Research Article

Student Support and Transition Through a Buddy Programme to Foster Social Integration

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Abstract

The University of Pretoria (UP) began offering formal academic student support in 2011 when the first faculty student advisor (FSA) was appointed. Although many more FSAs were subsequently appointed, assistance to all the students in need of support remained insufficient. However, financial assistance through the collaboration grant received from the Department of Higher Education and Training in 2018 made it possible to explore new areas of support. The UP was able to pilot four innovations due to the availability of additional funds. These included generic workshops across faculties; the creation of a hub in the library, which served as a common contact point for students requiring assistance; the appointment of peer advisors; and a Buddy Programme for first-year students. This article explains the Buddy Programme as perceived by the senior students who mentored the first-year students. The mentors are known as "big buddies". Our work on this programme is based on Tinto's (1975) ideas about social integration. The Buddy Programme was introduced to assist first-year students in their transition from school to university life. This paper highlights the challenges that first-year students faced and it explains how the concepts could become institutionalised once university activities have been normalised in the post-pandemic future.

Keywords

Advising, mentoring, buddy system, peer support

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Background and Context

As part of our support to students, the University of Pretoria (UP) has a number of practices that address the academic and social aspects of a student's life (Kuh et al., 2005). The UP focuses on five spheres of student support that the institution regards as essential for student academic success, namely faculty student advisors (FSAs), tutors, mentors, academic orientation, and UPO[1] workshops.

In the context of interventions implemented to support students, this paper looks at a new initiative involving a buddy system introduced in 2019. The data was extracted from Naidoo and Kwenaite's (2019) more comprehensive research report on the evaluation of new interventions for student support. These new interventions (summarised later) were conceptualised in the context of those already existing.

Existing Interventions

The *FSAs* are responsible for academic development; they are managed by the office of the Deputy Director: Academic Development and Support, and by the deputy deans of teaching and learning in each faculty. The UP concurs with Troxel and Joslin (2018) that *advising* is an important touchpoint between the students as primary stakeholders and its learning mission. FSAs focus on first-year students, but they also provide academic advice to other undergraduate students who contact them.

The various departments provide *tutors* to all students who need additional support. Tutors are trained by both the academic departments and by the Department for Education Innovation. They are supervised in the faculties to ensure that their effectiveness is monitored and evaluated. FSAs are responsible for referring students who are struggling academically to tutors in their particular departments.

The Department of Student Affairs provides *mentors* to students who are identified by the Student Academic Readiness Survey (STARS),[2] which measures the non-cognitive, financial and academic needs of first-year students, as well as their potential risk of failing. The senior students who are members of house committees act as mentors in the residences. Mentorship programmes are meant to provide psychosocial support.

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1   University of Pretoria Orientation Programme (UPO) is an online academic orientation module intended to provide information and to assist first-year students to cope with the skills required for success at university level.

2   The Student Academic Readiness Survey assesses students' academic readiness by gauging their needs in fields such as motivation, well-being, integration and support, goal orientation, academic skills, anticipated / current academic involvement, and vocational identity. Based on the results, a programme consisting of peer mentoring and academic advising is developed to support students who are identified as being at risk of failure or withdrawal. The purpose of the programme is to facilitate the transition from school to university in order to have students fully integrated into the university environment within the first quarter of the first year.

Academic orientation is considered to be a high-impact practice (Kuh, 2008), which is applied to ensure student retention and success. It involves complementary co-curricular and curricular processes. A core element of academic orientation involves informing students about what it means to study at a research-intensive university.

As an extension of the one-week academic orientation programme, students complete a compulsory eight-week online module (called UPO), which is specific to their faculty. The aim of the UPO module is to assist students in making a successful transition from high school to university. According to Kuh et al. (2007), being academically underprepared for university-level work is one of the risk factors that threaten persistence and graduation from university.

Despite the increase in active FSAs from one in 2011 to eighteen in 2016, support to all the students who needed it was still insufficient. A serious concern was that, by 2018, only 45% of the 2016 cohort registered for three-year degrees, and 38% of the 2015 cohort registered for four-year degrees, graduated in the minimum time allocated for the completion of these degrees (University of Pretoria, 2020).

Tinto's integration theory (1975) requires that institutions channel support for both academic and social integration. Looking at the existing interventions until 2018, it is evident that the FSAs and tutors, together with academic orientation and UPO, have focused on academic aspects, whereas mentoring has provided support at the social level. A study undertaken at the UP (Eloff, 2020) showed that not enough attention was paid to student wellness.

