



What are the key elements of a positive learning environment? Perspectives from students and faculty

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Abstract

The learning environment comprises the psychological, social, cultural and physical setting in which learning occurs and has an influence on student motivation and success. The purpose of the present study was to explore qualitatively, from the perspectives of both students and faculty, the key elements of the learning environment that supported and hindered student learning. We recruited a total of 22 students and 9 faculty to participate in either a focus group or an individual interview session about their perceptions of the learning environment at their university. We analyzed the data using a directed content analysis and organized the themes around the three key dimensions of personal development, relationships, and institutional culture. Within each of these dimensions, we identified sub-themes that facilitated or impeded student learning and faculty work. We also identified and discussed similarities in subthemes identified by students and faculty.

Keywords Faculty · Learning environment · Qualitative research methods · Undergraduate students

Introduction

The learning environment (LE) comprises the psychological, social, cultural, and physical setting in which learning occurs and in which experiences and expectations are co-created among its participants (Rusticus et al., 2020; Shochet et al., 2013). These individuals, who are primarily students, faculty and staff, engage in this environment and the learning process as they navigate through their personal motivations and emotions and various interpersonal interactions. This all takes place within a physical setting that consists of various cultural and administrative norms (e.g. school policies).

While many studies of the LE have focused on student perspectives (e.g. Cayubit, 2021; Schussler et al., 2021; Tharani et al., 2017), few studies have jointly incorporated the perspectives of students and faculty. Both groups are key players within the educational learning environment. Some exceptions include researchers who have used both

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instructor and student informants to examine features of the LE in elementary schools (Fraser & O'Brien, 1985; Monsen et al., 2014) and in virtual learning and technology engaged environments in college (Annansingh, 2019; Downie et al., 2021) Other researchers have examined perceptions of both groups, but in ways that are not focused on understanding the LE (e.g. Bolliger & Martin, 2018; Gorham & Millette, 1997; Midgley et al., 1989).

In past work, LEs have been evaluated on the basis of a variety of factors, such as students' perceptions of the LE have been operationalized as their course experiences and evaluations of teaching (Guo et al., 2021); level of academic engagement, skill development, and satisfaction with learning experience (Lu et al., 2014); teacher–student and student–peer interactions and curriculum (Bolliger & Martin, 2018; Vermeulen & Schmidt, 2008); perceptions of classroom personalization, involvement, opportunities for and quality of interactions with classmates, organization of the course, and how much instructors make use of more unique methods of teaching and working (Cayubit, 2021). In general, high-quality learning environments are associated with positive outcomes for students at all levels. For example, ratings of high-quality LEs have been correlated with outcomes such as increased satisfaction and motivation (Lin et al., 2018; Rusticus et al., 2014; Vermeulen & Schmidt, 2008), higher academic performance (Lizzio et al., 2002; Rusticus et al., 2014), emotional well-being (Tharani et al., 2017), better career outcomes such as satisfaction, job competencies, and retention (Vermeulen & Schmidt, 2008) and less stress and burnout (Dyrbye et al., 2009). From teacher perspectives, high-quality LEs have been defined in terms of the same concepts and features as those used to evaluate student perspective and outcomes. For example, in one quantitative study, LEs were rated as better by students and teachers when they were seen as more inclusive (Monsen et al., 2014).

However, LEs are diverse and can vary depending on context and, although many elements of the LE that have been identified, there has been neither a consistent nor clear use of theory in assessing those key elements (Schönrock-Adema et al., 2012). One theory that has been recommended by Schönrock-Adema et al. (2012) to understand the LE is Moos' framework of human environments (Insel & Moos, 1974; Moos, 1973, 1991). Through his study of a variety of human environments (e.g. classrooms, psychiatric wards, correctional institutions, military organizations, families), Moos proposed that all environments have three key dimensions: (1) personal development/goal direction, (2) relationships, and (3) system maintenance/change. The personal development dimension encompasses the potential in the environment for personal growth, as well as reflecting the emotional climate of the environment and contributing to the development of self-esteem. The relationship dimension encompasses the types and quality of social interactions that occur within the environment, and it reflects the extent to which individuals are involved in the environment and the degree to which they interact with, and support, each other. The system maintenance/change dimension encompasses the degree of structure, clarity and openness to change that characterizes the environment, as well as reflecting physical aspects of the environment.

