
**Enhancing Student Success through Learning
Communities:
The Case of University of Pretoria**



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Introduction

The process of learning within education institutions extends beyond the classrooms and the educator/student binary. The influence of globalisation and the rapid speed of flow of information have created demand for multicultural and diverse skills of learning and teaching. Organisational and learning community educational practices have been developed, particularly in the United States of America, to address the issue of individual learning through collective and collaborative effort¹. A learning community is a group of individuals who share common academic goals and attitudes, who meet regularly to collaborate on classwork and other assignments. One of the objectives of a learning community is to advance the collective knowledge whilst at the same time it supports the growth of individual knowledge (Scardamalia & Bereiter, 1994)². This is where the value of a learning community lies, involving everyone in a collective effort of understanding rather than individual effort. The exchange of knowledge and skills among peers creates a less formal learning environment which can assist students who struggle to learn in bigger groups. Such communities have become the template for a cohort-based, interdisciplinary approach to education. The case study describes how the use of learning communities has improved student success at one of the premier universities of South Africa, University of Pretoria (UP), by tracking the academic performance of student participants in learning communities in 2017.

At UP, the Learning Communities Project (LCP) is administered by the Department of Student Affairs (DSA) and forms part of the student success plan (SSP) which focuses on student academic success, welfare and wellness within a proactive and programme based approach. Central to the transformation agenda of the UP 2025 Vision is the access and success of students in the institution, resulting in the formation of initiatives such as FLY@UP. LCP and FLY@UP play a complementary role in the implementation of adequate support for students, particularly those from disadvantaged backgrounds, to advance within the higher education ladder.

Several cognitive and sociocultural learning theories were used in this study to analyse and assess the response by students to the LCP at UP. These theories include *cognitive dimensions learning* and *sociocultural learning* from Higgins; Ishimaru and Fowler's article "Examining Organisational Learning in Schools: The Role of Psychological Safety, Experimentation and Leadership that enforces Learning"; and *social-constructivist, learning-to-learn* and *multi-cultural arguments* from Bielaczyc and Collin's article "Learning Communities in Classrooms: A Reconceptualisation of Educational Practice" will be engaged to analyse and assess the response of students to LCP in UP.

Background

Many students struggle with transition from high school to a university space; while some students have the ability to quickly adjust to the change in environment, others find it more challenging leading to poor mental and academic performance. The main objective of LCP is to bridge the gap between

¹ See, Bielaczyc, K & Collins, A. (2009) Learning Communities in Classrooms: A reconceptualization of educational practice. In Reigeluth, C.M. (ed.) *A New Paradigm of Instructional Theory*, Taylor & Francis, New York, pp. 269-292

Higgins, M., Ishimaru, A., Holcombe, R., & A Fowler, A. (2012). Examining organizational learning in schools: The role of psychological safety, experimentation, and leadership that reinforces learning. *Journal of Educational Change* Vol. 13 (1), pp. 67-94 and Mindich, D & Lieberman, A. (2012). *Building a Learning Community: A Tale of Two Schools*. Stanford, CA. Stanford Center for Opportunity Policy in Education

these spaces of learning by providing a platform for individual learning through the process of collective/peer knowledge construction; Higgins *et al* define these parameters of learning through *sociocultural* and *cognitive dimensions learning theory*. The cognitive stream of modes of learning focuses mainly on the “absorptive capacity” of the individual and/or group in valuing new kinds of information and absorbing it into existing habits of thinking and learning.³ Similar to Higgins *et al*, Bielaczyc and Collins identify *social-constructivism* and *learning-to-learn* arguments as more related to the cognitive component of learning whereby the process of learning is influenced by the external environment (i.e. “reading clubs” and community) and existing habits of knowledge construction.⁴ The peer learning environment created by LCP allows for students to merge their old methods of learning with new ones; therefore expanding their understanding of how to learn efficiently in preparation for the university and later, the labour market. However; the learning process is incomplete when not linked with the *sociocultural* and/or *multi-cultural* argument advanced by both Higgins and Bielaczyc. Due to the diversity of people, perspectives and expectations - as a result of rapid globalisation and technological growth – learning communities create a space whereby students can interact with individuals from diverse backgrounds, learn new perspectives towards problem-solving and have the ability to deal with complex issues relating to cognitive and social engagements.⁵

The first year of study is critical for students because it is the foundation phase of their university career and its trajectory thereof. A set of indicators have been developed in the programme to identify students who may need and/or benefit from additional support, many of these overlap each other. Support provided through LCP complements the academic programme and other support projects facilitated by the Department of Student Affairs and Faculties geared towards ensuring academic success.

Students identified to participate in LCP include:

- First and Second year students;
- NSFAS funded students (-1 and 0 category);
- First generation;
- Day Students;
- “Missing Middle”;
- Poor Academic Performance (students who have a history of academic exclusion);
- Voluntary (referrals from Faculty and/or other programmes).