In 2016, a campaign called *FLY@UP* (the Finish Line is Yours) was launched to encourage students and to enable them to graduate in the minimum time. This campaign provided a channel through which interventions to improve completion rates in the recommended minimum time could be facilitated.

The key messages that were consistently communicated to students emphasised the importance of maintaining a good semester mark, not dropping or changing modules unnecessarily, and registering for the correct number of credits in order to have a balanced credit load for completion in the minimum time. Perna and Thomas (2008), having scrutinised definitions of student success extensively, list ten indicators – two of which the FLY@UP campaign aimed to address. By focusing on academic readiness and on university achievement, academic performance and persistence to complete a degree were encompassed.

The interventions for student support, which were piloted in 2019, were aligned with the FLY@UP campaign and were guided by the UP Institutional Plan (2019, p. 15). This plan stated that "the adjustment of students to university life during the first six months following enrolment is a critical determinant of their progress and success." The formal messages to the students were of an academic nature, but they were also encouraged to enjoy the "fun" side of university life. Whereas all students were invited to participate in the campaign to take responsibility for their studies, the Buddy Programme aimed at making individual students aware that they were valued.

Interventions Piloted in 2019

FSAs and peer support interventions direct students towards resources to improve their quality of life in terms of their university careers. Some of the aims of these interventions are to reduce the confusion and frustration experienced when access to resources is limited and students become disengaged (Henning et al., 2015).

At a workshop held with the FSAs on the findings of a benchmark study, it was established that many faculties were presenting workshops on the same topics to small groups of students. This seemed to be an inefficient use of the FSAs' time and it was decided that generic workshops would be offered to all students across the university. Topics covered included but were not limited to study skills, time management, understanding curricula, and motivation, all of which contribute to first-year success. This falls in line with Thalluri's (2016) focus on mass higher education.

The *hub* was established to give the FSAs more exposure and to encourage students to use their services. A desk was installed in the library, in full view of students on their way to the computers or when they were leaving the library.

The funds that were made available enabled the FSAs to employ senior students as peer advisors for the first time. The first criterion in the selection of peer advisors was that they had to have interacted with their FSAs in the past; therefore, the best person to select a peer advisor would be an FSA. These students attended to students' minor queries and also prioritised their challenges before they saw an FSA.

Although a mentorship programme already existed at the university, there was a need for a more inclusive programme to focus on the social integration of the first-year student. This took the form of a voluntary peer support programme called the "*FLY@UP Big Buddy Programme*". The "Buddy system" was introduced to help first-year students adapt to university life. This paper highlights the challenges that had to be overcome, and it offers suggestions about how the concepts could become institutionalised when university activities return to normal in the post-pandemic future.

The FLY@UP Big Buddy Programme

Findings based on evaluations (Mphanda, 2017, 2018) of the existing STARS mentorship programme show that the criteria used for the selection of the mentees, namely first-generation commuter students, who are aged younger than 21 and who are from a rural/township home environment, should be reviewed in favour of a voluntary or self-selection model. Some of the mentees incorrectly understood mentors to be similar to tutors (Mphanda, 2018) and they expected the tutors to assist with academic issues. The main difference between the STARS mentorship programme and the FLY@UP Big Buddy Programme was that participation by first-year students in the latter programme was voluntary.

The intention was to enable the big buddies to create a safe and friendly environment in which to listen to the problems encountered by the first-year students. The aim was therefore to complement university services and to inform students of what was available. Being familiar with university life, the senior students could promptly identify those who were not adapting or who were struggling (Ford, 2015). In many cases, big buddies are the first to discover student challenges and they can alert professional staff so that problems can be addressed before they cause students to drop out (Tinto, 2012).

Methodology

The larger research was undertaken to explore the effectiveness of academic student support interventions implemented in 2019. This paper looks at the Buddy Programme as a case study of the support offered to first-year students; it evaluates the Buddy Programme based on the experiences of the participating big buddies. It is limited to examining the perceptions of the big buddies. Salkind (2010) refers to case studies as the inquiry into a bounded entity by examining the entity in its social and cultural context.

A qualitative research methodology was used for this research, i.e. descriptive data were obtained by collecting "people's own words" through which researchers "develop concepts, insights, and understandings from patterns in the data" (Taylor et al., 2015, p. 18). This differs from gathering data that can be used to evaluate a predetermined model, hypothesis, or theory (Taylor et al., 2015). Thus, this research uses data collection methods that aim to gather data directly from its subjects to gain insight into the Buddy Programme.

