

2020

Investigating the Influence of Residential Learning Communities on Student Experiences

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Recommended Citation

Dahl, L. S. , Duran, A. , Hooten, Z. J. , Stipeck, C. J. , Youngerman, E. , Mayhew, M. J. (2020). Investigating the Influence of Residential Learning Communities on Student Experiences. *Learning Communities Research and Practice*, 8(1), Article 6.

Available at: <https://washingtoncenter.evergreen.edu/lcrjournal/vol8/iss1/6>

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Investigating the Influence of Residential Learning Communities on Student Experiences

Abstract

Residential learning communities (RLCs) are a subset of living-learning programs (LLPs) where students live together based on a theme and are simultaneously enrolled together in at least one course related to that theme. Yet little research has focused on differentiating RLCs from those LLPs without a connected course. Using existing data from the Assessment of Collegiate Residential Environments and Outcomes (ACREO), we explored this distinction by comparing the experiences of students participating in RLCs with those of students in LLPs that did not have course components. Results from this study revealed that, when compared to students in LLPs, students in RLCs reported higher mean values across most experiences, with the two largest effect sizes observed for the factors related to student interactions with residential faculty and peers. Implications are then offered for future research and practice.

Authors

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Embedded in every high impact practice that is designed to influence student outcomes (see Mayhew et al., 2016) are the educators charged with ensuring its success. Living-learning programs and learning communities are surely—as any practitioner involved in such programs knows—high effort practices. But it is not always clear what efforts are directly and positively influencing students. To help practitioners and researchers determine whether a particular learning community strategy is well placed, we examine the relationship between learning community type and a set of student experiences related to positive outcomes.

Learning communities, initiatives that “promote and maximize the individual and shared learning of its members . . . as they strive for specified common learning goals” (Lenning et al., 2013, p. 7), have long been a staple in the U.S. higher education system. Although learning communities take many forms, one structure of learning communities that has consistently captured the attention of scholars and practitioners are those based in residential living (Fink & Inkelas, 2015), designed to bring the education “home” through programs that integrate learning with students’ living environments. The creation of integrated residential learning communities (RLCs) has emerged as a popular mechanism for this effort. Based on the assumption that “natural overlap [exists] between students’ academic and social learning activities,” RLCs help to draw connections between students’ in- and out-of-class experiences (Shapiro & Levine, 1999, p. 36). Additionally, these programs stem from the belief that learning can occur outside of classrooms and take place in residence halls (Brower & Inkelas, 2010; Inkelas, 2006; Inkelas & Soldner, 2011).

Connected to the idea that learning can happen outside of curricular environments, RLCs can be categorized under the umbrella of living-learning programs (LLPs)¹. Researchers have yet to substantially examine how the kinds of LLPs differentially impact students. Simply put: are RLCs influencing students differently than course-less LLPs? As Wawrzynski et al. (2009) argued, a trend in the scholarship exists of “negating differences between types of living-learning communities (e.g., thematic living-learning communities versus academically based living-learning communities) [which makes] it difficult to discern what about these communities makes them successful” (p. 138). Attempting to fill this gap, certain studies explored the experiences and outcomes that result from participating in specific types of LLPs, including those with courses associated with them (i.e.,

¹ LLPs are thematically diverse in their content focus (e.g., support of a discipline), targeted student group (e.g., transfer students), and programmatic offerings (e.g., faculty in residence) across higher education in the United States (Inkelas & Associates, 2008). This variety of types has led to some inconsistency in language among scholars and practitioners; indeed, LLPs are often referred to as living-learning communities (LLCs). For the purposes of this study, we broadly define LLPs as those initiatives that intentionally integrate learning experiences into the residential environment. Residential learning communities (RLCs) are the subset of LLPs that require students to enroll in an academic course as part of their participation in the program.

RLCs; Inkelas et al., 2008; Stassen, 2003; Wawrzynski et al., 2009). This growing body of literature has the potential to contribute to the field of higher education's understanding of LLPs, specifically RLCs, and potential benefits for students who participate.