Following the transformation agenda of the UP 2025, Vision more attention has been placed on the challenges experienced by day students coming from disadvantaged backgrounds. The environments they may find themselves in, i.e. cheaper accommodation spaces farther away from campus, during the period of study can disrupt the process of learning. Many academic exclusion cases that escalated to the Senate Appeals Committee cited lack of financial and psychological support and problems related to accommodation and travelling as the root causes for poor academic performance. Some of the students who appeal to the Senate Appeals Committee and are conditionally accepted back into the institution are referred to join LCP through the guidance and discretion of the Director of the

³ Higgins, M., Ishimaru, A., Holcombe, R., & A Fowler, A. (2012) Examining organizational learning in schools: The role of psychological safety, experimentation, and leadership that reinforces learning. *Journal of Educational Change* Vol. 13 (1), pp. 67-94

⁴ Bielaczyc, K & Collins, A. (2009) Learning Communities in Classrooms: A reconceptualization of educational practice. In Reigeluth, C.M. (ed.) *A New Paradigm of Instructional Theory*, Taylor & Francis, New York, pp. 269-292

⁵ *Ibid.*, p. 12

Department of Student Affairs. LCP provides a safe space for peer learning for students who are studying the same course and may have similar struggles linked to the earlier mentioned indicators. Intervention of LCP prioritises the overall mental and social wellbeing of students with the understanding that it aids and enhances the student's academic success.

Programme Implementation

The programme offers group discussions facilitated by Learning Communities Coordinators (LCC). Part of the programme includes transformation through social cohesion activities such as sports, study methods strategies and workshops. Since the academic programme is focused on high impact modules, LCC are selected per faculty. LCC are senior students who perform well academically in the course of study.

Below are the criteria used to select LCC:

- Merit (Academic Performance);
- Day Students;
- Financially Needy (typically students funded by NSFAS and/or other related funders);
- Former students from the LCP;
- Interview and Training.

Overall, the programme is comprised of 25 LCC and 30 Learning Community (LC) groups of between 15 – 50 individuals each. Currently there are 310 students who form part of LCP, with 98% being first generation students mostly from low income families/backgrounds. ClickUP is used as a medium of communication to drive a set of LC activities. These include social and main events such as motivational and study skills sessions, the Spring Impact Tutor programme and exam preparation sessions. Communication between LCC and students in their respective groups is facilitated via a WhatsApp group created for each faculty. It has been observed through reports submitted by LCC that the WhatsApp group has more participants than the discussion groups themselves, this point will be revisited later in the section discussing challenges. The role of the LCC is to nurture and support the students, assist in terms of module content, facilitate and engage in discussions. However, it is important to note that this role differs from that of a tutor in that students are not taught, instead they engage actively in problem-solving collectively. Bielaczyc observes this method as a framework for redesigning learning environments; the *learning activities* used in LCP sessions can share commonalities structurally with lectures, however; the critical differentiating point becomes the openness to knowledge sharing in less formalised and hierarchical manners.⁶ Furthermore, students under the LCP share their individual efforts towards a deeper understanding of the subject matter under study. Students learn to synthesize multiple perspectives, to solve problems in a variety of ways, and to use each other's diverse knowledge and skills as resources to collaboratively solve problems and advance their understanding.

The intention of this adopted model for LC in UP is to achieve the following:

- Good pass rates in first year;
- Low drop out;
- Sustaining the students bursar;
- Avoid academic exclusion.

⁶ Ibid., p. 8

The goal of LC is to improve retention especially amongst previously disadvantaged students, also to encourage worthy academic performance, persistence, graduation rates, and completion time to obtaining the degree. The Project provides a foundation for proactive intervention techniques, for which the specific targeted students are catalogued, supported, and monitored throughout their academic journey to ensure high graduation rates.

Implementation of LCP is scheduled to roll-out in four phases.

Phase	Period of Implementation	Information
Consultation and Evaluation	2015 First semester	<ul style="list-style-type: none"> ➤ The project plans and objective. ➤ Ensuring that there are no duplicates within other support service, ➤ Cost analysis and logistic analysis. ➤ *project plan
Implementation	2015 Second semester – December 2018	<ul style="list-style-type: none"> ➤ Project is effective during this period, particularly in ensuring that student success is attained through data analytics of targeted students for the duration of their academic programme.
Rolling out	2017 First semester	<ul style="list-style-type: none"> ➤ Project will be in senior years. From first year student taking further the project into their senior studies without being constantly coordinated.
Analysis	2018 First semester	<ul style="list-style-type: none"> ➤ Use data to track student success among those who have been active participants in the project.

Methodology for Data Collection

In order to investigate the impact of the intervention through the implementation of LCP in the student success plan following the UP 2015 Vision, formal documents outlining the history of the project, written reports from the Learning Community Coordinators and Project Coordinator, responses from student participants and assessment of GPA of targeted students was used. The process of qualitative and quantitative method of data collection was used as complementary tools in the evaluation and analysis of the project. Data was collected using an online survey. The survey was open to all the above mentioned participants.

Sampling Technique

The selection of respondents is pivotal to every study since any survey is only as good as the subjects who have agreed to participate. A self-selection sampling technique⁷ was adopted for this study using a survey open and available to all active and non-active participants invited to join LCP. Individuals had

⁷ Bradley, N. (1999). Sampling for Internet Surveys: An Examination of Respondent Selection for Internet Research. *International Journal of Market Research*. 41(1), p. 387

the option to either participate or not in the survey. Self-selection sampling is not a random sampling technique. One advantage of this technique is that it can reduce the amount of time necessary to search for appropriate respondents, that is, those individuals that meet the selection criteria needed for the sample. A common disadvantage is the possibility of having a biased or skewed representation of the population being studied, a problem that can be rectified through data cleaning.

Commented [EM1]: Not sure that any amount of data cleaning can resolve this.

Data Analysis

The approach towards the analysis will be comparative; will compare the academic performance and success rate of all students who were invited to participate in the programme and did not participate versus all students who were invited and participated in the programme. Qualitative data gathered on the experiences and results produced by LCP and its impact on the students and LCC was organised into themes, and interrogated intellectually. Data collected through the surveys targeting students, LCCs and the Project Coordinator was analysed and used in both the qualitative and quantitative findings of the report. Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data. Quantitative data (in the form of descriptive statistics) were analysed using SPSS and presented in tables and graphs.

