

RESEARCH AND PRACTICE OF STUDENT RETENTION: WHAT NEXT?*

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ABSTRACT

After reviewing the state of student retention research and practice, past and present, the author looks to the future and identifies three areas of research and practice that call for further exploration. These concern issues of institutional action, program implementation, and the continuing challenge of promoting the success of low-income students.

INTRODUCTION

Student retention is one of the most widely studied areas in higher education. In addition to the extensive body of research literature that now spans more than four decades, there are books and edited volumes, a journal, and a variety of conferences dedicated solely to student retention. There has also been considerable theoretical work and no small amount of debate as to the character of student retention. Several edited volumes and numerous articles have debated the merits of various theoretical models each of which have been posited as a more accurate portrayal of the process of student retention. The result has been an ever more sophisticated understanding of the complex web of events that shape student leaving and persistence.

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At the same time, as the environment for higher education has changed from one of plenty to one of diminishing resources, there has also been a heightened focus on the part of institutions and states alike on increasing the rate at which students persist and graduate from both two- and four-year colleges and universities. Not surprising, there has also been a concomitant increase in the number of businesses and consulting firms that have sprung up each of which claims unique capacity to help institutions increase the retention of their students. It would not be an understatement to say that student retention has become a big business for researchers, educators, and entrepreneurs alike.

But for all that, substantial gains in student retention have been hard to come by. Though some institutions have been able to make substantial improvements in the rate at which their students graduate, many have not. Indeed the national rate of student persistence and graduation has shown disappointingly little change over the past decade (NCES, 2005a). The fact is that despite our many years of work on this issue, there is still much we do not know and have yet to explore. More importantly, there is much that we have not yet done to translate our research and theory into effective practice.

It is therefore not unreasonable to ask what else we need do to further improve the effectiveness of our work on behalf of increased student retention and enhanced institutional effectiveness. What additional research questions must we ask, what issues need we explore to more effectively address the continuing problem of student attrition in higher education? After a brief review of the past and the present state of our work, the article considers these questions by identifying three challenges that we need to address next and offers, in turn, some possible responses to those challenges.

STUDENT RETENTION: THEN AND NOW

When the issue of student retention first appeared on the higher educational radar screen, now some 40 years ago, student attrition was typically viewed through the lens of psychology. Student retention or the lack thereof was seen as the reflection of individual attributes, skills, and motivation. Students who did not stay were thought to be less able, less motivated, and less willing to defer the benefits that college graduation was believed to bestow. Students failed, not institutions. This is what we now refer to as blaming the victim.

This view of retention began to change in the 1970's. As part of a broader change in how we understood the relationship between individuals and society, our view of student retention shifted to take account of the role of the environment, in particular the institution, in student decisions to stay or leave. Though I was not the first to argue for this shift (Spady, 1970, 1971), my 1975 article and in turn my book, *Leaving College*, was the first to lay out a detailed longitudinal model that made explicit connections between the environment, in this case the academic and social systems of the institution and the individuals who

shaped those systems, and student retention over different periods of time (Tinto, 1975, 1987). Central to this model was the concept of integration and the patterns of interaction between the student and other members of the institution especially during the critical first year of college and the stages of transition that marked that year.

This early work on student retention ushered in what can be called the “age of involvement” (Study Group on the Conditions of Excellence in Higher Education, 1984). Research, most notably by Alexander Astin, Ernest Pascarella, and Patrick Terenzini, served to reinforce the importance of student contact or involvement to a range of student outcomes not the least of which was student retention (e.g., Astin, 1975, 1984; Endo & Harpel, 1982; Pascarella, 1980; Pascarella & Chapman, 1983; Pascarella & Terenzini, 1980; Terenzini, Lorang, & Pascarella, 1981). We learned that involvement matters and that it matters most during the critical first year of college.

As a result, much of our early practice focused on the first year of college, especially the transition to college, and the nature of student contact with faculty, most notably outside the classroom. We rushed into service a range of programs to enrich the freshman year experience ranging from expanded and extended orientation, freshman seminars, and a variety of extracurricular programs (Upcraft, Gardner, and Associates, 1989).