We used this framework to guide our research question: *What do post-secondary students and faculty identify as the positive and negative aspects of the learning environment?* Through the use of a qualitative methodology to explore the LE, over the more-typical survey-based approaches, we were able to explore this topic in greater depth, to understand not only the what, but also the how and the why of what impacts the LE. Furthermore, in exploring the LE from both the student and faculty perspectives, we highlight similarities and differences across these two groups and garner an understanding of how both student and faculty experience the LE.

Methods

Participants

All participants were recruited from a single Canadian university with three main campuses where students can attend classes to obtain credentials, ranging from a one-year certificate to a four-year undergraduate degree. Approximately 20,000 students attend each year. The student sample was recruited through the university's subject pool within the psychology department. The faculty sample was recruited through emails sent out through the arts faculty list-serve and through direct recruitment from the first author.

The student sample was comprised of 22 participants, with the majority being psychology majors ($n=10$), followed by science majors ($n=4$) and criminology majors ($n=3$). Students spanned all years of study with seven in their first year, three in second year, five in third year, six in fourth year, and one unclassified. The faculty sample consisted of nine participants (6 male, 3 female). Seven of these participants were from the psychology department, one was from the criminology department and one was from educational studies. The teaching experience of faculty ranged from 6 to 20 years.

Interview schedule and procedure

We collected student data through five focus groups and two individual interviews. The focus groups ranged in size from two to six participants. All sessions occurred in a private meeting room on campus and participants were provided with food and beverages, as well as bonus credit. Each focus group/interview ranged from 30 to 60 min. We collected all faculty data through individual interviews ranging from 30 to 75 min. Faculty did not receive any incentives for their participation. All sessions were conducted by the first author, with the second author assisting with each of the student focus groups.

With the consent of each participant, we audio-recorded each session and transcribed them verbatim. For both samples, we used a semi-structured interview format involving a set of eight open-ended questions about participants' overall perceptions of the LE at their institution (see Appendix for interview guide). These questions were adapted from a previous study conducted by the first author (Rusticus et al., 2020) and focused on how participants defined the LE, what they considered to be important elements of the LE, and their positive and negative experiences within their environment. Example questions were: "Can you describe a [negative/positive] learning [students]/teaching [faculty] experience that you have had?".

Analysis

We analyzed the data using a directed content analysis approach (Hsieh & Shannon, 2005) that used existing theory to develop the initial coding scheme. We used Moos's (Insel & Moos, 1974; Moos, 1973, 1991) framework and its three dimensions of personal development, relationships, and system maintenance/change to guide our analysis. During the analysis phase, we renamed the system maintenance/change dimension to 'institutional setting' as we felt it was more descriptive of, and better represented, the content of this theme.

We analyzed student and faculty data separately, starting with the student data, but used the same process for both. First, we randomly selected two transcripts. We each independently coded the first transcript using the broad themes of personal development,

relationships and institutional setting, and developed subcodes within each of these themes, as needed. We then reviewed and discussed our codes, reaching consensus on any differences in coding. We then repeated this process for the second transcript and, through group discussions, created a codebook. The first author then coded the remaining transcripts.

When coding the faculty data, we aimed to maintain subcodes similar to the student data while allowing for flexibility when needed. For instance, within the personal development theme, a subcode for the student data was ‘engagement with learning’, whereas a parallel subcode for the faculty data was ‘engagement with teaching’.

Results

We present the results of the student and faculty data separately. For both, we have organized our analysis around the three overarching themes of personal development, relationships and institutional setting.

Student perspectives of the learning environment

Personal development

Personal development was defined as any motivation either within or outside the LE that provide students with encouragement, drive, and direction for their personal growth and achievement. Within this theme, there were two subthemes: engaging with learning and work-life balance.

