

International Perspectives on Retention and Persistence

Gary J Burkholder*
Walden University, USA
Gary.Burkholder@laureate.net

Nicole Holland
Walden University, USA
Nicole.Holland@waldenu.edu

Introduction

Improving retention and persistence in higher education institutions in the United States has been a key priority since the 1970's, when researchers began focusing on why students were leaving school. The focus for institutions up to that time was primarily on financial viability; achieving sustainability through increased enrollment and college attendance then became important (Morrison & Silverman, 2012, p. 62). Researchers in persistence and retention have proposed a number of theoretical models to explain why students do and do not persist in traditional higher education settings; these models have evolved over time to include reasons for attrition among non-traditional students, ethnic minority students, and others.

Calderon (2012) reported that the number of students enrolled in tertiary education worldwide will likely increase 314% between 2000 and 2030; such a dramatic increase presents challenges for retention and persistence of students. As education is becoming increasingly global in nature through the establishment of branch campuses, mobility of international students, and the increasing reach made possible through internet delivery, it is important to clarify our understanding of retention and persistence and its potential consequences for education worldwide. Researchers can use the experiences of the development of higher education infrastructure in the United States to guide models of development in other countries outside the U.S.. In a similar manner, understanding the challenges faced in higher education outside the U.S. can provide perspectives on contemporary understanding of persistence and retention.

Participation in and completion of higher (tertiary) education degrees has become a priority worldwide. In the United States, President Obama has set significant goals for higher education attainment; for example, he has suggested that community colleges should strive for 5 million graduates by 2020 (The White House, 2013). The European Union (EU) has stated a goal of 40% of all traditional college age individuals having graduated from a higher education institution by 2020 (European Commission, 2013, p. 12). In developing countries, there is a pressing need to provide tertiary education that supports the professions that are necessary to sustain a rising middle class and thus a healthy economy (Kapur & Crowley, 2008). This expressed need is not without positive consequences.

Research in the United States continues to support the economic and social advantage that results from achieving a tertiary degree. “Higher education benefits students, employers, the economy and society. Graduates earn higher salaries and contribute more, on average, to economic growth” (Comptroller and Auditor General, 2007, p. 5).

Greenstone, Looney, Patashnik, and Yu (2013), as part of a policy statement, demonstrated that higher education is one pathway out of poverty (p. 14) and that the annual earnings of college graduates, compared to those who did not attend college, were approximately double (p. 16). The Organization for Economic Cooperation and Development (OECD, 2012) reported that employment rates are 28% higher for graduates from tertiary programs compared to those who have not completed upper secondary education (p. 120). It is evident that higher education holds a promise for better employability and higher individual incomes globally as well as for more general social and economic prosperity, particularly in developing countries seeking to expand the middle class. As such, these benefits of tertiary education appear to have encouraged participation.

Enrollment in tertiary education has increased significantly. Kapur and Crowley (2008) noted that the number of students in tertiary education worldwide approximately doubled between 1991 and 2004 to 123 million students. In a report prepared for the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Altbach, Reisberg, and Rumbley (2009) pointed that “the percentage of the [college] age cohort enrolled in tertiary education has grown from 19% in 2000 to 26% in 2007” (p. vi); the authors also noted that “there are some 150.6 million tertiary students globally, roughly a 53% increase over 2000” (p. vi). Of note is that the largest gains have been in middle income countries and the least in developing nations (Altbach et al., 2009).

Statistics on enrollments in higher education in select countries provide insight into these trends. Gross enrollment ratios (the percentage of students in higher education of the total population of eligible students) between 1980 and 2004 more than doubled in Southeast Asia (to 9.7%) and in Latin America (to 28.6%); other areas saw more significant expansions (for example, in the least developed countries, the percentage increased nearly 4 times to 8.7%) (Kapur & Crowley, 2008). Much of this is likely due to improvements in primary education rates; however, such improvements continue to place stresses on tertiary education structures that may be unable to accommodate the larger number of students seeking higher education degrees (Kapur & Crowley, 2008). Although students are enrolling in tertiary education at increasing rates, attention must also be given to whether these same students are progressing and eventually completing their degrees.

International Retention and Persistence Data

Retention data was found for a few select countries and for varying cohorts. In a multi-national analysis of retention in tertiary education, van Stolk et al. (2007) provided available retention rate data as context for a discussion of retention strategies. First year retention rates of 78% were cited for a 2002 cohort of Australian undergraduate students and 97% for a 1999 cohort of native Dutch students in the Netherlands (van Stolk et al., 2007). The National Audit Office (2007) reported a 91% first year retention rate for a 2004 cohort of tertiary students in the

United Kingdom; this rate ranging by country between 89.3% (Scotland) and 91.6% (England) and remaining fairly stable since 1999. More recent data can be found for first time, full time undergraduate students in the United States via the Integrated Postsecondary Data System (IPEDS). The first year retention rate for a 2010 cohort of full time, first time undergraduates from all participating U.S. institutions was 78% (National Center for Education Statistics, 2010).

