

2016

Beyond the Traditional Retention Data: A Qualitative Study of the Social Benefits of Living Learning Communities

Jill Arensdorf

Fort Hays State University, jrarendorf@fhsu.edu

Janett Naylor-Tincknell

Fort Hays State University, jmnaylor@fhsu.edu

Follow this and additional works at: <https://washingtoncenter.evergreen.edu/lcrjournal>



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Arensdorf, J. , Naylor-Tincknell, J. (2016). Beyond the Traditional Retention Data: A Qualitative Study of the Social Benefits of Living Learning Communities. *Learning Communities Research and Practice*, 4(1), Article 4.

Available at: <https://washingtoncenter.evergreen.edu/lcrjournal/vol4/iss1/4>

Authors retain copyright of their material under a [Creative Commons Non-Commercial Attribution 3.0 License](#).

Beyond the Traditional Retention Data: A Qualitative Study of the Social Benefits of Living Learning Communities

Abstract

Living Learning Communities (LLCs) have been shown to increase student retention rates and academic performance (Hotchkiss, Moore, & Pitts, 2006), as well as increase overall satisfaction with college (Baker & Pomerantz, 2000) and increase cognitive skills (Walker, 2003). These benefits have been demonstrated in a variety of institutions with diverse students (Andrade, 2007). However, these studies have relied on quantitative measures of assessment. As suggested by Taylor, Moore, MacGregor, and Lindblad (2003) and Ward and Commander (2011), more qualitative data is needed to really understand why LLCs are linked to positive outcomes. This qualitative study collected focus group data from both LLC students and non-LLC students to determine what possible social and psychological benefits students reported about their LLC or university experiences. Themes emerged from the qualitative data to reveal that LLC students do experience some of the same university life experiences that non-LLC students experience. However, LLC students reported richer connections to faculty and students, as well as additional social and academic opportunities.

Keywords

Living Learning Communities, Social, Qualitative

Cover Page Footnote

This research was supported partially by funds from the Division of Student Affairs, Fort Hays State University and the Department of Leadership Studies, Fort Hays State University.

Introduction

Because Living Learning Communities (LLCs) have been utilized by universities for over 20 years, much is known about their academic benefits. For example, in comparison to non-LLC participants, LLC participants have higher retention rates, more timely progression towards a degree, and higher GPAs (Buch & Spaulding, 2008). LLC students report participating more heavily in courses and being more challenged to improve basic skills (Love, 2012). Students in LLCs often report that their peers and faculty encourage class attendance and class participation, leading to a more collaborative learning environment (Tinto, 1987).

However, less is known about the social and psychological benefits of student participation in LLCs. Generally, students in any type of LLC report more positive feelings about their college environment, such as being more socially connected to faculty and more engaged in sociocultural issues (Inkelas & Weisman, 2003). Given the lack of research about LLC participation and its link to additional benefits, the current study explored the reported general themes of social and psychological benefits of students participating in LLCs at a small Midwestern university. This qualitative study utilized focus groups to interview current and previous LLC students, as well as non-LLC students (control group) to determine the potential social and psychological benefits of LLC participation.

Literature Review

Living Learning Communities

For over two decades, the number of LLCs has grown steadily across higher education institutions. These unique communities have their roots in the work of John Dewey (1938) and Alexander Meiklejohn (1932). Built as an interdisciplinary collaborative experience, learning communities have flourished on college campuses across the nation since that time. Identified as one of ten “high impact best practices” through the National Survey of Student Engagement (NSSE, 2007), LLCs result in a variety of positive student development outcomes and are adopted widely on campuses (both two-year and four-year) throughout the nation (Taylor, Moore, MacGregor, & Lindblad, 2003).

