CONTEXTUALISED CRITICAL REFLECTIONS ON ACADEMIC DEVELOPMENT PRACTICES

Towards professional learning

EDITOR

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SI-based tutorial and mentoring programme: An integrated model

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INTRODUCTION

Improving the success and throughput rates in higher education has been a long-standing concern of institutions across the globe, and many strategies have been formulated to overcome the challenges, with varying degrees of success. These intervention strategies are broadly comprehended in the term “student academic support.” Although student academic support has many different definitions, there is consensus among researchers that it encapsulates a broad array of educational strategies intended to assist learners to become effective in their studies. Strategies include tutorial sessions, mentoring sessions, and supplemental instruction (SI) courses, as well as alternative ways of grouping, counselling, and instructing students. Depending on the context, academic support may be offered in terms of separate, semi-integrated, or integrated models (Crosling, Heagney & Thomas, 2009). At the strategic level, the integrated model means that students receive academic support as an essential element of the curriculum and coursework in each subject, instead of as a separate programme of assistance.

In this chapter, we argue for transitioning to the integrated SI based tutorial and mentoring model that we have been developing at Vaal University of Technology (VUT) since 2016. Our model is consistent with broader trends in academic development, where integration has been happening at the philosophical and theoretical level as well as at the strategic level (Quinn, 2012). The rationale behind transitioning to such student support programmes at VUT is that providing academic support in an integrated approach, at both theoretical and strategic levels, provides for the needs of the students in a gestalt way with high degrees of efficacy (as recorded in a considerable body of research).

At the practical level, it is near impossible to separate the academic and psycho-social aspects of students' engagement in their studies. As Balfanz, McPartland and Shaw (2002) demonstrate, an emotionally and socially mature student is more likely to do well academically. The integrated approach has proved valuable in helping to develop students' learning capacity in the following ways:

- instilling strong cognitive and practical skills;
- inculcating reasoning and thinking capabilities, as well as developing habits of critical thinking;
- significantly developing language and communication skills; and
- enhancing life skills and study skills. (Kloot, Case & Marshall, 2008)

Generally the term "academic support" may refer to a wide variety of instructional methods, academic support strategies, general educational services, and/or resources provided to students, in an effort to help them overcome their learning barriers, learn effectively, meet learning standards, or generally succeed in their quest to become graduates (see Balfanz et al., 2002; Kloot et al., 2008; Tinto, 1993; Tinto, 2012).

Key criticisms of student academic support practices include a myopic focus on "unprepared and underprepared" *students*, which, in the South African context, inevitably assumes racial connotations. Furthermore, student academic support has been locked, over time, on the deficit model. These two unsavoury factors have mired what was intended as a positive intervention mainly because of the implied underlying pejorative stigmatisation of students.

In this chapter, we demonstrate how we dealt with such vitiating aspects of student academic support when we began to rebuild the tutorial and mentoring programmes at our institution, which included not only their integration into the curricula and coursework of the faculties, but also the theoretical integration into our support practices of the principles of supplemental instruction (SI). The SI model of academic support was first developed at the University of Missouri, Kansas City, around 1973. The objective of the model is to identify and provide support in terms of those courses that are most challenging for students. SI refers to a student academic support programme that is tailor-made to promote engagement and effective study skills among students in "high-risk" tertiary subjects or courses (Hurley, Jacobs & Gilbert, 2006). Its key advantage is that it eliminates stigmatisation of underperforming students with its focus on underperforming subjects.

We also record here something of our personal journeys in the process of implementing the tutoring and mentoring programmes: how we got to hinge the programmes on SI, and the theoretical variations that emerged in our understandings of tutoring and mentoring as a result of the realities and dynamics of our institution.

We share our experiences and challenges as we implemented these two programmes, mainly through a decentralised implementation model. In terms of the tutorial system, continuous development of tutors through training and support is done at our Centre for Academic Development (CAD), whilst the recruitment, screening and selection, as well as payment of tutors, are conducted at the faculty level. In the mentoring programme, a more centralised model

is used, in that most of the undertakings concerning mentors – such as recruitment, screening, selection, training, continuous development, and payment – are done at CAD.

