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Contributing to Society—An Impetus for Student Retention?

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Abstract. Participation in higher education is widening, resulting in a diverse student body from a variety of backgrounds. Institutions must identify factors contributing to the success of these students in order to improve first to second year retention as well as completion. They must also ensure these students are prepared with the cross-cutting skills valued by employers. This paper reviews a research study conducted at a large, regional, open admission university in the United States. The study examined the results of surveys administered to graduating students and alumni regarding their experiences at the university and specifically their perceptions of learning. Findings indicate that those who saw value in higher education as determined by perceived growth in skills such as oral and written communication, leadership, critical thinking, and global perspective were more likely to specify that they would make the decision to enroll in higher education were they to make the choice again than those who perceived less growth in these skill areas. The study indicates that recognition of the importance of skills that contribute to the broader society may influence degree completion.

Introduction

In an era of democratized higher education, institutions must understand the needs of a diverse range of students and how to support their success. In the US, 35.5% of all students enrolled in colleges and universities are considered traditional in terms of age (18-24 years old) (American Council on Education), 38% attend part-time, 34% are the first in their families to attend university, 28% have children, 26% are employed full time, 36% work part time, and 44% are non-White (Bill & Melinda Gates Foundation, 2020). In the UK, 34.1% of 18-year-olds were accepted to higher education in 2019 with mature acceptances for those over the age of 30 increasing following previous declines; this growth has resulted in achievement of the goal set in 1999 for 50% of people in England to attend university (UCAS, 2019). Additionally, the entry rate for 18-year-olds from the UK's least advantaged areas reached 21% in 2019 with an entry rate of 47.4% acceptance into higher education for the most advantaged group; in Scotland, entry rates were 13.3% for the least advantaged and 42.7% for those in the highest quintile area (UCAS, 2019). Those with minority ethnic backgrounds attending university consist of 24% (Pakham, 2019). Part-time enrollments in first-degree programs are currently around 24% (Bolton, 2019).

Data such as this indicates that conditions under which students traditionally experienced higher education, specifically by enrolling directly after high school, attending full time, living on campus, and focusing only on their studies with no work or family responsibilities, are

representative of the past. But how successful are the diverse students enrolling in higher education institutions today? In the US, recent figures indicate a 61.1% first-year retention rate for students who continue at the university where they initially enrolled and a 73.9% rate when including who transferred to a different university in their second year (National Student Clearinghouse Research Center, 2018). The completion rate for the 2012 cohort of entering students at four-year public institutions was 65.7% (National Clearinghouse Research Center, 2019). However, extensive gaps in attainment based on race and ethnicity are evident (Carnevale, Jayasundera, & Gulish, 2016). Non-continuation rates have been increasing in the UK due to widened participation from students with a range of life experiences and the need to balance family and work while studying (ITV, 2020). Disadvantaged students are more likely to drop out in the first year than those from advantaged backgrounds (8.8% compared to 6%).This undermines progress made in expanding access and calls are increasing for institutions to provide students with the support needed to be successful (Gov.UK, 2019).

Although the advantages of a post-secondary degree are substantial in terms of financial stability, with degree holders in the US earning on average 40% more than those with a high school education and those in the UK earning 30% more (Morshed, 2016, 2017), a variety of factors impact students' success. In both contexts, emphasis on assessment of student learning has become a critical factor in demonstrating accountability and value-added (Caspersen et al., 2017; Mountford-Zimdars et al., 2015; Seifert et al., 2014), but research has not explored how students' learning experiences impact their continuation and completion (Andrade et al., 2020).

The study reviewed in this paper examines student experiences in terms of perceived learning outcomes, goals, and engagement based on surveys administered to students at the time of graduation and university alumni one year after graduation (Andrade et al., 2020). The question explored is whether or not these students would return to the same university, go to another university, or simply not have attended university if they could start over with their current knowledge of higher education. The intent of the study was to gain insights into students' experiences, particularly those that impact continuation.

Literature Review

Two areas of research are relevant to the study. The first is current practice related to learning outcomes assessment in higher education and the second is retention theories.

