

*Impact of First-Year Learning Communities on
Retention and Graduation Rates at the University
of Utah*

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NOTE THAT THE DATA CONTAINED IN THIS REPORT MAY NOT COINCIDE WITH THE UNIVERSITY'S OFFICIAL RETENTION AND GRADUATION DATA BECAUSE THEY ARE NOT ADJUSTED FOR ALLOWABLE DEPARTURES.

History of Building Community Portfolio Team

This report builds on the work of the Building Community Portfolio Team during the 2020-2021. The committee was established in November 2015 by Senior Associate Vice President for Academic Affairs, Martha Bradley. The initial goal of the committee was to develop common goals and definitions that could be embedded in the UGS strategic plan. Later, the goals evolved to identify learning outcomes for learning communities and recommend assessment tools. Specifically, the committee:

1. Explored a systematic approach to assessing the student learning that occurs in the context of learning communities
2. Examined the qualitative and quantitative tools to assess these learning communities

The committee was originally chaired when established in 2015 by Sylvia Torti, Dean of the Honors College, and Carolyn Bliss, Director of LEAP. In the academic year 2017-2018, the committee was chaired by Erica Rojas, Director of Curriculum and Assessment of the Honors College and Marissa Diener, new director of the LEAP Program. In 2019-2020 the committee was chaired by Marissa Diener, Director of LEAP Learning Communities and was expanded to include members from learning communities around campus beyond those situated in Undergraduate Studies. With the expansion of the committee, we spent time understanding what was happening around campus with regard to first-year learning communities and discussing assessment strategies. During the 2020-2021 year, we attempted to identify all of the first year learning communities on campus and involve them in the discussions on learning communities. Julie Metos, Director of BlockU, joined the committee as a co-chair with Marissa Diener, Director of LEAP.

We identified the following First-Year Learning Communities at the University of Utah, represented on the committee by the following individuals:

ACCESS – Tanya Vickers
 BlockU – Julie Metos
 Business Scholars – Mandy Hamelstrom
 Diversity Scholars – Julia Kingsdale & Tricia Sugiyama
 First Generation Scholars – Linda Paternina
 Gender Justice Scholars – Flor Olivo & Ana Antunes
 Honors – Monisha Pasupathi
 Humanities Scholars – Taunya Dressler
 Impact Scholars – Alexa Hudson
 Lassonde-X – Kathy Hajeb
 Lassonde Founders – Kathy Hajeb
 LEAP – Marissa Diener

The committee met in December 2020, February 2021, March 2021 and April 2021 to discuss issues around learning communities. The focus of the committee's work was on the creation of the learning communities dashboard and a white paper evaluating learning communities and establishing next steps. We also identified as a priority the ability to inform prospective students about the first-year learning communities available at the University of Utah. Thus, we

prioritized the development of a website that would showcase all of the first-year academic learning communities. The website is hosted by Undergraduate Studies at <https://ugs.utah.edu/student-programs/fy-communities.php>

The website provides brief information on each first-year learning community with links to each community's webpage. In order to develop the webpage, we identified common elements across learning communities, such as the use of peer advisors and group projects. These are described in more detail in the white paper.

A data dashboard was created by OBIA that included membership in all of the first-year learning communities. This important step enabled us to evaluate retention and graduation rates not just for our individual learning communities, but across learning communities as a whole. Given the larger sample sizes associated with combining data from multiple programs, we were also able to disaggregate data by race/ethnicity, Pell-Grant status, and First-Generation status. These analyses confirm the benefit of first-year academic learning communities for retention and graduation rates, especially for students from minoritized backgrounds. These analyses were further supported by a previous Civitas Impact study which used propensity matching to evaluate the benefit of participating in a first-year learning community on fall-to-fall retention. This analysis matched students on a number of demographic and academic characteristics, reducing the likelihood that the differences in performance between students who choose an LC and those who don't are due to pre-existing differences in the groups.

Evaluation of Academic First-Year Learning Communities at the University of Utah

Over the last 10 years, the University of Utah has seen a proliferation of academic learning communities geared towards first-year students, largely based on the LEAP model. These learning communities are offered by colleges within the University or geared towards specific groups of students. They typically operate independently of one another. There has not yet been any attempt to examine learning communities as a whole at the University of Utah, nor evaluate nor synthesize student performance data on these first-year academic learning communities (LCs) as a whole. Each program has worked independently to evaluate their learning communities, but this approach is problematic for a number of reasons. The comparison group for these evaluations may be all other first-year students, regardless of whether they are in a different learning community. This approach may provide misleading comparisons because it doesn't consider whether students are in various other learning communities across campus. It also usually results in small numbers of students which precludes the ability to disaggregate data by ethnicity or other demographic characteristics. Finally, comparisons across small groups of students may not be as robust as looking at trends over years across many learning communities.

Thus, the goals of the white paper are to synthesize data on these first year LCs across the University of Utah campus, determine the characteristics of the LCs offered at the University, identify the range and variety of LCs and who is and is not served by LCs, and examine student outcomes based on participation in LCs. We will also identify next steps based on the data we have on first-year academic learning communities.

Literature on the Impact of First-year learning Communities

The first-year learning community movement started to appear at colleges and universities in the 1980's, and by 2004, learning communities were ubiquitous across the United States (Smith, 2004). Learning communities are defined by Gabelnick (Matthews, Smith, a Leigh, & MacGregor, 2012) as “purposeful restructuring of the curriculum by linking courses that enroll a common cohort of students. This represents an intentional structuring of the students’ time, credit, and learning experiences to build community, and foster more explicit connections among students, faculty, and disciplines.” Collaborative, active learning centered on teamwork is a hallmark of learning communities. Learning communities reflect trends in education focused on the affective side of learning, including the roles of social interaction in human learning and the value of humanistic and holistic approaches to complement knowledge acquisition (Hod, Bielaczyc & Ben-Zvi, 2018). Being part of a learning community is also viewed as important for developing an engaged citizenry prepared to address complex societal issues using collaborative skills.

While the educational philosophy of learning communities is focused on active, rather than passive education, there is a wide variety in the curricular design of learning communities, ranging from those centered on a college major, major exploration, transition to college, and personal interests, to those focused on target groups such as women, first-generation college students, socioeconomic status, ACT scores, and students of specific race and ethnicity. Variety is also observed in the goals and expected outcomes of first-year learning communities. Many universities implement first-year learning communities to improve retention and graduation rates; others focus on improving academic performance, engagement in campus activities, friend groups, or social-emotional health. A majority of first-year learning communities are optional and students voluntarily choose to participate, whereas at other schools, typically smaller, private institutions, they are required.

Qualitative research suggests that first-year learning communities are successful in engaging students in college life and enhancing feelings of belonging (Hotchkiss, Moore & Pitts, 2006). Gilbert-Thomas (2018) reports that first-year students gain a cohort of friends that enhance their sense of belonging, their ability to solve problems together, and “learn from passionate instructors who are willing to share their own stories about their educational path.” In student interviews, researchers find that retention of students is shaped by their sense of belonging in campus social groupings, “especially freshmen students that experience many adjustments in forming new relationships with peers, staff, and faculty” (Tinto, Love & Goodsell 1995).