Ethical Considerations

Using the case study of the learning communities at the University of Pretoria, this study seeks to investigate the impact of the intervention on the student success. The focus of this study is on how collective learning can assist in the growth and development of individual learning and success. In studies such as this one, where attention is placed on people, ethics are one of the most important considerations to observe. Researchers have to make their potential informants fully aware that they seek information for research purposes. Therefore, researchers must make their potential informants adequately aware of what kind of information they need and how it will affect the informants, directly, or indirectly.⁸ In addition, researchers need to have informed consent from their potential informants, preferably in writing.⁹

Researchers must also maintain confidentiality of their informants' information unless informants indicate otherwise. Therefore, it is crucial to hide the identity of informants by using *pseudonyms* and to ensure that the context within which information is used cannot lead to the discovery of informants.¹⁰

Researchers also have to guard against bias in using informants' information. According to Ranjit Kumar, bias occurs when researchers deliberately hide certain findings, or when researchers "highlight something disproportionately to its true existence."

In addition, using information inappropriately, or twisting its original meaning, or context in which it was provided is unethical on the part of the researcher. Finally, with respect to this study, ethical clearance by the University of Pretoria, Ethics Committee will be sought.

⁸ Kumar, R. (2011) *Research Methodology: A Step-by-Step for Beginners*, London: SAGE, pp. 245-247.

⁹ Kumar, *Research Methodology*, p. 224.

¹⁰ Darlington and Scott, *Qualitative Research in Practice*, p. 30.

Results of Intervention: Descriptive Statistics

There are six faculties that participated in LCP; namely, Humanities (HUM), Education (EDU), Theology (THEO), Natural and Agricultural Sciences (NAS), Economic and Management Sciences (EMS) and Engineering, Built Environment and IT (EBIT). Each faculty has its own LCP group, with the number of participants varying from one faculty to the next. The number of participants range per faculty from a minimum of 8 to a maximum of 65 students. Various factors influence inconsistent participation of students and these are usually faculty specific. Through the interview sessions some students residing in Mamelodi, mostly from NAS, shared that the lack of transport to Hatfield is one of the greatest constraints blocking them from attending LCP sessions and other faculties such as EDU and THEO cited that timetable clashes affected attendance.

Using the criteria highlighted earlier in the section of "Programme Implementation" 968 students were invited to join the programme in 2017. From that number, only 300 students responded and agreed to be participants in LCP. The sample size for this study stands at 133 students, which is approximately 45% representation of active students in LCP; it represents the students who participated in the online survey. Below is a graph depicting the distribution of marks of students before and after joining LCP; furthermore it contrasts these findings with the overall performance of students who were invited to the programme and were actively attending the sessions. Additionally, a sample of 150 students were analysed to trace the academic success of students who were invited to LCP but did not respond and/or were inactive. Data is structured to show the distribution of marks and performance from each faculty.

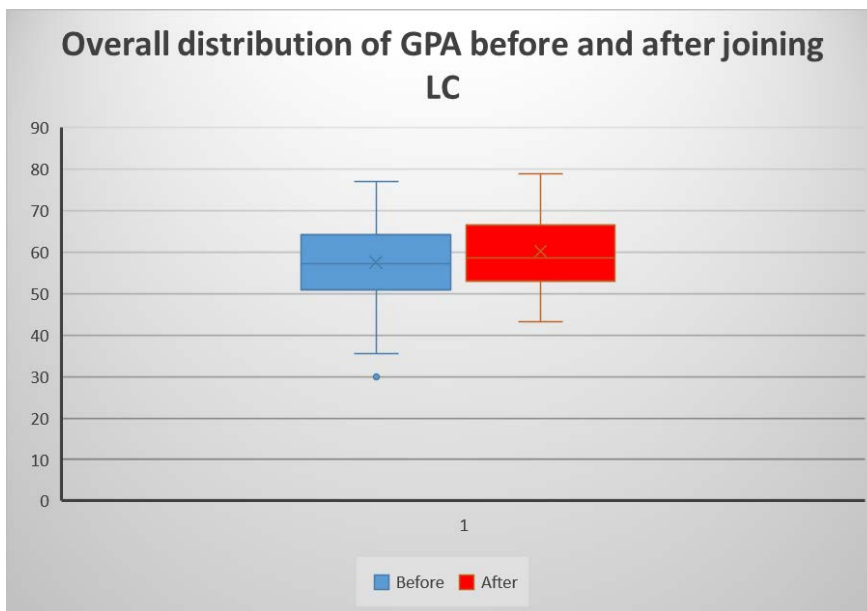


Figure 1

	Before	After
Min	30	29.86
Max	76.96	80.33
Average	57.5724186	61.195
Standard Deviation	9.517164249	9.0363

Table 1 : Summary statistics for GPA before and after joining LC

In Figure 1, the box plots show similar distributions for the marks of students before and after joining the LCP. However, there is a 3.6% increase in the average marks for students who participated in the program. The box plot also shows that there was an improvement in students' performance.