The FLY@UP Big Buddy Programme, hereafter referred to as the Buddy Programme, was introduced to give first-year students the opportunity to opt for support through contact with a senior student. The senior students were referred to as the "big buddies", whereas the first-year students were the "new buddies". Kuh et al. (2005) and Tinto (1975) emphasise that both academic and social support are required to enable a student to succeed. Universities are increasingly becoming aware of the need to support students holistically as they grapple with the various elements that have a bearing on their motivation to learn (Ford, 2015). Peer relationships foster a feeling of security and belonging in student groups, which can affect students' experience of the university, their attachment to the institution, and their academic performance as they adapt to university life (Ford, 2015).

Big buddies were invited to assist the new buddies through their transitioning process. A major criterion was those big buddies needed to have attained an average of 60% in their studies. In 2018, 1 000 students volunteered to become buddies in 2019. These students were contacted in January 2019 and they were invited to participate in a training day before the Buddy Programme began.

Three hundred big buddies responded and they were trained to receive the new buddies on 1 February 2019. Big buddies were informed of the purpose of the programme and its relation

to the FLY@UP campaign. They were also introduced to the growth mind-set (Dweck, 2015), and how it could bring about a paradigm shift in a student's thinking. In addition, the training included a focus on student wellness and on the ability to study effectively. A session on listening was also presented to prepare the big buddies to take on the role of listener. Towards the end of February, once the new students had indicated their fields of interest and what they would be studying, an electronic sorting process was used to match three new students with each big buddy.

The first-year students completed a survey in UPO so that those without a mentor could indicate whether they would like to have a big buddy. This method of self-identification was necessary to start developing agency in the first-year students. The questions put to the students took the form of screening. The students in the residences who were automatically allocated to a mentor, and the STARS students to whom a mentor was allocated by the Department of Student Affairs, were filtered out. The first-time day-students received an opportunity to be supported by a senior student should they wish to do so. Only UPO modules offered on the Hatfield Campus were included in this pilot programme to ensure that the logistics would be manageable.

Ultimately, there were 250 big buddies supporting 752 new buddies. In mid-March, each big buddy received a voucher to take the new buddies for coffee. At the time when the vouchers were handed over, the students were taken through some ice-breaker exercises which they could do with the new buddies. Relevant 'dos and don'ts' were also discussed with them. The purpose of the vouchers and the exercises was to empower the big buddies to take a leadership role.

In April, the big buddies submitted their feedback through an online survey, after which second vouchers were made available. At this stage, when groups arrived to collect the vouchers, focus group interviews were held to discuss possible solutions to their challenges. Pairs of big buddies were asked to introduce all their new buddies to each other so that the new students could have a larger pool of peers with whom to interact. It was left to the big buddies to choose with whom to pair. In May/June the big buddies received data vouchers to enable them to contact the new buddies through WhatsApp to provide support during the examination period, as the big buddies were focusing on their own studies; they might not have had time to meet them in person.

Limitations

Since this was a pilot programme, the implementation of the Buddy Programme focused on the campus housing six of the nine faculties, which favoured easy programme management. A further reason for the limited focus was that the Health Science Faculty already had an established mentorship programme for its students.

This study focuses on the perceptions of the big buddies. Without buy-in from the big buddies and their willingness to improve the experiences of the new students, the Buddy Programme would not have been possible. However, the stakeholders included the new buddies and it is acknowledged that feedback received from them can improve the programme. As a first stage, it was necessary to consider the opinions of the big buddies, but future research will include feedback from the new buddies.

Data Collection

Primarily, data was collected by way of three online surveys, which will be referred to as Surveys A, B, and C. These surveys were administered to big buddies by using Google Forms. Data concerning the big buddies' perceptions of their interventions were collected using semi-structured interviews. These focus group interviews were conducted with the big buddies at the end of each session when they collected the vouchers for the next phase. The interview discussions revolved around the challenges that big buddies had experienced in attempting to meet their new buddies. Participants offered solutions to their groups to improve the implementation process.

Ethical clearance for this study was covered by a larger process of ethical clearance obtained under the STARS project. The data collected was analysed by determining common themes that emanated from the students' responses.

