THE ENGAGEMENT EXCHANGE

Pre-College Programs and the Engaged University

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INTRODUCTION

Pre-college programs are an important component of the engaged university's outreach mission, but are often overshadowed by the traditional research and teaching functions of the university. With increasing attention being devoted to college access issues around the country, engaged universities have an opportunity through pre-college programming to further their historical mission of reducing disparities in access to higher education. In this brief, the author describes the benefits of pre-college programming and offers suggestions for institutions to better support pre-college programs.

Until fairly recently, a high school education was sufficient training for most middle-class jobs in the United States. However, postsecondary education is critical in the knowledge-based economy of the 21st century (Drucker, 1992). As of 2006, the annual median family income of those with a four-year college degree was $50,000 more than those with a high school diploma (Haskins, Holzer, & Lerman, 2009). Despite the clear economic benefits of postsecondary education, only 39% of adult Americans hold a two- or four-year degree. Governments, foundations, and corporations in the U.S. have recognized the need to better prepare students for college in order to compete in the international economy. The engaged university, which has long promoted college access, has a significant opportunity to increase its commitment to pre-college programming to help meet the workforce demands of the knowledge-based economy.

The Kellogg Commission on the Future of State and Land-Grant Universities challenged universities to reengage with communities using collaborative practices to better align university activities with community needs (Kellogg Commission, 1999). The report specifically called on the engaged university to offer targeted academic programs to children and pre-college youth. Pre-college programs serve as a highly visible form of public engagement within the community that has the potential to "pay big dividends in the years ahead" (Kellogg Commission, 1999, p.34).

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This brief describes two main types of pre-college programs, then articulates the benefits of pre-college programs to the university and the community, andfinally provides suggestions to increase the role of pre-college programming on university campuses.

Though the term "pre-college" is applied in many ways, the term is used broadly here to refer to campus-based college access programs. Pre-college programs can be found at postsecondary institutions across the country. They offer K-12 students opportunities to prepare academically and socially for higher education, provide a pipeline for K-12 students, and expose students to campus living and learning experiences. Higher education is heavily invested in youth outreach efforts, but the benefits of pre-college programming for the community and for the university as a whole are often overlooked. This brief describes two main types of pre-college programs, then articulates the benefits of pre-college programs to the university and the community, and finally provides suggestions to increase the role of pre-college programming on university campuses.

TYPES OF PRE-COLLEGE PROGRAMS

Two types of pre-college programs are covered here: traditional college access programs and discipline-focused programs. Traditional college access programs typically assist disadvantaged populations in preparing for college. The most widely recognized traditional college access programs are the federal TRIO programs (Swail & Perna, 2002). The acronym refers to a "trio" of three federally-funded initiatives launched in the 1960s, as part of the War on Poverty, to encourage access to higher education for low-income students. Federal appropriations for TRIO totaled over $700 million in 2008 (U.S. Department of Education [USDOE] Office of Communications and Outreach, 2008). By law, TRIO programs require at least two-thirds of the participants to be both low-income and first-generation college attendees. The remaining participants must be either low-income or first-generation. The current TRIO programs include Upward Bound, Talent Search, and GEAR UP.

Upward Bound

Upward Bound was authorized as a pilot project by the Economic Opportunity Act of 1964 to support low-income youth in graduating from high school and pursuing a college education. The program serves students between the ages of 13 and 19 who have completed the eighth grade. In the 2005-2006 academic year, Upward Bound served over 140,000 students across the country (USDOE Office of Postsecondary Education, 2008a). The program is required to offer instruction in mathematics, laboratory science, composition, literature, and foreign languages (USDOE Office of Postsecondary Education, 2008b). Programs offer an intensive summer program that simulates the college-going experience and an academic year program. During the school year, programming is usually offered on the weekend and/or after regular school hours (Calahan & Curtin, 2004).

Talent Search

Talent Search was created a year after Upward Bound as part of the Higher Education Act of 1965 to assist students applying for federal financial aid for postsecondary education. The program serves students between the ages of 11 and 27 who have completed the fifth grade. During the 2003-2004 academic year, Talent Search served approximately 400,000 participants (USDOE Office of Postsecondary Education, 2006). Services include providing information on postsecondary education, financial aid counseling, career exploration, tutorial services, exposure to college campuses, college admissions assistance, college entrance exam assistance, mentoring programs, and workshops for the families of participants. Talent Search also serves high school dropouts by encouraging them to complete their high school education and pursue postsecondary education (USDOE Office of Postsecondary Education, 2008b).