Quantitative research on student outcomes associated with participation in learning communities is complex, with varying results. A large study examining early learning communities across the United States found that students in learning communities increased their GPA by 0.5 -1.0 grade points while in a learning community. This effect diminished by one-half in their second year of college (Pike, Kuh & McCormick, 2011). Previous research noted that effects on educational gains disappear when controls, such as high school GPA, ACT scores, college major, gender and ethnicity are added to statistical modelling (Pike, 2008). Zhao and Kug (2004) found that participation in a learning community was more related to student engagement than education outcomes, and student engagement was strongly related to educational outcomes. Studies like these propose an indirect relationship between learning communities and student academic success. A Dutch study further explores student connection and achievement level in academic

learning communities and suggests an achievement segregation. They conclude that the higher the student's achievement level, the more they connect with other high achieving students for academics and friendship, whereas lower-achieving students are excluded from the support of higher-achieving students and turn to similar low achievers for support (Brouwer & U.A., 2018). There are few studies examining the relationship of first-year learning communities with retention, however they suggest small, but meaningful positive effects among student subgroups. For example, an early study in a large public university found that freshman in learning communities at large institutions improved retention to the second year of college among Black men and women, White women, but decreased retention among white males (Hotchkiss, Moore & Pitts, 2006).

Several areas of on-going inquiry are needed to further the research on first-year learning communities. Based on this literature review, those involved in current learning communities should be encouraged to publish evaluation data more broadly. Additional studies addressing retention and graduation rates can examine the outcomes that learning communities achieve, knowing that learning communities are successful at creating a sense of belonging among first-year students. The specificity of research also needs improvement so that the details of the learning communities being studied are clear, since not all freshman learning communities are the same. Further, as the spatial relationships of learning change to more online and hybrid education, studies that examine unique ways of forming learning communities are needed. Finally, while learning communities at the University of Utah have contributed to improvements in graduation, the literature suggests the ability of first-year learning communities to influence graduation rates may be limited, and additional programming beyond the first-year holds promise for expanding the impact (Hof, Bielaczyc & Ben-Zri, 2018). Innovation and evaluation will continue to improve first-year learning communities, so that students who start college can successfully finish their academic careers and acquire the full promise of a college education.

History and Early Impact of Learning Communities at the University of Utah

Since 2011 the University of Utah has produced significant improvements in retention and completion rates, moving from 86% to 90% retention and from 55% to 70% 6-year graduation rate. These advancements have been produced by campus-wide attention to student success and include the strategic use of financial aid and the steady rise in the academic preparedness of our students. The University of Utah's strategies for retention and completion are represented in what we call the Utah Pledge. The Utah Pledge represents our strategic approach to retention and completion, an approach based on best practices, and that, importantly, has delivered results.

The Utah Pledge consists of four initiatives, one of which is first-year learning communities. (The other components of the Utah Pledge are advising and mentoring, a plan to finish developed in first- and second-year milestone advising, and deeply engaged learning that transforms students' understandings about themselves and their position in the world). The Utah Pledge is intended to impact the life of every University of Utah student, and as such, the initiatives and programs have the potential to be a part of every student's experience at the University.

The first component of the Utah Pledge is the focus on students in a first-year learning community. The University of Utah has a long history of strong Learning Communities. In

1994, cognizant of the potential benefits of these experiences, the University launched a combination learning community and freshman year experience called LEAP (Learning, Engagement, Achievement, and Progress), which initially enrolled around 100 students in five sections. Since then, the program has grown tenfold to nearly 1000 students, with 30 sections in the fall of 2019, targeting students with different career directions, majors, or interests. The formation and study of community is at the heart of all LEAP sections, and our own research has corroborated the positive student outcomes found in other learning community settings.

Data supports the effectiveness of the LEAP Learning Communities. In a published study of LEAP performance from 1999-2006, we matched LEAP students with non-LEAP students on demographic characteristics and incoming characteristics to control for the effects of these factors on student academic performance (Bliss, Webb, & St. Andre, 2012). Specifically, students were matched on the following characteristics: age, gender, race/ethnicity, admissions index, which was a composite of ACT score and high school GPA used by the admissions office, and high school from which the student graduated as a proxy for socioeconomic status. We included approximately 1500 pairs of demographically identical students in which one of these pairs elected to take LEAP courses while the other did not. Dependent variables included number of attempted and completed credits, GPA, first-to-second year retention, four-year graduation and six-year graduation rates. Findings showed that, on average, LEAP students earned better grades in their first year, attempted and completed more credit hours, were more likely than the non-LEAP students to return for their second year, and graduated at higher rates at both the four- and six-year marks. LEAP and non-LEAP students did not differ on second semester credits attempted or completed.

One of the central features of many first-year learning communities is the use of peer mentors (Peer Advisors) who cement community in the classroom, while approaching the University experience from a student point of view and guiding new students toward involvement and commitment to completing their degrees. Using social networking theory, which also shows us the community dynamics in the classroom, we theorize that connection to the Peer Advisor, especially for first-generation students, significantly increases the social capital students use to negotiate their first year at the University thereby increasing their likelihood of success (Webb & Engar, 2016). Peer Advisors also disseminate important information students need to succeed and connect students to classmates beyond their immediate circle.

A sense of belonging is linked to a number of academic performance measures, including motivation, persistence and grade achievement. Data from first-year learning communities at the University of Utah also indicate that the teamwork introduced in many first-year learning communities is effective for increasing social ties. A study at the University of Utah's Honors program, examined the impact of the Reacting to the Past (RTTP) pedagogy, a collaborative learning approaches used in both LEAP and Honors. This collaborative pedagogy, which requires students to interact and learn together, produced more acquaintance and friendship networks in first- and second-year students (Webb & Engar, 2012). Social network relationships, of both acquaintance and friends, increased during the RTTP collaborative learning approaches, and eliminated social isolation in the class. The ties developed tended to be inclusive rather than exclusive; they did not reinforce existing cliques or create new ones, but

instead the social networks became denser and more inclusive. All students developed multiple acquaintance ties and at least one friendship. It is unlikely that students in a traditional classroom would be unlikely to develop such social networks.

Learning Communities at the University of Utah in 2020-2021

Given the success of the LEAP program, since 2011, the University has created and grown other learning communities, such as BlockU, Business Scholars, Beacon Scholars, and Humanities Scholars, to ensure that learning communities are available to meet the needs of diverse students. Part of the Utah Pledge is that every student will be enrolled in a cohort learning community that fits their needs. However, until recently, there hasn't been a way to track which students select a learning community, nor an evaluation of student performance based on whether they took a first-year learning community course. In fact, there hasn't been any way to track whether a student was in a first-year learning community, or even what first-year learning communities exist and the characteristics of those learning communities.