Broad overview of tertiary student support

Globally, universities utilise student support programmes to lessen the quagmire of low success and throughput rates. Most will typically use forms of student support that include mentoring and tutoring.

Mentoring seeks to facilitate the transition of first-year students into university and to contribute towards their personal, academic and social development. It does not operate only in the psycho-social space but also ventures into the academic space, with particular focus on developing students' study and time management skills. Typically, the mentor works with mentees in small groups, to enhance effective facilitation of these academic skills and promote students' move towards greater emotional and social maturity. Mentees attend mentoring sessions in addition to their normal academic classes.

Tutoring usually involves selected senior students giving assistance to mostly first- and second-year students, to improve their academic performance, and is thus subject-based (Lorenza, Casado-Muñoz & Collado-Fernández, 2013). Ngegebule, Molatlhegi, Tshaka and Mamadisa (2007) describe tutoring and the role of the tutor as a well-recognised form of student support, and its operation is predominantly in the academic rather than the psycho-social space.

Both tutoring and mentoring are widely utilised to help enhance throughput and retention especially of undergraduate students, although they are largely treated as separate programmes. Our view is that tutorial and mentoring programmes must be integrated in order to cater more effectively and efficiently for all aspects of student life.

Historical trajectory of student support at VUT

Our institution, founded as a college of advanced technical education in 1966, became the Vaal Triangle Technikon in 1979, and was elevated to a University of Technology in 2004. It is a multi-site institution with the main campus in Vanderbijlpark and other sites of delivery in Secunda, Daveyton, Sebokeng and Upington, and it comprises four faculties: Applied and Computer Sciences; Engineering and Technology; Human Sciences; and Management Sciences. It offers approximately 80 programmes and its Engineering programmes are well known for their quality and practical relevance.

VUT's Teaching and Learning policy (2016) requires that a system of mentors and/or tutors supporting first-year students should be implemented across all campuses, demonstrating that VUT values and recognises the importance of effective student academic support. In 2002, amidst low throughput and success rates, the institution had established a tutorial programme based on SI principles and provided in all faculties. Its implementation model was highly centralised and the programme served as a stand-alone. The mentoring programme was located within the Counselling Unit of the university and there was no relationship between the two programmes. This meant that the academic and psycho-social needs of students were met in different units

with no form of collaboration and different theoretical underpinnings. This created problems for students as they had to access these services at different physical locations. When Linda Mandewo was appointed to train tutors in 2012, she realised that there was a need to include the mentoring programme as part of her brief so that both academic and psycho-social needs of students could be met in one place, and thus she was enabled to reignite the moribund mentoring programme in 2013. When Sibongile Hlubi joined CAD in 2015, and we decided to work together in developing both programmes, we received SI training, but found we were unable to integrate it into our programmes apart from embracing its facilitation mode. Tebogo Kekana was roped in to help us integrate the theoretical foundations of SI into both programmes.

It was also important to align these programmes with the Teaching and Learning policy (2016) of VUT: we had to ensure that academic support would be a well-planned, effectively coordinated programme; available to all students; and form an integral part of the overall academic experience. The policy further states all support departments, coordinated by CAD, should be involved in the provision of support of different kinds to students, working closely with faculties and departments to ensure a coherent, coordinated support programme, available to all students, on all campuses, and integrated into the delivery of modules and programmes.

The policy also states that the work of mentoring should be carried out within a support framework of “learning communities,” which we established in 2015, although it was not properly conceptualised at that time. Efforts are under way to develop a deeper understanding of learning communities in the context of our students.