An LLC is a group of freshmen college students who live on the same floor of a residential hall and who share an interest in a common theme or major. Learning communities are intentionally structured around curricular and co-curricular components, with the goal that students will form a community sooner during their collegiate experience and develop deep connections with faculty members and fellow students (Gabelnick, MacGregor, Matthews, & Smith, 1990). Many variations of learning communities exist in higher education institutions;

however, common elements are present in each learning community, such as shared learning in small groups, focused learning outcomes, meaningfully connected faculty and students, and integrated learning (Pascarella & Terenzini, 2005; Shapiro & Levine, 1999). Creating a more holistic experience for students, LLCs have been shown to not only increase retention and degree completion, but also improve student learning, faculty interaction, and student engagement in and outside of the classroom (Astin, 1993; Tinto, 1987; Tinto, Goodsell, & Russo, 1994). As Astin (1993) notes, “The single most important environmental influence on student development is the peer group. By judicious and imaginative use of peer groups, any college or university can substantially strengthen its impact on student learning and personal development” (p. xxii).

Most of the assessment studies conducted about Living Learning Communities have focused on the quantifiable data, including student retention rates, grade points averages, and graduation rates, (Taylor, Moore, MacGregor, & Lindblad, 2004; Ward & Commander, 2011). As LLCs continue to be developed, much research needs to be conducted on the evidence of their effectiveness with regard to student learning outcomes, social transitions to college, overall satisfaction and sense of belonging, civic engagement participation, and perceptions of both intellectual ability and growth (Brower & Inkelas, 2010).

LLCs at the Institution

LLCs at this Midwestern state comprehensive university consist of 20-25 first-year students who live on the same residential hall floor, share common interests or majors, take classes together through an integrated curriculum throughout the fall and spring semesters of their freshmen year, and participate in co-curricular activities as a group throughout the year. Since they are made up of students enrolling in two or three dedicated course sections and linked by a common theme, communities at this institution are identified as curricular learning communities (Lenning & Ebbers, 1999). LLC students also live in the freshmen residence hall and are linked to residential life programs (Shapiro & Levine, 1999).

Learning communities at the institution began in an effort to increase retention rates for the campus student population. Learning communities at this institution began in the 2010-11 academic year with just one community focused on leadership development and service. A unique partnership between both academic and student affairs, LLCs at this institution are now prolific through most departments on campus. In the 2014-15 academic year, the number of LLCs rose to 13, ranging from psychology to global issues to nursing to business. With a freshmen class of approximately 900 students, these 13 communities gave approximately 25% of the incoming class an opportunity to participate in an LLC in 2014-15.

Each LLC develops its own specific learning objectives; however, common learning objectives for all LLCs were created at the inception of the first community. Those objectives include that students are able to:

- Describe progress on the personal and educational goals set for themselves at the beginning of the academic year;
- Identify at least one way to develop supportive relationships within their LLC;
- Describe how they have developed meaningful relationships with their Community;
- Articulate the expectations of their peers; and
- Describe how their LLC involvement shaped their roommate experience.

It is the intent that these outcomes will increase retention of students and impact the social and psychological benefits of the college experience.

Benefits of LLCs

Many benefits exist for students who participate in LLCs. Although they are not deemed a “silver bullet” (Zhao & Kuh, 2004, p. 132), learning community research conducted over the past twenty years indicates that student success, academic performance, curricular and co-curricular integration, and perceptions of college are positively related to students’ participation in LLCs (NSSE, 2007; Rocconi, 2010; Zhao & Kuh, 2004). As such, LLCs can result in life-changing experiences (Kuh, 2008).

Student development theory indicates that students change, grow, and develop their capabilities throughout their higher educational experiences (Astin, 1999; Chickering & Reisser, 1993). Chickering and Reisser (1993) postulate that students move through seven vectors (steps) that interact and build upon each other throughout their college experience. One of these vectors, the development of mature relationships, has been a positive outcome of students’ participation in LLCs (Pike, 1999; Ward & Commander, 2011; Zhao & Kuh, 2004;). Astin’s Student Involvement Theory (1984) states that the level of academic success is a result of students’ quality participation in activities on a college campus. According to Astin (1999), “An involved student is one who devotes considerable energy to academics, spends much time on campus, participates actively in student organizations and activities, and interacts often with faculty” (p. 518). LLCs encourage these components of interaction and participation.