Engagement with learning reflected a student’s desire and ability to participate in their learning, as opposed to a passive-learning approach. Students felt more engaged when they were active learners, as well as when they perceived the material to be relevant to their career goals or real-world applications. Students also said that having opportunities to apply their learning helped them to better understand their own career paths:

I had two different instructors and both of them were just so open and engaging and they shared so many personal stories and they just seemed so interested in what they were doing and what I was like. Wow, I want to be that. I want to be interested in what I’m learning. (G6P1)

A common complaint that negatively impacted student motivation was that instructors would lecture for the entire class without supporting materials or opportunities for students to participate.

I’ve had a couple professors who just don’t have any visuals at all. All he does is talk. So, for the whole three hours, we would just be scrambling to write down the notes. It’s brutal...(G7P2)

Trying to establish a healthy work-life balance and managing the demands of their courses, often in parallel with managing work and family demands, were key challenges for students and were often sources of stress and anxiety. For instance, one student spoke about her struggles in meeting expectations:

It was a tough semester. For the expectations that I had placed on myself, I wasn't meeting them and it took a toll on me. But now I know that I can exceed my expectations, but you really have to try and work hard for it. (G6P1)

Achieving a good work-life balance and adjusting to university life takes time. Many students commented that, as they reached their third year of study, they felt more comfortable in the school environment. Unfortunately, students also noted that the mental and emotional toll of university life can lead to doubt about the future and a desire to leave. One student suggested more support for students to help with this adjustment:

I think school should give students more service to help them to overcome the pressure and make integration into the first year and second year quicker and faster. Maybe it's very helpful for the new students. (G7P4)

Relationships

Relationships was the second dimension of the LE. Subthemes within this dimension included: faculty support, peer interaction, and group work. Most students commented on the impact that faculty had on their learning. Faculty support included creating a safe or unsafe space in the classroom (i.e. ability to ask questions without judgement, fostering a respectful atmosphere), providing additional learning material, accommodating requests, or simply listening to students. Students generally indicated that faculty at this university were very willing to offer extra support and genuinely cared for them and their education. Faculty were described as friendly and approachable, and their relationships with students were perceived as "egalitarian".

I think feeling that you're safe in that environment, that anything you pose or any questions that you may have, you're free to ask. And without being judged. And you'll get an answer that actually helps you. (G1P4)

While most students felt welcome and comfortable in their classes, a few students spoke about negative experiences that they had because of lack of faculty support. Students cited examples of professors "shutting down" questions, saying that a question was "stupid", refusing requests for additional help, or interrupting them while speaking. Another student felt that the inaction of faculty sometimes contributed to a negative atmosphere:

I've had bad professors that just don't listen to any comment or, if you suggest something to improve it which may seem empirically better, they still shut you down! That's insane. (G2P2)

The peer interactions subtheme referred to any instances when students could interact with other students; this occurred both in and out of the classroom. Most often, students interacted with their peers during a class or because of an assignment:

I think the way the class is structured really helps you build relationships with your peers. For example, I met S, we had several classes with each other. Those classes were more proactive and so it allowed us to build a relationship... I think that's very important because we're going to be in the same facility for a long time and to have somebody to back you up, or to have someone to study with...". (G1P4)

However, other students felt that they lacked opportunities to interact with peers in class. Although a few participants stated that they felt the purpose of going to school was

to get a degree, rather than to socialize with others, students wanted more opportunities to interact with peers.

The final subtheme, group work, was a very common activity at this school. The types of group work in which students engaged included classroom discussions, assignments/projects, and presentations. Many students had enjoyable experiences working in groups, noting that working together helped them to solve problems and create something that was better than one individual's work. Even though sometimes doing the work itself was a negative experience, people still saw value in group work:

Some of the best memories I've ever had was group work and the struggles we've had. (G2P2)

I don't like group work but it taught me a lot, I've been able to stay friends and be able to connect with people that I've had a class with in 2nd year psych all the way up till now. I think that's very valuable. (G6P1)

Almost all students who spoke about group work also talked about negative aspects or experiences they had. When the work of a group made up a large proportion of the final grade, students sometimes would have preferred to be evaluated individually. Students disliked when they worked in groups when members were irresponsible or work was not shared equally, and they were forced to undertake work that other students were not completing.