GEAR UP

GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) offers a wide range of services to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. GEAR UP serves an entire cohort of students beginning no later than the seventh grade and follows the cohort through high school (National Council for Community and Education Partnerships, 2008). The passage of the Higher Education Opportunity Act in 2008 gives GEAR UP programs the option of continuing to serve participants during the first year of college (National Council for Community and Education Partnerships, 2008). Programs are required, at minimum, to provide financial aid counseling, encourage students to enroll in a rigorous high school curriculum, increase high school graduation rates, assist students in applying for college, and offer scholarships to participants.

Disciplinary Programs

The federal TRIO programs are the most widely known pre-college programs, but many other college access programs exist on campuses across the country. Universities sponsor a large number of programs designed to encourage interest in particular disciplines. Programs that expose students to STEM disciplines (i.e., science, technology, engineering, and mathematics) have become increasingly popular in light of government and corporate calls for more STEM graduates, a vital factor in the country's ability to compete in the global economy (Jobs for the Future, 2007). Particular emphasis has been placed on attracting more women and minority students to STEM disciplines. Discipline-focused pre-college programs can also be found in the arts, foreign language and area studies, health professions, agriculture, communications, teacher education, business, and political science. Programs may be short- or long-term, residential or commuter.

BENEFITS OF PRE-COLLEGE PROGRAMS

Benefits to Participants

Traditional K-12 schools have also incorporated programs to place students on a college-going path. However, educational stakeholders are increasingly devoting more attention to the education of children outside of the traditional school day (Jordan & Nettles, 2000). Out-of-school time (OST) programming, like pre-college, offers students enrichment opportunities outside of the classroom and provides youth with structured environments, especially during the summer months. OST programming increases the academic skills of students and assists in developing positive youth assets (Pittman, Irby, Yohalem, & Wilson-Ahlstrom, 2004). Participation in OST programming has been linked to increased efforts to complete homework, increased parental engagement (Kane, 2004), increased intrinsic motivation, more effort, less apathy, and increased positive emotions (Vandell et al., 2005). Choy, Horn, Nunez, and Chen (2000) found that college outreach programs targeting high-school students doubled the odds that students would enroll in postsecondary education.

Annual appropriations for the 21st Century Community Learning Centers, which fund a broad array of before-and after-school programs, increased from $453 million in 2001 to $981 million in 2007 (USDOE, 2008).

Funding devoted to OST programming has increased substantially over the past few decades (Borman, 2001). Annual appropriations for the 21st Century Community Learning Centers, which fund a broad array of before- and after-school programs, increased from $453 million in 2001 to $981 million in 2007 (USDOE, 2008). These funding increases have doubled the availability of OST programming within the public schools over the past 25 years (Borman, 2001). Nonetheless, the demand for OST programming, including college access programming, far outpaces the supply (Fairchild & Boulay, 2002; Venezia & Rainwater, 2007).

Benefits to the Community

College access programs are not exclusively campus-based. Community-based college access programs have become a popular way to assist youth in pursuing postsecondary education. However, pre-college programs offer several unique advantages over college access programming outside the university. First, the university campus offers a wealth of expertise for youth outreach professionals. Content and pedagogical expertise on campus is an important resource for youth outreach programs that may not always be present in other college programs. Secondly, the university has the potential to foster increased motivations toward and preparation for postsecondary education among youth (Venezia & Rainwater, 2007). Finally, because of the expertise on campus, the engaged university is uniquely situated to serve as a leader within the community on college access programming that can help other youth-serving organizations embed college access into existing programming.

As pressures mount to demonstrate the public good of postsecondary institutions, the contributions of pre-college programs cannot be overlooked.

Benefits to Institutions

Pre-college programming offers a number of benefits to postsecondary institutions as well. First, pre-college programming is used to recruit students and to promote specific majors. Second, with most of the undergraduate population off campus during the summer, pre-college programs serve as an important source of revenue for postsecondary institutions during the summer months. At Michigan State University, for example, $3 million of revenue was generated by housing over 20,000 youth in 2008. More and more colleges are counting on pre-college programs to generate additional revenue during the summer months when the campus serves fewer undergraduate students (Foderaro, 2009). Finally, pre-college programs are an investment in the community. The research and teaching functions are often referenced to demonstrate the importance of postsecondary institutions to communities, but pre-college programs touch many families and are a valuable service to communities. As pressures mount to demonstrate the public good of postsecondary institutions, the contributions of pre-college programs cannot be overlooked.