This present study, therefore, adds to scholarship by comparing the differential effects of RLCs to non-coursework-connected LLPs. Using data from the Assessment of Collegiate Residential Environments and Outcomes (ACREO), we examined the differences in student experiences for collegians in RLCs versus those in LLPs without connected courses. The question that guided this inquiry was: How do the experiences of students in RLCs differ from individuals in LLPs without connected courses? The findings from this study will benefit faculty and student affairs practitioners alike by identifying what characteristics of RLCs are positively associated with important collegiate experiences. In a time when living on campus has not yielded the same effects as it previously did (see Mayhew et al., 2016), it is crucial to comprehend what continues to make residential learning communities valuable practices for students.

Conceptual Framework

To guide this study, we used the conceptual framework developed for the Assessment of Collegiate Residential Environments and Outcomes (ACREO; Mayhew, et al., 2018), which was adapted from Astin's (1984) Input-Environment-Outcome (I-E-O) college impact model. Astin's (1984) I-E-O model described how inputs (demographics and pre-collegiate experiences) and collegiate environments influence vital student outcomes. With this model in mind, the ACREO conceptual framework articulates the inputs and environments that are relevant to the collegiate residential experience. For example, inputs include identities such as gender, sexuality, nationality, as well as high school GPA. Additionally, environments in the ACREO framework are split into academic (e.g., discussing learning experiences with peers), social (e.g., perception of peer network), and campus climate experiences. In this case, one major environment can include living-learning programs, as well as the subset of residential learning communities that have a course associated with them. See Figure 1 for a full description of inputs, environments, and outcomes covered in the ACREO conceptual framework.

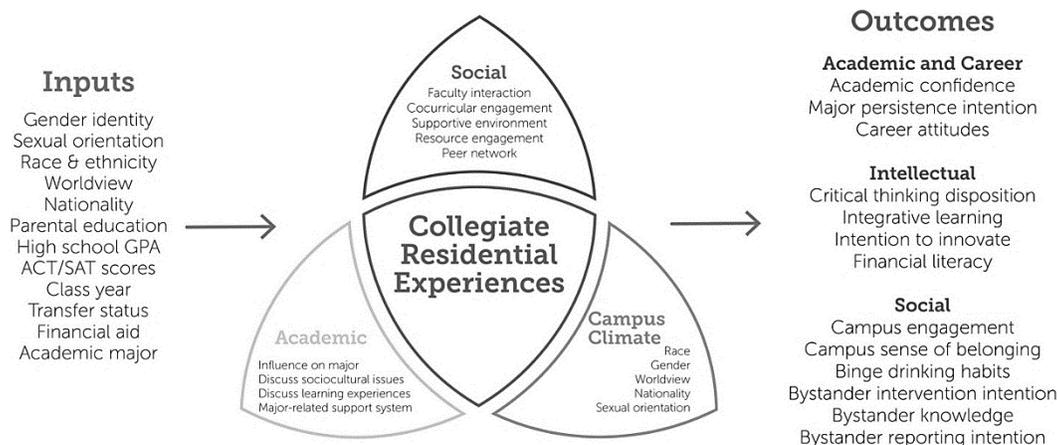


Figure 1. ACREO conceptual framework

Literature Review

To set a foundation for this study, we reviewed the relevant literature on residential learning communities (RLCs) and the larger umbrella of living-learning programs (LLPs). Because a majority of literature has examined LLPs broadly without much attention to those attached to courses, we first provide a brief overview of LLPs before then describing the scholarship that does exist on RLCs. In particular, we focus on how these communities impact relevant student outcomes.

Living-Learning Programs

RLCs as a residential initiative are considered one type of LLP, described as “programs in which undergraduate students live together in a discrete portion of a residence hall (or the entire hall) and participate in academic and/or extracurricular programming designed especially for them” (Inkelas & Associates, 2008, p. I-2). Long considered a beneficial practice, LLPs are a popular feature offered by residential life offices throughout higher education. Many institutions implement these residential innovations as a means of impacting student experiences such as faculty-student interaction and stronger peer networks; these experiences, in turn, are related to outcomes such as increased satisfaction on campus, enhanced academic performance, and deeper reports of critical thinking (Inkelas et al., 2007; Inkelas & Weisman, 2003).