Thus, the goals of the current paper are to:

- 1) Examine the breadth and type of learning communities at the University of Utah**
- 2) Describe the characteristics of LCs offered at the University of Utah**
- 3) Determine the number of students enrolled in LCs and who is not served by an LC**
- 4) Evaluate the student outcomes of students in first year LCs compared to those not in first year LCs**
- 5) Identify next steps based on these data**

Data on Learning Communities at the University of Utah

Goals 1 and 2: Examine the breadth and type of learning communities at the University of Utah and Describe the characteristics of LCs offered at the University of Utah

The first goal identified the first-year academic learning communities on campus and the key characteristics of each program (see Table 1). This analysis also identified which students each program served. Twelve first-year academic learning communities were identified at the University of Utah. All of the programs provided a cohort experience across semesters, and 10/12 provided thematic content across semesters. **It is notable that of these 12 communities, two-thirds of them helped students fulfill general education requirements. This approach of integrating first-year learning communities with general education requirements is unusual.** The majority (8 out of 12) also provided the support of peer advisors and the opportunity to meet peers and build skills through group projects or collaborative teamwork. Half provided instruction from a librarian and 2 more provided optional librarian interaction. Eight provided varying levels of community engagement. Five provided a capstone experience. The majority (8 out of 12) required an application. Programs were split among being defined by student interest (e.g., issues of gender equity, business, humanities, etc.) or by student characteristics (e.g, first-generation students, students of color).

Table 1: Description of First-year academic Learning Communities at the University of Utah 2020-2021

Name of First-year Learning Community	Who?	What?	Key Features									Application Required	Website
			Cohort Across Semesters	Group Projects	Peer Advisors	Instruction from a Librarian	Thematic Content	Community Engagement	Capstone Projects	Learning Portfolios	Meets General Ed Requirements		
ACCESS	Students interested in advancing gender equality in STEM	Living-learning and summer course, SCI3000; spring research experience and symposium	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	https://science.utah.edu/access/
BLOCKU	All students who want to study a topic of their interest while completing most general education requirements in first year	Take a block of 3 gen ed courses each semester of first year; capstone project and symposium	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	https://blocku.utah.edu/
Business Scholars	High-achieving first-year	Explore business disciplines, visit	YES	YES	NO	NO	YES	NO	NO	NO	NO	YES	https://eccles.utah.edu/students/business-scholars/

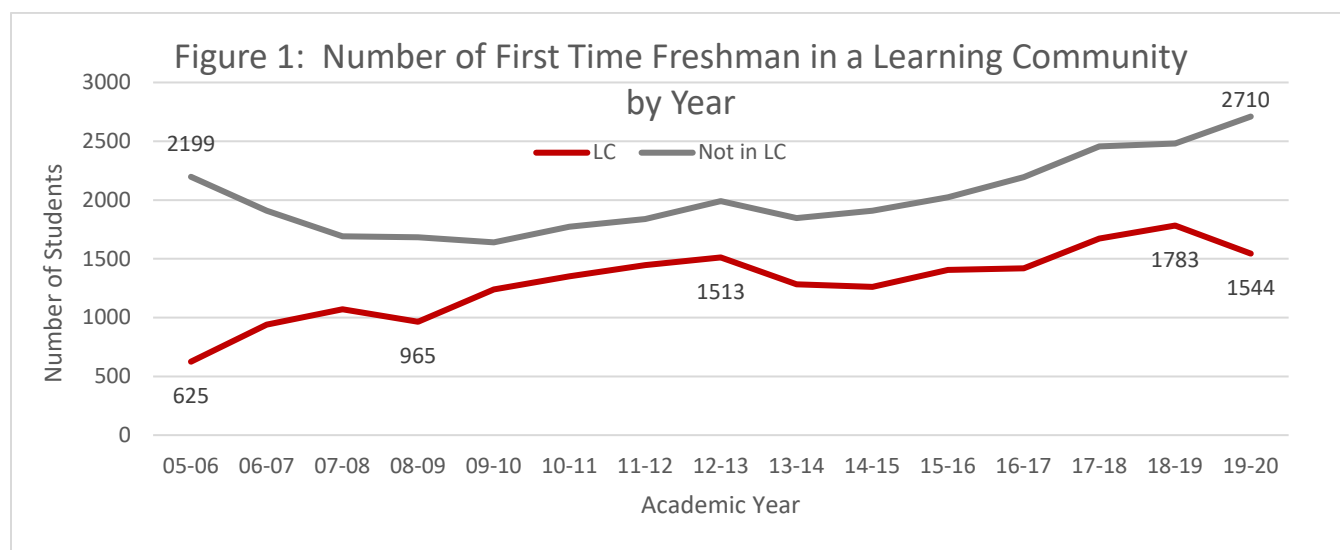
	students in Business	companies, travel through BUS 3995												
Diversity Scholars	First-generation and students of color	Monthly advising meeting with Advisor and peer mentor; take ETHNC 2510 fall	YES	YES	YES	NO	YES	YES	NO	NO	YES	YES	https://diversity.utah.edu/first-year-diversity-scholars/	
First-generation Scholars	First year, first-generation students	One credit, elective course to provide advising, mentoring and leadership while building community	YES	NO	YES	YES	NO	YES	NO	NO	NO	YES	https://engagement.utah.edu/formeroffice/beacon.php	
Gender Justice Scholars	Students interested in issues of gender equity	Take GNDR 2500 fall, GNDR 3500 Spring, UC 3001 2 nd year fall; complete CEL and Sustainability credits in first year and build community	YES	NO	YES	YES	YES	YES	NO	YES	YES	YES	https://womenscenter.utah.edu/programs/ustart.php	
Honors	Students admitted to the Honors College	HONOR 1000 and Intellectual Traditions/writing courses	YES	NO	YES	NO	YES	NO	NO	NO	YES	YES	Information: https://honors.utah.edu/	

		first year and option for living learning community	YES		NO		YES						Application: https://honors.utah.edu/admissions/current-students/
Humanities Scholars	Students in 1 of the 7 CoH disciplines	Summer intensive orientation at Taft-Nicholson Environmental Humanities Center then year-long Humanities Scholars seminar	YES	YES	NO	YES	YES	YES	NO	NO	NO	YES	https://humanities-scholars.utah.edu/
Lassonde-X	Students from all majors interested in exploring entrepreneurship	ENTP 1010, ENTP 1020, ENTP 2050; complete entrepreneurship certificate	YES	YES	NO	YES Optional	YES	YES informal	YES	YES	YES	NO	https://eccles.utah.edu/lasondex/
Lassonde Founders	Students from all majors interested in exploring entrepreneurship	4-year program to launch or grow a company; living and learning component at Lassonde Studios	YES	YES	YES	YES Optional	YES	YES informal	YES	YES	YES	YES	https://lassonde.utah.edu/founders/