SUPPORTING PRE-COLLEGE PROGRAMS

Since pre-college programs provide significant benefits to both communities and postsecondary institutions, coordinated institutional investment in such programs has the potential to yield even greater impacts. To develop systemic supports for pre-college programs, postsecondary institutions can improve organizational structures around pre-college programs and create systems to document and evaluate their impact on participants, the community, and the university.

Improving Organizational Structures

Some institutions may centralize pre-college functions, but at most universities pre-college programs are scattered across campus. Without adequate support at the institutional level, programs may lack the resources to maintain funding and staffing. Professionals working with pre-college programs in a decentralized environment may have few opportunities to interact with other youth outreach professionals. Central organizational support can help legitimize pre-college programs on campus and offer coordination of resources to better support them. Two options that institutions might consider to increase support for pre-college programs include appointing a senior administrator to oversee pre-college functions and creating a community of practice around pre-college programming.

Central administrator. The appropriate senior administrator or group of administrators will largely depend on the institution, but likely candidates include the senior administrators for outreach or continuing education, student support services, or enrollment management. The administrator(s) can offer general oversight and funding support to pre-college programs and serve as a

point of entry for those interested in participating. Having one or more senior administrators responsible for pre-college programs has the advantage of support within the executive levels of the institution.

Communities of practice. Although investment in a central administrator has the potential to leverage significant impacts for pre-college programs, budgetary constraints in today's environment may make it difficult to implement this option. Another—and a low-cost—option for institutions seeking to create organizational structures to support pre-college programs is to form a community of practice. Wenger, McDermott, and Snyder (2002) define a community of practice as "a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p.4). Communities of practice cut across traditional organizational and disciplinary structures and can exist without any formal recognition by the institution. A community of practice around pre-college programs has the potential to foster greater expertise among pre-college professionals, more effective collaborations within the university, and improved partnerships outside of the institution.

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Expertise on the university campus is invaluable. Most youth outreach programs at postsecondary institutions are still in the early stages of developing professional standards. Youth development professionals may not be educators by training and are "often unfamiliar with the literature to support their program goals and methods" (Wiltz, 2005, p.16). Communities of practice can support pre-college professionals by sharing informational resources that will build expertise as well as by facilitating collaboration between program administrators and university faculty with expertise in the areas of interest. Furthermore, pre-college professionals can use the community of practice to disseminate information about program outcomes and expand awareness and investment in pre-college programs.

A community of practice around pre-college programs can also encourage greater collaboration within the university. With budget deficits affecting postsecondary institutions across the country, sharing resources becomes a greater priority. Additionally, the educational needs of youth are evolving in many ways and programs must find ways to respond to this evolution. Shifts in population, the economy, the workforce, the environment, and technology all impact how educational institutions should be preparing youth to succeed in postsecondary education and to function as global citizens. Just as university research and undergraduate education are beginning to move beyond traditional disciplinary lines, pre-college programs must respond to the complex, multi-faceted issues that affect youth by developing initiatives that span disciplines. Multidisciplinary efforts are likely to be more appealing to funders and will allow practitioners to approach these complex issues from different disciplinary traditions.

Finally, a community of practice around pre-college programs can foster better collaboration with community organizations. When pre-college programs are scattered across the university, each program's personnel is responsible for their own networking, with varying success depending on the individuals and units involved. However, a community of practice creates a platform for pre-college directors to share their external networks and promote each other's programs.

Documenting and Evaluating the Impact of Pre-College Programs

With reform efforts sweeping K-12 education systems and increasing pressure for accountability on higher education from governments and the public, pre-college programs must establish systems to measure program outcomes and impacts. The intended outcomes of traditional K-12 education, especially since No Child Left Behind, have tended to rely on standardized tests and grades. These measures of success stand in sharp contrast to the intended outcomes of many pre-college programs, which focus on building developmental assets and preparing students for college.

With increased expectations among funders for demonstrated outcomes, pre-college programs must develop systems to measure their impact.

