relative academic performance while the SFMP students' rates dipped slightly.

5. *The positive effects of SFMP participation on issue-adjustment event schema development and expertise development continue and grew stronger over the two post-program-participation years.*

In regards to schema development, it is clear that both groups of SFMP not only developed more issue-adjustment event schemas than the comparison group students, but that the SFMP students' scripts showed a deeper understanding of specific issues and were generally more effective. Another trend that continued for the year #1 analyses was that the mode of delivering mentoring services – on-line (OLM) versus on-line in-person (OLMP) – did not have a differential effect SFMP students' relative levels of schema development.

In regards to expertise development, one of the major findings was that ALL students operated at a higher level expertise in regards to most of the adjustment issue by the end of the two post-program participation years. And both groups of SFMP students made the biggest jumps in relative level of expertise. At the end of the first year of this study, all the SFMP students were operating at the experience-based advanced beginner level of expertise. By the end of the second year of this study, the SFMP students had shifted upward on the expertise continuum, consistently exhibited competent expertise levels, through the offering of contingency plans for dealing with the full range of 11 issues discussed in the interview.

6. *The positive effects of the SFMP intervention persisted in the 2 years following program participation regardless of the modes of delivering mentoring support.*

Even after dividing the SFMP students into two groups based on mode of delivering mentoring services, the positive effects from participating in SFMP for first generation students persist beyond the program year. However the positive effects of SFMP participation on different measures of academic performance (i.e. retention, gpa, credits earned) appear to interact with whether students received their mentoring support on-line (OLM) or through a combination of on-line and in-person mentoring (OLMP).

A surprising finding was that students receiving on-line mentoring only demonstrated the highest retention rates both during the program year and in both post-program participation years. Just to make sure this was not some artifact based on some characteristics of the 2006-2007 OLM SFMP students, an additional analysis of the persistent of effects was performed on data from students from the 2005-2006 cohort. Again the OLM SFMP demonstrated the highest retention rate one year after program participation, with a rate 13.7% higher than that of the All freshmen students, 10.5 % higher than the comparison freshmen students, and 14.6% higher than the SFMP students who received a combination of online plus in-person mentoring. This finding deserves further study.

7. *An expertise development advising/mentoring approach is consistent with the developmental model of academic advising.*

There is a conceptual "fit" between a developmental advising perspective and SFMP's expertise development mentoring approach. Developmental advising's emphasis on the advisor facilitating problem-solving, decision-making, and rational-evaluation-of-options processes, along with promoting the greater likelihood of high quality, positive outcomes for the student in key campus interactions, fits nicely with expertise development mentoring model's stated goal of providing a socialization context in which students learn high-likelihood of success strategies for dealing with specific college adjustment issues. The Students First intervention's adaptation of Dreyfus and Dreyfus (2005) model of expertise development to expertise level–appropriate plans for working with first generation students can be a valuable tool for academic advisors favoring a developmental approach.