In fact, studies revealed that students who engage with LLPs regularly have more positive experiences and outcomes than those in traditional residential communities (e.g., Inkelas & Soldner, 2011; Inkelas et al., 2008; Inkelas & Weisman, 2003; Stassen, 2003). Brower and Inkelas (2010) showed that LLP

participants reported a more positive college academic transition when compared to those in traditional residential communities. Some of the significant environmental variables explaining this academic transition included being more likely to have a supportive hall climate (academically and socially), in addition to having more course-related faculty interactions. Indeed, one of the defining characteristics of LLP participation has been increased interaction with faculty members (Brower & Inkelas, 2010; Inkelas et al., 2007; Stassen, 2003). This experience can lead students to feel more supported as it relates to their academic abilities. Additionally, LLPs also have an impact on student expectations for career preparation (Szelényi et al., 2013), particularly for those in STEM fields (Soldner et al., 2012).

On a communal level, students in LLPs also experience an easier social transition when compared to those in traditional environments (Inkelas & Associates, 2008; Inkelas et al., 2007). This reality stems from the stronger peer networks that result from living and engaging with fellow students in ways that are more intentionally designed (Brower & Inkelas, 2010). As Brower and Inkelas (2010) discussed, the more often that students had interactions with peers, as well as faculty, the more likely they were to report higher scores on social outcomes such as commitment to civic engagement. These peer interactions encapsulated behaviors such as studying with fellow students or having academic/sociocultural conversations with these individuals. Findings from this study suggest that engaging with peers in such ways resulted in stronger perceptions of students' connections to their institution. Finally, some studies showed that social outcomes can be particularly salient for certain students who hold minoritized identities, including social transitions for first-generation students (Inkelas et al., 2007) and supportive residential environments for women in STEM (Szelényi et al., 2013). With these positive benefits, LLPs have taken on many different forms, including those that are theme-based and academic-based.

Residential Learning Communities

Although scholarship on living-learning programs continues to grow, higher education researchers such as Wawrzynski et al. (2009) argued that studies rarely look at the variations within the several types of LLPs. Of relevance to this particular research, only a small body of literature exists that brings residential learning communities into focus (Domizi, 2008; Inkelas et al., 2008; Smith, 2015; Stassen, 2003; Wawrzynski & Jessup-Anger, 2010; Wawrzynski et al., 2009). The connected course aspect of RLCs can be instrumental to a student's success at the institution (Inkelas et al., 2018). In fact, Stassen (2003) discovered that participation in RLCs meant that these collegians had higher rates of retention than those who were not associated with these initiatives (i.e., students in traditional residential

programs). Within this area of literature, scholars have examined the effects that RLCs have on academic and social outcomes for students.

To begin, existing studies show the role that residential learning communities play as it relates to academic outcomes. For example, researchers highlighted how students in RLCs frequently experience more academic interactions with their peers (see Schussler & Fierros, 2008; Smith, 2015; Wawrzynski & Jessup-Anger, 2010). Additionally, individuals in RLCs are more likely to interact with faculty both in and outside of the classroom (Schussler & Fierros, 2008). As a result, students in Schussler and Fierros' (2008) research communicated having a closer relationship to faculty members and feeling as though their opinions mattered. Connected to this reality, Wawrzynski and Jessup-Anger's (2010) study revealed that collegians in RLCs reported a more enriching educational environment when compared to those in non-academically-based living-learning programs. Similarly, Inkelas et al. (2008) discovered that students who resided within RLCs indicated higher critical thinking scores than peers in other types of LLPs. Students in RLCs ultimately exhibited more cognitive complexity (describing students' capacity to employ critical thinking in pursuit of new knowledge) and an appreciation for liberal learning (a measure of people's appreciation of different perspectives). Beyond showing the value of RLCs for students' academic-related outcomes, scholarship has also underscored the connections between RLCs and social connections.

Within the body of research on RLCs, scholars illustrated how RLCs can contribute to a wide variety of social outcomes. Examples include studies that show a positive relationship between RLCs and collegians' sense of belonging (Schussler & Fierros, 2008; Wawrzynski et al., 2009). Whereas Wawrzynski et al. (2009) underscored how RLC involvement fostered stronger relationships among peers within residential environments specifically, Schussler and Fierros (2008) highlighted how living in an RLC fostered a sense of belonging to the university at large. Similarly, Domizi's (2008) study on students in a first-year residential learning community found that participants learned how to connect with their fellow students in new and beneficial ways, citing a meaningful social network in their RLC peers. This present study expands upon this scholarship by comparing the student perceptions of the experiences found in RLCs to those in other LLPs. By focusing on the differences in experiences, we aim to highlight the particular ways connected courses contribute to a positive learning environment.