Results

Big buddies were requested to complete three online surveys in which they reflected on three aspects of the programme, namely on feedback after their first and second face-to-face meetings, and on feedback concerning their WhatsApp communication. Table 1 below shows the participation rate for each survey.

Table 1

Big Buddy Participation per Survey

| Survey	Faculty	Total number of big buddies	Number of completed surveys	%
SURVEY A Feedback: Meeting between big buddies and new buddies	EBIT	46	42	91%
	EMS	68	64	94%
	HUM	48	46	96%
	LAW	22	19	86%
	NAS	61	52	85%
	THEO	7	6	86%
TOTAL		**252**	**229**	**91%**
SURVEY B Second–quarter feedback	EBIT	46	41	89%
	EMS	68	55	81%
	HUM	48	38	79%
	LAW	22	18	82%
	NAS	61	51	84%
	THEO	7	5	71%
TOTAL		**252**	**208**	**83%**
SURVEY C Final feedback: Buddy WhatsApp communication	EBIT	46	17	37%
	EMS	68	15	22%
	HUM	48	17	35%
	LAW	22	6	27%
	NAS	61	14	23%
	THEO	7	1	14%
TOTAL		**252**	**70**	**28%**

There was a high participation rate for the first survey, with 91% of the big buddies participating. For the next survey, the participation rate dropped by 8% to 83%. This was followed by a drastic drop of 55% in the participation rate for the final survey, with only 28% of the big buddies participating. However, the overall participation rate was well above average at 67%. The last survey was conducted during the examination period, which could explain the low participation rate.

Findings

The data analysis identified the big buddies' descriptions of the positives that they had experienced during the Buddy Programme as the main category of programme positives. Figure 1 illustrates the major themes that emerged from big buddies' descriptions of these positives.

Figure 1

Major Themes Emerging from Programme Positives
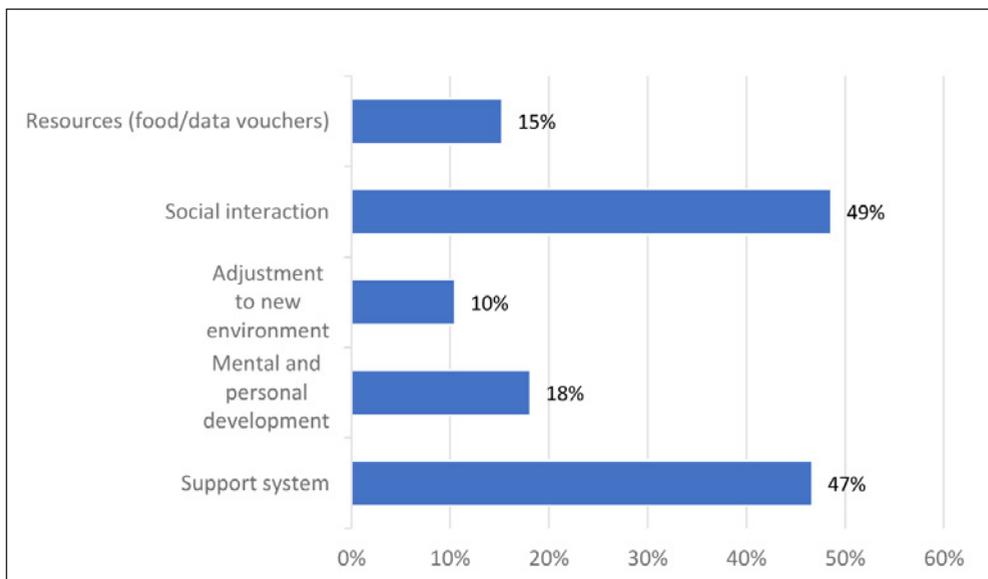
The most common positive theme that was identified related to the social interaction that the programme provided. Big buddies commented on how they enjoyed meeting new people, sharing their experiences with new buddies, getting to know someone, making new friends, learning about different cultures, and developing a sense of belonging. Two big buddies' comments suitably summarise these experiences in Figure 2 below.

Figure 2

Excerpts from Survey B Linked to Social Interaction

> "Meeting new people is good for me as I get to make friends, that is what me and buddies ended up, we are now friends."
>
> "… the fly buddy programme develops a community of mentees and mentors. It helps both the big buddy and the buddies to have a sense of belonging."

