

Promoting student persistence and academic success: Implications for higher education institutions

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ABSTRACT

There are numerous factors which have a role in impacting students' experiences at higher education institutions. The study's main objectives are to determine which support structures at institutions of higher learning promote a conducive environment for student success. Secondly, to explore activities that institutions of higher learning can consider when addressing the issue of academic success. The paper focuses on the Honors Living-Learning Community (HLLC) at Rutgers University – Newark (RU-N), New Jersey as a case study to examine how it successfully ensures its students' academic success. A self-report survey was conducted to examine the experiences of HLLC alumni to identify factors impacting students' academic success. The 2018 to 2021 alumni at the Honors Living-Learning Community (HLLC) at Rutgers University – Newark (RU-N) were the population for this study. The study opted for the theoretical framework of Tinto and Pusser; two noted theorists on student success and persistence. The study's findings suggest that maintaining institutional commitment, enhancing academic and social support, diversifying the curriculum, implementing longitudinal assessments, investing in faculty development, and promoting alumni engagement as ways to improve the HLLC's impact on student success. By implementing the proposed recommendations, the HLLC can allow students to achieve academic success, grow personally, and positively impact their communities. The HLLC is a beacon of hope for higher education because it continues to shape students' lives and ensure that students can attain their undergraduate education within four years to help reduce the financial burden on all stakeholders in higher education.

Keywords: *First-year students, Graduates, Institutions of higher learning, Student persistence, Student success, Undergraduate studies.*

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Highlights of this paper

- This paper highlights the role of the Honors Living-Learning Community (HLLC) at Rutgers University-Newark and how it provides the necessary resources for students to attain their undergraduate degree within four years.
- This helps alleviate the financial burden on the U.S. government and society.
- In addition to equipping the students for their educational pursuits, the HLLC also adds value by preparing them for post-graduate studies and various careers.

1. INTRODUCTION

The evolution of higher education in the United States of America (USA) has undergone numerous changes over the years. The bachelor's degree attainment rate has fluctuated over time. According to Hanson (2021) bachelor's degree aspirants enrolled in American higher education institutions graduate at a rate of 46%. Only 41% of students get a bachelor's degree within four years. The low bachelor's degree attainment rate is a concern because institutions have used this to assess student performance (Alyahyan & Düşteğör, 2020). As per the U.S. Department of Education National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS) (2017) only 41% of students earn a bachelor's degree within four years. Of this 41%, 45% of enrolling White students earn their degree in four years, with 21% of Black students, 32% of Hispanic students, and 50% of Asian students earning theirs in four years, respectively. Furthermore, not graduating within four years adds additional pressure on higher learning institutions' state and federal resources.

An interesting case study for evaluating how the institutional environment of higher education affects student persistence and academic achievement is the Honors Living-Learning Community (HLLC). The HLLC, which has a tremendous four-year graduation rate of 57%, surpasses the U.S. National average of 46% and is a prime illustration of the advantages of a purposely supportive ecology. The HLLC, which is committed to equality and inclusion, also boasts better graduation rates for students from racial and ethnic minorities, such as Black (52%), Latino/Hispanic (57%) and Asian (59%) students. The HLLC fosters an atmosphere that encourages academic achievement, leadership development, interdisciplinary cooperation, and community participation to support students in achieving their goals. Understanding the factors affecting the HLLC's four-year graduation achievement may provide substantial insights for higher education institutions seeking to improve student persistence and academic success.

According to Jon Marcus, the higher education editor at The Hechinger Report, the origin of measuring graduation from four-year postsecondary qualifications over six years started in 1989. Scholars, politicians, and the media fully embraced the shift to a six-year standard (Marcus, 2021). U.S. Senator Bill Bradley, a former college and professional basketball player, and some of his supporters started to question student-athletes' academic achievement at this time since many of them never graduated. Until 1989, schools, institutions of higher learning, and the National Collegiate Athletic Association (NCAA) refused to unveil and share graduation statistics. Due to the five-year duration of sports eligibility, Senator Bradley suggested mandating institutions of higher learning to publish athletes' five-year graduation rates (Marcus, 2021).

This recommendation led to other institutions of higher learning lobbying to institute this policy. Also, U.S. Senator Edward M. Kennedy inserted a last-minute amendment defining undergraduate completion as a six-year standard (Marcus, 2021). Even though the legislation was approved in 1990, institutions of higher learning postponed publicly publishing graduation rates until 1997. Subsequently, this metric does not motivate institutions of higher learning to increase graduation rates within the four-year period, which had plateaued even before the interruptions caused by the occurrence of the global COVID-19 pandemic in 2020. Also, the National Student Clearinghouse Research Center data reported that the number of students completing their education within six years only improved by 0.003% in 2020, the smallest rise in five years (Marcus, 2021).

According to [Tinto and Pusser \(2006\)](#) there has been a minimum attempt to connect inquiries of state policy with institutional practice, even though state policy shapes institutional activity. Consequently, institutional and state policy debates around student support have yet to shed light on how state measures might strengthen institutions' potential to support student persistence and success. Even so, student success is gaining increased attention as graduation rates stagnate, especially after the worldwide COVID-19 pandemic, which threatens to intensify the situation. To address this situation, the U.S. Presidential Administration invested US\$62 billion in 2021 to increase graduation rates at public institutions of higher learning with a significant percentage of low-income students.

2. BACKGROUND

In January 2015, the Social Justice Learning Community (SJLC) was piloted as a signature initiative within Rutgers University Newark's (RU-N) Strategic Plan ([An Anchor Institution Rutgers University-Newark, 2023](#)). Following the pilot year, the Honors Living-Learning Community (HLLC) was founded in September 2016, after a successful year housed within the SJLC.

HLLC scholars are dynamic students selected as the cohort to join an honors living-learning community and intergenerational network designed to increase knowledge, foster understanding across and within communities, and promote social, institutional, and cultural change. HLLC scholars are from various racial and socioeconomic backgrounds, including recent high school graduates, General Education Development Test (GED) holders, and transfer students holding associate degrees from community colleges. The HLLC program provides a residential scholarship towards room and board for all students admitted into the program to facilitate the living-learning component.

The HLLC provides numerous opportunities for personal, social, and academic advancement. By bringing together a diverse group of instructors, staff members, students, and external stakeholders with various professional backgrounds, the HLLC enables students to broaden their skill sets and explore new ideas. In addition, challenging curricular and co-curricular activities are incorporated into everyday campus and community life-extending learning beyond the classroom.

Some students are extraordinarily gifted, talented, and academically promising but unfortunately encounter personal or financial burdens that prevent them from enrolling in college. Sometimes, some institutions prefer to recruit from outside their respective state instead of recruiting talents from their communities, cities, or towns. In contrast, the HLLC is dedicated to fostering the creativity required to find solutions to regional and global problems. Students who have seen and experienced the effects of these urgent public issues are probably better situated to find solutions for these issues. These students contribute to the campus community and the disciplines they majored.