Methods

This study used a large, multi-institutional sample from the Assessment of Collegiate Residential Environments and Outcomes (ACREO) to examine how students in RLCs differ in their experiences when compared to students in LLPs without connected courses. ACREO seeks to understand the influence of residential environments on the academic, intellectual, career, and social development of

college students, and uses a validated survey designed to assess these relationships. In its first four administrations (2015-2018), this project invited 96,953 college students at three private and 14 public 4-year institutions across the United States to participate and yielded an overall response rate of 18.3%. The participating institutions are all classified as doctoral universities, yet they vary in geographic location across the continental United States, with 14 states represented. After screening data for range and performing listwise deletion to ensure that only complete and original student responses were examined (see Tabachnick & Fidell, 2019), the total dataset included a sample of 13,688 students.

Based on our research question, we limited the sample to the 4,322 students who participated in an LLP at the time of the survey; of these students, 1,577 participated in an RLC. Although students had the option to self-report their residential environment (i.e., LLP, traditional residential program, residential community based on a theme, etc.) on the survey, we categorized students into the two groups used in this study based on the information provided to us by their institution. In other words, students were classified as an LLP participant through the use of housing records provided by their institutions; students were then subclassified as an RLC participant if their LLP also required enrollment in a connected course for at least one semester.

The ACREO survey measures 11 residential experiences, campus climate related to five social identities, and 14 student outcomes (see Mayhew et al., 2018 for more details about these scales). All scales on the survey included at least three items and were initially tested using the pilot data from 2015; the team retested the scales each year thereafter to ensure validity and reliability over various samples. Cronbach's alphas for the scales meet conventional criteria, with reliability ranging from 0.85 to 0.95. Only one of the factors—perception of major-related support system—has a Cronbach's alpha below 0.80. Scores for each experience and outcome were created using weighted sums (see DiStefano et al., 2009) with the polychoric factor loadings to account for the ordinal nature of the item response scales (see Zumbo et al., 2007).

We used independent sample *t*-tests with unequal variances to determine differences in the 11 environmental scales by participation in RLCs versus LLPs without connected courses. Since our sample was fairly large, we then looked at Cohen's *d* effect sizes for any factor with a significant difference ($p < 0.05$; see Cohen, 1992). Using measures of effect size allowed for a more meaningful understanding of the differences that exist between RLCs and LLPs without connected courses. In other words, significance testing identifies if statistical differences between different groups exist, whereas tests of effect size attempt to quantify the magnitude of the difference.

Limitations

This study has a number of limitations that the reader should consider. First, although this study used data from multiple institutions, the sample is not nationally representative. As such, the statistical generalizability of our findings is limited to the campuses included in this study. Additionally, we recognize that our sample demographics do not match the national figures of college students. For instance, our sample consists of a disproportionately low number of Black/African American students (4.9%) when compared to the national figures (13.4% enrolled in 4-year postsecondary institutions; NCES, 2017) and an overrepresentation of Asian/Asian American and Pacific Islander respondents (22.3% in the sample, compared to 7.2% in 4-year postsecondary institutions nationally; NCES, 2017). We believe this limitation is due in part to the sampling frames used to collect the data each year, which relied heavily on census sampling as well as various levels of institutional investment. Accordingly, students with certain demographic characteristics were not intentionally oversampled.

Another limitation the reader should consider is the lack of information regarding specific practices within the LLPs and RLCs examined in this study. Although we used institution-provided information to classify the LLPs and RLCs (versus student self-reported information from the ACREO survey), we did not have additional data on the pedagogies used in the connected-courses. In other words, we were unable to consider those specific initiatives occurring within the courses or the residential environments that could influence our results. Relatedly, the ways in which students enrolled in connected courses differed from program to program and institution to institution. Some courses were offered in the fall only, others in the spring only, and some for the full year. Although some of the participating institutions provided us this information, several did not. As such, we were unable to break down the RLC sample by type of courses offered (i.e., one-semester or one-year). Finally, although the data used in this study were collected over time, it is not longitudinal (i.e., follows the same set of students over time). Therefore, we are unable to make any claims about student development and change.