A lot of people don't really care, or they don't take as much responsibility as you. I think people have different goals and different ways of working, so sometimes I find that challenging. (G7P2)

Institutional setting

The third overarching theme was the institutional setting. Broadly, this theme refers to the physical structure, expectations, and the overall culture of the environment and was composed of two key subthemes: importance of small class sizes; and the lack of a sense of community.

Small class sizes, with a maximum of 35 students, were a key reason why many students chose to come to this institution. The small classes created an environment in which students and faculty were able to get to know one another more personally; students felt that they were known as individuals, not just as numbers. They also noted that this promoted greater feelings of connectedness to the class environment, more personalized attention, and opportunities to request reference letters in the future:

My professors know my name. Not all of them that I'm having for the first time ever, but they try... That means a lot to me. (G6P4)

Several students also said that having smaller class sizes helped them to do well in their courses. The extra attention encouraged them to perform better academically, increased their engagement with their material, and made them feel more comfortable in asking for help.

Having a sense of belonging was a key feature of the environment and discussions around a sense of community (or lack thereof) was a prominent theme among the students. Students generally agreed that the overall climate of the school is warm and friendly. However, many students referred to the institution as a "commuter school", because there are no residencies on campus and students must commute to the school. This often resulted in

students attending their classes and then leaving immediately after, contributing to a lack of community life on campus.

What [other schools] have is that people live on campus. I think that plays a huge role. We can't ignore that we are a commuter school... They have these events and people go because they're already there and you look at that and it seems to be fun and engaging. (G4P1)

Furthermore, students commented on a lack of campus areas that supported socialization and encouraged students to remain on campus. While there were events and activities that were regularly hosted at the school, students had mixed opinions about them. Some students attended the events and found them personally beneficial. Other students stated that, although many events and activities were available, turnout was often low:

There isn't any hanging out after campus and you can even see in-events and in-event turnout for different events... It is like pulling teeth to get people to come out to an event... There are free food and fun music and really cool stuff. But, no one's going to go. It's sad. (G5P1)

Faculty perspectives on the learning environment

Similar to the student findings, faculty data were coded within the three overarching themes of personal development, relationships, and institutional setting.

Personal development

Personal development reflected any motivation either within or outside the LE that provided faculty with the encouragement, drive, and direction for their personal growth and engagement with teaching. Within this dimension, there were two main subthemes: motivation to teach and emotional well-being.

As with any career, there are many positive and negative motivating factors that contribute to one's involvement in their work. Faculty generally reported feeling passionate about their work, and recounted positive experiences they have had while teaching, both personally and professionally. While recollecting positive drives throughout their career, one instructor shared:

It's [teaching in a speciality program] allowed me to teach in a very different way than the traditional classroom... I've been able to translate those experiences into conferences, into papers, into connections, conversations with others that have opened up really interesting dialogues.... (8M)

Faculty also reported that receiving positive feedback from students or getting to see their students grow over time was highly motivating:

I take my teaching evaluations very seriously and I keep hearing that feedback time and time again they feel safe. They feel connected, they feel listened too, they feel like I'm there for them. I think, you know, those are the things that let me know what I'm doing is achieving the goals that I have as an educator. (1F)

Being able to watch [students] grow over time is very important to me... I always try to have a few people I work with and see over the course of their degree. So, when they graduate, you know I have a reason to be all misty-eyed. (2M)

Emotional well-being related to how different interactions, primarily with students, affected instructors' mental states. Sometimes the emotional well-being of faculty was negatively affected by the behaviour of students. One instructor spoke about being concerned when students drop out of a class:

A student just this last semester was doing so well, but then dropped off the face of the earth... I felt such a disappointing loss... So, when that happens, I'm always left with those questions about what I could have done differently. Maybe, at the end of the day, there is nothing I could've done, nothing. It's a tragedy or something's happened in their life or I don't know. But those unanswered questions do concern-- they cause me some stress or concern. (1F)

Another instructor said that, while initially they had let the students' behaviour negatively affect their well-being, over time, they had eventually become more apathetic.