Graduation and completion rates were reported more broadly. According to the 2013 OECD *Education at a Glance* report, an analysis of graduation rates (defined as the total number of graduates divided by the population at the typical age of graduation for said educational level) revealed that “39% of young people will graduate from tertiary-type A first-degree programmes (often called a bachelor’s degree) and 17% from tertiary-type A second degree programmes (often called a master’s degree)” (OECD, 2013, p. 56). Like enrollment rates, graduation rates have been increasing over time. The 2013 OECD report noted a 19 percentage point average increase in graduation rates from 1995 to 2011 amongst OECD countries for first degree (bachelors) programs. Graduation rates are lower when we look at non-OECD or other G20 countries (e.g., Argentina, Brazil, China, India, and South Africa) with an average graduation rate of 29% from first degree (bachelors) and 9% from second degree (master’s) tertiary programs across G20 countries combined (OECD, 2013).

In addition to graduation rates, the OECD provides another measure of persistence via completion rates (defined as the percentage of students who enter tertiary education in a specific cohort and eventually graduate). About 70% of students across OECD countries graduated from a first degree (bachelors) program, with completion rates ranging from 48% (Hungary) to 91% (Japan) (OECD, 2013). The United States falls below the OECD average, reporting a completion rate of 64%. Although completion rate data were not available within the OECD report for other G20 countries, Fisher and Scott (2007) found that for African higher education institutions, only 30% of first-time students will graduate within 5 years; completion rates also varied across field of study; ranging from 60% completion in business/management professional bachelor’s degree programs to 17% in engineering diploma degree programs. Additionally, rather large differences in completion rates between black and white students in Africa were found, with white students completing professional bachelor’s degrees in business/management at rates more than two times that of black students (33% compared to 83%; Fisher & Scott, 2007).

International Retention Strategies

A number of researchers have proposed models of retention, including Astin (1984); Bean (2005); and Tinto (1975; 1993; 2012). Tinto’s model of student persistence is probably one of the most widely recognized frameworks for understanding undergraduate student retention (Met, 2004). Tinto identified a number of factors that influence this transition and impact individual decisions affecting degree attainment, including background variables (student high school academic performance, parent education, and individual personality attributes); institutional variables (support by teachers, learning facilities); and situational factors (such as medical circumstances, and debt, family, and other obligations). Family and individual background variables, institutional factors, and situational factors influence student academic and institutional commitment that are critical to academic and social integration into the institution, and the success of this integration impacts graduation outcomes.

A detailed analysis of the different theories is beyond the scope of this article; others have explored this area in great detail. Seidman (2012) has an edited book that describes thoroughly the different models of retention and empirical support; Metz (2004) provides a detailed historical analysis of the evolution of the Tinto model in the context of competing models, and Salter (2012) described how online student retention would be influenced using Bean's themes of college student success. What is useful is a preliminary examination of factors related to student retention and persistence outside the U.S. in order to gain an initial understanding of what kinds of interventions could be useful and whether the models of retention and persistence that guide interventions in the United States have broader applicability.

Retention and persistence research outside the U.S. has focused on the need for better college preparation, increased educational financial resources for both institutions and students, and the ability to attract high quality faculty. In Africa, (which arguably also holds true for other developing countries), large drop-out rates in primary and secondary education result in a smaller proportion of the population ready for tertiary education, and interventions aimed at developing skills at the post-secondary level are needed (Fisher & Scott, 2007). The authors proposed the development of a post-secondary sector that would focus on preparation for tertiary education for those who did not complete secondary schooling. There has been growing recognition as well in the United States for the need for programs to prepare students for higher education, particularly those who are first generation and working adults, many of whom have been out of school for significant periods of time (Burkholder et al., 2013; Morrison & Silverman, 2012). Africa is not alone in focusing their resources towards establishing and improving tertiary preparation.

Asia has been investing significant resources in primary education which ultimately should boost numbers of prepared students who can succeed in tertiary education (Pfeiff, 2010). However, Pfeiff also noted that there is still much work to be done at the higher grade levels, particularly where (a) college competition is stiff and limited numbers of students enter; (b) many students are still not sufficiently prepared for further education; and (c) the number of students needing skills training offered in post-secondary education far outpaces available space. Such preparation is consistent with Seidman's model (Morrison & Silverman, 2012) that focuses on developing student success skills as a necessary component of institutional retention efforts.