Like any early body of work, the study of student retention lacked complexity and detail. Much of the early work was drawn from quantitative studies of largely residential universities and students of majority backgrounds. As such it did not, in its initial formulation, speak to the experience of students in other types of institutions, two- and four-year, and of students of different gender, race, ethnicity, income, and orientation. We were, if you will, in the infancy of our work.

The same can be said of our practice. At the outset, much of the real work of retaining students fell on the shoulders of student affairs professionals who sought to provide students the assistance they needed to persist. This was most noticeable in the types of first-year programs established at the time, in particular the freshman seminar. Faculty were largely absent. Most retention activities were appended to, rather than integrated within, the mainstream of institutional academic life. Retention activities were then, as they are in some measure today, add-ons to existing university activity.

Since that time, the study and practice of student retention has undergone a number of changes. First, our understanding of the experience of students of different backgrounds has been greatly enhanced (e.g., Allen, 1992; Bennett & Okinaka, 1990; Clewell & Ficklen, 1986; Fleming, 1985; Hernandez, 2000; Hurtado, 1994; Hurtado & Carter, 1996; Johnson, et al. 2004-2005; Murguia, Padilla, & Pavel, 1991; Nora, 1987; Rendon, 1994; Richardson, 1987; Solorzano, Ceja, & Yosso, 2000; Thayer, 2000; Thompson & Fretz, 1991; Torres, 2003; Zurita, 2005) as has our appreciation of how a broader array of forces, cultural, economic, social, and institutional shape student retention (e.g., Berger, 2001;

Braxton, Bray, & Berger, 2000; Christie & Dinham, 1991; Herndon, 1984; St. John, Cabrera, Nora, & Asker, 2000). Take for instance the research on the retention of under-represented students and the so-called stages of student departure (Tinto, 1988). Where it was once argued that retention required students to break away from past communities, we now know that for some if not many students the ability to remain connected to their past communities, family, church, or tribe is essential to their persistence (e.g., Attinasi, 1989; London, 1989; Nora, 2001; Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, & Jalomo, 1994; Tierney, 1992; Torres, 2003; Waterman, 2004).

Second we have come to understand how the process of student retention differs in different institutional settings, residential and non-residential, two- and four-year (e.g., Allen, 1992; Borglum & Kubala, 2000; Padilla & Pavel, 1986; Pascarella & Chapman, 1983; Pascarella, Smart, & Ethington, 1986; Tinto, Russo, & Kadel, 1994). As we studied persistence in non-residential settings, for instance, we have come to appreciate as we did not before, not only the impact of external events on student lives, but also the importance of involvement in the classroom to student retention (e.g., Tinto, 1997; Tinto, Russo, & Kadel, 1994). This is the case because the classroom is, for many students, the one place, perhaps only place, where they meet each other and the faculty. If involvement does not occur there, it is unlikely to occur elsewhere.¹

Third, as we learned more about the complexity of student retention, we have come to appreciate the limits of our early models of retention. We now have a range of models, some sociological, some psychological, and others economic in nature that have been proposed as being better suited to the task of explaining student leaving (e.g., Bean, 1980; Braxton & Brier, 1989; Cabrera, Castaneda, Nora, & Hengstler, 1992; Braxton & Hirschy, 2005; Nora, 2001; Tierney, 2000; Tinto, 1993, 2005). Indeed there are now several edited volumes dedicated solely to comparing these models and exploring possible alternatives (e.g., Braxton, 2000; Seidman, 2005).

Throughout these changes and the putting forth of alternative models, one fact has remained clear. Involvement, or what is increasingly being referred to as engagement, matters and it matters most during the critical first year of college (Tinto, 2001; Upcraft, Gardner, & Barefoot, 2005). What is less clear is how to make involvement matter, that is to say how to make it happen in different settings (e.g., non-residential institutions) and for differing students (e.g., commuting students who work) in ways that enhance retention and graduation.