Learning Outcomes

In the US, extensive research has been conducted to identify essential learning outcomes that stakeholders, specifically educators and employers, believe to be critical to professional success. These include practical skills such as written and oral communication, critical thinking, teamwork, ethical decision-making, real-life application of knowledge, and the ability to work with those different from oneself as well as elements of a liberal arts education, which includes knowledge of human cultures and the physical and natural world (Association of American Colleges & Universities, 2002; Hart Research Associates, 2015, 2018). Regional and professional accrediting bodies require evidence of loop-closing, or the measurement of student learning and the resulting improvement of curriculum, pedagogy, or other aspects of learning. Most universities in the U.S. have adopted some form of these essential learning outcomes and also have discipline-specific outcomes, both of which are regularly measured.

Research-focused universities in the UK have a greater number of student assessments than do teaching-intensive institutions while the latter have a greater variety of assessments in the form of projects and portfolios. A criticism of assessment practices is that they focus on regurgitation of facts, surface learning, and are too intensive whereas a lighter load could lead to deeper learning (Tomas & Jessop, 2018). Others have indicated the importance of examining factors contributing to learning rather than just measuring the outcomes (Caspersen et al., 2017; Strang et al., 2016). In both US and UK higher education contexts, the rational for learning gain measurement is concerned with transparency, and specifically "asking what students should achieve and to what extent institutions are enabling this" (Evans et al., 2018, p. 10). However, given the variety of students entering universities and the variation in skills and abilities with which students exit, factors such as inputs, student experiences within higher education, and variations in outputs must all be considered (Evans et al, 2018).

Learning outcomes standardisation across contexts in either the US or UK is unlikely as are comparisons of learning; however, sharing knowledge of learning outcome practices and results can inform and improve practice (Evans et al, 2018). Also, given the diversity of students in higher education in both contexts, teaching, learning, and assessment practices must be examined to determine their efficacy and equity for different student populations.

Retention Theory

Student retention is defined as continued enrolment from the first to the second year with persistence defined as continued enrolment beyond the second year to completion although these terms may be used interchangeably (Burke, 2018). An extensive number of retention theories have been developed and account for different variables in students' experiences. These typically describe inputs, institutional factors, and outputs. The following provides a brief overview of key theories.

- *Spady's undergraduate dropout process model* (1971) focuses on the interaction of a student with an institution's academic and social systems. Success in the academic realm is measured by grades while success in the social realm is evident in a student possessing attitudes and interests congruent with those of the institution. Satisfaction with an institution depends on social and academic rewards while commitment is based on academic and social integration and the number of rewards a student obtains.
- *Tinto's institutional departure model* (1975) accounts for students' pre-entry characteristics, initial goals and commitment to graduation, external commitments, and academic and social experiences in the institution. These variables impact integration, further commitment to goals, and persistence.
- *Bean's attrition model* (1980) is based on workplace turnover and suggests that reasons for persistence are primarily due to institutional structure and variables such as GPA, satisfaction, educational value, and social engagement. *Bean and Metzner's non-traditional undergraduate attrition model* (1985) suggests that environmental factors (e.g., finances, employment, outside encouragement, family responsibilities) have greater influence on departure for mature students than do academic factors (e.g., study habits, academic advising, absenteeism, course availability).
- *Astin's theory of student involvement* (1999) focuses on student behaviors. The greater a student's involvement, the greater amount of learning will occur. Involvement is a manifestation of motivation. Institutions need to facilitate academic involvement which leads to positive academic performance.
- *Kerby's model of voluntary dropout decision* (2015) accounts for the fact that retention issues are in a constant state of change and vary across institutions; factors such as the

economy, political unrest, or budget cuts impact how an institution functions; thus, retention plans must be context specific and focus on internal factors.

Although all of these theories account for academic factors, such as academic integration, academic involvement, academic performance, intellectual development, and academic outcomes, research on retention has not typically focused on how students' learning experiences, and specifically, the development of boundary-crossing skills, impact completion (Andrade et al., 2020).

Study and Findings

The study reviewed in this paper occurred at a large, regional, open admission university in the US that offers a range of academic programs including short-term certificates, associate degrees, bachelor's degrees, and master's degrees (Andrade et al., 2020). A graduating student survey is required for all students as part of their graduation application. The study represented 3,897 respondents of whom 80.7% indicated they return to the same university, 18.1% would go to a different university, and 1.2% would not attend any university if given the choice again (Andrade et al., 2020). The study also involved an alumni survey, which is administered by the university by phone to students a year after graduation. This study reflects responses by 2,283 alumni, 85.7% of whom indicated they would return to the same university, 12.9% that they would go to a different university, and 1.4% stating they would not attend any university if given the choice again.