Consequently, the HLLC intends to recruit students from high schools, community colleges, and GED programs within Newark and the surrounding areas. The HLLC believes that accepting these students will significantly improve our college community, locally and globally. The HLLC aims to prepare students to become thoughtful leaders in their areas, helpful collaborators in their communities, and agents of change in our world.

Compared to other university honors living-learning communities, the HLLC takes a somewhat different approach to the admissions process. HLLC uses a distinct definition of "honors", examining student potential at a maximum level than is conceivable using assessment tools like test results. HLLC uses in-person interviews and group simulations to assess prospective students' use of multiple intelligences in team-building activities. Students' abilities, identities, and what they can contribute to a diverse setting are revealed during this process. Also, the HLLC offers a unique curriculum centered around *Local Citizenship in a Global World, Navigating Spaces, Places and Identities*,

and Voice, Citizenship, and Engagement. These foundational courses provide a framework to explore social inequities and essential themes related to engaged citizenship and social justice.

The HLLC offers its students numerous support structures, varying from individualized academic coaching and counselling, a multidisciplinary approach, a culturally responsive curriculum, and peer support to enhance the collegiate experience. Additionally, the HLLC offers internships, research assistantships, active community participation, international prospects for research and service, on and off-campus opportunities, leadership and professional growth, and engagements with individuals from diverse backgrounds. Guided by its mission, the HLLC knows that positive social connections are crucial for students' adaptability, perseverance, and enjoyment throughout their education years. To this extent, the HLLC provides their students with a holistic approach that connects them to various social support networks (e.g., writing center, career support) to develop their social and intellectual foundation from the onset of their acceptance into the university.

The HLLC cohort meets twice a month and is guided by the HLLC peer mentors. The cohort meetings offer HLLC students the following benefits: a chance to get acquainted with the RU-N community; become familiar with campus resources; a setting for the development and practice of social, intellectual, and leadership skills; a safe environment for HLLC students to reflect on their undergraduate experiences and accomplishments; and a smaller structured community support group inside the larger HLLC community.

The HLLC's curriculum encourages critical intellectual inquiry, builds cultural competency, and delves into what it means to be a responsible citizen on a local and global scale. The HLLC curriculum serves as a second concentration. It is integrated into each primary curriculum, enabling scholars to engage critically with how local and international concerns develop in their diverse areas of study. Additionally, the curriculum involves HLLC Scholars in existing anchor institution relationships in Newark, enabling them to link local and global issues in publicly engaged research and teaching.

The HLLC uses an interdisciplinary approach to educate, support, and implement programs to establish a national college model to promote student persistence and academic success. With an 80% six-year graduation rate, the HLLC model continually improves persistence and graduation rates.

3. RESEARCH OBJECTIVES

The overall objective of this study is to examine how the HLLC program ensures its students' academic success. The article set the following research questions to address the study's overall objective.

1. To investigate the factors determining which support structures at institutions of higher learning promote a conducive environment for student success.
2. To explore activities that institutions of higher learning can consider when addressing the issue of academic success.

4. LITERATURE REVIEW

Student success is crucial for higher learning institutions since it is a significant factor in assessing their quality (Eaton, 2015). Indeed, academic success can be traced back to acquiring knowledge, evidenced by high assessment grades. Furthermore, academic success might reference graduates' capacity to obtain a professional career associated with their degree.

Additionally, several definitions of student achievement exist in the literature. The literature review disclosed various definitions related to student academic success. Some of these definitions are as follows:

- According to [Kuh, Kinzie, Buckley, Bridges, and Hayek \(2006\)](#) student success is "academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills, competencies, persistence, attainment of educational outcomes, and post-higher learning performance."
- [Cachia, Lynam, and Stock \(2018\)](#) declare that academic achievement has historically been related to completing summative examinations aligned with learning goals.
- On the contrary, [York, Gibson, and Rankin \(2015\)](#) contend that it is controversial due to its 'amorphous' character that fluctuates according to subjective assessment. After reviewing the literature on the term's use in various subject areas, [York et al. \(2015\)](#) identify six components: academic achievement, participation in educationally beneficial activities, contentment, acquisition of desired information, skills, and competencies, tenacity, achievement of educational objectives, and future career performance.

It is crucial to capture the students' perceptions in addressing this issue. Students view exams as valuable to their learning when they are fully aware of contributing to their current skillset and relevance to their future job ([Lynam & Cachia, 2018](#)). Studies suggest that students are more likely to engage in the learning process if they relate the allocated work to their future career objectives. Environments inside institutions of higher learning where students are under institutional influence reflect previous institutional choices and may be modified if institutions are serious about student persistence and ultimate success. This paper adopts the six components of academic success, as stated by [York et al. \(2015\)](#).

4.1. Actions by Institutions of Higher Learning to Promote Academic Success

This next section addresses the actions institutions of higher learning can initiate to promote academic success. Some of these services include but are not limited to a conducive environment for student success at higher education institutions.

Postsecondary faculty often do not receive formal pedagogical training, unlike K–12 teachers who must complete teacher preparation courses ([Robert & Carlsen, 2017; Walker, Golde, Jones, Bueschel, & Hutchings, 2008; Weidman, Twale, & Stein, 2001](#)). Many institutions of higher learning have teaching centers that provide new and seasoned professors with programs to assist teaching growth. These learning communities have improved instructor involvement and teaching, similar to what is in place for students ([Richlin & Cox, 2004](#)). Depending on the available resources, center programming assists both individuals and groups of faculty, and intervention formats include workshops, multi-day institutes, one-on-one teaching consultations, and faculty learning communities that last an entire academic year ([Sunal et al., 2001](#)).

4.2. Institutional Commitment and Leadership

The critical role of institutional commitment and leadership strategies in promoting student success rates over time is essential, and without institutional commitment, most development attempts are modest and temporary ([Tinto & Pusser, 2006](#)). Institutional commitment reflects institutional leadership ([Clark, 1995](#)) and the leadership's desire to spend resources on institutional functioning components that directly or indirectly affect student performance ([Ryan, 2004](#)). While it is challenging to envision developing effective programs that survive over time without supporting leadership at the top, support from deans, department chairpersons, and chancellors is also critical ([Demery, Brawner, & Serow, 1999](#)). Supportive leadership throughout the entire leadership cadre directly affects instructors' and staff members' motivation to participate in programs and activities that contribute to their students' persistence and success ([Umbach & Porter, 2002](#)).

4.3. Campus Climate

Furthermore, campus climate is another aspect of the institution's expectational environment. A conducive campus climate establishes an expectational environment for individual behavior and, in turn, promotes student achievement through how expectations shape a person's behavior, how they relate to others and often conflicting demands on their time and energy. As it relates to student achievement, the expectations for student performance, as conveyed, for example, by instructors in the classroom, are critical due to the influence expectations have on the quality of student effort (Schilling & Schilling, 1999).