The second-most common positive was linked to the concept of a support system. Several big buddies saw the programme as an opportunity to help and support the new buddies by providing them with guidance and advice on how to face their challenges. This support system was also seen as a means of reassuring the new buddies that they were not alone. It also surfaced that some big buddies felt that it was good to give the new buddies the kind of support that they had not received as first-year students. Some big buddies pointed out that peer support was appreciated when students could meet without judgement, as indicated in Figure 3.

Figure 3

Excerpts from Survey A that Deal with the Concept of a Support System

> "Having peers that support you and each other, you don't feel alone."
>
> "The fact that we meet up with students and discuss challenges we are facing in school without judgement. The buddy programme is a safe group for the strong and the vulnerable."
>
> "… give buddies advice regarding university stuff that they would otherwise not know, for example the impact of deregistering a module, the value of attending tutorials and to consult with lecturers and stuff that will await them in future years, for example vacation work and bursaries."

The theme of personal development included elements described by big buddies as relating to mental well-being and development, motivation, positive impact, fulfilment and the development of new skills as a result of being a part of the Buddy Programme. Some big buddies described how they were able to motivate the new buddies not to give up or to work hard, who allowed them and their new buddies to develop and to feel empowered. Several big buddies said that helping others gave them a sense of fulfilment.

Figure 4

Excerpts from Survey B that Express Positives Linked to Personal Development

"Motivating first-year students that they should not give up."

"It's rewarding to see students open up to you about what's letting them down and how they feel about certain things and seeing their paradigm shift once you are done talking to them."

"You learn so much about yourself, benefit from a sense of fulfilment and personal growth … leadership skills and gain a personal sense of satisfaction from knowing that I helped someone."

Some of the big buddies appreciated being given resources such as data and food vouchers, which contributed to creating a conducive social setting in which the buddies could meet and interact.

Figure 5

Excerpts from Survey B Linked to Having Resources

"The fact that they give us vouchers to buy food, it really helps with coming together and also to break the silence if some of the members are shy."

"The food was a great way to bond and get to know the buddies."

"The best part is I get to meet with my buddies while we are having something to eat. It is not something formal, it is easy to meet with buddies in an environment that enables us to talk freely, and share jokes."

The theme about which the least was said, but which is nevertheless important, is the adjustment to a new environment. Some big buddies understand that first-year students have to make a "leap" from high school to university. These big buddies see their role as having to help the new buddies to adapt to university life, settle into a new environment, and cope with the transition.

Figure 6

Excerpts from Survey A and B Linked to Adjustment to a New Environment

"… helping them settle into a new space."

"… helps them cope with the transition from high school to university."

"Being able to help first-years cope with the jump from high school to university and helping them relax and find their footing"

"It also helps the students cope with the life in university, my first-year students' life in university is different from what they thought, so it is helpful to have a support system to help them get used to and manage it properly."

In general, the big buddies appreciated the opportunity to be involved in the programme; they stated that it was a valuable experience for them and that they believed that it was a good support platform for first-year students.

Figure 7

Excerpts from Survey C that Express Appreciation

"Thanks for a great awesome experience fly big buddies, this programme helped me to see life in a different perspective, and also it helped me to get out of my comfort zone."

"I would just like to thank you for this initiative! This helps students to deal with situations in a more effective manner because they know they have someone to advise them, or just to basically know that someone is there if they ever need a shoulder. The vouchers are such a nice initiative!"

"I think this is a great programme that helps a lot of first-years."

"The programme has a good setup. It isn't burdensome in that we only have to be people who give guidance and we can help the buddies get more help from the appropriate people if it is needed."

"The programme really helps the first-years feel welcomed and being taken care of. Also they have someone to talk to concerning any problems with access to some school facilities."

The feedback surveys asked the big buddies to reflect on what challenges they faced and what their greatest frustrations were. The five themes that emerged from the analysis of their responses are presented in Figure 8 below.