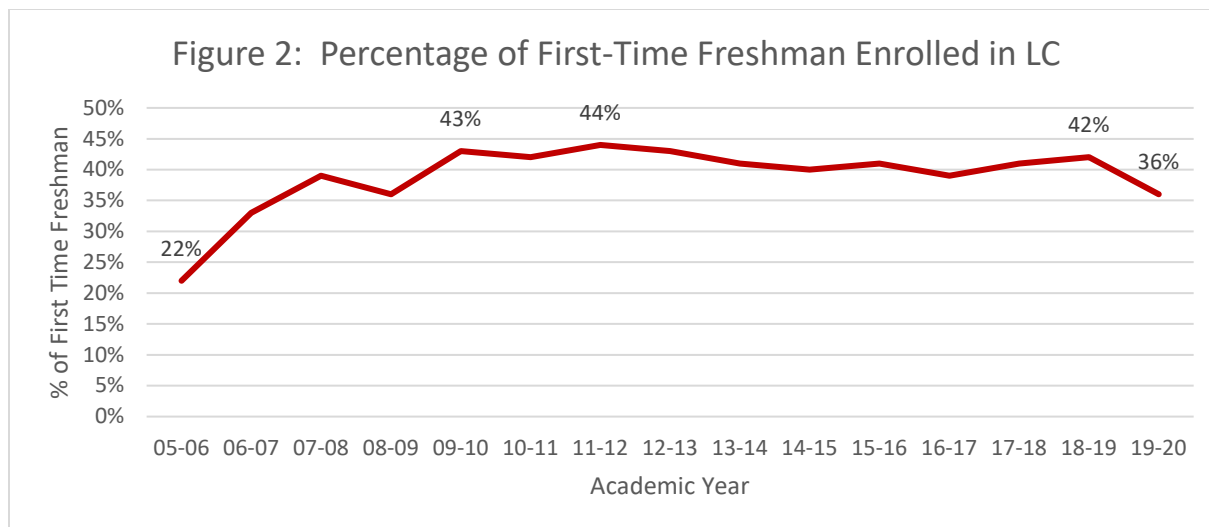
LEAP Learning Communities	All students	LEAP class Fall and Spring - small seminar classes aligned with interests or majors that meet gen ed requirements	YES	YES	YES	YES	YES	Some	YES	NO	YES	NO	https://leap.utah.edu
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Goal 3: Determine the number of students enrolled in LCs and identify who is not served by an LC

As can be seen from Figure 1, the number of students in Learning Communities has generally increased over time, from 625 in 2005 to 1544 in 2019-20, although the number of first-time freshman has also increased. During academic year 19-20 and the COVID-19 pandemic, there was a reduction in the number of students in first-year LCs. We will have to see if this downward trend continues but we suspect it was a direct result of the pandemic. At least one of the first-year learning communities was cancelled due to the pandemic. Enrollment in LEAP, one of the larger learning communities, declined substantially. It may also be due to changes in NSO which make it more challenging to inform students about learning communities given the move to virtual orientation.

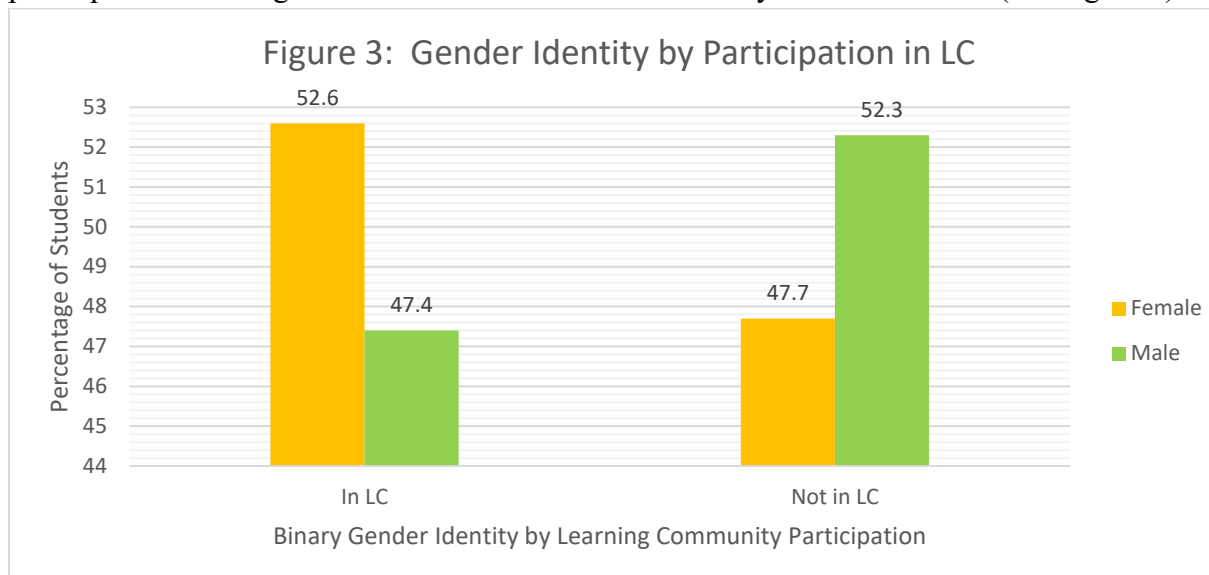


Although the number of first-time freshmen enrolled in a Learning Community have increased, so have the number of first-time freshmen. As can be seen in Figure 2, the percentage of first time freshman enrolled in a LC has mostly plateaued over the past ten years.