Two known benefits of LLCs are increased student retention rates (Tinto, 2000; Zhao & Kuh, 2004) and higher grade point averages (Buch & Spaulding, 2008; Hotchkiss, Moore, & Pitts, 2006; Zhao & Kuh, 2004). However, many psychological and social benefits can also be realized through the LLC experience (Pascarella & Terenzini, 1991). A significant portion of the impact of college is influenced by students’ socialization on campus, with both faculty members and

student peers. After examining NSSE data from 80,000 students at 365 four-year institutions, Zhao and Kuh (2004) concluded that students in LLCs felt more connected to their faculty and had the confidence to ask for help from their faculty members.

Additional studies illustrated that students felt cared for by their faculty members, had respect for them, and, further, were approachable both in and out of the classroom (Baker & Pomerantz, 2000; Blackhurst, Akey, & Bobilya, 2003; Crissman, 2001). The 2004 and 2007 National Studies of Living-Learning Programs also found that LLCs were helpful in the social transition for students (Inkelas, Brower, Crawford, Hummel, Pope, & Zeller, 2004; Inkelas, Szeleyhi, Soldner, & Brower, 2007). These social and psychological benefits are central to extending the conversation about quality LLCs.

Current research on LLCs fits with the intense focus in higher education on accountability and assessment. Although fairly extensive, much of the research conducted on LLCs has utilized quantitative measures such as retention and academic achievement by way of persistence rates and grade point averages. Studies that use other methodologies, such as qualitative methods, could “provide a more complete picture of the learning community experience” (Ward & Commander, 2011, p. 64). This qualitative study aims to examine the qualities of living learning experiences at a mid-sized state comprehensive university in the Midwest.

Methods

The study was designed using a phenomenological approach, which “describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon” (Creswell, 2013, p. 76). This particular approach was used to explore the experiences of LLC and non-LLC (control group) students to better understand the social and psychological benefits of learning community participation. A standard focus group framework was used with consistent, open-ended questions asked of each focus group.

Participants

Convenience sampling (Merriam, 2014) identified participants in two categories—LLC participants and non-LLC participants. Forty-two participants (Males=11, Females=31) in two types of focus groups consisted of 25 LLC students and 17 non-LLC students. The LLC students represented seven different learning communities based on either common interests ($N=17$) or major specific ($N=8$) and were recruited by email and via in-class announcements. To be used as the control group, non-LLC students were recruited (by an announcement in classes and word of mouth) from general education and leadership studies courses at the respective

university. As partial compensation for their participation, pizza and soda were offered during each focus group. Some participants may have been offered extra credit by their instructors for participation. The project was approved by the university Institutional Review Board prior to data collection.

Measures

All participants responded to ten similar questions adapted from Ward and Commander (2011). Questions were about their experiences in the LLC or at the university, contact with students and faculty at the university, connections to the university and community, and opportunities gained through the LLC or university (Table 1). Focus groups were used to acquaint the researchers with a particular concept, to help group members remember events by group conversation, or to triangulate other findings (Denzin & Lincoln, 2000). The objective for focus groups is to “get high quality data in a social context where people can consider their own views in the context of the views of others” (Patton, 2002, p. 386).

Table 1

Focus Group Questions

1. What were the major components of your LLC or your time at the university?
2. What elements of your LLC/time at the university had the most impact on you?
3. To what extent did your LLC/the university experience influence your approach to learning?
4. To what extent did your LLC/the university experience connect you to the university?
5. To what extent did your LLC/the university experience connect you to the greater community?
6. To what extent did your LLC/the university experience connect you to faculty in and outside of classes?
7. To what extent did your LLC/the university experience connect you to students in and outside of classes?

8. To what extent did your LLC/the university experience connect you to students who are different from you?
9. What additional opportunities have you had as a result of your participation in an LLC or at the university?