Additionally, the expectational atmosphere influences faculty and staff behavior (Wolverton, 1998). An institution of higher learning that demands more of its instructors and offers support for teaching would raise faculty readiness to prioritize teaching. While many contribute to an institution's expectational environment, no one is more critical to institutional action than the president or chancellor. Additionally, that individual makes vital resource allocation decisions, but they also set the tone for the institution and its diverse members. Without their dedicated commitment to student achievement, it is difficult to envisage significant improvements in student success over time.

4.4. Financial, Academic, Social, and Personal Support

Another significant aspect draws upon student assistance, encompassing financial, academic, social, and personal support. Numerous studies have shown the critical role of financial assistance in ensuring student achievement (John, Kirshstein, & Noell, 1991; St. John, Andrieu, Oescher, & Starkey, 1994). Though there are other types of programs, work-study is exceptionally efficient since it assists students in paying for undergraduate education and connects them with other members of the institution of higher learning (Astin, 1975; Wilkie & Jones, 1994). Therefore, a growing number of institutions of higher learning are including work-study programs in their student success strategies. Advisory assistance is another support higher education institutions can utilize, ranging from primarily faculty-led to combining faculty and professionally staffed. Advising centers for all students (Frost, 1991; Gordon & Habley, 2000) first-year students (Nannette Commander, Valeri-Gold, & Darnell, 2004; Stark, 2002) first-generation undergraduate students (Hicks, 2003) and undecided students (Korschgen & Hageseth, 1997; Lewallen, 1995). Finally, it is worth mentioning that most students enrolled in four-year undergraduate studies at higher learning are either undecided upon admission or change majors at least once during their studies (Titley & Titley, 1980).

Additionally, several universities have implemented web-based advising systems or staffed their advising programs with qualified peer advisors (Koring, 2005). Regardless of the curriculum, students must have easy access to reliable guidance when required. Academic help, such as advising, is another type of support. They vary from the usage of learning and tutoring centers to the provision of study skills courses (Lipsky & Ender, 1990) to additional education (Blanc & Martin, 1994; Commander, Stratton, Callahan, & Smith, 1996; Congos, Langsam, & Schoeps, 1997; Hodges, Dochen, & Joy, 2001). Supplemental instruction programs tend to be especially beneficial since they give academic help to students enrolled in a single subject, enabling students to apply the support to excel in that course directly. Likewise, developmental education learning communities expanding usage demonstrates a similar trend (Malnarich, Sloan, van Slyck, Dusenberry, & Swinton, 2004; Tinto, 1999). When properly implemented, they need the related courses' contents and activities to be coordinated so that what is taught in one course may be applied to what is learned in other courses that are part of the learning community. Regardless of its form, academic assistance is critical for the success of students who enter tertiary education intellectually unprepared, a disproportionate number of whom come from low-income families (Muraskin, 1997). Finally, when students' educational requirements are significant, universities often deploy summer bridge programs that bring students to campus before the first semester for intense academic help and enrichment (Garcia, 1991; Terenzini et al., 1994).

The increasingly common first-year seminars are another type of academic assistance that doubles as social assistance. The lectures, which take on several formats, assist incoming students in navigating the educational system successfully (Upcraft, Gardner, & Barefoot, 2004). Likewise, orientation sessions before the start of the first year might be similar (Mullendore & Banahan, 2004; Ward-Roof & Hatch, 2003). When correctly executed, there is abundant evidence of their efficacy (Schnell & Doetkott, 2003; Wilkie & Kuckuck, 1989; Williford, Chapman, & Kahrig, 2001). Social support is another form of assistance that institutions should provide. Social support programs are also vital in the landscape of successful student success initiatives. Besides first-year seminars, universities have also used learning communities, such as first-year interest clubs, to help incoming students develop social relationships and social support sequentially (Smith, MacGregor, Matthews, & Gabelnick, 2004). While such programs are not easy to execute effectively, they may assist incoming students in navigating their first year of undergraduate teaching and beyond. Furthermore, they serve as critical role models for student achievement (Pagan & Edwards-Wilson, 2002; Santos & Reigadas, 2004; Thayer, 2000).

Another dynamic that is critical to this discussion is student evaluation, which can be approached from multiple lenses. The researchers, Tinto and Pusser (2006) advocate that feedback sometimes referred to as student evaluation, takes various forms. The most frequently used assessments that directly affect on student success are those administered at entry, typically as part of an institutional screening program to ensure appropriate placement in coursework. For example, those administered during the first semester as part of an early warning system, and those administered within classrooms to provide feedback to faculty and students on their performance. Though research on the impact of feedback on student success is scarce, it is widely accepted that a carefully constructed assessment program incorporating feedback on student and program performance is critical to institutional success (Banta, 2001; Ewell, 1997; Wholey, Hatry, & Newcomer, 1994). However, the research on the use of classroom-based assessments such as student portfolios (White, 2004) and classroom assessment procedures (CATs) is relatively substantial (Angelo & Cross, 1993). It demonstrates, for example, that incorporating CATs into classroom practice enhances student learning and perseverance (Cottell & Harwood, 1998; Cross & Steadman, 1996; Light, 1990). Finally, it partially accomplishes this because it fosters students' awareness of their learning (Corno & Mandinach, 1983) and provides instructors with feedback on what is and is not being taught in the classroom.

Notwithstanding, classroom evaluation methodologies are being incorporated into institutional early-warning systems. For example, traditional early warning systems based on midterm grades may occur too late to assist many students in succeeding in their enrolled courses. Rather than depending on midterm grades, many institutions use early classroom evaluations to facilitate the early identification of issues and implementation of suitable intervention strategies (Tinto & Pusser, 2006).

Finally, Tinto and Pusser (2006) suggest that involvement, or what is now frequently referred to as engagement, has long been established as a critical component determining student performance, given students' skills and capacities (Astin, 1993; Borglum & Kubala, 2000; Pascarella, 1980; Pascarella & Chapman, 1983; Terenzini, Lorang, & Pascarella, 1981; Tinto, 1975; Tinto, 1987). The literature shows that the more involved students are with others on campus, particularly their classmates and instructors, the more likely they will persevere. More engaged students demonstrate considerable academic progress (Endo & Harpel, 1982). For most students, more traditional engagement practices such as extracurricular activities, residential programming, and clubs (Kuh, Shuh, Whitt, & Associates, 1991) provide little benefit on most non-residential campuses, if only because many students do not have the luxury of spending time outside class.

Moreover, given their responsibilities, the classroom may be their sole opportunity to interact with other students and instructors on campus (Tinto & Pusser, 2006). To ensure a minimum level of interaction, many

institutions of higher learning employed methods that place a premium on the classroom and the areas directly next to it (Braxton & McClendon, 2001).