Results

This study used a sample of undergraduate students who participated in the ACREO survey to examine how the experiences of students in RLCs differ from individuals in LLPs without connected courses. The data were drawn from the 4,322 students who participated in an LLP at the time of the ACREO survey. In terms of demographics, the total sample included more students identifying as cisgender women (67.1%), heterosexual (81.2%), white (60.0%), and Christian (49.8%); the sample also included a small number of international students (5.4%).

Additionally, 24.3% of participants self-identified as first-generation college students (i.e., neither parent completed a bachelor’s degree). In terms of academic year, 65.9% of the sample were enrolled in their first year at the time of the survey administration, and 9.2% of respondents transferred to their current institution from another college or university. The most common academic disciplines are in the STEM fields (34.1%). Please see Table 1 for demographic information for the total sample as well as the two subgroups of focus.

Table 1
Number and Percent of Responses for Binary Variables

Variable	Full Sample (N = 4,322)		LLP (N=2,745)		RLC (N=1,577)	
	N	%	N	%	N	%
Gender						
Cisgender man	1,310	30.3%	894	32.6%	416	26.4%
Cisgender woman	2,898	67.1%	1,781	64.9%	1,117	70.8%
Transgender, genderqueer, or another gender	114	2.6%	70	2.5%	44	2.8%
Sexual Orientation						
Bisexual	347	8.0%	234	8.5%	113	7.2%
Gay	107	2.5%	71	2.6%	36	2.3%
Heterosexual	3,511	81.2%	2,210	80.5%	1,301	82.5%
Lesbian	65	1.5%	52	1.9%	13	0.8%
Queer or another sexual orientation	292	6.8%	178	6.5%	114	7.2%
Race/Ethnicity						
African American/Black	242	5.6%	117	4.3%	125	7.9%
Asian/Asian American/Pacific Islander	703	16.3%	493	18.0%	210	13.3%
Latino/a/x	277	6.4%	194	7.1%	83	5.3%
Multiracial	399	9.2%	256	9.3%	143	9.1%
Native American or another race/ethnicity	109	2.5%	77	2.8%	32	2.0%
White	2,592	60.0%	1,608	58.6%	984	62.4%
Worldview/Religion						
Another worldview	708	16.4%	465	16.9%	243	15.4%
Nonreligious	1,273	28.6%	1,608	58.6%	984	62.4%
Worldview majority	2,150	49.8%	1,267	46.2%	883	56.0%
Worldview minority	227	5.7%	163	5.9%	64	4.1%
International Student						
No	4,087	94.6%	2,591	94.4%	1,496	94.9%
Yes	235	5.4%	154	5.6%	81	5.1%
First-generation Student						
No	3,236	75.7%	2,066	75.7%	1,170	75.6%
Yes	1,039	24.3%	662	24.3%	377	24.4%

Transfer Student						
No	3,879	90.8%	2,452	89.8%	1,427	92.5%
Yes	394	9.2%	279	10.2%	115	7.5%
Academic Class						
First year	2,811	66.6%	1,602	59.6%	1,209	79.1%
Second year	725	17.2%	509	18.9%	216	14.1%
Third year	492	11.7%	420	15.6%	72	4.7%
Fourth year	191	4.5%	159	5.9%	32	2.1%
Planned Academic Major						
Arts and Humanities	577	13.4%	417	15.2%	160	10.2%
Business Administration	523	12.1%	254	9.3%	269	17.1%
Health Professions	562	13.0%	355	12.9%	207	13.1%
No major selected	362	8.4%	174	6.3%	188	11.9%
Science, Engineering, or Math	1,475	34.1%	1,047	38.1%	428	27.1%
Social Sciences or Education	823	19.0%	498	18.1%	325	20.6%