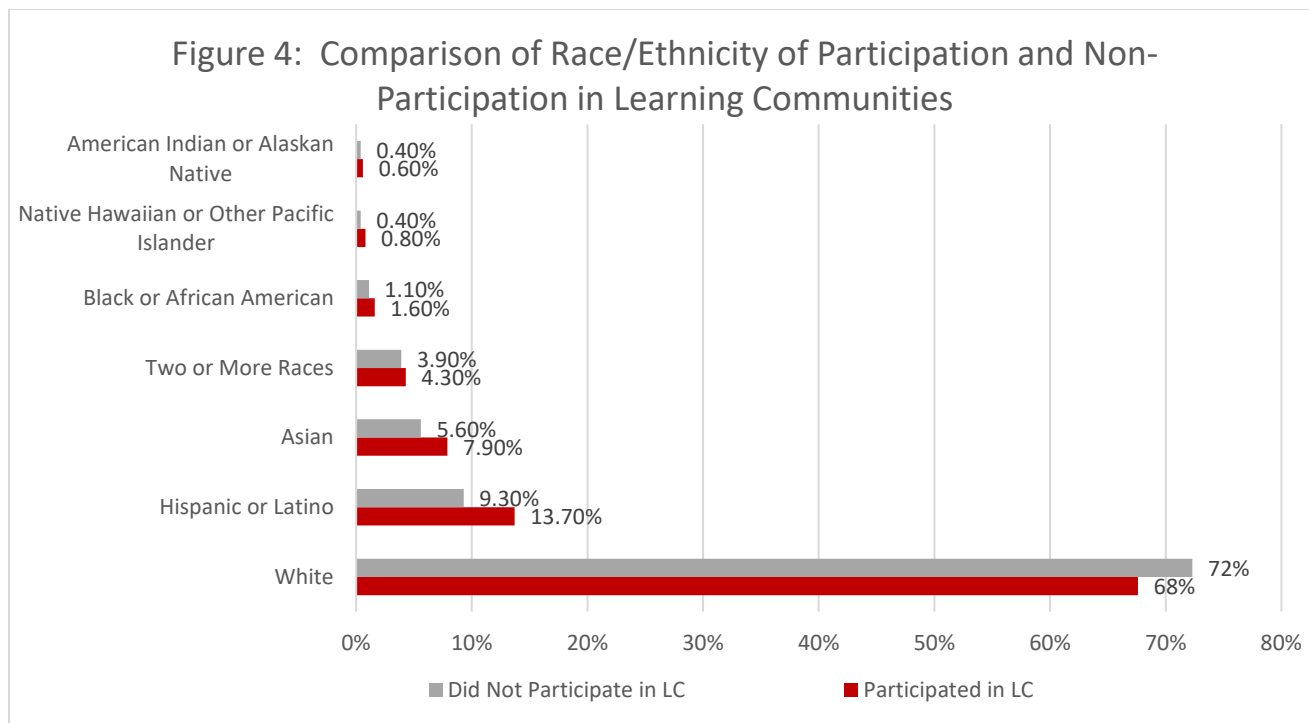


The demographics of the students in learning communities are described below.

Data on non-binary and non-gender conforming students were not available so we were restricted to binary gender categories. Students who identify as females are more likely to participate in learning communities than those who identify as male students (see Figure 3).

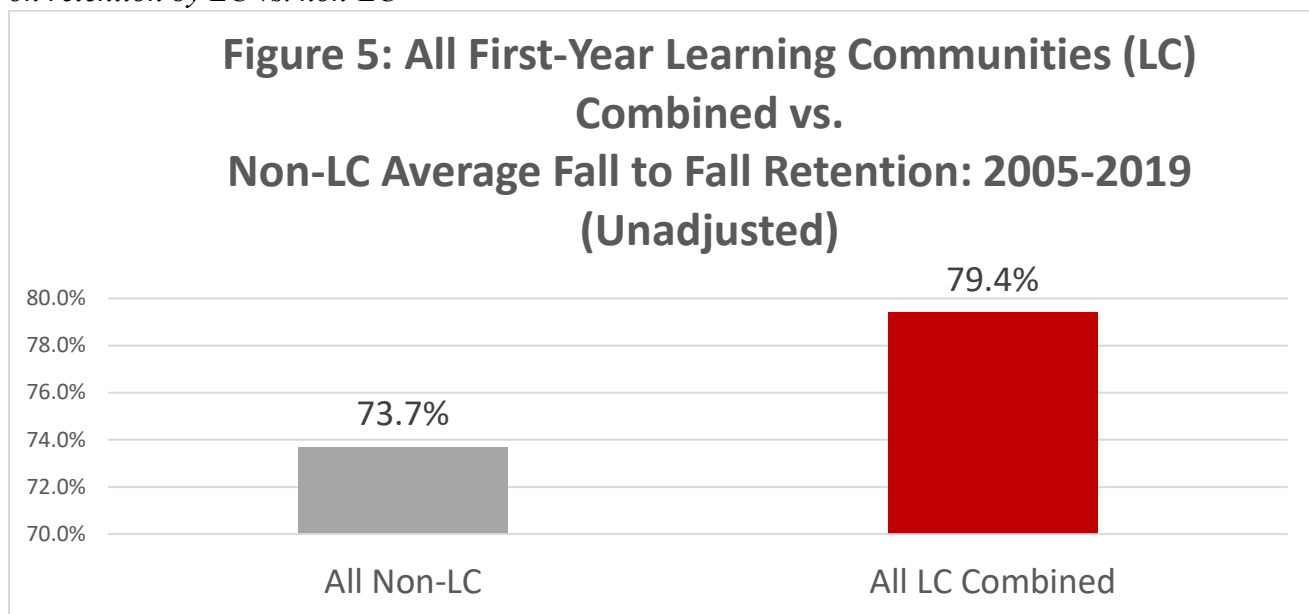


Students of color represent a higher proportion of students in first-year learning communities than the proportion of students not in first-year learning communities (see Figure 4).

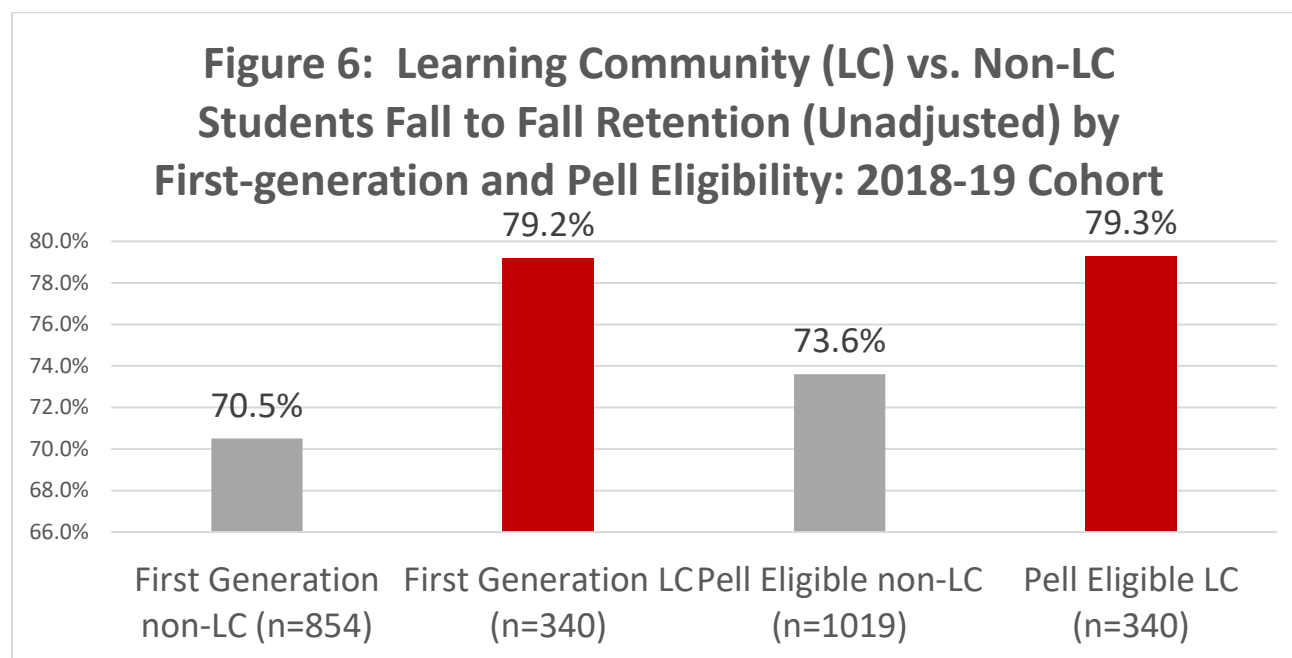


Goal 4: Evaluate the student outcomes of students in first year LCs compared to those not in first year LCs

University of Utah Office of Budget and Institutional Analysis Data on First Year LCs - Figures on retention by LC vs. non-LC



These data show a clear advantage for retention for students who enrolled in a first-year learning community compared to the students who were not in a learning community over the past 15 years or so (see Figure 5).