Two approaches are worth mentioning: engagement pedagogies and the formation of learning communities. Tinto and Pusser (2006) suggest that institutions of higher learning should adopt engagement pedagogies that can guarantee student success. Unlike the conventional lecture, in which students are often passive, particularly in the many big first-year classes in the higher education landscape, engagement pedagogies urge students to be actively involved in learning with their peers. Among the options available, the most frequently used are cooperative and collaborative learning and problem-based learning. While cooperative and collaborative learning is not synonymous (Bruffee, 1995) they both require students to become actively engaged in learning groups with other students so that the group's task cannot be performed without each member contributing (Garth, 1999; Johnson, Johnson, & Smith, 1991; Johnson, Johnson, & Smith, 1998a; Johnson, Johnson, & Smith, 1998b).

Problem-based learning is similar to cooperative learning in that it uses small collaborative groups, but it does so to solve curriculum-related challenges (Allen, Duch, & Groh, 1996; Duch, 1996; Wilkerson & Gijsselaers, 1996). Though both strategies are often utilized in smaller classrooms, few prominent institutions of higher learning have successfully used both in extensive courses (Ebert-May, Brewer, & Allred, 1997; MacGregor, Cooper, Smith, & Robinson, 2000; Smith, 2000). Notable is that engagement-based pedagogies significantly improve students' processing abilities compared to lecture sessions while maintaining or improving information acquisition (Ebert-May et al., 1997). Unsurprisingly, they also increase student engagement and perseverance, partly because cooperative activities foster social interaction (Braxton, Milem, & Sullivan, 2000).

Another area that requires a need to explore is that of learning communities (Tinto & Pusser, 2006). Learning communities are a sort of co-registration or block scheduling that allows students to enroll in courses concurrently. In certain instances, this may include sharing the whole first-semester curriculum, ensuring that all new students in that learning community study the same content throughout the semester (Smith et al., 2004). The emphasis on co-registration is a crucial component for learning communities.

Learning communities need more than simple co-registration to be successful. In contrast, co-registration is beneficial because it encourages socially supportive peer groups (Tinto & Goodsell, 1994). However, co-registration alone does not guarantee student success. A core subject or issue must unite the courses in which students co-register. The aim is to establish an interdisciplinary learning environment where students may connect what they learn in one course and what they study in another. Additionally, a growing number of learning communities are using engagement pedagogies where students share a similar body of information and the experience of studying it, which leads to enhanced engagement and increases learning and perseverance (Johnson, 2000; Taylor et al., 2004; Tinto, 1997, 1998; Zhao & Kuh, 2004).

When learning communities are designed to meet the requirements of new students, they usually include a first-year seminar as one of the related courses (Baker & Pomerantz, 2000). When meeting the academic needs of students who are not academically prepared, institutions of higher learning frequently link study skills courses to other courses the students are taking or developmental level courses to content courses like history so that the writing skills learned in the developmental course can be applied immediately to a credit-bearing course in history (Malnarich et al., 2004). By linking courses that help other courses, whether for new or academically underprepared students, learning communities connect assistance to students' daily learning requirements and enhance the support for success in the course to which it is related (Tinto, 1999).

In conclusion, Tinto and Pusser (2006) suggest administrative activities that can be taken to ensure that the environment is conducive to effective programs. Increased institutional success rates do not happen by chance.

Instead, they result from deliberate institutional actions, rules, and practices implemented consistently through time (Carey, 2005).

5. THEORETICAL FRAMEWORK

The theoretical framework employed for this paper is drawn from the work of two renowned scholars in higher education, Vincent Tinto and Brian Pusser. Their area of research focuses on student retention and success. Tinto and Pusser (2006) article, "*Moving From Theory to Action: Building a Model of Institutional Action for Student Success*", provided recommendations on institutional action that gives institutions suggestions for effective efforts to boost student persistence, which can promote student success.

Tinto and Pusser (2006) focus on the three stakeholders' contributions to student success. Namely (1) the student, (2) the state or federal government, and (3) the institution of higher learning. However, this article explores higher learning institutions' role in student academic success. Tinto and Pusser (2006) offer an institution's commitment to student success as the first and most critical condition that higher learning institutions should embrace to enhance student performance. Institutional commitment is more than promises in the vision, mission, and websites of institutions of higher learning but rather a reflection of the institution's preparedness and actions towards utilizing resources and offering incentives and rewards necessary to promote student achievement. Student achievement initiatives may begin without this dedication, but they seldom succeed eventually.

Furthermore, Tinto and Pusser (2006) argue that lofty expectations are essential for student accomplishment since no student does well under low expectations. Regrettably, institutions of higher learning sometimes have unrealistic expectations of students, particularly during the critical first year of undergraduate studies (Tinto & Pusser, 2006). According to research by Kuh (2003) first-year students spend less time outside class studying than we believe is essential for optimal learning. Furthermore, Tinto and Pusser (2006) note that research indicates that students rapidly acquire expectations and are impacted by how those expectations justify their presence on campus. Institutions of higher learning should take the necessary practical actions to ensure students' buy-in, particularly first-year students who are stakeholders pursuing their undergraduate studies.

Another condition Tinto and Pusser (2006) offer is formal advising, yet formal advising continues to be a "strike or miss" affair. Some students are fortunate enough to obtain the desired knowledge, while others do not. The same may be true of informal advising, which is sharing acquired knowledge among and between academics, staff, and students on campus. Again, some students successfully locate such information, often via informal peer networks, while others are not fortunate (Attinasi, 1989). However, advising is critical to the success of students who enter undergraduate education unsure about their major and switch it throughout their enrollment. The inability of students to acquire the necessary guidance during their first year of transition into their undergraduate education, which students may experience as a substantial change, might diminish motivation, increase the risk of leaving, and extend the time required to complete the degree for those who remain.

Finally, Tinto and Pusser (2006) assert that student progress depends on monitoring, frequent feedback, and student engagement. Students perform better in environments where instructors and staff offer timely monitoring and feedback on their performance. In addition, the more academic and social involvement students have, the more likely students will continue and graduate. Social involvement is essential for future learning and perseverance during the precarious first year of enrollment (Tinto, 2001). Participation during that year lays the foundation for ongoing connections and activities. Overall, students are more likely to succeed when placed in environments that are committed to their success, have elevated expectations for their success, provide necessary academic and social

support, provide frequent feedback, and actively engage them in learning through interactions with other students and faculty.

6. METHODOLOGY

This research uses a secondary data analysis methodology to understand better how the higher education institutional environment influences student persistence and academic achievement. Reanalyzing previously gathered and examined data is called secondary data (Punch, 2005).

The data used in this study was based on a self-report survey completed by 97 of the 170 graduates who graduated from January 2018 to August 2021 from the HLLC at Rutgers University-Newark. The data for this article is the HLLC graduates' self-report online survey. Since its inception, the HLLC at Rutgers University-Newark has administered a self-report to all graduating seniors. The survey was based on their experiences as scholars within the HLLC, including open-ended questions and an option to provide any additional comments. The data collection process was self-explanatory because the self-report form was electronic and housed by the HLLC.

