

Selecting Interventions that Succeed: Navigating Through Retention Literature

DAVID ARENDALE
UNIVERSITY OF MINNESOTA

Many developmental educators have been assigned increased responsibilities for campus-wide enrollment management activities. A new system is needed for educators to more accurately sort through the rapidly growing database of information related to student retention. This will enable the reader to more quickly identify promising practices for further investigation. This article provides a scale to evaluate the likelihood of success among potential programs and identify them for further research. Scrutiny of potential retention programs must be increased by asking more questions early in the investigation process regarding: essential components of a program, research evaluation studies, barriers to successful implementation, and the availability of technical assistance to enable other institutions to successfully adapt and adopt the student retention practice.

Developmental educators are increasingly called upon by their institutions to serve in positions of influence with enrollment management task forces that are charged with increasing student persistence and graduation rates. Being an expert with this topic has become more challenging as there has been an exponential growth in the professional literature associated with this topic. Several national conferences each year are devoted to student persistence (e.g., American Association of Collegiate Registrars and Admissions Officers, Noel-Levitz Centers). Two national publications publish in this area of scholarship (Journal of College Student Retention, www.baywood.com; Recruitment & Retention in Higher Education Newsletter, www.maganapubs.com). A number of publications identify best practices in this area (Habley & McClanahan, 2004; Noel, Levitz, & Saluri, 1985; Thomas, Quinn, Stack, & Casey, 2003; Upcraft, Gardner, & Barefoot, 2005). There are more than 4,000 citations in the national ERIC database that contain the term student retention in a postsecondary setting (ERIC, 2005).

Sorting through all these conference presentations, reports, articles, books, brochures, and other descriptive literature is a challenge for any educational leader. Some of the literature describes home grown student retention programs that have only operated at a single institution. Other publications

describe programs that have been replicated at other institutions in addition to the one that first created the academic intervention program. A better system is needed to help educators select from among this burgeoning database that all claim effectiveness for increasing student persistence and graduation rates.

TRADITIONAL SELECTION SYSTEM

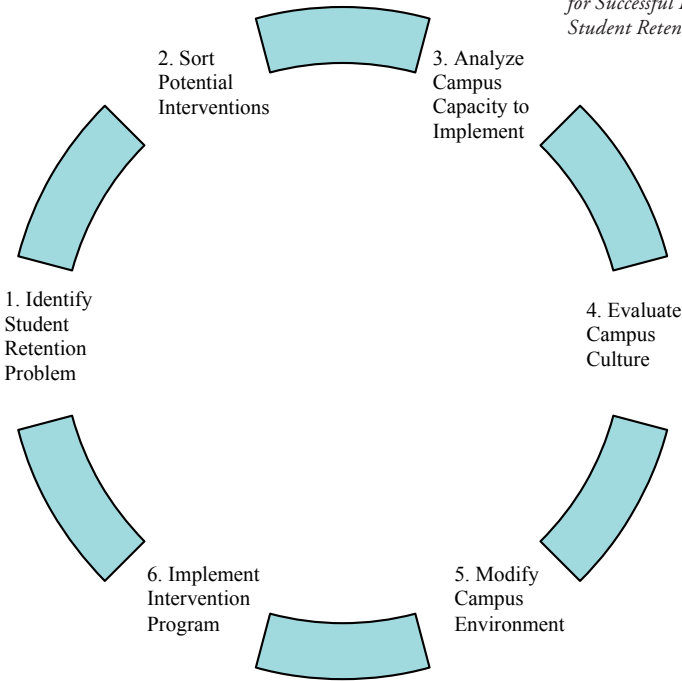
There are common patterns that many educators follow when seeking an intervention system to address the premature departure of students. Often a delegation of one or more is sent to a national conference to listen to a sample of concurrent presentations describing student retention programs. A decision about which session to attend is based on short presentation titles and 50-word summaries from the conference program book. Too often the speakers do not provide detailed research evaluation studies, detailed cost breakdowns, and barriers to implementation. A similar pattern is replicated in written reports or articles that describe the interventions. Little follow-up occurs between the speakers/authors. Institutions commit resources of time, personnel, and money to implementing intervention programs on the basis of several articles or listening to a conference presentation. A better system is needed to be more accurate, timely, and cost-effective in selecting new programs to adopt.