When we examine first-generation and Pell-grant eligible students, we see that participating in a learning community provides an advantage in terms of retention, especially for first-generation students (see Figure 6).

Figure 7: Learning Community (Solid Lines) vs. Non-LC (Hatched Lines) Fall to Fall Retention (Unadjusted) by Ethnicity 2018-19

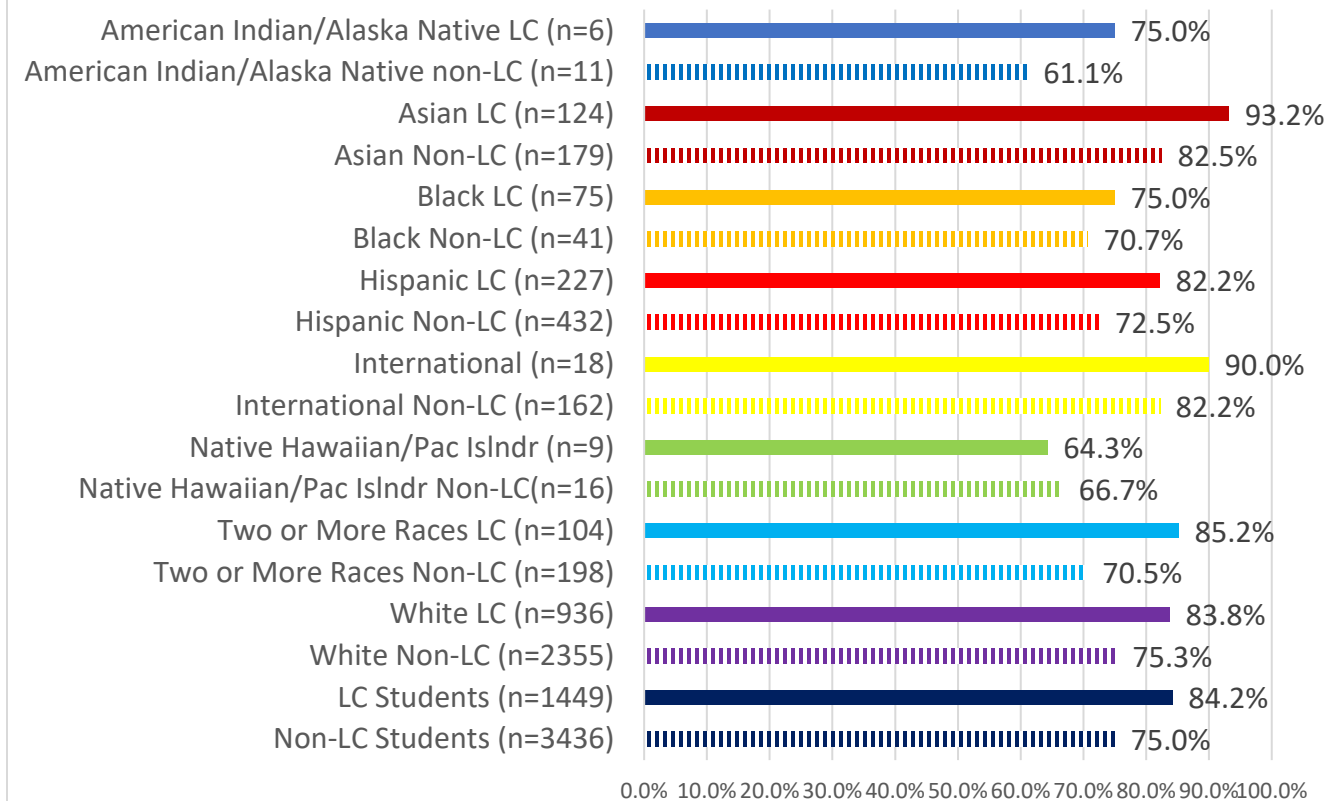
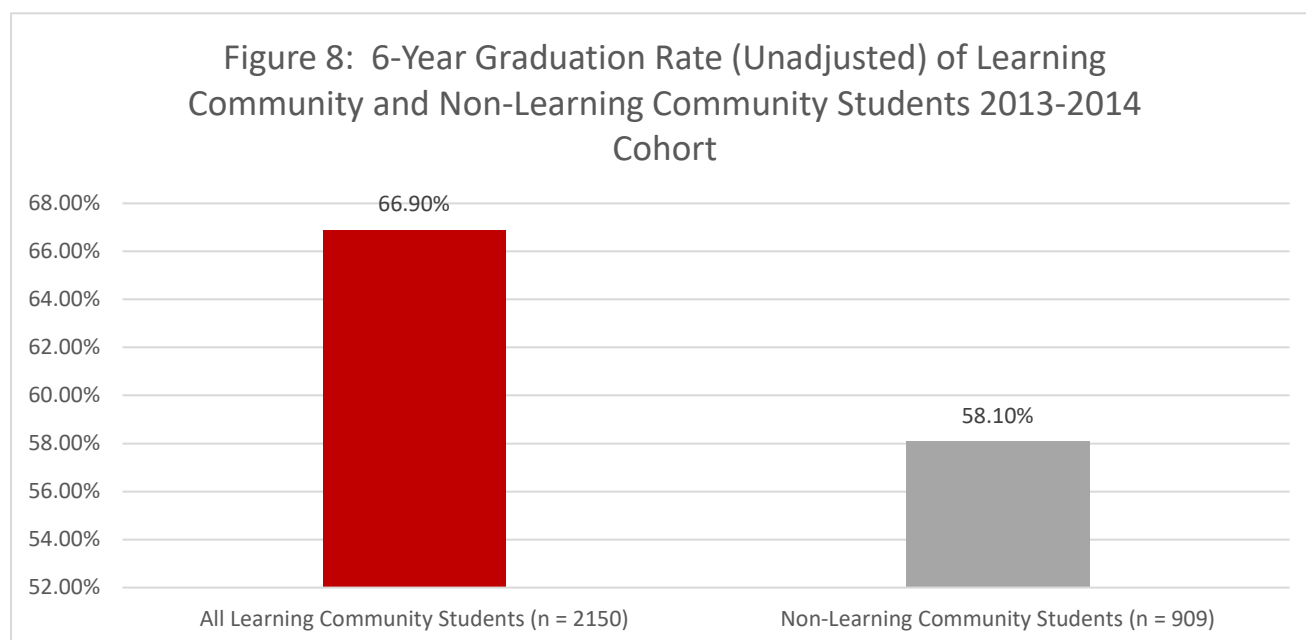