Willing participants attended one of several 30-60 minute focus groups held at times throughout the day across three months during the spring semester. The focus group times were audio recorded using either an iPad or a Zoom H2n Handy Recorder. Once all focus groups were completed, the recorded sessions were transcribed by trained researchers. Identifying information, either of the participants or people mentioned during the sessions, was removed for confidentiality purposes.

Results

Transcriptions were categorized into themes using guidelines for qualitative data analysis set forth by Merriam (2014). Coding of data involved a thematic methodology to review data, create categories for each question, then revise and collapse categories when needed (Creswell & Miller, 2000; Merriam, 2014). The process was followed once for the LLC interviews and once for the non-LLC group interviews. First, the researchers independently read the interviews to make general observations and comments on content to create overall themes of information, resulting in fifteen open codes. Those themes were collectively combined by the two primary researchers into eight axial codes. Separately, the two main researchers then reread all the interviews and extracted from them quotes that exemplified each theme. Finally, the two main researchers conferred again and collapsed the data into final selective codes resulting in four main themes.

To help ensure validity and reliability of the coding process, the researchers conducted all coding separately; a third researcher, familiar with LLCs but not with the literature on psychological and social benefits of LLCs, independently coded the responses. Triangulation of answers revealed that similar categories were created by all three researchers, demonstrating the trustworthiness of the coded themes. The researchers discussed their themes and then later checked the codes of the other researchers to audit the constructed categories. Detailed records of themes and categories were kept to follow the pattern of condensing themes. Thus, investigator triangulation, member checking, and an audit trail were techniques used to secure the validity and reliability of the research study (Creswell & Miller, 2000).

A comparison of LLC students to non-LLC students shows that some student experiences were similar. When asked about the major components of their time in

the LLC or at the university, all students, regardless of group, reported outside class activities, classes, and relationships with others. All students also reported having additional opportunities made available to them as a result of their LLC or university experience, including being able to become involved in campus events and forming connections to others. However, several thematic distinctions emerged between the groups.

Student Study Skills

When considering the impact that the LLC or university experience had on their learning, both groups reported that study habits had to change to adjust to the increased workload and course difficulty of college compared to high school. However, LLC students reported more team-based and collaborative approaches to learning and studying. LLC students shared this about their learning:

“I think it helped in the classes that we took together because it was easier to study with someone that we knew...”

“...it didn’t just focus on what you had to do and what you can do best; it focused on what you can do to help other people.”

“It was great to have those kind of built in study groups.”

“...it motivates you to do well because people are expecting something out of you and you were selected for this program and they expect you to devote yourself to it and do well with it.”

Conversely, the non-LLC students altered their study habits to include more solitary activities, like reading texts, using a day planner, and making lists. Some example non-LLC student comments regarding their study habits were:

“I have to do like a planner and I have to write everything down to remind myself...”

“...I’ve always been a list maker, like I make lists constantly, but still I see myself two or three days before and I’m like ‘well that assignment’s done now, onto the next one that’s due tomorrow’”

“I think definitely the organizational capacity...”

“So to learn how to study, you didn’t really have anybody close next to you that you could work on homework with as well...”

Engagement with University and Community

When asked about connections to both the university and greater local community, both LLC students and non-LLC students reported differences when it

came to their connectedness. One of those differences that emerged was how connected students felt to the greater local community. The non-LLC students reported feeling connected to the greater community because of living in the community, doing things for the community, or interacting with community organizations.

“I mean, I grew up in (local town), so I kind of feel connected I guess because I’ve been here my whole life and I know a lot of people just like outside the college and stuff.”

“My major is tourism and hospitality management, and we’ve done a lot of projects in the community...”

” Through my fraternity brother actually getting involved in church, and just getting more involved in church and meeting all the older people that attend there and not just college students.”

“...it feels like (local town) is really supportive of the college and they help the college kids out.”

In contrast, when asked about their connection to the greater local community, LLC students felt isolated or disconnected.

“I would say that I felt disconnected from community...”