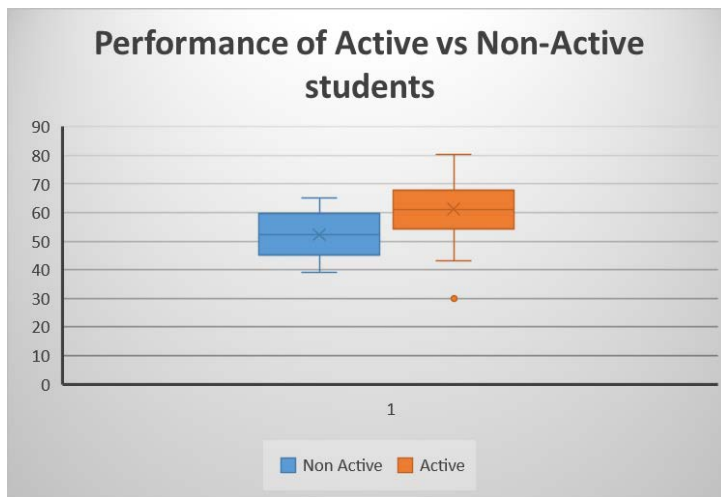


Figure 2

	Non-active	Active
Min	39.200	29.86
Max	64.929	80.33
Average	52.167	61.195
Standard Deviation	9.5172	9.0363

Table 2: Summary statistic on GPA of Non-active and Active students

Figure 2, compares the distribution of marks of students who were invited and agreed to join the programme, those who were active¹¹ and those who were not active. Table 2 summarises the statistics for these two groups. From the results it is evident that the students who were active outperformed students who were not active by 9.1%. These results demonstrate that LCP does improve and enhance the academic performance of those students who are active in the programme. Interestingly, students

¹¹ The definition of "active" in this context refers to students who were in attendance of the organised sessions of LCP; this information is corroborated by the attendance register which was signed at every session.

are not coerced into attendance but are rather prompted to attend due to the environment fostering a safe place and culture for learning.

Comparing Results by Faculty

	EBIT		Education		EMS		NAS		Humanities		Theology	
Year	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017
Min	44.19	29.86	37.66	52.60	30.00	43.25	35.60	45.83	43.04	45.00	55.00	65.00
Max	69.69	78.63	74.28	70.13	76.96	77.15	76.96	80.33	68.47	77.16	60.60	69.71
Average	58.11	59.43	59.22	60.11	58.35	59.91	57.02	62.09	52.11	59.78	57.07	66.66
Standard Deviation	8.05	12.30	12.26	5.40	10.71	9.64	9.08	8.63	11.21	11.61	3.07	1.88
Percentage Improvement		1.32		0.89		1.56		5.08		7.67		9.59

Table 3 Summary of results by faculty

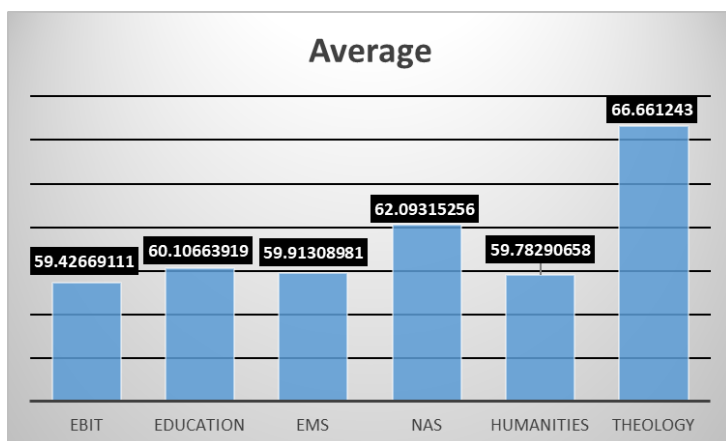


Figure 3: Average performance of intervention students by 2017

From the summary above – Table 3 and Figure 3 - we note an improvement in the students' marks after joining LCP for all the six faculties involved in the programme. Theology has the highest improvement rate of up to 9.6%, as well as the highest performance in 2017 with an average of 67%. NAS faculty records the second highest performance in 2017 with an average of 62%. However, it comes third on improvement with 5% improvement. Also worth noting, while EBIT, EMS and NAS do not reflect the highest overall performance students are scoring individual Grade Point Averages (GPA) greater than 75%; which is contrary to the most improved faculty which gives a range of 65 – 69%.

Impact of LCP on Students

Students have varied opinions on the impact of LCP on their academic performance as well as mental and social wellness and their integration into the university space. Below are results from the sampled 133 students who were asked if LCP had a positive impact on their university journey.

As Figure 4.1 shows, a large proportion of the students (74%) responded with a "Yes", LCP has had a positive impact on their academic performance. This indicates that their involvement and engagement with LCP has positively impacted and enhanced their performance. A further 20% of the student proportion said "Maybe" their involvement with LCP did have a positive impact on their academic performance. The last 6% said LCP did not have a positive impact on their academic performance.