This realization of the gap between research and practice, together with the challenges of declining enrollments and budgets, lead to what is now a heightened

¹ By placing so much emphasis of contact outside of class our research was inadvertently taking on a social class bias that tended to favor the more privileged students who had the luxury of either attending a residential institution or of being able to spend time on campus before and after class.

focus on “what works.” Though my own research on learning communities is far from the only study of effective practice (e.g., Beal & Noel, 1980), it is the first to clearly link educational innovations that shape classroom practice both to heightened forms of engagement and, in turn, to student persistence (Tinto, 1997, 1998). In doing so, it established what is now a widely accepted notion that the actions of the faculty, especially in the classroom, are key to institutional efforts to enhance student retention. Though it is true, as we are often reminded, that student retention is everyone’s business, it is now evident that it is the business of the faculty in particular. Their involvement in institutional retention efforts is often critical to the success of those efforts. Regrettably faculty involvement is still more limited than it should be.

Student retention has now become big business. There are a number of consulting firms that promote their ability to increase institutional retention rates. Each seems to have discovered the secret to student retention. In addition to the conferences, edited volumes, and a journal dedicated to student retention, there are now surveys of student engagement such as the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CCSSE). There are also several instruments that purport to measure “dropout proneness” and a number of institutional retention audits that are designed to enable institutions to assess their own actions on behalf of student retention. Many states now use some measure of institutional retention and/or graduation rates in their accountability programs for state sponsored or supported institutions. Several organizations and at least one well-known news magazine now rank institutions and in some cases states, by some measure of retention. Even the Federal government is considering using institutional retention rates in a national system of higher educational accountability. Indeed a number of states already use institutional retention in their accountability systems. Clearly increasing student retention matters more now than ever.

STUDENT RETENTION: WHAT NEXT?

Unfortunately, most institutions have not yet been able to translate what we know about student retention into forms of action that have led to substantial gains in student persistence and graduation. Though some have, many have not (Carey, 2005a, 2005b). Why is this? The answer is not simple, the challenges institutions face are many and complex, the pressures they feel to serve many different and often competing ends not trivial or easily dismissed.

Nevertheless it is possible to learn from our experience of over four decades of work on student retention to begin answering this critical question. That experience has, in this author’s view, taught us valuable lessons not only about the character of our practice, but also about the nature of our research and theory. These lessons tell us about what we must do next in the development of theory and its application to practice to further enhance our ability to promote student

retention on our campuses. Here I want to focus on three lessons that have to do with institutional action, program implementation, and student income.

MOVING FROM THEORY TO ACTION

The first lesson, the lesson of institutional action, can be broadly stated as follows: It is one thing to understand why students leave; it is another to know what institutions can do to help students stay and succeed.

Leaving is not the mirror image of staying. Knowing why students leave does not tell us, at least not directly, why students persist. More importantly it does not tell institutions, at least not directly, what they can do to help students stay and succeed. In the world of action, what matters are not our theories per se, but how they help institutions address pressing practical issues of persistence. Unfortunately, current theories of student leaving are not well-suited to that task. This is the case for several reasons not the least of which is that current theories of student leaving typically utilize abstractions and variables that are, on one hand, often difficult to operationalize and translate into forms of institutional practice and, on the other, focus on matters that are not directly under the immediate ability of institutions to influence. Take for instance the concept of academic and social integration. While it may be useful to theorists to know that academic and social integration matter, that theoretical insight does not tell practitioners, at least not directly, what they would do to achieve academic and/or social integration in their particular setting. Though the early work of Pace (1980), Astin (1984, 1993), and more recently Kuh (1999, 2003) has done much to operationalize the concept of academic and social integration in ways that can be reasonably measured and in turn used for institutional assessment, it does not yet tell institutions how they can enhance integration or what is now referred to as engagement. And while it is true that recent studies, for instance by Tinto and Russo (1994), Tinto (1997), Zhao and Kuh (2004), and Whitt et al. (2005) have looked into practices that enhance engagement, there is a great deal more to do.