Despite increasing investment in pre-college programs, little is known about the outcomes and effectiveness of these programs (Swail & Perna, 2002). Even the federal TRIO programs and other large-scale pre-college programs lack significant longitudinal data on program outcomes. Many pre-college programs lack sufficient funding to conduct evaluations. Moreover, program directors may not see assessment and evaluation as particularly relevant to helping students get into college (Tierney, 2002), instead preferring to devote all funds to programming. However, with increased expectations among funders for demonstrated outcomes, pre-college programs must develop systems to measure their impact.

Individual pre-college programs have limited resources and generally lack expertise in assessment and evaluation. To address these needs, postsecondary institutions can create centralized systems to measure program outcomes (Swail & Perna, 2002). Documenting participants' subsequent college enrollment and graduation rates is a practice that should be applied to all pre-college programs. The National Student Clearinghouse is a national enrollment verification system that can be used by pre-college programs to determine college enrollment and graduation rates for program participants. The system provides detailed information for each student, including postsecondary institutions attended.

However, most pre-college programs have established outcomes that go beyond enrollment and graduation. Other program outcomes may include increased motivation for postsecondary education, interest in particular fields, interest in a particular institution, increased motivation toward K-12 education, improved college transitions, increases in specific content or skill areas, and improvements in developmental assets and 21st century skills such as critical thinking, communications skills, and problem-solving.

An excellent assessment system for pre-college programs should be longitudinal and should track individual students. The system should have the ability to be integrated with other functions within the university, especially admissions. Postsecondary institutions can use strategic planning activities like logic modeling to articulate program outcomes that are relevant across pre-college programs and to establish benchmarking for outcomes (W.K. Kellogg Foundation, 2004). Individual programs may have needs that a campus-wide approach cannot account for, but a centralized approach will make the most use of limited resources. Developing a data tracking system for pre-college programs requires an investment from institutions, especially in maintaining and updating the system, but improved data systems are necessary for programs to move beyond anecdotal information on program outcomes (Tierney, 2002). With little expertise at the program level and a lack of existing evaluation criteria for college access programs, pre-college programs have a critical need for institutional support for assessment and evaluation (Coles, 1999; Swail & Perna, 2002; Tierney, 2002)—and the investment has the potential to leverage significant benefits for the university and community.

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CONCLUSIONS

Pre-college programs serve an important purpose on college campuses and are likely to proliferate as more focus is placed on raising college enrollment and graduation rates. However, accountability pressures and the potential to increase the benefits of pre-college programs for both higher education and the community make it imperative for postsecondary institutions to reevaluate how pre-college programs are supported on campus. Two promising areas for support are the organizational structures around programs and the assessment systems used to measure program outcomes. With limited investment in these two areas, universities can move toward identifying successful programs and elevating pre-college programming as an important function of the engaged university.

REFERENCES

Borman, G. D. (2001). Summers are for learning. *Principal*, 80, 26–29.

Calahan, M. W., & Curtin, T. R. (2004, August). *A profile of the Upward Bound program: 2000-2001*. U.S. Department of Education, Office of Postsecondary Education. Retrieved from http://www.ed.gov/programs/trioupbound/ubprofile-00-01.pdf

Choy, S. P., Horn, L. J., Nunez, A.-M., & Chen, X. (2000). Transition to college: What helps at-risk students and students whose parents did not attend college. *New Directions for Institutional Research*, 107, 45-63. Retrieved from http://www3.interscience.wiley.com/journal/101524636/issue

Coles, A. S. (1999). School to college transition programs for low income and minority youth. *Advances in Education Research*, 4, 7-42. Washington, DC: National Library of Education.

Drucker, P. F. (1992). *The age of discontinuity: Guidelines to our changing society*. Piscataway, NJ: Transaction Publishers.

Fairchild, R. A., & Boulay, M. (2002, November). *What if summer learning loss were an education policy priority?* Paper presented at the Association of Public Policy Analysis and Management Conference, Dallas, TX.