The results from the t -tests suggested that students in RLCs reported mean values higher than students in LLPs without connected courses across most of the experiences we measured (see Table 2). For instance, our results indicate that students in RLCs felt as though their environment was more academically focused than students in LLPs without connected courses. When comparing mean differences (M_{diff}), RLC students noted stronger major-related support systems ($M_{diff} = 0.08$, $p < 0.01$), more frequent discussion of learning with peers ($M_{diff} = 0.15$, $p < 0.001$) and faculty interaction ($M_{diff} = 0.26$, $p < 0.001$), and a stronger connection between their residential environment and major ($M_{diff} = 0.09$, $p < 0.001$). They also reported more engagement with the resources (e.g., computer labs, academic advisors, peer counselors) provided in their residential environment ($M_{diff} = 0.18$, $p < 0.001$). Additionally, students in RLCs were more engaged in the general co-curricular environment ($M_{diff} = 0.09$, $p < 0.01$) and more likely to establish a professional peer network ($M_{diff} = 0.14$, $p < 0.001$) than students in LLPs without connected courses.

Table 2

Significance and Effect Size Testing for ACREO Experience Scales

Scale Name	LLP M (SD)	RLC M (SD)	sig.	ES
Academic Experiences				
Major-related Support System	3.75 (0.80)	3.83 (0.83)	**	-
Discuss Learning with Peers	2.44 (1.20)	2.59 (1.13)	***	-
Discuss Sociocultural Issues with Peers	1.87 (1.04)	1.92 (1.03)		
Residential Environment's Influence on Major	3.76 (0.71)	3.85 (0.75)	***	-
Social Experiences				
Residential Faculty Interaction	0.79 (0.94)	1.05 (0.96)	***	+
General Faculty Interaction	1.35 (0.92)	1.36 (0.94)		
Residential Resource Engagement	1.31 (1.07)	1.49 (1.16)	***	-
Residential Co-curricular Engagement	0.76 (0.75)	0.78 (0.69)		
General Co-curricular Engagement	1.23 (0.79)	1.32 (0.72)	**	-
Peer Network	3.73 (0.97)	3.87 (0.87)	***	-
Supportive Residential Environment	3.63 (0.88)	3.64 (0.92)		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$;

"-" indicates trivial effect size ($d < 0.2$), "+" indicates small effect size ($0.2 < d < 0.5$)

Across all of the measures tested for this study, the two largest effect sizes occurred for the two factors related to perception of peer network ($d = 0.152$) and residential faculty interaction ($d = 0.272$). Perception of peer network is a five-item scale consisting of statements such as “I have friends with whom I can have intellectual discussions” and “I have friends who have diverse identities/backgrounds” to which students rated their level of agreement (1 = Disagree strongly; 5 = Agree strongly). Additionally, residential faculty interaction is comprised of six items related to how often (0 = Never; 4 = Always/Daily) students interacted in multiple ways with affiliated faculty, including “discussed personal problems or concerns” and “discussed career plans and ambitions.” As such, these effect sizes—as measures of magnitude—indicate that students in RLCs have notably stronger patterns of peer network perception and faculty interaction than those in LLPs.

Discussion and Implications

This study delved into the LLP typology to examine whether there were different influences in student experiences for participants in RLCs (residential communities integrated with coursework) compared to those in non-coursework LLPs. It produced two noteworthy findings based on Cohen's *d* effect sizes.

First, the results of this study endorsed what might have been intuitive to many practitioners—participants in RLCs reported stronger faculty interactions than did students in LLPs without courses. Considering the significant role that faculty relationships play across a host of higher education outcomes (see Mayhew et al., 2016), this study confirms RLCs' added value in connecting students with faculty. Furthermore, this finding supports adding courses for credit and other opportunities for student-faculty interaction as a meaningful practice for LLCs (see the Best Practices Model [BPM] for LLCs; Inkelas et al., 2018). These valuable interactions, it bears repeating, are not all course-related per se and often extend beyond curricular spaces. This finding suggests that the integrated nature of RLCs, where residential programs build on the classroom curriculum or facilitate connections within the residence halls, sets up more opportunities for experiences related to promoting academic success.