NEW SELECTION SYSTEM

Selecting the appropriate academic intervention or making a change in institutional policies is contingent upon many factors. What are the unique academic and culture issues at the institution and which academic intervention(s) is best fitted to meet those needs? Is there clear evidence that the intervention will contribute to higher academic achievement at a particular institution as opposed to its past success at the institution where it was first developed? What is the capacity of the institution to implement the intervention or policy regarding administrative support, faculty support, skill level of the intervention program, and the cost to implement and continue the program?

Based on twenty years of experience as a learning center director, enrollment management leader, and director of the National Center for Supplemental Instruction at the University of Missouri-Kansas City, I have developed a different perspective for facilitating change regarding improved student graduation rates. An academic intervention or policy decision on one campus may not be effective on another one due to a variety of reasons. The following model presents a decision-making process that helps to more objectively enable institutions to compare among possible actions or intervention programs which are most appropriate for their particular situation and their capacity to enact change.

FIGURE 1 Transformation Cycle for Successful Implementation of Student Retention Programs



This student retention program model [Figure 1] has six stages of activities: (1) Identify the student retention problem by determining the characteristics of the students who are dropping out of the institution; (2) Sort through potential intervention programs by evaluating their likelihood of success at a particular institution; (3) Analyze the capacity of a particular institution to implement the intervention program; (4) Evaluate an institution's campus climate and to what degree it will embrace and support the student subpopulation that it wants to retain; (5) Identification of specific action steps to be taken by an institution to change itself to be more supportive of students and conducive of their success; and (6) Implementation of the identified intervention program designed to increase student retention at the campus.

SORTING POTENTIAL INTERVENTIONS

This article focuses on stage two of these activities: evaluating potential intervention programs regarding their likelihood of success at a particular institution. A prerequisite to selection of an academic intervention or making changes in campus policies is to carefully evaluate the evidence for effectiveness. Time limitations often preclude answering all of the following questions during a conference presentation or addressing them during an article.

However it is reasonable for them to be addressed in professional articles, conference handouts, and during follow-up discussions with presenters. The following scale provides an increasing level of evidence of the likelihood of success in implementing the practice. Programs which reach the higher scale ratings are more likely to result in higher student persistence rates.

1. There is little evidence or documentation that the practice has any evidence of effectiveness or is based on current research-based educational theory. This is the lowest rating that can be assigned to an intervention. In this case the conference presentation or article provides a basic description of the program, but no evidence of its effectiveness. With the rich professional literature that identifies other programs with evidence, spending much time investigating this intervention seems to be a waste of limited time resources.
2. Practice is based upon sound educational theory and other previously validated successful practices. Rather than only a description of the intervention, some explanations or theories are presented that suggest reasons for its effectiveness. What is the theory base for development of the intervention? Theory must lead practice, especially when considering the student population to be served. What is the connection between what we know about student departure (Tinto, 1993) and the intervention program? What other programs or practices similar to the one under scrutiny have been validated in the past? Most successful innovations are always based on elements of previously developed successful programs.
3. Practice has undergone rigorous evaluation at one institution. What were the quantitative and/or qualitative research procedures employed? Are they rigorous and state-of-the art? Are they appropriate for the type of research questions being asked? Use of simple t-tests or student surveys is insufficient for research studies today. Rather than comparing to other research studies published, what are the new evaluation procedures being discussed at national association conferences such as the American Educational Research Association? Does the program make claims that are unsubstantiated or overreaching? This is especially important if the practice is making claims related to student retention and graduation rates.

The further the distance of time between when the intervention occurs and the outcome is measured, the less likely the impact. Too many intervening variables will have an impact upon the student in the meantime. Such claims must be supported by highly sophisticated evaluation procedures. Does the research evaluation model take into account that the student has been impacted by multiples variables? Perhaps they have participated in simultaneous intervention programs? With hundreds of

variables having an impact upon students, the likelihood that only one intervention is responsible for the results is less likely. If the academic intervention model is a complex one with several activities operating simultaneously, how has the research evaluation model identified the contributing impact of each separate activity upon the student outcomes? This is especially important if students have choices on which activities that they participate.

Do the quantitative research procedures take into account background information about the individual students when conducting the analysis? Examples of this would include student demographics, affective domain (e.g., academic content mastery orientation, academic performance orientation, and self-efficacy), and academic preentry attributes as part of the research model. If the research model does not do so, the reported positive results may be due to the participation of students who were more academically prepared or motivated.