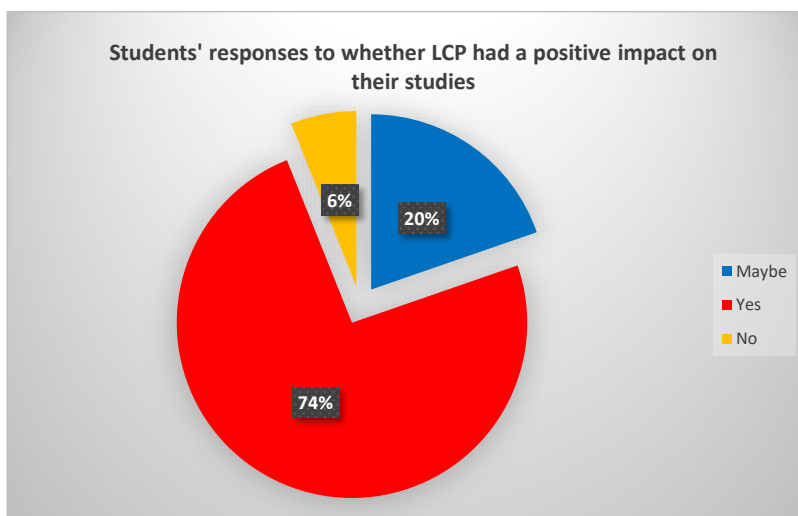


Figure 4.1

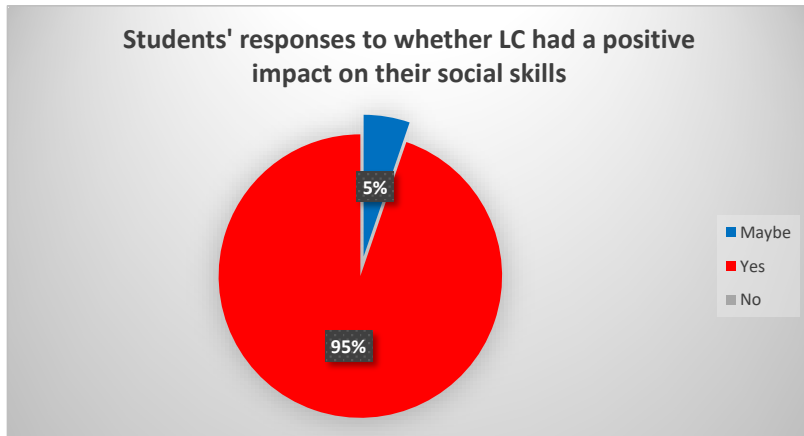


Figure 4.2

In Figure 4.2, 95% students responded “Yes” to the positive impact of LCP on their social welfare and integration into the university community. These relations include the fostering of new friendships with peers and also the confidence to engage with lecturers in the classrooms. On the hand 5% responded negatively, stating that their social welfare was not enhanced through participating in LCP.

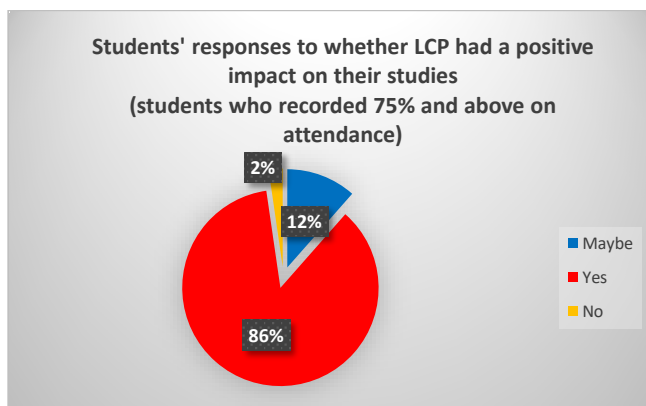


Figure 5.1

For the results represented in Figure 5.1, consideration was only given to those who attended the LCP sessions, focusing particularly on average >75% monthly sessions attended, results were as follows:

A great proportion of students (86%) responded that “Yes” LCP had a positive impact on their academic performance. A further 12% of the students said that their involvement with LCP could have

possibly had a positive impact on their academic performance. Finally, only 2% said LCP had no positive impact on their academic performance.

Below, Figure 5.2 shows the responses pertaining to the impact of LCP on the social welfare and social skills of students with an average attendance >75%. The majority (99%) responded that their involvement in LCP has positively enhanced their social welfare and social skills. However, (1%) responded that LCP did not have a positive impact on their social welfare and skills.

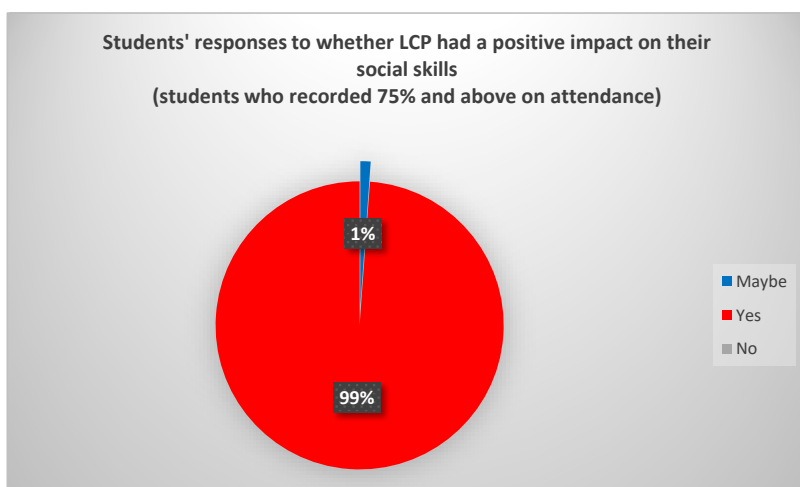


Figure 5.2

Relationships

Various external factors influence the performance of students and their ability to learn. This section explores the relationship between the GPA of the 133 sampled students and factors such as the rate of attendance (number of monthly sessions attended) and the type of funding (student loan versus bursary); and how these affect the academic success of students.

Attendance is a very important aspect in every academic environment. For most students it has a direct correlation with the student's grade at the end of their academic year. LCP offers weekly sessions which means there are 4 sessions in a month. Students were asked how many sessions they attend in a month; this information was corroborated with the attendance register. The results below, Figure 6, summarise the relationship between the average marks of students and the number of sessions they attend in a month.