In a similar fashion, though it is enlightening to know, for example, that student high school experiences and family context influence persistence in college, such knowledge is less useful to institutional officials because they often have little immediate control over student prior experiences or private lives. This is not to say that such information cannot be useful at least in an indirect way. Knowing about the role of family context may help institutions more effectively configure their support programs for differing student situations and populations. But it does not tell the institution either how to effectively tap into issues of family context or whether such actions, relative to other possible actions, are more likely to yield the outcome of increased persistence that it desires.

What is needed and what is not yet available is a model of institutional action that provides guidelines for the development of effective policies and programs that institutions can reasonably employ to enhance the persistence of all their

students.² Such a model would have to describe in a coherent, interrelated manner, how different institutional actions impact student persistence in varying ways and degrees in both two- and four-year settings. To be useful a model of institutional action would also have to be multi-layered in that it would have to connect specific programs and practices for students to institutional actions that provide support for the faculty and staff directing those programs and practices. In other words, it would have to delineate the organizational context within which effective practices and programs arise and endure. The development of such a model would require, among other things, not only more research on effective practice but also more research on the impact of organizational policies on those practices and in turn on student retention. Though the research of Braxton and Brier (1989) and Berger (2001) is a move in the right direction, it is only a first step.

Two areas, among many, that are ripe for exploration are the effects of classroom practice upon student learning and persistence and the impact of institutional investment in faculty and staff development programs on those outcomes. As for the former, though some research has looked into the impact of classroom practice (e.g., Nora, Cabrera, Hagedorn, & Pascarella, 1996; Tinto, 1997; Braxton, Bray, & Berger, 2000; Braxton, Milem, & Sullivan, 2000; and Umbach & Wawrzynski, 2005), there is clearly much more to be done in this area especially as regards the use of varying curricular, pedagogical, grading, and assessment practices. Here the growing body of research on the impact of learning communities on student retention stands out as having provided solid evidence of practices that enhance student retention (e.g., Tinto, 1997; Taylor with Moore, MacGregor, & Lindblad, 2004; Zhao & Kuh, 2004).

Regarding faculty and staff development, it is increasingly clear that faculty actions, especially in the classroom, are critical to institutional efforts to increase student retention, but it is also clear that the faculty of our universities and colleges are, as a matter of practice, the only faculty from kindergarten through universities who are literally not trained to teach their students. Yet we know little about the ways in which investments in differing types of faculty development programs impact rates of student retention. Though we have begun to link faculty pedagogy to student retention and therefore by inference to the importance of faculty development, that linkage has yet to be fully explored and tested.³

² In this regard the work of Braxton (2001), Braxton and McClendon (2001), Braxton, Hirschy, and McClendon (2004), and Seidman (2005) is noteworthy for it represents the first serious attempt to translate into recommendations for action what we know from the extensive body of research on student retention.

³ It can reasonably be argued that the best time to address the issue of faculty development is during doctoral study. For those who anticipate an academic career, it seems reasonable to expect that part of their program be directed toward the acquisition of pedagogical and assessment skills appropriate to the task of teaching. Though some such programs now exist (e.g., Syracuse University's Future Professorate Program), they are not yet fully developed or widespread.

So too have we yet to test the efficacy of institutional practices that differentially allocate faculty and resources to different segments of the institution. In this regard it is striking that many institutions, in particular the larger state colleges and universities, continue to assign the least experienced, typically least well paid, faculty to the key first year courses. The use of adjuncts and junior faculty for these typically large classes continues even though research tells us that the first year is the critical year in which decisions to stay or leave are most often made, where the foundations for effective learning are or are not established and where, by extension, the potential returns to institutional investment in student retention and learning are likely to be greatest. This is not to say that adjuncts and junior faculty may not be effective teachers. They may be. But they are generally less experienced and typically less connected to the institution than are senior faculty. Nevertheless, though we have reason to believe that “putting the best first” matters, we do not yet have research that provides reliable evidence of the impact of differential forms of institutional investment (e.g., in allocation of faculty and support services) on student retention. Here too there is much to be done.