“I didn’t really do much with the community.”

Compared to the non-LLC students, a larger portion of the LLC students also reported not feeling connected to the university. Reasons for the LLC students not feeling connected to the university were the isolating effect of being in the learning community. Several LLC students’ comments indicated a disconnection from the university as a result of their learning community experiences.

“It almost disconnected me from the university at times. Because it’s like a little clique or little team...”

“...it connected you to more to the people you were in the community with than the university itself. You didn’t really interact with university stuff...”

“When you’re in a learning community, ...you’re automatically more noticed. I mean you stand out more than the rest of the freshmen in the class.”

For the non-LLC students, the feeling of not being connected to the university resulted from not participating in university events.

“I feel that I don’t feel connected to the university at all other than coming here every day.”

“I just come to class, do what I gotta do...”

Connections to Peers

The LLC participants reported that they had a richer support system with peers. In comparison to the non-LLC group responses, LLC students' responses focused on the connections to other students as having the most impact. Some example LLC student responses regarding peer connections were:

"I'd say what had the most impact on me was the sheer closeness that was the (LLC) community"

"I know I'm very introverted and I don't like going out to meet new people. But with the learning community I was forced to and that was great."

"Definitely the camaraderie. I mean it wasn't just that you knew people. You had a connection to somebody from the very start."

"As homesick as you may have been that first semester, you always had those two classes throughout the week, or three times a week, however often it was you could at least go to that class and it would feel somewhat like home."

"You had those connections right away when school got started. So you weren't just out on your own. You had those people you could go to and talk and talk about classes and everything."

LLC students also reported making earlier connections with other students.

"I think the learning community was most beneficial for me the moment I came here and generally speaking the first one or two months it was just like perfect for me because I wanted to get out of my comfort zone and meet people..."

"I think that if you join a learning community even if just for the first few months. I thought I was ready for college. I got here and I wasn't. I was this close to leaving and it was because of my learning community that I stayed."

"...being here a day or so early and already knowing people made you a little more friendly."

A key difference between the groups was that the non-LLC students reported minimal connections to other students.

"Most of the students in my classrooms, I know their names and if I see them around I'll say hello but other than that I don't really like have a full conversation with them or anything."

"I have a lot of acquaintances but there's only one person that I actually will text, call, or hang out with on a regular basis."

"And so I just I feel like I'm not very connected to students."

Another striking difference between the two groups was the extent of clique tension and subgroup formation reported by the LLC students.

“There were cliques that were separated within the group so outside of class people usually keep with their own group within the group.”

“But then after you got to know everyone you were just done. You get the fed up. You get those people who feel as if they are just different species because they don’t want to be part of what you are a part of anymore.”

“Oh, we had to keep people away from each other because it was like we were going to hit WWII if they got together.”

Connections to Faculty

A majority of students in both groups reported feeling connected to faculty. However, differences emerged in the depth of connection felt toward faculty. The LLC students reported supportive, nurturing relationships with faculty. These connections not only provided academic and non-academic opportunities and comfort about approaching faculty but also fostered relationships that were more caring, mentor-like, and friendlier than those of typical college students in the non-LLC group.

“Because our teachers and our professors knew we were a learning community, we had that connection with our advisor, they’d probably feel more at ease with us and we should be with them.”

“It’s just more of a personal connection with those faculty members who were involved with the learning community.”

“I like connecting to people and being able to relate to people and having that with my professors and being able to connect with the faculty I was associated with it just made the transition better for me. That way I didn’t feel like just another student on campus.”

“It kind of felt more like a family with the learning community and the professors. They just kind of took care of us.”

“...he (the professor) could sit down and talk to you like every single person in his office so he could see where you were and if you were on track and stuff.”

Non-LLC students reported typical college student/faculty interactions about office hours, small classes, and faculty advisor contact. These interactions were focused mostly on academic classroom components.

“I like how all the faculty members kind of have office hours and you can go by and see them whenever.”