Figure 8

Major Themes Emerging from Big Buddies' Descriptions of Programme Challenges
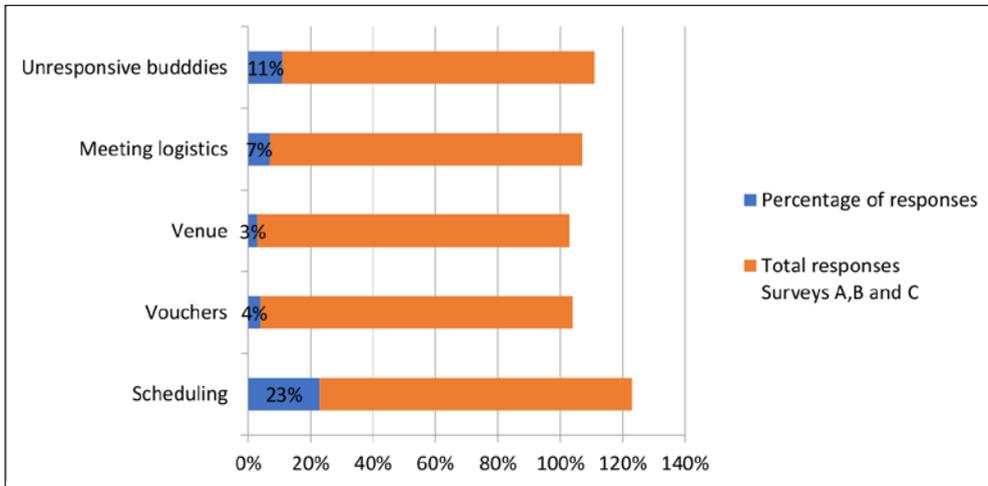
Scheduling was a major source of frustration to some big buddies who found it difficult to arrange meetings for times that would suit everyone, due to timetable clashes and busy schedules. In some cases, new buddies would arrive late for meetings, which put strain on the already limited time. Even though this was a common problem mentioned by big buddies, it was fairly insignificant at 23% of all responses in Surveys A, B, and C combined. A related problem was the issue of arranging physical meetings with group members. Some big buddies reported that new buddies sometimes cancelled meetings and in some cases, the big buddies were unable to keep their appointments with their groups. Some big buddies stated that new buddies were unresponsive, indifferent to the programme, and that they did not pay attention. This was attributed to the delayed commencement of this intervention. Consequently, some big buddies believed that their new buddies had already made friends (in some cases with senior students), had adjusted to university life, and that they no longer needed their support.

Very few big buddies experienced problems with the venues that were used for meetings with their new buddies (3%), and with the data vouchers that they received to use for communication with their buddies (4%). Complaints about the venues were that they were overcrowded and noisy. The main problem with the vouchers was that they had sometimes expired before they could be used.

Discussion

The overall experiences of the big buddies were positive. Several big buddies suggested that the programme should commence earlier than was the case in 2019. The buddies started meeting

after semester tests had begun, and several big buddies found it difficult to arrange meetings with their new buddies who were preoccupied with preparations for tests. Some big buddies suggested helping their new buddies with examination preparation skills. This suggestion can be directly linked to the timing of the commencement of the programme, and to their acute awareness of the stress levels experienced by new buddies at that time of year. However, it should be noted that such assistance would fall outside their ambit of peer support as they are not supposed to offer academic support.

Several big buddies suggested that quieter, less crowded venues should be made available for their meetings with new buddies. Big buddies realised that issues with unsuitable venues could have been diminished by simply collecting lunch from busy establishments and moving to a more conducive environment for interaction with their new buddies.

Some big buddies suggested that there should be more one-on-one meetings than group meetings to give new buddies the opportunity to discuss private matters that were causing them problems. Some of the questions suggested in their interactions were perceived to be impersonal and more like interview questions. They wanted to put their new buddies at ease and create a deeper connection with them but were unable to do so. Others suggested that they should have more face-to-face meetings with new buddies to be in a better position to attend to their specific needs. Although the programme did not limit the number of times when the big and new buddies could meet, the availability of funds could have given the impression that there should only be three sessions.

Lastly, several big buddies suggested that the data vouchers should be made available earlier than was done in 2019 so that they would have enough time to use them before the expiry date. Some suggested that the vouchers should be valid for both data and airtime to allow for more personal communication.

Recommendations and Conclusions

It is essential for an institution to organise its resources in a way that will encourage student engagement through which student experiences can be influenced (Kuh et al., 2007). The aim of this research was to examine the value of establishing a buddy programme as support for first-year students.

Ford (2015) highlights the importance of training and supervision in the execution of a peer support programme, as a person trying to help a peer may feel inadequate. This feeling of not being sufficiently prepared surfaced when a big buddy expressed disappointment about not being able to deal with a new buddy's emotional breakdown. The Buddy Programme tried to address this by providing the big buddies with initial training, and by requiring accountability from them through reports at every phase of their interaction with new buddies. However, this training should be more frequent and broader, and the

supervision needs to be more comprehensive.