What is the cost/benefit equation for the intervention? Careful factoring of all expenses associated with implementation is needed. For example, supervision and training costs are often underreported in conference presentations and journal articles. Often the most expensive component of an intervention is not the direct salaries, but the time required for activities both by the direct service provider and those who administer, supervise, and train (Arendale, 2001). The professional literature often cites these elements for many intervention programs to be effective. Maybe some optional activities are more helpful than others. Perhaps it is not necessary to implement all parts of a complex intervention model since only a few contribute the majority of the impact to the desired effects. With tight budgets and limited resources, academic interventions will need to demonstrate their cost effectiveness as well as the improved student outcomes.

4. Practice has undergone evaluation at one institution over a period of time with consistent results of positive outcomes. Have the research studies been carefully replicated over succeeding academic terms at the institution that originally developed the intervention? One of the most powerful research findings is the consistent report of positive outcomes over a long period of time. This helps to avoid the Hawthorne Effect of introducing something new in the environment and promoting short-term increased productivity before the environment returns back to the previous baseline behavior level.
5. Practice has been validated by one or more external agencies (e.g., accrediting agencies, peer-reviewed publications, national awards competitions). What does a review of the professional literature suggest about

this or similar academic interventions for effectiveness? Publication of research about the intervention by a peer-reviewed journal increases the likelihood of effectiveness since it requires approval by an unbiased third-party editorial staff. Review by external accrediting agencies and national organizations conducting rigorous awards programs serve a similar purpose.

6. Practice has been replicated successfully at several other institutions in addition to the one that originally created it. Has the academic intervention been successfully implemented at other institutions? Were the results replicated over succeeding academic terms? Were the institutions similar to the one considering its adoption? Were the students served at the other institutions similar to the one considering its adoption? An affirmative answer to these question increases the chance that the program can be successfully installed at another institution. This helps to address the potential problem that some programs are more dependent on the personality and traits of the original developer and less on the actual program components. In these cases, rarely is the program successful elsewhere.
7. There are additional sources of information, consultation services, and training workshops about successful implementation of the practice. Will the institution or individual that developed the intervention program allow visitors to view the program in operation and talk with key individuals including the students who are served? Will it sell or share materials and consultation services? Considering the potential economic and social impact of implementation of a potential new program or policy, it is critical to more fully understand the challenges with implementation and ongoing operation. Few conference presenters have the time to share the challenges, failures, and details with program implementation. Considering the total cost of starting and operating a new program, this is a small investment of time and money.

CONCLUSION

I am reminded of the expression, “we are drowning in data but are starved for knowledge and wisdom.” While we may have ready access to articles, reports, and presentation on student retention, we need to increase our scrutiny of these information sources. We must ask more questions early in the investigation process, probe for the essential components of a program, and vigorously evaluate the research studies that evaluate the retention program. These activities will enable educators to more quickly and accurately sort through the confusing data and emerge with more likely prospects to enable our institutions to help students achieve their aspirations and dreams.

REFERENCES

- Arendale, D. R. (2001). Effect of administrative placement and fidelity of implementation of the model on effectiveness of Supplemental Instruction programs. *Dissertation Abstracts International*, 62, 93.
- Education Resources Information Center (ERIC). (2005). *The educator's reference desk*. [On-line]. Retrieved May 1, 2005, from <http://www.eric.ed.gov>
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention?* Iowa City, IA: American College Testing Service. Retrieved February 21, 2005, from <http://www.act.org/path/postsec/droptables/index.html>
- Noel, L., Levitz, R., & Saluri, D. (Eds.). (1985). *Increasing student retention: Effective programs and practices for reducing the dropout rate*. San Francisco: Jossey-Bass.
- Thomas, L., Quinn, J., Stack, K., & Casey, L. (2003). *Effective approaches to retaining students in higher education*. Stoke-on-Trent, United Kingdom: Institute for Access Studies, Staffordshire University.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd Ed.). Chicago: The University of Chicago Press.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (Eds.). (2005). *Challenging & supporting the first-year student: A handbook for improving the first year of college*. San Francisco: Jossey-Bass.

David Arendale is Assistant Professor in Social Sciences with the General College of the University of Minnesota-Twin Cities. In addition to teaching history courses, Arendale investigates the history of postsecondary college access, developmental education, and academic interventions that support improved student achievement and persistence. One of his roles at General College is serving as Faculty Advisor for Outreach with the Center for Research on Developmental Education and Urban Literacy. Arendale formerly served at the University of Missouri-Kansas City in several capacities including National Project Director of Supplemental Instruction. He served as President of the National Association for Development Education from 1996 to 1997.