“Out of my smaller classes, I have a couple professors from first semester that still see me and ... ask how your life is going.”

“Like I feel like that adult role model, just the advisors in general, I feel like for me it’s helped me with a lot because I can just contact him if I have any questions or anything like that.”

“I like that it’s like a smaller college, cause like one of my teachers is my advisor too. And so like, you can just go talk to them whenever...”

“The teachers I’ve had, they’ve been more than willing to help me with anything I’ve had.”

Discussion

Generally, students who participated in an LLC had a rich experience in college filled with opportunity and connections with students and faculty, whereas the non-LLC group had a more typical college experience with courses as a major focus of their experience, along with more support from the greater city/community in which the campus resides. These findings are consistent with other studies evaluating the impact of Living Learning Communities (Rocconi, 2010; Zhao & Kuh, 2004). Through the focus groups with both students in the LLC and the non-LLC groups, four themes emerged. Of those four themes, Student Study Skills, Connections to Peers, and Connections to Faculty were stronger, enduring themes of LLC students than those in the non-LLC group. The fourth theme, Engagement with the University and Community, showed mixed results between both groups, with non-LLC students feeling more connected to the greater community.

With respect to student study skills, both groups realized that their study habits had to change from high school; however, the LLCs used a more team-oriented approach to studying and had built-in accountability within their LLCs. LLC students built collaborative study groups more readily and with ease. In addition to the study groups, the LLCs built a support system within themselves that led to connections to other peers and activities on campus. The LLC social connections formed early during their special orientations whereas the non-LLC participants’ connections came later through their academic coursework. The social and academic connections were stronger in LLCs, which is consistent with findings in a study by Spanierman, Soble, Mayfield, Neville, Aber, Khuri, and De La Rosa (2013).

However, these connections sometimes lead to cliques within the respective LLCs, leaving some students feeling isolated from other students. Research shows that the social adjustment to college is a central tenant of the high school to college

transition (Chickering & Reisser, 1993). Our research indicates that conflicts arise during this adjustment, even as the social connection benefits that LLC students experience are well documented (Blackhurst, Akey, & Bobilya, 2003; Stefanou & Salisbury-Glennon, 2002; Ward & Commander, 2011). With these important benefits of socialization in mind, it is important for faculty and staff to be aware of the formation of cliques and assist students in navigating social connections with those outside of the LLC as well. This could assist in reducing those feelings of isolation from the campus and greater local community felt in an LLC.

When considering relationships with faculty, both the LLCs and non-LLC groups were connected to faculty. But connections were deeper within the LLCs, with the faculty described as nurturing, caring, and helpful at any time. LLC students indicated that these connections to faculty helped lead them to opportunities whereas faculty relationships with the non-LLC group were described as just “helpful with classes.” The LLC students realized that their faculty connections assisted them with understanding of materials and taking advantage of more opportunities on campus. Many cited their relationship with the LLC faculty as the reason for more unique opportunities afforded to them in their later collegiate years on campus. Their involvement was deeper in that students were starting student organizations and serving as student leaders in many diverse organizations as early as their freshmen and sophomore years. These findings are similar to those documented by other researchers (Baker & Pomerantz, 2000; Blackhurst, Akey, & Bobilya, 2003; Rocconi, 2010; Stefanou & Salisbury-Glennon, 2002; Ward & Commander, 2011).

Experiences with faculty members as part of a learning community have a tremendous impact on students’ perception of gains in college. Students were more comfortable talking with their faculty both in and out of class. Wawrznski, Jessup-Anger, Stolz, Helman, and Beaulieu (2009) also found that, in describing connections with their faculty, LLC students “felt they were more valued than they might have felt in a non-living learning environment” (p. 151). These conclusions corroborate the importance of choosing caring, supportive faculty who are willing to challenge students for Living Learning Community leadership. The critical role of faculty in the development of LLC students and community should not be ignored, and more training on university campuses with respect to this role should occur (Stevenson, Duran, Barrett, & Colarulli, 2005).