The self-reports were scrutinized using a content analysis approach to gather student persistence and academic progress data. According to the U.S. General Accounting Office (1996) this type of research approach allows researchers to examine a plethora of data in a manageable manner. Also, Weber (1990) mentioned that this technique was proper, especially when working with specific individuals, groups, institutions, or social attention. Furthermore, this approach methodically groups and codes textual information such as tales, descriptions, and views based on the study's objectives. The data obtained were then grouped under the themes identified, as reflected in this paper's findings and discussion section. The researchers deemed this approach meaningful as they examined the self-reported surveys completed by the HLLC graduates. The secondary data collected for the study has no identifying information about the respondents. Since the HLLC Staff granted permission to use the self-reports, the researchers were not required to proceed with the Rutgers University Institutional Review Board process.

7. FINDINGS AND DISCUSSION

This section summarizes the feedback on the experiences of HLLC graduates from 2018 to 2021. The following four themes emerged: (1) HLLC's commitment to student success, (2) elevated expectations from the HLLC, (3) academic and social support by the HLLC, and (4) opportunities to engage in learning actively.

7.1. HLLC's Commitment to Their Success

Several graduates reported that the HLLC was a fantastic experience. Furthermore, the graduates shared that the HLLC faculty and staff supported them throughout their transitional journey. In addition, most graduates noted that being a part of the HLLC community was one of the best parts of their RU-N experience. For example, one student mentioned, "*The support system within the HLLC community is unmatched, from the deans and staff who care so deeply about our academics and well-being.*" Most graduates explained that the HLLC had been a transformational experience for them and matured over time with the support of the HLLC.

A variety of perspectives were expressed in the above section that addressed the graduates' experience regarding the commitment of the HLLC to their success. As a signature initiative of RU-N, the HLLC is well supported by its leadership, which promotes a conducive environment for the HLLC staff and faculty to commit themselves to the success of the HLLC students. Following Umbach and Porter (2002) claim, supportive leadership throughout the entire leadership cadre directly affects instructors' and staff members' motivation to participate in programs and activities that contribute to their students' persistence and success.

7.2. Elevated Expectations from the HLLC

Various graduates noted that the HLLC encouraged them to pursue opportunities they often thought were unattainable as a student. Many graduates also shared that being surrounded by a group of driven and ambitious people to create positive change in the world expanded their views of what is possible. Some graduates wrote that the HLLC taught them lessons they had never experienced inside the four walls of a classroom. Furthermore, they observed becoming self-aware, using their talents and voice to enact change, and developing deep empathy for issues that are not their own. In conclusion, some respondents stated that HLLC gave them a platform to hone natural leadership skills they never knew they possessed.

The views that surfaced in the themes above agree with what [Tinto and Pusser \(2006\)](#) argue, that lofty expectations are essential for student accomplishment. As an honors program committed to the success of its students, the HLLC sets high expectations for their students and offers them opportunities in and outside of the classroom to grow academically and professionally. These elevated expectations for academic success in and outside the classroom are supported by [Kuh \(2003\)](#) research that states that first-year students spend less time outside of class studying than we believe is essential for optimal learning. According to the graduates' statements, as a living-learning community, the HLLC creates a conducive and supportive environment that enhances students' expectations of success and sense of belonging. The aforementioned is highlighted by [Tinto and Pusser \(2006\)](#) as a success strategy in their research, which indicates that students rapidly acquire expectations and are impacted by how those expectations justify their presence on campus. To further support this claim, students who engage in traditional practices such as extracurricular activities, residential programming, and clubs ([Kuh, 2005; Kuh et al., 1991](#)) can justify their presence on campus, while some non-residential campuses cannot if only because they do not have the luxury of spending time on campus outside of class. Finally, the HLLC allows students to reside on campus and fully engage in various activities, fostering a conducive environment for higher expectations that can contribute to student success.

7.3. Academic and Social Support by the HLLC

Many graduates noted that the HLLC had been one of their educational journey's most meaningful, supportive, and remarkable experiences. Furthermore, they wrote that everyone, including the students and staff, are there to make a positive difference in every community member's life. The lessons learned are lifelong and meaningful. For example, some graduates mentioned that the HLLC had allowed them to become leaders, social change agents, and better people, develop new strengths and interests, and cultivate new friendships. Most graduates noted that being surrounded by a group of driven and ambitious people to create positive change in the world expanded their views of what is possible. Through the HLLC, many respondents reported making lifelong friendships and connections at Rutgers University - Newark. Some graduates wrote that HLLC was the primary reason they graduated on time and maintained an excellent GPA. Many graduates stated that the HLLC had been one of the most meaningful, supportive, and remarkable experiences of their school career, and a majority of the respondents reported that they felt supported throughout their entire experience at HLLC. Many graduates noted that the community's passion was a considerable part of their motivation to keep going at their lowest.

The graduates' comments regarding the HLLC's academic and social support resonate with the literature findings. Studies by [John et al. \(1991\)](#) and [St. John et al. \(1994\)](#) show that student assistance has significantly shifted, encompassing financial, academic, social, and personal support. The graduates' statements regarding the HLLC's advisory assistance align with the provisions of advising centers ([Frost, 1991; Gordon & Habley, 2000](#)) first-year students ([Nannette Commander et al., 2004; Stark, 2002](#)) first-generation undergraduate students ([Hicks, 2003](#)) and

undecided students (Korschgen & Hageseth, 1997; Lewallen, 1995). These advising opportunities offered by the HLLC promote a conducive environment for student success. The graduate responses also highlight the social support they received from the HLLC. Finally, social support programs are prominent in successful student success initiatives. Empirical evidence emphasizes the importance of social support, like learning communities, to help incoming students develop social relationships and, in turn, social support (Smith et al., 2004) which may enhance a sense of belonging and student success.

7.4. Opportunities to Actively Engage in Learning

A noteworthy of the respondents stated that the in-depth study of the subjects and classes offered through the HLLC was phenomenal. Furthermore, they noted that the professors were willing to go that extra mile and provide additional resources for their success. For example, many of the graduates wrote that the HLLC provided an intellectually stimulating environment that doubled as a great support system with various perspectives broadening their scope of thinking. Some graduates stated that the HLLC provided a great range of courses to grow intellectually and emotionally as scholars. Some graduates pointed out that the HLLC was a transformational program with courses that opened their eyes to new perspectives. The comments provided by the graduates support the HLLC's efforts to enhance student success through their curriculum and classroom engagement. Endo and Harpel (1982) point out that the more involved students are with others on campus, particularly their classmates and instructors, the more likely they are to persevere. Perseverance is vital to student success and subsequent graduation.