Foderaro, L. W. (2009, June 21). For colleges needing cash, summer's no longer a quiet season. *The New York Times*. Retrieved from http://www.nytimes.com/2009/06/22/education/22campus.html?_r=1&partner=rss&emc=rss

Haskins, R., Holzer, H., & Lerman, R. (2009, May). *Promoting economic mobility by increasing postsecondary education*. Washington, DC: Economic Mobility Project. Retrieved from http://www.pewtrusts.org/our_work_report_detail.aspx?id=51956

Jobs for the Future. (2007, April). *The STEM workforce challenge: The role of the public workforce system in a national solution for a competitive science, technology, engineering, and mathematics (STEM) workforce.* Washington, DC: U.S. Department of Labor. Retrieved from http://www.doleta.gov/Youth_services/pdf/STEM_Report_4%2007.pdf

Jordan, W. J., & Nettles, S. M. (2000). How students invest their time out of school: Effects on school-related outcomes. *Social Psychology of Education*, 3, 217-243. Retrieved from http://www.springerlink.com/content/k7h4503635178462

Kane, T. J. (2004, January 16). *The impact of after-school programs: Interpreting the results of four recent evaluations* (Working Paper). New York: W.T. Grant Foundation. Retrieved from http://www.pasesetter.com/reframe/documents/ThomasKane.pdf

Kellogg Commission on the Future of State and Land-Grant Universities. (1999, February). *Returning to our roots: The engaged institution* (Report No. 3). Washington, DC: National Association of State Universities and Land-Grant Colleges. Retrieved from http://www.aplu.org/NetCommunity/Page.aspx?pid=305

National Council for Community and Education Partnerships. (2008, August). *Overview of the reauthorization of the Higher Education Act: Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)*. Retrieved from www.aau.edu/WorkArea/DownloadAsset.aspx?id=7336

Pittman, K. J., Irby, M., Yohalem, N., & Wilson-Ahlstrom, A. (2004). Blurring the lines for learning: The role of out-of-school programs as complements to formal learning. *New Directions for Youth Development*, 101, 19-41. Retrieved from http://www3.interscience.wiley.com/journal/107642320/abstract

Swail, W. S., & Perna, L. W. (2002). Pre-college outreach programs: A national perspective. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 15-34). Albany, NY: State University of New York Press.

Tierney, W. G. (2002). Reflective evaluation: Improving practice in college preparation programs. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 217-230). Albany, NY: State University of New York.

U.S. Department of Education. (2008). *21st Century Community Learning Centers: Funding status*. Retrieved from http://www.ed.gov/programs/21stcclc/funding.html

U.S. Department of Education, Office of Communications and Outreach. (2008). *Guide to U.S. Department of Education programs*. Washington, DC: Author. Retrieved from http://www.ed.gov/programs/gtep/index.html

U.S. Department of Education, Office of Postsecondary Education. (2006, September). *An interim report of the Talent Search program: 2002-03 and 2003-04, with select data from 2000-02*. Washington, DC: Author. Retrieved from http://www.ed.gov/programs/triotalent/tsinterimreport2002-04.pdf

REFERENCES
CONTINUED FROM PAGE 9

U.S. Department of Education, Office of Postsecondary Education. (2008a, March). *Upward Bound and Upward Bound Math-Science program outcomes for participants expected to graduate high school in 2004-2005, with supporting data from 2005-2006.* Washington, DC: Author. Retrieved from http://www.ed.gov/about/offices/list/ope/trio/ub-ubms-outcomes-2004.pdf

U.S. Department of Education, Office of Postsecondary Education. (2008b, August). *A profile of the federal TRIO programs and Child Care Access Means Parents in School program.* Washington, DC: Author. Retrieved from http://www.ed.gov/about/offices/list/ope/trio/trioprofile2008.pdf

Vandell, D. L., Reisner, E. R., Brown, B. B., Dadisman, K., Pierce, K. M., Lee, D., & Pechman, E. M. (2005). *The study of promising after-school programs: Examination of intermediate outcomes in year 2* (Report to the Charles Stewart Mott Foundation). Irvine: University of California, Department of Education. Retrieved from http://childcare.gse.uci.edu/pdf/afterschool/reports/PASP%20Intermediate%20Outcomes.pdf

Venezia, A., & Rainwater, T. (2007). Early outreach. In State Higher Education Executive Officers (SHEEO), *More student success: A systemic solution* (pp. 13-35; DocID 27462). Boulder, CO: SHEEO. Retrieved from http://www.sheeo.org/pubs/pubs_results.asp?issueID=14

W. K. Kellogg Foundation. (2004, January). *Using logic models to bring together planning, evaluation, and action: Logic model development guide.* Retrieved from http://www.wkkf.org/knowledge-center/Resources-Page.aspx

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge.* Boston: Harvard Business School Press.

Wiltz, L. K. (2005). I need a bigger suitcase: The evaluator role in nonformal education. *New Directions for Evaluation*, 108, 13-28.