Finally to be useful in the broader political context within which institutions operate, a model of institutional action must recognize what is obvious to institutional officials in the public sector that state policy provides an important context for institutional action.⁴ As such a model of institutional action must also speak to the influence of state policies and practices on institutional behaviors and in turn on institutional rates of student retention. In doing so, it would bring together conversations about practice and policy for student retention that have hitherto fore been carried out independently, namely those concerning institutional practice with those of state policy. Here then are other opportunities for research that focus, for instance, on the impact of differing accountability and/or funding systems on institutional retention rates.

IMPLEMENTATION FOR EFFECTIVE ACTION

The second lesson, that of program implementation, can be broadly stated as follows: It is one thing to identify effective action; it is another to implement it in ways that significantly enhance student retention over time. This lesson can be broken down into two corollary lessons. First, it is one thing to identify effective action; it is another to implement it fully. Second, it is one thing to begin a program; it is another to see it endure.

The regrettable fact is that many good ideas are not well implemented or implemented fully. In other cases, even when fully implemented, many programs do not endure. After a few years, like other programs before them, they fade away

⁴The same can be said of the role of accrediting agencies and other external organizations that oversee both institutional and program accreditation.

typically with the departure of the originators of the program or of a supportive administrator. Programs begin but often fail to garner the broader institutional support needed to become institutionalized and endure. Even among programs that endure, too many do so at the margins of institutional life. They fail to gain access to the mainstream of institutional academic life and as a result are limited in their impact.

While many institutions tout the importance of increasing student retention, not enough have taken student retention seriously. Too few are willing to commit needed resources and address the deeper structural issues that ultimately shape student persistence. They are willing to append retention efforts to their ongoing activities, but much less willing to alter those activities in ways that address the deeper roots of student attrition. There are numerous reasons why this is the case. Perhaps the most important is that increasing student retention is not high on everyone's list of priorities, in particular that of the faculty. While most faculty are willing to publicly proclaim the importance of retaining each and every student, they typically do not see retaining students as their job. Given what many faculty believe to be the root causes of attrition, namely the lack of skills and motivation, they might observe that they would not have a retention "problem" if the admission office only admitted more qualified students. Consequently, they would argue, at least privately, that student retention is appropriately the job of student affairs professionals in particular those who work in the area of developmental education. Yet we know that successful student retention is at its root a reflection of successful student education. That is the job of the faculty. Unfortunately too many of our conversations with faculty are not about student education but about student retention. This must change. We must stop talking to faculty about student retention and focus instead on the ways their actions can enhance student education. If faculty attend to that task, increased student retention will follow of its own accord. It is for this reason that we must bring to the study of student retention the extensive body of research on student learning and demonstrate the multiple connections between faculty efforts to improve student learning to that of improved student retention. Unfortunately, with few exceptions noted above this has yet to be done.

It is also the case that most institutions do not align their reward systems to the goal of enhanced student retention. It is one thing to talk about the importance of increasing student retention, it is another to invest scarce resources and adopt institutional faculty and staff reward systems that promote the behaviors that would reinforce that goal. It is little wonder then that while many faculty are willing to publicly proclaim the importance of retaining each and every student, they are in private the first to argue, on university campuses at least, that they will not get promoted and tenured unless they get research grants and publish. Unless the education and retention of students is not rewarded, in particular through promotion and tenure systems, many faculty will only give it lip service.

Here again is where more research is called for. Among other things, we need research that sheds light on the types of program and institutional practices that lead to successful implementation of programs and do so in ways that ensure that they endure over time. Equally important we need to know more about how it is that some programs are able to endure at the center of institutional life and become institutionalized, while others remain isolated at the margins of that life. We need to know what might be called the “tipping points” of program institutionalization. Currently such research is not available. Though there is a good deal of experience in these matters and more than a few consultant firms that will offer the “secret” to successful program implementation, that experience and that “knowledge” has yet to be put into a form that can be verified and replicated. Much is still conjecture.