In this pilot programme, information could only be shared with new buddies once they had registered and completed their academic orientation. A new pre-orientation programme has since been developed and established at the University. Potential students who participate in this pre-orientation should be able to request a buddy. The big buddies can then be allocated their new buddies before the academic year begins, and meetings with new buddies can take place during the academic orientation. This will prevent challenges in terms of time clashes and will help them to establish more meaningful connections before the commencement of semester tests.

Vouchers are a useful resource for big buddies. Their ability to invite their buddies for coffee gave them a sense of leadership as they were able to make decisions about where and when they could meet. A suggestion from the students regarding the data vouchers was that they should provide for both data and airtime to enable them to choose how to communicate with their new buddies. The type of vouchers to be provided needs a re-think in light of a post-pandemic learning environment.

Finally, any future programme needs to consider how to best support the big buddies, as the feedback clearly indicated a need for more support. Since the FSAs are best placed to support the big buddies in the faculties, a working relationship needs to be established between the big buddies and the FSAs.

The overall purpose of the interventions at the UP is to enable students to complete their studies in the minimum time. Although the majority of these interventions have had an academic basis in the past, it has become evident in recent years that there is a need to also consider the social aspects of support. To this end, the further development and impact of the Buddy Programme has relevance. With future implementation, it will be necessary to also document the perspectives of the new buddies.

Acknowledgements

References

Dweck, C. (2015). Growth mindset, revisited in commentary. *Education Week*, *35*(5), 20–24. https://www.edweek.org/leadership/opinion-carol-dweck-revisits-the-growth-mindset/2015/09

Eloff, I., & Graham, M. (2020). Measuring Mental Health and Wellbeing of South African Undergraduate Students. *Global Mental Health*, 7(e34), 1–10. https://doi.org/10.1017/gmh.2020.26

Ford, A. (2015). Oxford University Peer Support Programme: Addressing the wellbeing of students. In Henning, M. Krageloh, C. & Wong-Toi, G (Eds.), *Student motivation and quality of life in higher education* (pp. 167–174). Routledge.

Henning, M., Krageloh, C., Wong-Toi, G., Manalo, E., Billington, R., Gibbs, C., & Hawken, S. (2015). Synthesis of motivation to learn and quality of life. In M. Henning, C. Krageloh, & G. Wong-Toi (Eds.), *Student motivation and quality of life in higher education* (pp. 203–212). Routledge.

Kuh, G. (2008). High-impact educational practices: What are they, who has access to them and why they matter. *Association of American Colleges and Universities*. https://provost.tufts.edu/celt/files/High-Impact-Ed-Practices1.pdf

Kuh, G., Kinzie, J., Buckley, J., Bridges, B., & Hayek, J. (2007). *Piecing together the student success puzzle: Research, propositioins, and recommendations.* Wiley Periodicals Inc.

Kuh, G., Kinzie, J., Schuh, J. & Whitt, E. (2005). *Student success in college: Creating conditions that matter.* (1st ed.). Jossey Bass.

Mphanda, E. (2017). Evaluation of the STARS mentorship programme: 2017 cohort. Unpublished.

Mphanda, E. (2018). Evaluation of the STARS mentorship programme: 2018 cohort. Unpublished.

Naidoo, A., & Kwenaite, S. (2019). Evaluation of interventions for student support in 2019. Unpublished research project report.

Perna, L., & Thomas, S. (2008). *Theoretical perspectives on student success: Understanding the contributions of the disciplines.* Wiley Periodicals, Inc.

Salkind, N. J. (2010) (Ed). *Case Study in Encyclopaedia of Research Design*. SAGE Publications. https://methods.sagepub.com/reference/encyc-of-case-study-research.

Taylor, S., Boogdan, R., & De Vault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.

Thalluri, J. (2016). Bridging the gap to first-year health science: Early engagement enhances student satisfaction and success. *Student Success*, 7(1), 37–48. https://doi.org/10.5204/ssj.v7i1.305

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89–125. https://doi.org/10.3102%2F00346543045001089

Tinto, V. (2012). Completing college: Rethinking institutional action. University of Chicago Press.

Troxel, W., & Joslin, J. (2018). Epilogue. *New Directions in Higher Education,* 184, 107–108.

University of Pretoria. (2019). UP Institutional Plan 2019. University of Pretoria. Unpublished.

UP Cohort Statistics. (2021). Management Overview - Student qualification type grouping cohort 2020. Unpublished.