- Questions on the graduating student survey related to *growth in learning* included the following items: disciplinary or major knowledge, critical thinking/problem-solving, communication skills, math skills, interpersonal skills, ethics, preparation for real-world problems, job-seeking and job-maintaining skills, leadership and team management, art/cultural knowledge, community/civic engagement, global perspective, understanding diversity & cultures, and lifelong learning desire.
- Questions on the graduating student survey related to *goal achievement* focused on the following: skills to find a job, find a better job, earn a promotion or raise, improve job skills or security, meet employer needs, satisfy family, take courses to transfer, take courses while attending another university, personal interest, and university experience.
- Questions on the graduating student survey related to *engagement*, or *satisfaction* included the following: overall experience, engagement in education, engagement with community, quality of instruction, course content, class size, instructor accessibility, instructor interest in students, and academic advising.
- Questions on the alumni survey related the *use of knowledge or skills* gained as a result of their university experience included the following: personal qualities, intellectual qualities, communicating with others, understanding people and cultures, care of family, ability to manage personal finances, manage physical and mental health, pursue interests or hobbies, community service, teaching others, and entrepreneurship.

Results were as follows (Andrade et al., 2020):

Learning outcomes - graduating students

- *Would not attend* v. would attend another university

    - The former had significantly lower ratings on growth in critical thinking, interpersonal skills, leadership/team management, and lifelong learning desire.
- *Would not attend* any university v. would return to the same university
    - The former had significantly lower ratings on growth on all learning outcomes.

Goal achievement - graduating students

- *Would not attend* v. would attend another university
    - The former had significantly lower perceptions of goal achievement on goals such as obtaining a more satisfying job, coursework for personal interest, and having a university experience.
- *Would not attend* any university v. would return to the same university
    - The former had significantly perceptions of gaining skills to find a job, acquiring skills to find a more satisfying job, getting course credit before transferring, and having a university experience.

Engagement - graduating students

- *Would not attend* v. would attend another university
    - The former had significantly lower perceptions on overall experience with their program of study.
- *Would not attend* any university v. would return to the same university
    - The former had significantly lower perceptions on overall experience, educational engagement, community engagement, quality of instruction, course content, class size, instructor availability, faculty interest in students, and academic advising.

Learning outcomes alumni

- *Would not attend* v. return
    - The former had significantly lower ratings of growth in personal qualities, intellectual abilities, communication, understanding others/other cultures, caring for family, personal interests/hobbies, community service, and teaching others non-professionally.
- *Would not attend* v. attend another school
    - The former had lower (but not significantly lower) ratings on all questions except growth in communication.
- *Would return* v. attend another school
    - The former had significantly higher ratings on all questions except personal finance and entrepreneurship.

Conclusions

The findings of this study indicate that perceived growth in learning outcomes for graduating students and alumni as well as goal achievement, and engagement in the university for graduating students resulted in positive valuations of higher education and intentions to seek educational opportunities again if given the chance (Andrade et al., 2020). Specifically, perceived growth in areas such as critical thinking, interpersonal skills, leadership, lifelong learning, communication, understanding others and other cultures, logical thinking, critical thinking, and appreciation for diverse perspectives were positively related to this intention.

As such, these findings demonstrate the importance of academic engagement to persistence and the importance of cross-cutting skills in students' positive perceptions of the gains that result from a university degree. The study provides expanded insights into academic factors impacting persistence and suggests the importance of the attainment of cross-cutting skills to degree completion. It also identified specific factors related to academic involvement and integration (Astin, 1999; Tinto, 1973).

References

Andrade, M. S., Miller, R. M., McArthur, D., & Ogden, M. (2020). The impact of learning on student persistence in higher education. *Journal of College Student Retention: Research, Theory & Practice.* Forthcoming.

Association of American Colleges & Universities. (2002). *Greater expectations: A new vision for learning as a nation goes to college*. Washington, DC: Association of American Colleges & Universities. https://www.aacu.org/sites/default/files/files/publications/GreaterExpectations.pdf

Astin, A. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518-537.