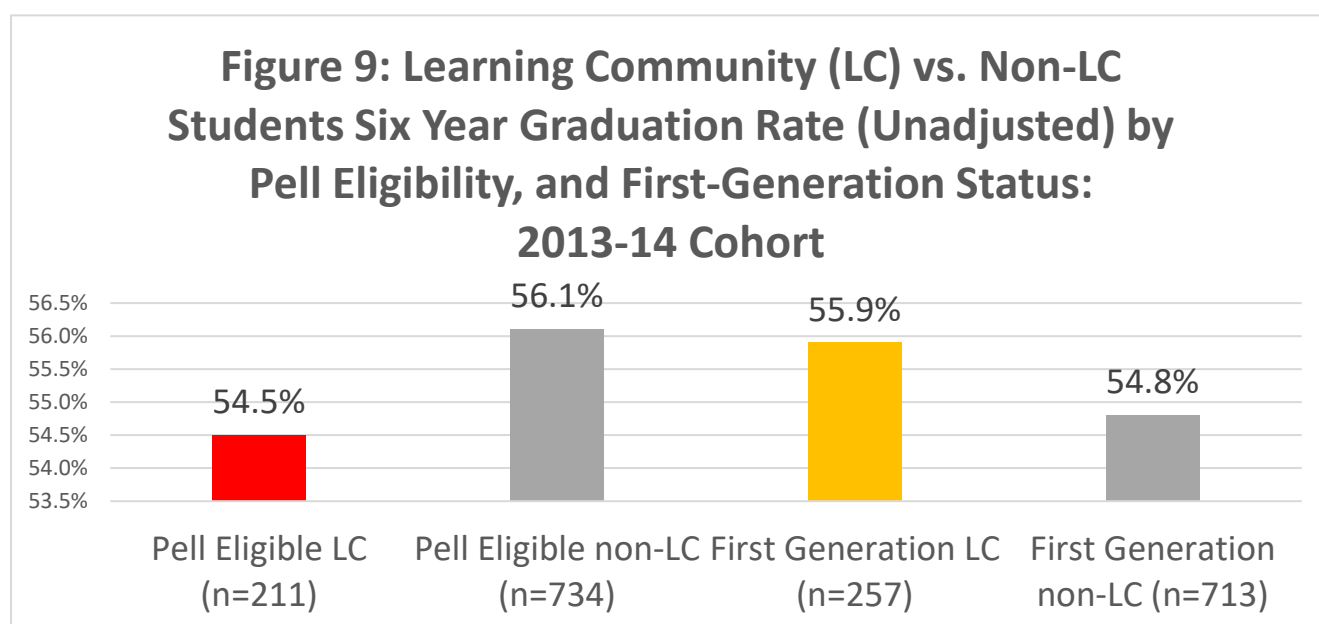
Figure 7 examines the fall-to-fall retention rates of students who participated in a learning community broken down by race/ethnicity. This figure shows that across the board (with the exception of Native Hawaiian/Pacific Islander students, for whom the sample size was quite small), students of color who participated in learning communities had an advantage in terms of retention compared to students of color who didn't participate in learning communities. White students in learning communities also showed higher retention compared to white students who did not enroll in a first-year learning community.

The next set of analyses (see Figure 8) compared the 6-year graduation rates of students who participated in a learning community with those who did not participate in a learning community.

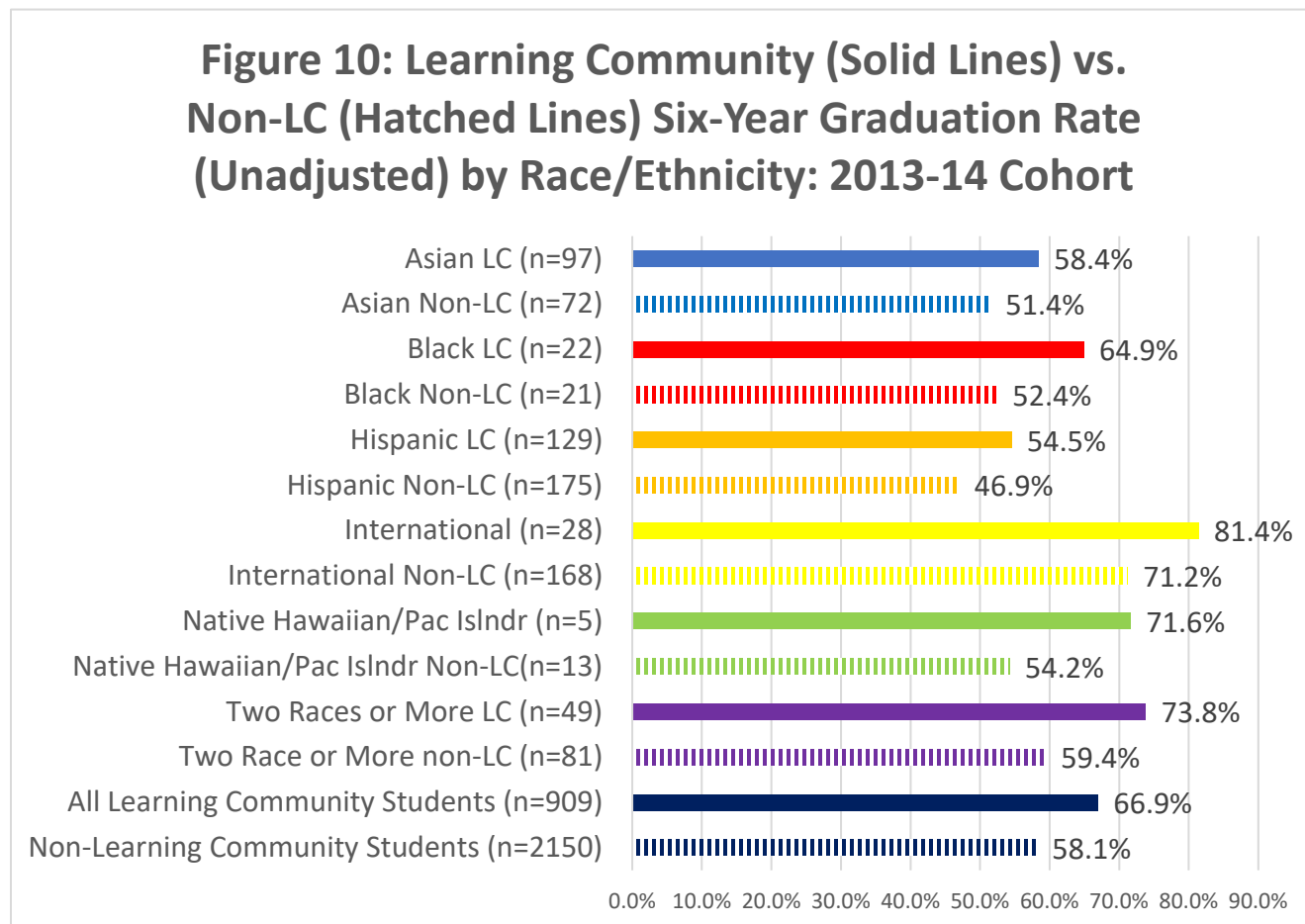


This analysis showed an advantage for students who participated in a learning community.