There are some who come, leave after the break. Or they do not come, right, or come off and on. Previously I was motivated to ask them 'what is your problem?' Now I do not care. That is the difference which has happened. I do not care. (4M)

Relationships

This dimension included comments related to interactions with other faculty and with students and consisted of three subthemes: faculty supporting faculty; faculty supporting students; and creating meaningful experiences for students.

Most faculty felt that it was important to be supported by, and supportive to, their colleagues. For instance, one instructor reported that their colleagues' helpfulness inspired them to be supportive of others:

If I was teaching a new course, without me having to go and beg for resources or just plead and hope that someone might be willing to share, my experience was that the person who last taught the course messaged me and said let me know if anything I have will be useful to you... When people are willing to do that for you, then you're willing to do that for someone else....(7M)

Many faculty members also spoke about the importance of having supportive relationships with students, and that this would lead to better learning outcomes:

If you don't connect with your students, you're not going to get them learning much. They're not; they're just going to tune out. So, I think, I think connection is critical to having a student not only trust in the learning environment, but also want to learn from the learning environment. (3M)

Facilitating an open, inviting space in the classroom and during their office hours, where students were comfortable asking questions, was one way that faculty tried to help students succeed. Faculty also spoke about the value of having close mentorship relationships with students:

I work with them a lot and intensively...and their growth into publishing, presenting, and seeing them get recognized and get jobs on their way out and so forth are extraordinary. So, being able to watch them grow over time is very important to me. (2M)

Faculty also noted that occasionally there were instances when students wanted exceptions to be made for them which can create tensions in the environment. One instructor spoke about the unfairness of those requests arguing that students need to be accountable to themselves:

The failure rate, ...it was 43%. I do not know if there is any other course in which there is a 43% failure rate. So, I do not want to fail these students, why? Instructors want these students to pass, these are my efforts [...], and there are also the efforts of these students and their money, right? But, if a student doesn't want to pass himself or herself, I cannot pass this student, that's it. (4M)

Faculty were generally motivated to provide memorable and engaging experiences for students. These included providing practical knowledge and opportunities to apply knowledge in real-world settings, field schools, laboratory activities, group discussions, guest speakers, field trips, videos and group activities. They were often willing to put in extra effort if it meant that students would have a better educational experience.

Creating meaningful experiences for students was also meaningful for faculty. One faculty member said that faculty felt amazing when the methods that they used in their courses were appreciated by students. Another faculty member noted:

This student who was in my social psychology class, who was really bright and kind of quirky, would come to my office, twice a week, and just want to talk about psychology ... That was like a really satisfying experience for me to see someone get so sparked by the content. (9F)

Institutional setting

This third theme refers to the physical structure, expectation, and overall culture of the environment and it consisted of two subthemes: the importance of small class sizes, and the lack of a sense of community.

The majority of the faculty indicated that the small class sizes are an integral feature of the LE. The key advantage of the small classes was that they allowed greater connection with students.

Your professor knows your name. That's a huge difference from other schools. It's a small classroom benefit. (6F)

Similar to the students, nearly all the faculty indicated that a sense of community at the institution was an important part of the environment, and something that was desired, but it currently was lacking. They spoke about various barriers which prevent a sense of community, such as the lack of residences, a dearth of events and activities at the university, the busy schedules of faculty and students, the commuter nature of the school, and characteristics of the student population:

When I complain about the commuter campus feeling that occurs with students, we suffer from that too at a faculty level... People are just not in their offices because we work from home... And that really also affects the culture... We come in. We do our thing. We meet with students. And then we leave... I encounter so many students in the hallway who are looking for instructors and they can't find them. (9F)

Discussion

These findings have provided insight into the perspectives of both students and faculty on the LE of a Canadian undergraduate university. We found that framing our analysis and results within Moos' framework of human environments (Insel & Moos, 1974; Moos, 1973, 1991) was an appropriate lens for the data and that the data fit well within these three themes. This provides support for the use of this theory to characterize the educational LE. Within each of these dimensions, we discuss subthemes that both facilitated and hindered student learning and commonalities among student and faculty perspectives.