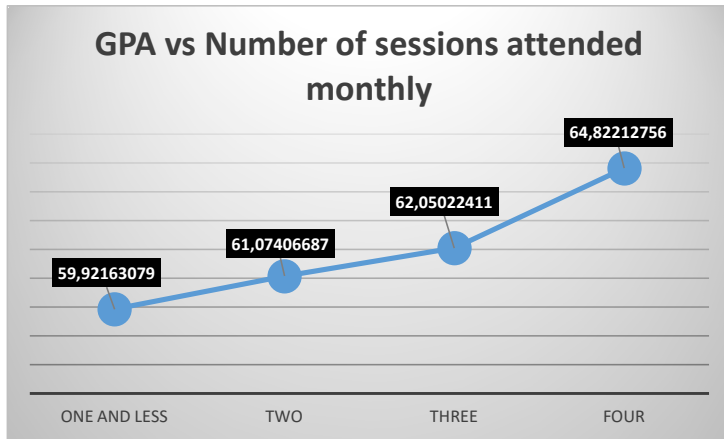


Figure 6

From Figure 6 above, it is clear that there is a strong positive relationship between the number of sessions a student attends and their GPA. This means the more a student attends, the more likely that their GPA will be higher.

Another factor that plays a pivotal role in a student's academic career in university is financial security (i.e. tuition and accommodation). Below, Table 6 is a summary of how LCP students fund their studies. It can be seen that a vast majority of students (65% of the sample) use NSFAS/Scholarship/Loans to fund their tuition.

Type of funding	Counts	Percentage
No Funding	8	6.0
NSFAS/Scholarship/Loans	86	64.7
Parents/Guardians	20	15.0
Bursary	19	14.3

Table 6 Percentages of students who use the different types of funding

Figure 7, below shows how students with different types of funding perform. From the graph, it is evident that the highest performing students are students who are either funded by NSFAS, scholarships or have loans. Surprisingly, the second highest performing are those with no funding. The least performing students are students that are funded by their parents/guardians.

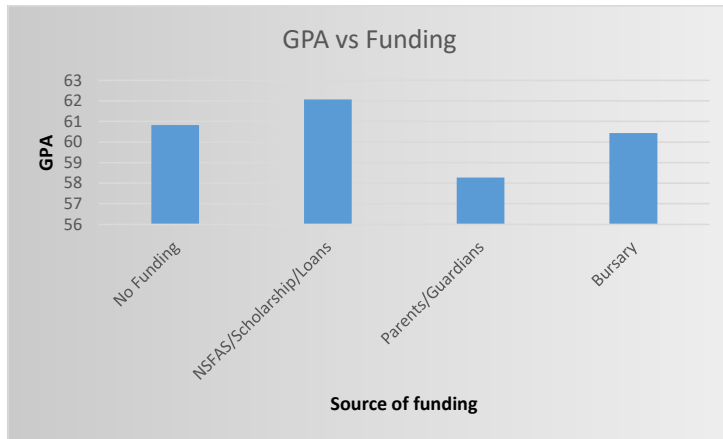


Figure 7

Inference

The aim of the study is to examine and assess whether the learning environment provided by LCP improves the overall welfare of the student therefore resulting in enhanced academic success. Based on the descriptive statistics outlined in the above sections, a definitive conclusion cannot be reached. The descriptive results are based on a sample of LCP participants and not its entire population thus bias of the results cannot be discounted. In this section we make generalisations about the population of LCP student participants using our sample data. We use inferential statistics to draw conclusions from quantitative data collected. . We perform certain statistical tests to validate these generalisations. Two generalisations are checked in this study. The first hypothesis is that performance of students improves after joining LCP. The second hypothesis we test is that students who were invited to join LCP and were active participants outperformed their peers who were invited to join LCP but were inactive.

Commented [EM2]: Hypothesis?

To carry out statistical tests certain assumptions need to be made. In our case we are dealing with tests on the averages for which a suitable test is the t-test¹², assumptions on normality of the data were checked and it was found that they are met. Therefore, for both the tests we are interested in, we will perform the t-test.

Test on Improvement of Participating Students

In the previous section, the descriptive study showed a 3.6% improvement on the marks. With the information received from the sample, a question that can be asked is: "is this 3.6% significant enough to suggest an improvement on the entire population?" We perform a test on the difference between the GPA before joining LCP and the GPA after joining LCP. We test the null hypothesis that there is no difference in GPA scores against an alternative hypothesis that there was an improvement in the GPA scores. This test is done by first taking the difference between the GPA scores and the test is done on

¹² Boneau, C.A., 1960. The Effects of Violations of Assumptions Underlying the T-Test. *Psychological Bulletin*, 57(1), p.49.

the difference variable $D = GPA_{after} - GPA_{before}$. This test is known as the matched pairs-test¹³³. Below we give the test statistic and associated p-value which helped us reach a conclusion.

Test statistic	3.0674
p-value	0.0014

The above results suggest that we can reject the null hypothesis. That is, we have sufficient evidence to support that the sample information shows that there is significant improvement in the results of the entire population of LCP students. The same test can be done for the different faculties as well.

Test on Difference between Active and Non-Active Students

It was seen in the descriptive statistics that the sample of 133 active students outperformed the sample of 150 non-active students. We now test the claim that there is no difference between the two groups against our research that the active group outperforms the non-active group. This test is done by comparing the averages of the two groups of students.