Let me suggest that one area worthy of exploration is that of the application of assessment to the tasks of program improvement and program validation (i.e., formative and summative assessment). Both are important to successful implementation. But the latter is particularly important to gaining the institutional support programs need to grow and endure. The strategic use of data on program impact can be employed to validate the claim that resources committed to the program is in fact an investment that generates benefits to the institution that outweigh the costs of the program. Such usage of assessment data would call upon program staff to convert data on gains in student retention to data that different audiences, whose support is needed for program growth, take to be sufficient to warrant their support. Unfortunately too few retention programs pay heed to the importance of assessment and the ways it can be used to demonstrate the cost effectiveness of their programs. The hard truth is that there are many programs, retention or otherwise, that make claims upon institutional resources. In such circumstances, retention programs have to provide empirical evidence that resources committed to them are an investment that yields long-term benefits to the institution. Failing to do so undermines their ability to generate the sorts of long-term funding that is essential to program institutionalization.

Whether this or any other argument about the essential elements of successful program implementation proves correct is at this point merely conjecture. What is needed but what is not yet available, at least in verifiable form, is research that documents the common elements of successful program implementation in different institutional settings that lead to program institutionalization over time.

MOVING BEYOND ACCESS

The third lesson, the lesson of student income, has to do with the critical issue of equity. It can be stated as follows: Though access to higher education for low-income students has increased and gaps in access between high- and low-income students decreased, the gap between well-to-do and poor students in

four-year degree completion remains. Indeed it appears to have increased somewhat over time (NCES, 2005, Table 5-B, p. 24).⁵

That this is the case is reflected in a number of different, but related, events. First, there has been a noticeable shift in patterns of attendance of low-income students in two- and four-year institutions. In 1973-74, the first year of the Pell Grant program, 62.4% of Pell Grant recipients were enrolled in four-year colleges and universities. By 2001-02 the share of Pell Grant recipients enrolled in four-year colleges and universities had shrunk to 44.9%, a decline of 28%. Understandably, some, if not a large measure of differential participation can be attributed to well-documented differences in levels of academic preparation of low- and high-income students and the impact of recent policies that have restricted the access to four-year institutions for students who have substantial academic needs.⁶ But even among students with similar levels of academic “resources,” low socioeconomic students are less likely to attend four-year institutions than are students from high socioeconomic backgrounds (Cabrera, Burkum, & La Nasa, 2005, pp. 159-160, Figures 7.1 and 7.2) and, in attending four-year institutions, less likely to attend the most selective colleges and universities (Carnevale & Rose, 2003; Bowen, Kurzweil, & Tobin, 2005). There is, in fact, less socioeconomic diversity than racial and ethnic diversity at the most selective colleges and universities (Bowen, Kurzweil, & Tobin, 2005, p. 69, Table 1.1).

Economic stratification of participation can also be observed in forms of participation that lead some students to attend full-time while others attend part-time and/or work while attending college. Not surprisingly, students from low-income families are considerably less likely to attend college full-time than are students from higher income families and more likely to work full-time while attending college (NCES 1999, Table 1.3).

Why does such economic stratification of participation matter? It matters because where and how one goes to college influences the likelihood of college completion. Data from a recently completed six-year national longitudinal study of students who began college in 1995/96 bear testimony to this fact. Whereas over 56% of high-income students earn a Bachelor’s degree within six years, only 25% of low-income students do (NCES, 2003, p. 57, Table 2.0C).⁷ Even among those who began higher education in similar types of institutions, income matters.

⁵ It is noteworthy that while overall rates of completion of all degrees over a five-year period have declined somewhat between 1989-90 to 1995-96 (49.9 to 46.6%), the percentage of students still enrolled after five years has grown (13.3 to 18.2%) (NCES, 2005, Table 5-A, p. 20). The net effect is that overall rates of persistence (including graduation) has increased somewhat (63.2 to 64.9%).

⁶ According to Cabrera, Burkum, and La Nasa’s (2005) recent study while only 7% of students from high socioeconomic status backgrounds begin college with “low academic resources” 22% of students from low-socioeconomic status backgrounds do.

⁷ Though some of this difference can be assigned to differences in prior academic preparation and educational aspirations, it is still the case that students from lower socioeconomic backgrounds are still less likely to transfer to a four-year institution (Dougherty & Kienzl, 2006).