8. LIMITATIONS

The results of this study are based on self-reports from several reporting periods, and the sample size was not consistent between the graduation periods examined. Thus, only 57% of the graduates completed the self-report. Additionally, there was no baseline data collected for pre-post analysis. Furthermore, there has not been a thorough and ongoing data collection on methods that assist students' graduation success (Tinto & Pusser, 2006). Although empirical evidence shows that frequent feedback is required for student performance, the study could not confirm the relationship between ongoing feedback frequency and student progress.

Another study limitation was that the researchers could not contact the respondents to expand on some of the comments provided due to confidentiality issues. With this methodological approach, the disadvantage of using secondary data is that secondary researchers often have to accept the original measurement technique, which requires them to evaluate and pass judgment on the equipment (Clarke & Cossette, 2000). Ergo, the findings cannot be generalized because of the specific target population used in the study.

9. RECOMMENDATIONS

Several suggestions are made to improve and maintain the positive results attained by the program. These suggestions provided by the graduates include the following: (1) institutional responsibilities, (2) student assistance, (3) curriculum development, and (4) continuing assessment. By implementing these strategies, the HLLC may strengthen and continue to encourage students to achieve academic success and personal development.

9.1. Institutional Commitment to Continue

There should be buy-in from both the leadership at the HLLCs and the institution to ensure a successful outcome. The buy-in can be achieved through continued funding, faculty development, and ongoing evaluation of the program's goals and objectives.

9.2. Improved Academic and Social Support

The HLLC should continue to prioritize expanding and enhancing its students' academic and social support programs. It would require increasing the number of academic advisers, mentorship programs, and tutoring services.

9.3. Diversified Curriculum Design

The HLLC should regularly adjust their curriculum to stay abreast of current events and new innovative ideas emerging with the times. The curriculum adjustment could involve problem-based learning, multidisciplinary methods, and engagement pedagogies to assist students in becoming actively involved in their education and acquiring practical skills that they can use inside and outside the classroom.

9.4. Assessment of Graduate Achievements Over Time

An assessment or tracking of graduate student accomplishments over time is necessary to determine the long-term impact of the HLLC on student progress. The program's success and potential for development may be determined by tracking participants' academic progress, professional paths, and general personal growth.

9.5. Emphasize the Value of Faculty Development Initiatives

Aside from student achievement, continuing to equip the faculty is critical. The furtherance of the faculty can be achieved by developing a supportive learning environment and using cutting-edge teaching strategies. Academic advisers and faculty members should continue to collaborate to improve students' learning experiences by encouraging faculty members to take an active role in initiatives for student achievement.

9.6. Encourage Graduates to Remain Active in the HLLC Community

Alumni can play a critical role in the success of an institution. The HLLC alumni should actively be involved in paying it forward. They can share their experiences with current students and provide advice by acting as mentors, guest speakers, or advisers. This involvement may improve networking possibilities and post-graduation assistance.

9.7. The HLLC Can Offer Exchange Opportunities for Students and Staff

These exchange programs can introduce students to new cultures, which may assist them to adapt to changing situations. Also, this level of exposure can allow them to learn and understand different cultures and values, to name a few highly valued in engaging globally. This would adequately position them to implement lessons learned from courses like *Local Citizenship in a Global World*, *Navigating Spaces, Places and Identities*, and *Voice, Citizenship, and Engagement* in a practical manner.

10. AREAS FOR FUTURE RESEARCH

Further studies are needed to evaluate the effect of the HLLC on students' long-term perseverance and success. Also, course evaluations should be ongoing throughout the student's academic journey with the HLLC program. Other areas to consider for future research should include the role of gender and graduation rates and family and friends' impact on students' success in honors programs. Finally, there is a need to examine the effect of study abroad or global education and internalization of the HLLC curriculum on their students.

11. CONCLUSION

Through the HLLC, alumni are allowed to experience education uniquely, and the HLLC has embodied what an honors living-learning model should resemble by fostering an atmosphere that promotes academic performance, personal development, and community participation. Findings from this study revealed that individual, institutional, and external stakeholders are essential to creating a space that allows students to thrive and excel. However, to ensure this progress, an ongoing evaluation should be conducted with the students and the faculty to determine how to enhance the program. By implementing the recommendations listed in the study, the HLLC will continue to flourish as a transformational program that gives students the tools they need to succeed academically, develop personally, and impact their communities.

REFERENCES

- Allen, D., Duch, B., & Groh, S. (1996). *The power of problem-based learning in teaching introductory science courses*. In L. Wilkerson & W. Gijsselaers (Eds.), *Bringing problem-based learning to higher education: Theory and practice. New Directions for Teaching and Learning*, No. 68. San Francisco: Jossey-Bass.
- Alyahyan, E., & Düşteğör, D. (2020). Predicting academic success in higher education: Literature review and best practices. *International Journal of Educational Technology in Higher Education*, 17(1), 1-21. <https://doi.org/10.1186/s41239-020-0177-7>
- An Anchor Institution Rutgers University-Newark. (2023). *An anchor institution*. Retrieved from <https://www.newark.rutgers.edu/anchor-institution>
- Angelo, T., & Cross, P. (1993). *Classroom assessment: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.
- Astin, A. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Attinasi, J. L. C. (1989). Getting in: Mexican Americans' perceptions of university attendance and the implications for freshman year persistence. *The Journal of Higher Education*, 60(3), 247-277. <https://doi.org/10.1080/00221546.1989.11775035>
- Baker, S., & Pomerantz, N. (2000). Impact of learning communities on retention at a metropolitan university. *Journal of College Student Retention: Research, Theory & Practice*, 2(2), 115-126. <https://doi.org/10.2190/62p5-cq2u-ntuw-dm1c>
- Banta, T. (2001). *Assessment update: Progress, trends and practices in higher education*. San Francisco: Jossey-Bass
- Blanc, R., & Martin, D. C. (1994). Supplemental instruction: Increasing student performance and persistence in difficult academic courses. *Academic Medicine*, 69(6), 452-454. <https://doi.org/10.1097/00001888-199406000-00004>
- Borglum, K., & Kubala, T. (2000). Academic and social integration of community college students: A case study. *Community College Journal of Research and Practice*, 24(7), 567-576.
- Braxton, J. M., & McClendon, S. A. (2001). The fostering of social integration and retention through institutional practice. *Journal of College Student Retention: Research, Theory & Practice*, 3(1), 57-71. <https://doi.org/10.2190/rgxj-u08c-06vb-jk7d>
- Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory. *The Journal of Higher Education*, 71(5), 569-590. <https://doi.org/10.1080/00221546.2000.11778853>
- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change: The Magazine of Higher Learning*, 27(1), 12-18.
- Cachia, M., Lynam, S., & Stock, R. (2018). Academic success: Is it just about the grades? *Higher Education Pedagogies*, 3(1), 434-439. <https://doi.org/10.1080/23752696.2018.1462096>
- Carey, K. (2005). *One step from the finish line*. Washington, DC: The Education Trust.