This first finding also suggests some important practical considerations for both faculty and administrators. Although connecting students in LLPs without courses can be a productive way for students to build relationships with faculty, staff, and peers in a residence hall, the addition of a related course can have even more positive effects for their faculty connections. This finding has important implications given previous studies that found that first-year students who shared higher satisfaction with their level of faculty interaction displayed positive outcomes toward academic adjustment, class expectations, and study skills (Delaney, 2008). For residence life professionals looking to augment their LLP outcomes, pairing a course with the established programming and inviting faculty to actively participate in the LLP can positively impact students both academically and socially.

Second, students in RLCs reported having more complex peer relationships, including more friends with diverse identities and backgrounds and with whom they can study and have intellectual discussions. This finding complements previous research suggesting that academically integrated LLPs tend to increase student interaction and create a more enhanced residential experience among peers (Wawrzynski & Jessup-Anger, 2010). By taking a course together, students in RLCs have opportunities to subsequently discuss material outside of class with other students experiencing similar academic environments. Additionally, since they live and attend class together, students have multiple fronts to get to know one another. This finding is important since student perceptions of their peer network

are crucial to building engaged residential communities (Frazier & Eighmy, 2012). Residence life professionals use many methods—such as intentional programming, pre-established commonalities between residents, or paraprofessional staff interactions—to create bonds between students participating in these programs (Inkelas et al, 2012). Connecting a course is another powerful tool for achieving this experience; by adding a course component, the community may be developed both within the classroom as well as the residence hall.

A strong peer network in the residential space also matters for long-term student success. The peer relationships built on the co-curricular foundation of coursework and residential engagement is related to first-year students' psychosocial well-being (Bowman, 2010), assisting them in navigating their environments and developing further relationships that contribute to achievement of future goals. Furthermore, as students engage productively across differences in their peer networks, they experience positive academic gains (Denson & Chang, 2009), and improved racial attitudes and college satisfaction (Bowman & Denson, 2012). By participating in RLCs, students may encounter stronger peer networks, leading to additional academic and social gains, compared to those in LLPs without connected courses.

Finally, we turn to implications for future research, which could explore the results further. For example, this study looked at students in totality, but how might the results look for underrepresented populations? Also, are there particular practices that were more effective (e.g., study groups, academic or social programming) than others? More work is needed to further examine other outcomes and experiences of RLCs, as well as if particular student groups benefit more than others.

Conclusion

Students who live together in a residential education program benefit from taking courses together as well. This phenomenon appears to be particularly relevant for fostering human interactions, including those that students have with faculty and their peers. As colleges build up increasingly elaborate programs to curate the success of collegians, this study may provide a surprisingly necessary reminder: among the most powerful tools that residential education units have at their disposal is perhaps . . . a college class.

References

- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 25(4), 297-308.
- Bowman, N. A. (2010). The development of psychosocial well-being among first-year college students. *Journal of College Student Development*, 51(2), 180-200.
- Bowman, N. A., & Denson, N. (2012). What's past is prologue: How precollege exposure to racial diversity shapes the impact of college on interracial interactions. *Research in Higher Education*, 53(4), 406-425.
- Brower, A. M., & Inkelas, K. K. (2010). Living-learning programs: One high-impact educational practice we now know a lot about. *Liberal Education*, 96(2), 36-43.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Delaney, A. M. (2008). Why faculty-student interaction matters in the first year experience. *Tertiary Education and Management*, 14(3), 227-241.
- Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46(2), 322-353.
- DiStefano, C., Zhu, M., & Mîndrilă, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research & Evaluation*, 14(20), 1-11.
- Domizi, D. P. (2008). Student perceptions about their informal learning experiences in a first-year residential learning community. *Journal of the First-Year Experience & Students in Transition*, 20(1), 97-100.
- Fink, J. E., & Inkelas, K. K. (2015). A history of learning communities within higher education. In M. Benjamin (Ed.), *Learning communities from start to finish* (New Directions for Student Services, no. 149, pp. 5-15). Jossey-Bass.
- Frazier, W., & Eighmy, M. (2012). Themed residential learning communities: The importance of purposeful faculty and staff involvement and student engagement. *Journal of College & University Student Housing*, 38(2), 10-31.
- Inkelas, K. K. (2006). Living-learning under the microscope: Study puts real numbers to living-learning trend. *ACUHO-I Talking Stick*, 23(3), 23-25.
- Inkelas, K. K., & Associates. (2008). *National Study of Living-Learning Programs: 2007 report of findings*. <https://drum.lib.umd.edu/handle/1903/8392>
- Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Brown Leonard, J. (2007). Living-learning programs and first-generation college students' academic and social transition to college. *Research in Higher Education*, 48(4), 403-434.
- Inkelas, K. K., Garvey, J., & Robbins, C. (2012, April). *Best practices in living-learning programming: Results from a multiple case study*. Paper presented