Conversely, the LLC students felt isolated from the greater community than the non-LLC group, which felt supported by the greater community in which the university is housed. Many of the LLC activities are on campus, and work should be done not only to assist the students in campus outreach but also to educate the community about LLCs and how to get involved. This conclusion is not consistent with results described by Ward and Commander (2011), who found that students in learning communities reported a greater connection to both the university and city.

With respect to the lack of connection to the city found in the current study, one recommendation would be to conduct specific projects and activities outside of the institution to ensure that LLC students have an opportunity to connect with the larger community outside of the university. LLC faculty could also model this connection to the greater community by participating with them in off campus community activities.

Limitations and Future Research

The findings in this study are limited to the single institution from which the data was collected. Although generalization can occur from the results, it is recognized that additional research conducted at different sized institutions might lead to more robust research findings and generalizability. Participating students self-selected into the study, which could contribute to self-selection bias. Further, not all of the LLCs are represented in the present study because participants self-selected in both LLC and non-LLC groups. An additional limitation to this study is that no LLC student who had dropped out of an LLC mid-year chose to participate in the study. On the other hand, students who participated in the study may see their collegiate experience as favorable and report their gains more positively because of their openness to educational experiences (Pascarella, 2001).

The impact of GPA, academic major, gender, ethnicity, and other demographics on the students' collegiate experience were not factors considered in this study. Hence, outcomes observed between LLC participants and non-LLC participants may be due to pre-existing characteristics (Pike, 1999). Therefore, the findings related to this study should be interpreted with these limitations in mind.

The findings from this study suggest that learning communities provide value-added social and psychological benefits to the students who participate. As a high impact practice and as evident from this and previous research, learning communities certainly enhance connections and opportunities for involvement on a college campus. However, more research should be conducted to further understand the direct and indirect outcomes of learning communities in addition to increased retention and better academic performances (Lardner, 2014). Specifically, longitudinal studies using direct measures of student outcomes are needed to advance the design and implementation of LLCs. Collaborative research across multiple institutions could lead to this understanding of impact beyond student academic success and retention.

References

- Andrade, M.S. (2007). Learning communities: Examining positive outcomes. *Journal of College Student Retention: Research, Theory, & Practice*, 9(1), 1-20.
- Astin, A. (1993). *What matters in college*. San Francisco, CA: Jossey-Bass.

- Astin, A.W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40, 518-529.
- Baker, S., & Pomerantz, N. (2000). Impact of learning communities on retention at a metropolitan university. *Journal of College Student Retention*, 2(2), 115-126.
- Blackhurst, A., Akey, L., & Bobilya, A. (2003). A qualitative investigation of student outcomes in a residential learning community. *Journal of the First-Year Experience and Students in Transition*, 15(2), 35-60.
- Brower, A. M., & Inkelas, K. (2010). Living-learning: One high-impact educational practice. *Liberal Education*, 96(2), 36-43.
- Buch, K., & Spaulding, S. (2008). A longitudinal assessment of an initial cohort in a psychology learning community. *Teaching of Psychology*, 35, 189-193. doi: 10.1080/00986280802181582
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: Sage.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.
- Crissman, J. (2001). Clustered and nonclustered first-year seminars: New students' first-semester experiences. *Journal of the First-Year Experience and Students in Transition*, 13(1), 69-88.
- Denzin, N. K. & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Dewey, J. (1938). *Experience and education*. New York: Collier Books.
- Gabelnick, F., MacGregor, J., Matthews, R. S., & Smith, B. L. (1990). *Learning communities: Creating connections among students, faculty, and disciplines*. *New Directions for Teaching and Learning*, no. 41. San Francisco, CA: Jossey-Bass.
- Hotchkiss, J. L., Moore, R. E., & Pitts, M. M. (2006). Freshman learning communities, college performance, and retention. *Education Economics*, 14(2), 197-210.
- Inkelas, K. K., Brower, A. M., Crawford, S., Hummel, M., Pope, D., & Zeller, W. J. (2004). *National study of living-learning programs: 2004 report of findings*. College Park, MD: University of Maryland and Association of College and University Housing Offices International.
- Inkelas, K. K., Szeleyhi, K., Soldner, M., & Brower, A. M. (2007). *National study of living-learning programs: 2007 report of findings*. College Park, MD: University of Maryland.
- Inkelas, K. K., & Weisman, J. L. (2003). Different by design: An examination of student outcomes among participants in three types of living-learning programs.