- Clark, B. R. (1995). Leadership and innovation in universities from theory to practice. *Tertiary Education & Management*, 1(1), 7-11. <https://doi.org/10.1080/13583883.1995.9966849>
- Clarke, S., & Cossette, S. (2000). Secondary analysis: Theoretical, methodological, and practical considerations. *Canadian Journal of Nursing Research*, 32(3), 109-129.
- Commander, N., Stratton, C., Callahan, C., & Smith, B. (1996). A learning assistance model for expanding academic support. *Journal of Developmental Education*, 20(2), 8-16.
- Commander, N., Valeri-Gold, M., & Darnell, K. (2004). The strategic thinking and learning community: An innovative model for providing academic assistance. *Journal of the First-Year Experience & Students in Transition*, 16(1), 61-76.
- Congos, D., Langsam, D., & Schoeps, N. (1997). Supplemental instruction: A successful approach to learning how to learn college introductory biology. *The Journal of Teaching and Learning*, 2(1), 2-17.
- Corno, L., & Mandinach, E. B. (1983). The role of cognitive engagement in classroom learning and motivation. *Educational Psychologist*, 18(2), 88-108.
- Cottell, P., & Harwood, E. (1998). Do classroom assessment techniques (CATs) improve student learning? *New Directions for Teaching and Learning*, 75, 37-46. <https://doi.org/10.1002/tl.7504>
- Cross, P., & Steadman, M. (1996). *Classroom research: Implementing the scholarship of teaching*. San Francisco: Jossey-Bass.
- Demery, J., Brawner, C. E., & Serow, R. C. (1999). Instructional reform at research universities: Studying faculty motivation. *The Review of Higher Education*, 22(4), 411-423.
- Duch, B. J. (1996). Problem-based learning in physics: The power of students teaching students. *Journal of College Science Teaching*, 15(5), 326-329.
- Eaton, J. S. (2015). *An overview of US accreditation. Revised November 2015*: Council for Higher Education Accreditation.
- Ebert-May, D., Brewer, C., & Allred, S. (1997). Innovation in large lectures: Teaching for active learning. *Bioscience*, 47(9), 601-607.
- Endo, J. J., & Harpel, R. L. (1982). The effect of student-faculty interaction on students' educational outcomes. *Research in Higher Education*, 16, 115-138.
- Ewell, P. (1997). *Strengthening assessment for academic quality improvement*. In M. W. Peterson, D. D. Dill, & L. A. Mets (Eds.), *Planning and management for a changing environment: A handbook on redesigning postsecondary institutions*. San Francisco: Jossey-Bass.
- Frost, S. H. (1991). *Academic advising for student success: A system of shared responsibility*. ASHE-ERIC Higher Education Report No. 3, 1991. ASHE-ERIC Higher Education Reports, the George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036.
- Garcia, P. (1991). Summer bridge: Improving retention rates for underprepared students. *Journal of the First-Year Experience & Students in Transition*, 3(2), 91-105.
- Garth, R. (1999). Group-based learning. *New Directions for Teaching and Learning*, 80, 55-60.
- Gordon, V. N., & Habley, W. R. (2000). *Academic advising: A comprehensive handbook*. San Francisco: Jossey-Bass.
- Hanson, M. (2021). *College graduation statistics educationdata.org*. Retrieved from <https://educationdata.org/number-of-college-graduates>
- Hicks, T. (2003). Advising the first-generation college students. *The Mentor: Academic Advising Journal*, 1.
- Hodges, R., Dochen, C. W., & Joy, D. (2001). Increasing students' success: When supplemental instruction becomes mandatory. *Journal of College Reading and Learning*, 31(2), 143-156. <https://doi.org/10.1080/10790195.2001.10850111>
- John, E. P. S., Kirshstein, R. J., & Noell, J. (1991). The effects of student financial aid on persistence: A sequential analysis. *The Review of Higher Education*, 14(3), 383-406.
- Johnson, D., Johnson, R., & Smith, K. (1991). *Cooperative learning: Increasing college faculty instructional productivity*. In R. Feldman (Ed.), *Social psychological applications to education*. Cambridge, U.K: Cambridge University Press.

- Johnson, D., Johnson, R., & Smith, K. (1998a). *Active learning: Cooperation in the college classroom* (2nd ed.). Edina, MN: Interaction Books.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1998b). Cooperative learning returns to college what evidence is there that it works? *Change: The Magazine of Higher Learning*, 30(4), 26-35. <https://doi.org/10.1080/00091389809602629>
- Johnson, J. L. (2000). Learning communities and special efforts in the retention of university students: What works, what doesn't, and is the return worth the investment? *Journal of College Student Retention: Research, Theory & Practice*, 2(3), 219-238.
- Koring, H. (2005). Peer advising: A win-win initiative. *Academic Advising Today*, 28(2), 1-3.
- Korschgen, A. J., & Hageseth, J. A. (1997). Undecided students: How one college developed a collaborative approach to help student choose majors and careers. *Journal of Career Planning & Employment*, 57(3), 49-51.
- Kuh, G. (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.
- Kuh, G., Shuh, J., Whitt, E., & Associates. (1991). *Involving colleges: Encouraging student learning and personal development through out-of-class experiences*. San Francisco: Jossey-Bass.
- Kuh, G. D. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change: The Magazine of Higher Learning*, 35(2), 24-32.
- Kuh, G. D., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature* (Vol. 8). Washington, DC: National Postsecondary Education Cooperative.
- Lewallen, W. C. (1995). Students decided and undecided about career choice: A comparison of college achievement and student involvement. *NACADA Journal*, 15(1), 22-30.
- Light, R. (1990). *The Harvard assessment seminars*. Cambridge, MA: Harvard University.
- Lipsky, S., & Ender, S. (1990). Impact of a study skills course on probationary students' academic performance. *Journal of the First-Year Experience & Students in Transition*, 2(1), 7-16.
- Lynam, S., & Cachia, M. (2018). Students' perceptions of the role of assessments at higher education. *Assessment & Evaluation in Higher Education*, 43(2), 223-234.
- MacGregor, J., Cooper, J. L., Smith, K. A., & Robinson, P. (2000). *Strategies for energizing large classes: From small groups to learning communities*. San Francisco: Jossey-Bass.
- Malnarich, G., Sloan, B., van Slyck, P., Dusenberry, P., & Swinton, J. (2004). *The pedagogy of possibilities: Developmental education, college-level studies, and learning communities*. Olympia, WA: Washington Center for Improving the Quality of Undergraduate Education, Evergreen State College.
- Marcus, J. (2021). *Most college students don't graduate in 4 years, so the government counts 6 years as "success."* *NBCNews.com*. Retrieved from <https://www.nbcnews.com/news/us-news/college-students-dont-graduate-4-years-government-counts-6-years-succe-rcna2776>
- Mullendore, R., & Banahan, L. (2004). *Designing orientation programs*. In M. Upcraft, J. Gardner, & B. Barefoot (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco: Jossey-Bass.
- Muraskin, L. (1997). *Best practices in student support services: A study of five exemplary sites*. Washington, DC: U.S. Department of Education.
- Pagan, R., & Edwards-Wilson, R. (2002). A mentoring program for remedial students. *Journal of College Student Retention: Research, Theory & Practice*, 4(3), 207-226.
- Pascarella, E. T. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research*, 50(4), 545-595.
- Pascarella, E. T., & Chapman, D. W. (1983). A multiinstitutional, path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal*, 20(1), 87-102.
- Punch, K. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London: Sage.