- at the Annual Meeting of the American Educational Research Association, Vancouver, BC.
- Inkelas, K. K., Jessup-Anger, J. E., Benjamin, M., & Wawrzynski, M. R. (2018). *Living-learning communities that work: A research-based model for design, delivery, and assessment*. Stylus.
- Inkelas, K. K., & Soldner, M. (2011). Undergraduate living-learning programs and student outcomes. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research* (Vol. 26, pp. 1-55). Springer.
- Inkelas, K. K., Soldner, M., Longerbeam, S. D., & Leonard, J. B. (2008). Differences in student outcomes by types of living-learning programs: The development of an empirical typology. *Research in Higher Education*, 49(6), 495-512.
- Inkelas, K. K., & Weisman, J. (2003). Different by design: An examination of student outcomes among participants in three types of living-learning programs. *Journal of College Student Development*, 44(3), 335-368.
- Lenning, O. T., Hill, D. M., Saunders, K. P., Solan, A., & Stokes, A. (2013). *Powerful learning communities: A guide to developing student, faculty and professional learning communities to improve student success and organizational effectiveness*. Stylus.
- Mayhew, M. J., Dahl, L., Hooten, Z., Duran, A., Stipeck, C., & Youngerman, E. (2018). *Assessment of Collegiate Residential Environments and Outcomes report*. <https://www.acreosurvey.org/researchfindings/>
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., & Wolniak, G. C. (2016). *How college affects students: 21st century evidence that higher education works* (Vol. 3). Jossey-Bass.
- National Center for Education Statistics. (2017). Digest of education statistics, Table 306.20. Total fall enrollment in degree-granting postsecondary institutions, by level and control of institution and race/ethnicity of student: Selected years, 1976 through 2016. https://nces.ed.gov/programs/digest/d17/tables/dt17_306.20.asp
- Schussler, D. L., & Fierros, E. G. (2008). Students' perceptions of their academics, relationships, and sense of belonging: Comparisons across RLCs. *Journal of the First-Year Experience & Students in Transition*, 20(1), 71-96.
- Shapiro, N. S., & Levine, J. H. (1999). *Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs*. Jossey-Bass.
- Smith, R. A. (2015). Magnets and seekers: A network perspective on academic integration inside two residential communities. *The Journal of Higher Education*, 86(6), 893-922.
- Soldner, M., Rowan-Kenyon, H., Inkelas, K. K., Garvey, J., & Robbins, C. (2012). Supporting students' intentions to persist in STEM disciplines: The role of

- living-learning programs among other social-cognitive factors. *The Journal of Higher Education*, 83(3), 311-336.
- Stassen, M. L. A. (2003). Student outcomes: The impact of varying living-learning community models. *Research in Higher Education*, 44(5), 581-609.
- Szelényi, K., Denson, N., & Inkelas, K. K. (2013). Women in STEM majors and professional outcome expectations: The role of living-learning programs and other college environments. *Research in Higher Education*, 54(8), 851-873.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Wawrzynski, M. R., & Jessup-Anger, J. E. (2010). From expectations to experiences: Using a structural typology to understand first-year student outcomes in academically based living-learning communities. *Journal of College Student Development*, 51(2), 201-217.
- Wawrzynski, M. R., Jessup-Anger, J., Stolz, K., Helman, C., & Beaulieu, J. (2009). Exploring students' perceptions of academically based living-learning communities. *College Student Affairs Journal*, 28(1), 138-158.
- Zumbo, B. D., Gadermann, A. M., & Zeisser, C. (2007). Ordinal versions of coefficients alpha and theta for likert rating scales. *Journal of Modern Applied Statistical Methods*, 6(1), 21-29.