Financial resources are likely to be a concern for establishing access to tertiary education worldwide. A study of education in Brazil, Colombia, Mexico, and Peru demonstrated that living costs are a higher percentage of gross national product per capita than in high-income countries (29% compared to 19%) and that students in those countries pay a significant proportion of the education expense (60% of gross domestic product per capita compared with 19% in high-income countries) (Murakami & Blom, 2008). In addition, low levels of grant aid compound financial inability to attend tertiary education. The Asian Development Bank (2010) noted that increased private-public partnerships would be necessary to offset the high costs of providing post-secondary education. Authors found in one major study comparing attrition causes in the United Kingdom, Netherlands, United States, and Australia that financial burden is a primary cause of attrition (van Stolk, Tiessen, Clift, & Levitt, 2007). Financial support at the

individual level as well as at the government level (to boost infrastructure) is a necessary component of access, retention, and persistence to graduation.

Retention and Persistence in Global Tertiary Education: Questions for the Future

This brief analysis raises several areas for further research regarding understanding retention and persistence in tertiary education on a global level.

Access

While not directly related to retention and persistence, as education becomes increasingly global, the number of opportunities for quality tertiary education greatly expands. To take advantage of this, prospective students will need access to those resources which will require technology infrastructures that are variable across the globe. Globally, the number of internet users has increased from about 14% in 2004 to 36% in 2012 (World Bank, 2014). However, internet access is highly variable with greater than 80% of the population in the U.S. and in many European countries, to less than 10% in many Asian and African countries. Moreover, within Asia, internet access ranges from 0.5% (Cambodia) to 73.8% (Japan) (Asian Development Bank, 2012). When e-learning readiness (defined as an organization/country preparedness to engage in e-learning activities) was examined, country rankings ranged (out of 70 countries included) from 5th (Korea) to 59th (Sri Lanka), indicating that many countries in Asia have a significant way to go in order to have distance learning become a viable and significant part of the educational delivery system (Asian Development Bank, 2012). Also useful would be an analysis of the roles that private and public, not-for-profit and for-profit entities play in improving access to quality education.

Infrastructure

It is likely that the paths to developing the necessary infrastructure to support tertiary education will follow a path similar to that in the U.S., with an initial focus on sustaining education followed by retention. As noted previously, in the earliest stages of evolution of higher education, it is only when the infrastructure was in place that attention could shift from a focus on stability to retention and persistence, and the important role both play in longer-term financial viability could be recognized. To what extent can we learn from our (U.S.) history to help developing countries to create the infrastructure necessary to support a sound tertiary education system that is so important to nurturing the development of a strong middle class? In addition, hiring qualified faculty to teach at the tertiary level can be challenging in countries where that education is not established (Kotecha, 2009). Deeper and critical analysis of the issues related to sustainability in the context of global efforts by the World Bank, the Organization for Economic Cooperation and Development, and other entities is warranted; such analysis can help direct resources to where they are most needed.

Financial Considerations

One of the key components of access is financial; people need to be able to finance, in an affordable way, their education. For example, in the U.S., the cost of education continues to increase as the amount of direct state and federal aid to tertiary education institutions continues

to decrease. While students have access to support through federal and private loans, the overall debt burden is dramatically increasing; students in the U.S. are going further into debt and defaulting at an increasing level on their student loans (Greenstone et al., 2013). Previously noted were the high cost of living expenses and education in South American countries relative to other countries in the world. As it is likely that students, both in the U.S. and internationally, base persistence decisions on the perceived value of the education in relation to accumulated debt, the roles of global bodies, such as the World Bank, federal/national and local governments, and the individual in financing education should be examined.

Readiness for tertiary education

Readiness for tertiary education is probably one of the largest challenges facing higher education globally and will have a significant impact on retention. In many developing countries, improving access to and graduation from primary and secondary education is creating a large demand for institutions of higher education; however, many of those students may not be poised for success. As higher education access improves and the focus shifts from viewing college attainment as something for the intellectual elite to a reasonable goal for all, the policies toward open access (or broad admission) creates a large pool of college ready individuals who do not necessarily demonstrate the competencies to be successful. Fisher and Scott (2007) proposed a new post-secondary sector as one solution.

Data and common language

Tertiary student retention and persistence data proved difficult to find. An initial search for retention and graduation rates globally resulted in limited and often inconsistent sources as data for only a few select countries and non-comparable cohorts. Additionally, although common terminology tended to be used, definitions differed across countries.

Conclusion

This brief analysis demonstrates that higher (tertiary) education is moving into an exciting phase as a large number of higher education and government entities, for-profit and not-for-profit, are expanding greatly access to education. However, the rapid expansion raises risks for retention and persistence, particularly from a financial and academic preparation perspective. More research is needed that examines retention and persistence from a global perspective as more students move across borders to access education and as education is delivered to more countries globally.