Within the personal development dimension, both students and faculty discussed the importance of engagement and/or motivation as a facilitator of a positive LE. When students were engaged with their learning, most often by being an active participant or seeing the relevance of what they were learning, they saw it as a key strength. Other studies have also identified engagement as a feature of positive LEs for populations such as high-school students (Seidel, 2006), nursing students (D'Souza et al., 2013) and college students taking online courses (e.g. Holley & Dobson, 2008; O'Shea et al., 2015). Faculty who reported being motivated to teach, often felt that this motivation was fueled by the reactions of their students; when students were engaged, they felt more motivated. This creates a positive cyclic pattern in which one group feeds into the motivation and engagement levels of the other. However, this can also hinder the LE when a lack of engagement in one group can bring down the motivation of the other group (such as students paying more attention to their phones than to a lecture or faculty lecturing for the entire class period).

Emotional climate was another subtheme within the personal development dimension that was shared by both students and faculty although, for students, this was focused more on the stress and anxiety that they felt trying to manage their school workloads with their work and family commitments. The overall emotional climate of the school was generally considered to be positive, which was largely driven by the supportive and welcoming environment provided by the faculty. However, it was the negative emotions of stress and anxiety that often surfaced as a challenging aspect in the environment for students. Past research suggests that some types of stress, such as from a challenge, can improve learning and motivation, but negative stress, such as that reported by our participants, is associated with worsened performance and greater fatigue (LePine et al., 2004).

For faculty, their emotional state was often influenced by their students. When things were going well for their students, faculty often shared in the joy; however, when students would disappear without notice from a class, it was a source of disappointment and self-doubt. For other faculty, the accumulation of negative experiences resulted in them being more distant and less affected emotionally than they had been earlier in their career. This diminishing concern could have implications for how engaged faculty are in their teaching, which could in turn influence student engagement and harm the LE.

The relationships dimension was the most influential aspect of the environment for both students and faculty. While both groups felt that the relationships that they formed were generally positive, they also reported a desire for more peer connections (i.e. students with other students and faculty with other faculty). Students commented that it was a typical experience for them to come to campus to attend their classes and then leave afterwards, often to work or study at home. Many of the students at this school attend on a part-time basis while they work part- or full-time and/or attend to family commitments. While this is a benefit to these students to have the flexibility to work and further their education, it comes at loss of the social aspect of post-secondary education.

The one way in which student–peer relationships were fostered was through group work. However, students held both positive and negative views on this: the positive aspect was the opportunity to get to know other students and being able to share the burden of the workload, and the negative aspect was being unfair workloads among team members. When group dynamics are poor, such as unfair work distribution, having different goals and motivations, or not communicating effectively with their groups, it has been shown to lead to negative experiences (Rusticus & Justus, 2019).

Faculty also commented that it was typical for them and other faculty to come up to campus only to teach their classes and then leave afterwards. They noted that their office block was often empty and noted instances when students have come looking for faculty only to find a locked office. Overall, faculty did report feeling congenial with, and supported by, their peers. They also desired a greater connection with their peers, but noted that it would require effort to build, which many were not willing to make.

Finally, student–faculty relationships were the most-rewarding experience for both groups. Students saw these experiences as highly encouraging and felt that they created a safe and welcoming environment where they could approach faculty to ask questions and get extra support. However, in some cases, students had negative experiences with faculty and these had an impact on their self-esteem, motivation and willingness to participate in class. Students' negative experiences and feedback have been shown to result in declined levels of intrinsic motivation, even if their performance ability is not low (Weidinger et al., 2016).

Within the third dimension, institutional setting, a key strength was the small class sizes. With a maximum class size of 35 students, this created a more personal and welcoming environment for students. Students felt that their instructors got to know their names and this promoted more opportunities for interactions. Faculty concurred with this, indicating that the small classes provided greater opportunities for interactions with their students. This enabled more class discussions and grouped-based activities which contributed to a more engaging and interactive educational experience for students and faculty. For students, not being able to hide in the crowd of a large lecture hall, as is common in other university settings, encouraged them to work harder on their studies and to seek help from their instructor if needed.