American Council on Education. (2019). *Race and ethnicity in higher education. A status report*. https://www.equityinhighered.org/resources/report-downloads/

Bean, J. (1980). *Dropouts and turnover: The synthesis and test of a causal model of student attrition*. *Research in Higher Education, I2*(2), 155–87. https://doi.org/10.1007/BF00976194

Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research, 55*, 485-540.

Bill and Melinda Gates Foundation. (2020). *Today's college students.* https://postsecondary.gatesfoundation.org/what-were-learning/todays-college-students/

Bolton, P. (2019, October 2). *Higher education student numbers*. file:///Users/Maureen/Desktop/CBP-7857.pdf

Carnevale, Anthony P., Tamara Jayasundera, and Artem Gulish. 2016. *America's divided recovery: College haves and have nots*. Washington, DC: Georgetown University Center on Education and the Workforce.

Caspersen, J., Smeby, J.-S., & Aamodt, P.O. (2017). Measuring learning outcomes. *European Journal of Education*, *52*(1), 20–30. https://doi.org/10.1111/ejed.12205

Evans, C., Kandiko Howson, C., & Forsythe, A. (2018). Making sense of learning gain in higher education. *Higher Education Pedagogies*, *3*(1), 1-45. doi:10.1080/23752696.2018.1508360

Gov.UK. (2019, March 7). Education secretary warns universities over dropout rates. https://www.gov.uk/government/news/education-secretary-warns-universities-over-dropout-rates

Hart Research Associates. (2015, January 20). *Falling short? College learning and career success*. Washington, DC: Hart Research Associates. https://www.aacu.org/sites/default/files/files/LEAP/2015employerstudentsurvey.pdf

Hart Research Associates. (2018, July). *Fulfilling the American dream: Liberal education and the future of work*. Washington, DC: Hart Research Associates. https://www.aacu.org/sites/default/files/files/LEAP/2018EmployerResearchReport.pdfMorshed, J. (2016, June 29). *The US and UK: Comparing higher education in the two top ranking nation*s. https://www.unit4.com/blog/2016/06/the-us-and-uk-comparing-higher-education-in-the-two-top-ranking-nations

Morshed, J. (2017, November 15). *The US and UK: Comparing higher education in the two top ranking nation*s. https://www.ecampusnews.com/2017/11/15/us-uk-comparing-nations/

Mountford Zimdars, A., Sabri, D., Moore, J., Sanders, J., Jones, S., & Higham, L. (2015). Causes of differences in student outcomes. London, UK: HEFCE. Report to HEFCE by King's College London, ARC Network and the University of Manchester. http://dera.ioe.ac.uk/23653/1/HEFCE2015_diffout.pdf

National Student Clearinghouse Research Center. (2018, June 27). *Snapshot report. First-year persistence & retention – 2018*. https://nscresearchcenter.org/wp-content/uploads/SnapshotReport33.pdf

National Clearinghouse Research Center. (2019, March 6). Completing college – state – 2019. https://nscresearchcenter.org/signature-report-16-state-supplement-completing-college-a-state-level-view-of-student-completion-rates/

Packham, A. (2019). *Is a British university degree really worth it any more*? https://www.theguardian.com/news/2019/aug/12/is-a-british-university-degree-really-worth-it-any-more

Seifert, T.A., Gillig, B., Hanson, J.M., Pascarella, E.T., & Blaich, C.F. (2014). The conditional nature of high impact/good practices on student learning outcomes. *The Journal of Higher Education*, *85*(4), 531–564.

Spady, W. (1971). *Dropouts from higher education: Toward an empirical model*. *Interchange* 2(3), 38–62. http://dx.doi.org/10.1007/BF02282469

Strang, L., Bélanger, J., Manville, C., & Meads, C. (2016). *Review of the research literature on defining and demonstrating quality teaching and impact in higher education*. York: Higher Education Academy. Higher Education Academy/RAND Europe. www.heacademy.ac.uk/knowledge-hub/review-research-literature-defining-and-demonstrating-qualityteaching-and-impact

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *The Review of Educational Research, 45*(1), 89–125.

Tomas, C., & Jessop, T. (2018). Struggling and juggling: A comparison of student assessment loads across research and teaching-intensive universities. *Assessment & Evaluation in Higher Education, 44*(1), 1-10. https://doi.org/10.1080/02602938.2018.1463355

UCAS. (2019). *UCAS end of cycle report 2019*. https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-reports/2019-end-cycle-report