Among those beginning in a two-year college, only 8% of low-income students earn a Bachelor's degree within six years while nearly 25% of high-income students do (NCES 2003, Table 2.1C). Similar, but not as dramatic differences in likelihood of completion also exist among four-year college entrants (NCES 2003-151, Table 2.2C).

Understandably, some of these differences can be attributed to differences in academic preparation and to the fact that low-income students are considerably less likely to attend elite institutions where graduates rates are quite high (Carnevale & Rose, 2003, p. 69, Table 2.1). But even within elite institutions, income matters. For instance among students attending the top tier of institutions, presumably among the most talented and motivated students in higher education, students from the lowest socioeconomic quartile are less likely to graduate (76%) than students from the highest quartile (90%) (Carnevale & Rose, 2003, p. 14). The facts are unavoidable. Though access to higher education has increased, greater equality in attainment of four-year college degrees has not followed suit. For too many low-income students access to higher education has become a revolving door, the promise of a Bachelor's degree unfulfilled.

Here is another area of research that must be addressed in the future, namely that which sheds light on the persistence of low-income students. We need to know more about the nature of their experiences in both two- and four-year institutions, the ways those experiences influence persistence, and more importantly the sorts of institutional and state actions that enhance their success in higher education.

This is not to say that there is no such work. There is (e.g., Choy & Bobbitt, 2000; Gandara, 1995; Gladieux & Swail, 1999; Paulsen & St. John, 2002). But much of the research co-mingles issues of race, education generational status, and income in ways that make it difficult to disentangle the independent effects of income. Though much of the research on students of color, for instance, is in fact research on low-income students, the two issues are not one and the same. Take as an example the well-known study *The Shape of the River* by Bowel and Bok (1998). Though much has been made of its analysis of the impact of affirmative action on the experiences of students of color among selective universities, the study proves not to be a study of low-income students (Rudenstine, 2001; Sowell, 1999). Only a small percentage of students of color who were able to gain entry to the elite institutions in the study were from low-income backgrounds.⁸

Given that low-income students are disproportionately academically under-prepared, we also need to connect the research on developmental education—inappropriately referred by some as remedial education—to that on the retention of low-income students. In particular, we must shed more light on the critical

⁸ The same problem of the co-mingling of income with other attributes characterizes the growing body of research on first-generation college students. Though first-generation college students are understandably more likely to be from low-income backgrounds, that is not always the case. More than a few are from middle-class backgrounds (NCES, 2005b, Table 1, p. 7).

linkage between institutional actions to enhance the education of academically under-prepared low-income students to that of their persistence and subsequent program completion. In this regard, research currently being conducted at Syracuse University on the adaptation of learning communities to the needs of academically under-prepared low-income students serves to reinforce a growing recognition that our ability to address the needs of these students requires that we do more than simply tinker at the margins of our educational practice.⁹ Among other things it requires a collaborative effort of faculty and student affairs professionals to change their pedagogical and curricular practices in ways that enable students to experience learning together within a context of contextualized academic and social support (Tinto, 1999).¹⁰

Finally, since so many low-income students begin in two-year colleges, we also need to conduct more research on the transfer of low-income students between two- and four-year colleges such as that by Cabrera, Burkum, and La Nasa (2005). This, it must be pointed out, is not simply a matter of articulation. Though articulation agreements are helpful, they do not help more low-income student transfer. What we need, but do not yet have, is a body of research that tells of the nature of institutional practices that enable more low-income students to transfer to and, in turn, succeed in four-year colleges and universities.

CLOSING THOUGHT

We have traveled a long way since we first began studying the issue of student retention. We have learned much about the complex character of student persistence and have become more sophisticated in our thinking about how to promote persistence for different students and in different settings. But, as the data reveal, it is a journey that has only begun. The really difficult work of shaping institutional practice, in particular for low-income students, has yet to be tackled. That work requires us to leave our retention fiefdoms and join forces with larger educational movements that seek to restructure the way we go about the task of educating all not just some of our students. It is to that larger educational task that we must now turn.

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¹⁰ The interested reader should visit <http://pathways.syr.edu> for more information.

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