- Richlin, L., & Cox, M. (2004). *Developing scholarly teaching and the scholarship of teaching and learning through faculty learning communities*. In M. Cox & L. Ricklin (Eds.), *Building faculty learning communities. New Directions for Teaching and Learning* 97. San Francisco: Jossey-Bass.
- Robert, J., & Carlsen, W. S. (2017). Teaching and research at a large university: Case studies of science professors. *Journal of Research in Science Teaching*, 54(7), 937-960.
- Ryan, J. F. (2004). The relationship between institutional expenditures and degree attainment at baccalaureate colleges. *Research in Higher Education*, 45, 97-114.
- Santos, S. J., & Reigadas, E. T. (2004). Understanding the student-faculty mentoring process: Its effects on at-risk university students. *Journal of College Student Retention: Research, Theory & Practice*, 6(3), 337-357.
- Schilling, K. M., & Schilling, K. L. (1999). Increasing expectations for student effort. *About Campus*, 4(2), 4-10.
- Schnell, C. A., & Doetkott, C. D. (2003). First year seminars produce long-term impact. *Journal of College Student Retention: Research, Theory & Practice*, 4(4), 377-391.
- Smith, B. L., MacGregor, J., Matthews, R., & Gabelnick, F. (2004). *Learning communities: Reforming undergraduate education*. San Francisco: Jossey-Bass.
- Smith, K. A. (2000). Going deeper: Formal small-group learning in large classes. *New Directions for Teaching and Learning*, 2000(81), 25-46.
- St. John, E. P., Andrieu, S., Oescher, J., & Starkey, J. B. (1994). The influence of student aid on within-year persistence by traditional college-age students in four-year colleges. *Research in Higher Education*, 35, 455-480.
- Stark, K. (2002). Advising undecided students: What works best? *The Mentor: Innovative Scholarship on Academic Advising*, 4.
- Sunal, D. W., Hodges, J., Sunal, C. S., Whitaker, K. W., Freeman, L. M., Edwards, L., . . . Odell, M. (2001). Teaching science in higher education: Faculty professional development and barriers to change. *School Science and Mathematics*, 101(5), 246-257.
- Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology*, 87(3), 354. <https://doi.org/10.1037/0022-3514.87.3.354>
- Terenzini, P. T., Lorang, W. G., & Pascarella, E. T. (1981). Predicting freshman persistence and voluntary dropout decisions: A replication. *Research in Higher Education*, 15, 109-127.
- Terenzini, P. T., Rendon, L. I., Lee Upcraft, M., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35, 57-73.
- Thayer, P. B. (2000). Retaining first generation and low income students. *Opportunity Outlook*, 1, 2-8.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition* (1st ed.). Chicago: University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599-623.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21(2), 167-177.
- Tinto, V. (1999). Adapting learning communities to the needs of development education students. *National Center for Postsecondary Improvement, Stanford University*.
- Tinto, V. (2001). Rethinking the first year of college. *Higher Education Monograph Series, Syracuse University*, 9(2), 1-8.
- Tinto, V., & Goodsell, A. (1994). Freshman interest groups and the first-year experience: Constructing student communities in a large university. *Journal of The First-Year Experience & Students in Transition*, 6(1), 7-28.

- Tinto, V., & Pusser, B. (2006). Moving from theory to action: Building a model of institutional action for student success. *National Postsecondary Education Cooperative, 1*(51), 89-125.
- Titley, R. W., & Titley, B. S. (1980). Initial choice of college major: Are only the "undecided" undecided? *Journal of College Student Personnel, 21*(4), 293-298.
- U.S. Department of Education National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS). (2017). Winter 2016-17, Graduation Rates Component. See Digest of Education Statistics 2017, table 326.10.
- U.S. General Accounting Office. (1996). *Content analysis: A methodology for structuring and analyzing written material*. Washington, D.C: GAO/PEMD-10.3.1.
- Umbach, P. D., & Porter, S. R. (2002). How do academic departments impact student satisfaction? Understanding the contextual effects of departments. *Research in Higher Education, 43*, 209-234.
- Upcraft, M., Gardner, J., & Barefoot, B. (2004). *Challenge and support: Creating climates for first-year student success*. San Francisco: Jossey-Bass.
- Walker, G. E., Golde, C. M., Jones, L., Bueschel, A. C., & Hutchings, P. (2008). *The formation of scholars: Rethinking doctoral education for the twenty-first century*. New York: John Wiley & Sons.
- Ward-Roof, J. A., & Hatch, C. (2003). *Designing successful transitions: A guide for orienting students to college. The first-year experience monograph series*: National Resource Center for The First-Year Experience and Students in Transition, University of South Carolina, 1629 Pendleton Street, Columbia, SC 29208.
- Weber, R. P. (1990). *Basic content analysis* (Vol. 49). London: Sage Publications.
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage? ASHE-ERIC higher education report, Jossey-Bass higher and adult education series* (Vol. 28). San Francisco, CA ERIC.
- White, C. P. (2004). Student portfolios: An alternative way of encouraging and evaluating student learning. *New Directions for Teaching and Learning, 100*, 37-42.
- Wholey, J., Hatry, H., & Newcomer, K. (1994). *Handbook of practical program evaluation*. San Francisco: Jossey-Bass.
- Wilkerson, L., & Gijsselaers, W. H. (1996). *Bringing problem-based learning to higher education: Theory and practice*. San Francisco, CA: Jossey-Bass Inc.
- Wilkie, C., & Jones, M. (1994). Academic benefits of on-campus employment to first-year developmental education students. *Journal of The First-Year Experience & Students in Transition, 6*(2), 37-56.
- Wilkie, C., & Kuckuck, S. (1989). A longitudinal study of the effects of a freshman seminar. *Journal of the Freshman Year Experience, 1*(1), 7-16.
- Williford, A. M., Chapman, L. C., & Kahrig, T. (2001). The university experience course: A longitudinal study of student performance, retention, and graduation. *Journal of College Student Retention: Research, Theory & Practice, 2*(4), 327-340.
- Wolverton, M. (1998). Treading the tenure-track tightrope: Finding balance between research excellence and quality teaching. *Innovative Higher Education, 23*, 61-79.
- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical Assessment, Research, and Evaluation, 20*(1), 1-21. <https://doi.org/10.7275/hz5x-tx03>
- Zhao, C.-M., & Kuh, G. D. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education, 45*, 115-138.

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