Our next set of analyses examined whether first-generation students, Pell-Grant Eligible students, and students of color showed these same advantages from learning communities. These analyses indicated that Pell Grant-eligible and first-generation students who participated in a first-year learning community graduated at higher rates than Pell Grant-eligible or first-generation students who did not participate in a learning community (see Figure 9).



Next, we disaggregated the data by race/ethnicity and examined the graduation rates of students who participated and did not participate in a learning community. This analysis showed that across all race/ethnicity groups, participation in a learning community was related to higher graduation rates than non-participation (see Figure 10).



Civitas Impact Study

The previous analyses did not make any attempt to control for pre-existing demographic differences between the comparison groups, although the disaggregated data may address some of these issues. However, a propensity score matching approach is a strong way to address pre-existing differences between groups. The Deeply Engaged Learning Portfolio team previously conducted a Civitas Impact study on the impact of learning communities on retention. This study involved propensity score matching to compare students who are similar on demographic and university-specific characteristics. Specifically, the retention of students who participated in learning communities was compared to other matched students at the University who did not participate in a first-year learning community. The matching group was created such that their likelihood of persisting was the same as those students in the learning communities by matching them on a large set of demographic and university-specific variables.

The overall increase in retention rate associated with students who participated in a learning community was 2.54%. The Civitas analysis also provides details about the increase in retention that is associated with specific demographic and other variables (see Table 2 below). These data showed the following:

- Students in learning communities who had completed zero semesters (i.e. were freshmen) at the University experienced a 2.54% lift in retention because of their participation in the learning community compared to those who weren't. Students who had completed 1-3 terms a 3.13% lift in retention, demonstrating that LCs can be beneficial for retention even beyond the first semester.
- Full-time students in learning communities were retained at a rate that was 2.68% higher than those not in a learning community but the same was not also true of part-time students.
- One finding that this analysis revealed that was different than previous results was that men experienced a larger increase in retention than was associated with their participation in learning communities compared to those who didn't participate. The overall fall-to-fall retention rate for women (93.3%) and men (93.9%) in learning communities was nearly identical, but the women's rate represented a 1.5% increase over their matched pairs whereas the men's rate was a significant 3.74% higher than their matched pairs.
- Students majoring in non-STEM disciplines were retained at a rate 2.15% higher than their matched pairs, and this was not true of students in STEM disciplines. We believe this is probably the result of STEM disciplines often having more prescriptive majors that students are less likely to deviate from.
- The lift of LCs was significant across most ethnic and racial groups. LatinX students showed a 4.0% lift in retention; white, non-LatinX students also showed a lift in retention. American Indian/Alaskan Native, Asian, students who identified as 2 or more races, and white students all showed significant lifts in retention.

Table 2: Civitas Impact Study Results by Demographic and Academic Categories

Student Group	# of Analyzed Participants (Matched Pairs)	Participant Group Outcome (Actual)	Comparison Group Outcome (Actual)	Outcome Difference
Overall	4095	0.9347	0.9097	0.0254**
Academic Level: Undergraduate	4095	0.9347	0.9097	0.0254**
Completed Terms: 0 Terms	3958	0.933	0.9082	0.0253**
Completed Terms: 1-3 Terms	134	0.9838	0.9521	0.0313*
Course Modality: All On-Ground	2759	0.9287	0.9042	0.0248**
Course Modality: Mixed or Blended	1334	0.9477	0.921	0.0278**
Ethnicity: Hispanic or Latino	737	0.9254	0.8996	0.0302*
Ethnicity: Not Hispanic or Latino	3357	0.9367	0.9111	0.0247**
Full-time vs. Part-time: Full-time	3850	0.9525	0.9265	0.0268**
Full-time vs. Part-time: Part-time	244	0.6534	0.6662	-0.0083
Gender: Female	2120	0.9325	0.9219	0.015*
Gender: Male	1948	0.9386	0.8969	0.0374**
Gender: Unknown	26	0.826	0.8945	-0.0264
Race: American Indian/Alaskan Native	27	0.9748	0.8558	0.1188*
Race: Asian	280	0.9761	0.9572	0.0219*
Race: Black or African American	68	0.9604	0.9523	0.0135
Race: Pacific Islander	53	0.8100	0.6993	0.1159
Race: Two or More	314	0.9373	0.8896	0.0413*
Race: Unknown	241	0.9099	0.9296	-0.0076
Race: White or Caucasian	3110	0.9338	0.9064	0.0266*
STEM Major: Not STEM	2460	0.9628	0.9419	0.0215**
STEM Major: STEM	1144	0.9639	0.9577	0.0047
Undergraduate Type: First Time in College	4083	0.9351	0.9098	0.0259*
Undergraduate Type: Transfer	11	0.7915	0.8977	-0.1161

*p<.10, one-sided hypothesis **p<.001

Qualitative Data on First-Year Learning Communities

Although each first-year learning community may collect qualitative data on their program, there is not qualitative data that tells the story of learning communities as a whole. We discussed the need for qualitative data as an important supplement to the retention and graduation rates presented here. We also plan to look back at the Exceptional Educational Experience Qualitative data to better understand students' experiences in first-year learning communities.

Next Steps for Understanding the Impact of Learning Communities

The data presented here indicate that first-year learning communities support students' retention and graduation rates at the University of Utah. These data also suggest opportunities for future growth and directions for additional data gathering. Although first-year learning communities appear to benefit students, the percentage of students enrolling in first-year LCs has declined at the University of Utah. It will be important to monitor this decline and better understand the factors contributing to it. Learning communities should be promoted to first-year students across multiple avenues, including through Enrollment Management, New Student Orientation, Advising and Major Maps. They can also be incorporated into the new General Education Learning Framework.

Men are less likely to enroll in first-year learning communities than are women. Greater research is needed to determine models that are attractive and successful for male students. We have some data helping us to understand the experience of students in first-year learning communities, but a more systematic approach to collecting data on first-year learning communities would be helpful to comprehend the reasons men are less likely to enroll in first-year learning communities. It is unclear whether they don't perceive a benefit, don't see an LC that interests them, or one of myriad other reasons for not choosing an LC.

We identified the key elements of learning communities at the University of Utah. The majority of LCs at the University of Utah helped students fulfill general education requirements and provided the support of peer advisors. However, there is little research that examines the dimensions of LCs that make them effective, and many questions remain. For example, are peer advisors critical for creating connections to the University? Are group projects important for building a sense of community? How do students build strong relationships with faculty? How do LCs address equity issues – e.g., do general education LCs have comparable rates of DWE to other general education courses?

Currently we are limited in the types of student outcomes that we can examine across LCs. The only student outcome data in the OBIA dashboard are retention and graduation rates. These aren't the only important measures of student outcome. We are interested in expanding our assessment of student outcomes to capture various dimensions of student development. We also hope to better understand the impact of modality of first-learning community (online, hybrid, in-person) on student outcomes.

In addition to promoting a better understanding of LCs, the Building Community Portfolio team also hopes to increase collaboration and communication among LCs. In the future, we hope to host a symposium for faculty who teach LCs to share pedagogy and best practices.

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