Below we give the test statistic and associated p-value which help us conclude.

Test statistic	8.0161
p-value	1.0000

The above results suggest that we can reject the null in favour of the alternate hypothesis. Thus, we have sufficient evidence to support the argument that active students do outperform non-active students.

Discussion of Results

The results from the intervention and descriptive statistics suggest that there has been an improvement in the academic performance of students who participated in LCP. However, there was an overwhelmingly positive response pertaining to the improvement on the social welfare of students due to LCP. The study itself, considering both the survey results and interviews, can be analysed using the learning theories as explored earlier described by Higgins and Bielaczyc. During the interviews, many of the students expressed that the environment created by LCP assists in complementing and enhancing their learning process since peer learning is less structured in hierarchical forms. What is evident is that there is a dialectical relationship between academic success, and social and mental wellness of students.

Theories explaining the process of learning also use a dialectical logic by dividing the process, according to Higgins *et al*, to the *cognitive dimensions of learning* and *sociocultural learning*. The cognitive component of learning focuses on the individual's capacity to engage with information and the process of learning using the data and content to be studied. The benefits of being part of a learning group is that the road towards problem-solving of classwork and assignments can be achieved using a collaborative effort, which ultimately also teaches the individual new possible and creative ways of approaching their academic work. The *social-constructivist* argument contends the theory of

¹³ Johnson, R.A. and Statistics, G.B., 2000. *Principles and Methods*. New York: John.

individual learning by stating that it is flawed and is not a true reflection of learning since it is representative of those students who have the ability to absorb information in a conservatively structured curriculum only. This is not to say that there is fault in students who learn within such structures, instead it problematises the blanket approach for all students in a classroom. Moreover, *social-constructivism* argues that people do not learn through assimilating information, instead they learn more when they are active in the knowledge construction process. Knowledge-construction is not an isolated process; rather it is linked closely with the external environment and the culture it represents.¹⁴

Students who participated in LCP mentioned during the interviews that one of the important lessons they learnt during the sessions was the process of knowledge construction, since they actively participate with their peers towards solving a problem. Many also stated that being surrounded by like-minded peers with similar academic struggles equally motivated them to not give up and to work even harder towards solving the problem. Additionally, many expressed that it always felt like an individual and collective victory when problems were solved within those sessions. This demonstrates that without realising it, these students were involved in a process of *learning-to-learn*¹⁵; the argument is that students are most likely to learn skills from others whom they hold in high esteem; in this case it would be the coordinators. Students voluntarily attend the LCP sessions and for the more eager students, the prospect of becoming a coordinator for LCP motivates them to work even harder towards performing well academically. At the core of this ambition is to give back to the UP community in the same way that they were supported. Interestingly, during the interview sessions many students demonstrated the sense of leadership and the ability to synthesise multiple perspectives.

Inasmuch as students who were active in LCP demonstrated an increase in academic performance, particularly individual performance, the group average marks could be improved further. Some students expressed that the sessions were not always beneficial as there was a limitation to the scope of content that could be engaged in depending on the strengths of the LCC. This leads us to the discussion on frameworks for viewing learning communities as reviewed by Bielaczyc and Collins.

The design of the learning environment is structurally flawed if its tenets are limited to the classroom space. For a learning community to be successful it is important for the learning activities to nurture the process of individual and collaborative knowledge construction and sharing; these activities can build on those of the classroom. Emphasis on redesigning the learning environment becomes important in an environment of learning communities since it dismantles power hierarchies; LCCs facilitate and are actively involved in the process of problem-solving with students. One of the fascinating observations is that an individual can simultaneously be LCC and student participant for different sessions. In faculties such as NAS and EBIT this phenomenon is highly prevalent since their 2nd year sessions are as vibrant and necessary as their 1st year sessions. LCCs who were former student participants in the programme demonstrated a much more in-depth understanding of LCP and empathy towards students. Their passion is reflected on the attendance rate of the sessions they facilitate. Thus it can be assumed that students who are most likely to have an efficient impact during their LCP sessions are those who were formerly part of the sessions as students themselves and therefore embody the culture of learning in a collaborative method.

The social aspect of an individual's life has an impact on their learning abilities and engagements; these extend beyond just the private space but are inclusive of community spaces. For Higgins these

¹⁴ Bielaczyc and Collins. "Learning Communities in Classrooms", p. 2

¹⁵ Ibid., p. 3

are categorised as *sociocultural* dimensions of learning. Constructing knowledge and learning requires that varied forms of data and information are used to synthesise multiple perspectives and solutions. A *multi-cultural* approach teaches students the skills of working collaboratively with individuals from different backgrounds with a common goal of learning. These skills can be transposed into the everyday existence of a student and further contribute positively towards their mental health. LCP organises students from various cultural, financial and social backgrounds to work together and teach each other problem-solving skills related to both their academic and interpersonal performance. Within these groups students become central and have the ability to mould their individual identity within and without clashing with the collective identity; since both are anchored in the principle of developing the culture of learning.

Most LCP students who were active in the programme stated that they developed long-lasting friendships with their peers. This is positive, in that students from first year have a peer that they can be able to grow with and share challenges, which is very important for mental health which plays a critical role in the academic performance of students. The combination of the *cognitive dimensions* and *sociocultural learning* theories is used in LCP. The benefits related to such an approach have been that the learning community environment has created a platform for students to deal with complex issues and problem solving while constantly negotiating space of diverse backgrounds and perspectives. The challenge that LCP now faces is that of ensuring that this integrated process finds better translation and implementation within the sessions. Indeed, there has been improvement and enhancements in the academic performance and welfare of students who are active in LCP; however there is great room for improvement which demands an in-depth analysis on the implementation of the programme and efficient methods to improve academic performance. The basic goal, however, of keeping the student away from exclusion and dropping out is consistent.