- Journal of College Student Development*, 44, 335-368. doi: 10.1353/csd.2003.0027
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Lardner, E. (2014). What campuses assess when they assess their learning communities programs: Selected findings from a nation survey of learning community programs. *Learning Communities Research and Practice*, 2(2), 1-17.
- Lenning, O. & Ebbers, L. (1999). The powerful potential of learning communities: Improving education for the future. *ASHE-ERIC Higher Education Report*, 26(6), 1-173.
- Love, A. G. (2012). The growth and current state of learning communities in higher education. *New Directions for Teaching and Learning*, 2012(132), 5-18. doi: 10.1002/tl.20032
- Meiklejohn, A. (1932). *The Experimental College*. New York, NY: Harper Press.
- Merriam, S. B. (2014). *Qualitative research: A guide to design and implementation*. Hoboken, NJ: Wiley & Sons.
- National Survey of Student Engagement. (2007). *Annual Report*. Retrieved from http://nsse.indiana.edu/NSSE_2007_Annual_Report/index.cfm
- Pascarella, E. (2001). Using student self-reported gains to estimate college impact: A cautionary tale. *Journal of College Student Development*, 42(5), 488-492.
- Pascarella, E. & Terenzini, P. (1991). *How college affects students*. San Francisco, CA: Jossey-Bass.
- Pascarella, E. & Terenzini, P. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Pike, G. (1999). The effects of residential learning communities and traditional residential living arrangements on educational gains during the first year of college. *Journal of College Student Development*, 40, 269-284.
- Rocconi, L. M. (2010). The impact of learning communities on first year students' growth and development in college. *Research in Higher Education*, 52, 178-193.
- Shapiro, N., & Levine, J. (1999). *Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs*. San Francisco, CA: Jossey-Bass.
- Spanierman, L. B., Soble, J. R., Mayfield, J. B., Neville, H. A., Aber, M., Khuri, L., & De La Rosa, B. (2013). Living learning communities and students' sense of community and belonging. *Journal of Student Affairs Research and Practice*, 50(3), 308-325. doi: 10.1515/jsarp-2013-0022

- Stefanou, C. R. & Salisbury-Glennon, J. D. (2002). Developing motivation and cognitive learning strategies through an undergraduate learning community. *Learning Environments Research*, 5(1), 77-97.
- Stevenson, C. B., Duran, R. L., Barrett, K. A., & Colarulli, G. C. (2005). Fostering faculty collaboration in learning communities: A development approach. *Innovative Higher Education*, 30(1), 23-36. doi: 10.1007/s10755-005-3293-3
- Taylor, K., Moore, W. S., MacGregor, J., & Lindblad, J. (2003). *Learning communities assessment and research: What we know now*. National Learning Communities Project Monograph Series. Olympia, WA: Washington Center for Improving the Quality of Undergraduate Education, The Evergreen State College, in cooperation with the American Association for Higher Education.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and causes of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (2000). What have we learned about the impact of learning communities on students? *Assessment Update*, 12(2), 1-4.
- Tinto, V., Goodsell, A., & Russo, P. (1994). *Building learning communities for new college students*. State College, PA: National Center on Postsecondary Teaching, Learning, and Assessment, Penn State University.
- Ward, T., & Commander, N. E. (2011). The power of student voices: An investigation of the enduring qualities of freshmen learning communities. *Journal of College Student Retention*, 13(1), 63-85.
- 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), 133-158.
- Zhao, C., & Kuh, G. D. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education*, 45(2), 115-138.