REFERENCES

- Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). Trends in global higher education: Tracking an academic revolution (UNESCO Doc. No. ED.2009/Conf.402/inf.5). Paris, France: UNESCO. Retrieved from: <http://www.uis.unesco.org>

- Asian Development Bank (ADB). (2010). *Education by 2020: A sector operations plan* (Pub. Stock No. TIM102254). Mandaluyong City, Philippines: ADB. Retrieved from <http://www.adb.org>
- Asian Development Bank. (2012). Access without equity? Finding a better balance in higher education in Asia (Pub. Stock No. RPS124558). Mandaluyong City, Philippines: ADB. Retrieved from <http://www.adb.org>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 25, 297-308.
- Bean, J. P. (2005). Nine themes of college student retention. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 215-243). Westport, CT: ACE/Praeger.
- Burkholder, G. J., Lenio, J., Holland, N., Jobe, R., Seidman, A., Neal, D., & Middlebrook, J. (2013). An institutional approach to developing a culture of persistence. *Higher Learning Research Communication*, 3(3), 16-39.
- Calderon, A. (2012, September 2). Massification continues to transform higher education. *University World News*. Retrieved from <http://www.universityworldnews.com>
- European Commission. (2013, June). *Report to the European Commission on improving the quality of teaching and learning in Europe's higher education institutions*. Luxembourg: Publications Office of the European Union. doi:10.2766/42468
- Comptroller and Auditor General. (2007). *Staying the course: The retention of students in higher education*. London, EN: The Stationary Office. Retrieved from <https://www.nao.org.uk/>
- Fisher, G., & Scott, I. (2011, October). The role of higher education in closing the skills gap in South Africa (Background Paper No. 3). *Closing the skills and technology gap in South Africa*. Washington, DC: The World Bank. Retrieved from <http://www.ched.uct.ac.za>
- Greenstone, M., Looney, A., Patashnik, J., & Yu, M. (2013, June). Thirteen economic facts about social mobility and the role of education (Policy memo). Washington, DC: The Hamilton Project. Retrieved from <http://www.brookings.edu>
- Kapur, D., & Crowley, M. (2008). *Beyond the ABCs: Higher education and development* (Working Paper 139). Washington, DC: Centre for Global Development.
- Lawrence, J. (2005). Re-conceptualising attrition and retention: integrating theoretical, research and student perspectives. *Studies in Learning, Evaluation, Innovation, and Development*, 2(3), 16-33.
- Metz, G. W. (2004). Challenge and changes to Tinto's persistence theory: A historical review. *Journal of College Student Retention*, 6(2), 191-207.
- Morrison, L., & Silverman, L. (2004). Retention theories, models, and concepts. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 61-80). Westport, CT: ACE/Praeger.
- Murakami, Y., & Blom, A. (2008). Accessibility and affordability of tertiary education in Brazil, Colombia, Mexico and Peru within a global context (Policy Research Working Paper No. 4517). Retrieved from <http://www-wds.worldbank.org/>
- National Center for Education Statistics (NCED). (2010). *IPEDS Enrollment Survey* [Data file]. Retrieved from <http://nces.ed.gov/ipeds/datacenter/>
- Organization for Economic Cooperation and Development. (2009). Tertiary education level attainment for age group 25-64. *Education: Key Tables from OECD*, No. 4. doi:10.1787/20755120-2009-table3
- Organization for Economic Cooperation and Development (OECD). (2012). *Education at a Glance 2012: OECD Indicators*. Washington, DC: OECD Publishing. Retrieved from doi:10.1787/eag-2012-en
- Organization for Economic Cooperation and Development. (2013). *Education at a Glance 2013: OECD Indicators*. Washington, DC: OECD Publishing. doi:10.1787/eag-2013-en

- Otis, J. (2011, April/June). World class challenge. *Developmental Asia*, 10, 14-18.
- Pfeiff, M. (2011, April/June). Learning by numbers. *Development Asia*, 10, 6-11.
- Seidman, A. (Ed.) (2012). *College student retention: Formula for student success* (2nd ed.). New York, NY: ACE/Rowman & Littlefield.
- Kotecha, P. (Ed.). (2009). *Towards a common future: Higher education in the SADC region*. Wit, South Africa: Southern African Regional Universities Association. Retrieved from <http://www.sarua.org>
- The White House. (2013). *Education: Knowledge and skills for the jobs of the future*. Retrieved from <http://www.whitehouse.gov/issues/education/higher-education>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: The University of Chicago Press.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. Chicago, IL: University of Chicago Press.
- United Nations Education, Scientific, and Cultural Organization (UNESCO). (2014). Position paper on education post-2015 (UNESCO Doc. No. ED-14/EFA/POST-2015/1). Retrieved from: <http://en.unesco.org/>
- Van Stolk, C., Tiessen, J., Clift, J., & Levitt, R (2007). *Student retention in higher education courses: International Comparison*. Cambridge, UK: Rand Corp.
- World Bank. (2014). *Internet users (per 100 people)* [Data file]. Retrieved May 3, 2014 from <http://data.worldbank.org>