Finally, both students and faculty commented that the lack of a sense of community was a negative aspect of the LE. This institution is known as a commuter school and both groups reported that they would often attend campus only for school/work and would leave as soon as their commitments were done. This limits opportunities to interact with others and could also potentially impact one's identity as a member of this community. While both groups expressed a desire for more of a community life, neither group was willing to put in much effort to make this happen. Others have also found that sense of community, including opportunities to engage and interact with others, is important in LEs (e.g. Sad-era et al., 2009). Schools with more activities and opportunities for student involvement have reports of higher satisfaction for both academic and social experiences (Charles et al., 2016).

Limitations

Because this study is based on a relatively small sample at a single university, there is a question of whether the findings can be applied to other departments, universities or contexts. However, it is a strength of this study that both student and faculty perceptions were

included, because few past studies have jointly looked at these two groups together using qualitative methods. The use of focus groups among the student groups might have limited the openness of some participants. We also acknowledge that the analysis of qualitative data is inevitably influenced by our roles, life experiences and backgrounds. (The first author is a faculty member and the second and third authors were fourth year students at the time of the study.) This might have impacted our approach to the interpretation of the data compared with how others might approach the data and analysis (Denzin & Lincoln, 2008). However, the analysis involved consultation among the research team to identify and refine the themes, and the findings are presented with quotes to support the interpretation. Finally, because experiences were self-reported in this study, they have the associated limitations of self-report data. Despite these limitations, we believe that our findings add to what is known about LEs by capturing multiple perspectives within the same environment.

Future directions

Because our sample was comprised of students across multiple years of their program, some of our findings suggest that upper-level students might have different perceptions of the LE from lower-level students (e.g. work/life balance, access to resources, and overall familiarity with the environment and resources available). However, because the small sample sizes within these subgroups prevent any strong conclusions being made, future researchers might want to explore year-of-study differences in the LE. Additionally, the data collected for this study occurred prior to the COVID-19 pandemic and the mandatory switch to online teaching and learning. Future researchers might want to consider how this has impacted student and faculty perceptions of the LE regarding their personal motivation, the nature and quality of the relationships that have formed with peers and faculty, and the culture and norms of their institution.

Conclusion

This study increases our understanding of LEs by incorporating data collected from both students and faculty working in the same context. Across both groups, we identified important aspects of the LE as being high levels of engagement and motivation, a positive emotional climate, support among peers, strong faculty–student relationships, meaningful experiences, and small class sizes. Students identified negative aspects of the LE, such as certain characteristics of group work and struggles with work–life balance. Both faculty and students identified a lack of a sense of community as something that could detract from the LE. These findings identify important elements that educators and researchers might want to consider as they strive to promote more-positive LEs and learning experiences for students.

Appendix: Interview guide

1. [Students] Going around the table, I would like each person to tell me a little bit about themselves. For instance, what program and year you are in, what your education goals are, why you were interested in this study.

- [Faculty] Tell me a little bit about yourself. For instance, what department you are in, how long you have been teaching at KPU, what courses you teach, why you were interested in this study
2. When I say the word learning environment, what does that mean to you?
 3. How would you describe the learning environment here at KPU?
 - a. Probe for specific examples
 - b. Relate to goal development, relationships, KPU culture
 4. Can you describe a positive learning/teaching [students/faculty] experience that you have had?
 - a. Probe for factors that made it a positive environment
 5. Can you describe a negative learning/teaching [students/faculty] experience that you have had?
 - a. Probe for factors that made it a negative environment
 6. How would you describe an ideal environment?
 7. How close is KPU to an ideal learning environment?
 - a. Probe for reasons why
 - b. Probe for how KPU could be made more ideal
 8. What recommendations would you give to the Dean of Arts regarding the learning environment? This could be changes you would recommend or things you recommend should stay the same.
 9. Do you have any final comments? Or feel there is anything about the learning environment that we have not addressed?

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