Challenges Faced

Administration

The programme is currently under-resourced and may potentially be discontinued. Discontinuation of the programme would have a negative impact on the many students who could potentially benefit from the additional support offered in an informal and peer learning environment, which will consequently have a negative effect on the FLY@UP initiative and the UP 2025 Vision.

Table showing the resources available versus the resources needed for LCP to yield the best possible outcome and to continue with the agenda of SSP:

Current Budget (Rand)	Actuals (Rand)	Shortfall (Rand)	Description
4,000.00	6,200.00	-2,200.00	Printing
5,000.00	12,000.00	-7,000.00	Transport
6,000.00	45,000.00	-39,000.00	Refreshments
60,000.00	400,000.00	-360,000.00	Salaries
40,000.00	8,000.00	+32,000.00	Workshops

Table 7: Resources available versus resources needed

LCP cannot operate in a vacuum and without the integration of faculties into the programme. Inasmuch as it is important for students to organise themselves in groups to facilitate the process of learning, administrative organisations directly working with the academic performance of students can work collaboratively towards ensuring that projects aimed at providing student support complement each other. Currently, LCP is experiencing resistance from faculties which makes it

difficult for LCCs to facilitate sessions that are aligned with the curriculum and academic needs of students. Additionally, there is minimum institutional backing and support of the project despite its alignment with FLY@UP and UP 2015 Vision. This has negatively affected the ability for the Department of Student Affairs to conduct research on the learning and educational practices at the University of Pretoria, especially tracing the efficacy of the support methods readily available to students. The lack of monitoring and evaluation of performance of students and projects will eventually lead to the discontinuation of important programmes such as LCP which most students interviewed expressed as highly unfavourable.

LCP Sessions

Many students had no issues with the structure of the LCP sessions; however, there were some students from the faculty of EMS who expressed that these sessions are exclusionary in that they find themselves frequently doing the same subjects. Others went further to state that their IM-PACT subjects were never covered during the sessions making it difficult for them to perform well in those subjects.

LCCs often complained about lack of consistency and preparation from the students; students complained about the lack of preparation by LCCs. Evidently, both students and LCC members observed the root cause for the oddly structured sessions on a lack of training of LCCs and a not clearly defined role that LCCs are to play as facilitators of the learning process during the sessions. LCC observed that there are attendance trends and patterns; sessions have a higher rate of attendance in the week of semester tests or examinations. This, of course, may have an impact on the students who attend frequently as there is a shift in environment and pace in the sessions resulting in a renegotiation of space. Part of the cause for a marginal improvement of active and partially active students may be linked to this inconsistency in attendance. Therefore making it difficult to adequately access and reflect on the true benefits of a learning community.

Another challenge for faculties such as EDU and EBIT is that the LCP sessions are hosted during the week and clash with classes in the academic calendar. There is a possibility that some students invited to join LCP end up not doing so due to timetable clashes. This issue can be resolvable with assistance from the faculties or through the process of moving the sessions to the weekend.

Another factor constraining effective implementation of LCP is linked to the lack of accountability of LCCs. One of the suggestions placed on the table by some students was that goals should be set for LCCs and those who fail to meet those goals must be sanctioned. A critical principle in learning communities is building and honing the leadership skills of individual students and insist on accountability and deliverables.

Concluding Remarks: Lessons of Experience

This study was tracking specifically the academic performance and welfare of students who were participants in LCP in 2017. Some of these students were not new to the programme and were either in their 2nd year of LCP or had become LCCs. Although the study focused specifically on the academic calendar of 2017, there is a level of continuity carried through by the project coordinator and those students who have participated in former years.

The descriptive statistics show that the average GPA from the six examined faculties were all below <67%. While this reflects positively with respect to academic performance and advancing to the next academic level, it brings into question the practicality of the expected results suggested by theories

on educational practices. These theories suggest that a multi-versal approach to education and learning leads to the optimisation of academic performance and knowledge construction. An expected output from plural platforms for educational engagement should yield academic excellence. Considering the descriptive data, students who attended more sessions performed better than those who did not. This suggests that many students have the potential to perform excellently in their academics provided they fully commit and apply themselves to the programme. The programme, as described earlier, integrates the practices of cognitive and sociocultural approaches towards learning; these require, like many programmes, consistency from participants to yield the best possible results.

Moving forward, an investigation should be conducted on the structure of the programme and its implementation, so as to improve attendance from students. Simultaneously, the administrative process should be tracked more closely because part of the crisis that occurred during sessions was linked to the unpreparedness of untrained LCCs. Critical to the preparedness of LCC is knowledge of curriculum and content of modules facilitated. There needs to be more variety of LCCs in a single faculty who will have the ability to assist students with more challenging questions and concepts.

On the whole, LCP has enhanced the academic performance and welfare of students who may have not survived within the institution and made it possible for those given another chance to find their feet and prove that they can make it in university. There are many life lessons that are learnt and taught to students by students through these sessions which are critical life skills that can be carried over into personal and professional life beyond the university space. The learning communities are not just spaces reserved for academic work but they provide a variety of skills that cut across various spheres of one's life and development. This platform is necessary for many students who require additional support outside the scope of just lecture halls and tutorials.