Unlike the mentoring programme, the tutorial programme is compulsory for all students. The tutorial programme at VUT is guided by the Tutor policy (2016), which defines tutors as senior students who have completed a minimum qualification of a bachelors or honours degree, have performed well academically, and are competent and equipped with knowledge, skills and values that enable them to assist and guide undergraduate students in their studies. Under the policy, CAD takes responsibility for the generic training of tutors while subject-specific training devolves on faculties, who also make tutor appointments and payments. Tutors are mainly allocated to first-year modules but are also used for at-risk second-year modules. At the third year and postgraduate level tutoring is arranged at the discretion of the department.

JOURNEYS TOWARDS OUR INTEGRATION MODEL

When the familiar becomes unfamiliar

by Linda Mandewo

I was appointed as Learning Development Coordinator (LDC) at CAD in September 2012. My main role in this position was to re-establish the tutorial system and the mentoring programme, which had become moribund. My responsibilities in the tutorial system involve training and continuous development of tutors. My responsibilities in the mentoring programme, on the other hand, focus on recruitment, screening, selection, training, continuous development, and payment of mentors. My interest in tutoring and mentoring students in a university setting started in the late 1990s in my position at another university, where my main roles involved training of both

mentors and tutors, course development, and community outreach, as well as collaboration with lecturers regarding tutoring and mentoring. Although the student demographic and university context there differed materially, the experience gained has been invaluable in developing my role at VUT, although it has required considerable adaptation of my previous experience and expertise.

VUT tends to attract students with average matriculation results and low socio-economic status, both of which demand a more sustained and integrated approach to the needs of students and the profile of education offered in the institution. In addition, such circumstances require a collaborative model rather than a “silo” approach to student support. Thus the model we seek to establish, which is cognisant of “the whole student,” recognises that the success of students is closely linked with support that considers all aspects of the student as a human being: that is, the academic, psycho-social and affective dimensions. These factors featured strongly in developing the model we share in this chapter, and points to the need we perceived, to move from offering “student support” to establishing a “learning community.” We have begun a collaborative research exercise that is intended to develop a learning community paradigm as a way forward for student support in higher education. It is my hope that, as we continually push into this still new, unexplored territory, our research and experience will result in insights relevant for tertiary contexts similar to ours.

Redrawing student support spaces

by Sibongile Hlubi

I was appointed as Tutor Development Coordinator (TDC) in CAD in March 2015. My main responsibilities within the VUT tutorial system involve training and continuous development of tutors, and in the mentoring programme my focus is on training only. My interest in student tutoring and mentoring at university level began during my previous work, over two decades, as a learner support educator within the basic education sector (which caters for primary and secondary education). In that context, my main role was to support learners with learning barriers, including differently-abled learners. The experience gained in providing support to these “disadvantaged” learners helped me realise the need to breach barriers between learning and emotional support. I came to the realisation that learning and emotional support require equal attention if students are to really benefit from any form of intervention. It was within this understanding that I saw value in the integration of the tutorial and mentoring programmes at VUT. Further key reasons for my insight were my experience of the situation at VUT coupled with my own similar experiences as a university student.

Universities can be quite alienating for students who struggle to cope emotionally and socially because of their socio-economic background and various other kinds of disabilities, which inevitably affect their academic performance. In this respect, a crucial element of student support at university level relates to the transition from school to university, which can be quite disempowering; yet can also open opportunities for growth when handled prudently. The first level of disempowerment that students experience in the transition from school to university lies in the fact that, a few weeks prior to university study, they had status as senior students at school but are suddenly relegated to lower status as first-year students in a much larger, more populous

institution with intimidating buildings and many unknown factors. Without proper orientation and support, even the brightest student may struggle academically if the psycho-social and affective adjustments are not handled satisfactorily. The second level of disempowerment in the transition to tertiary education relates to the imperative that accompanies first-year study: to exercise independence, and having to take decisions in which, previously, students would often have deferred to parents or teachers. The third level of disempowerment in the transition lies in the intimidating level and nature of the discourse of a university, which is substantially different from the home and school discourses that were familiar to the students (Kapp & Bangeni, 2011).

Another reason we advocate our integrated model is to promote inclusivity by catering for students with disabilities who would greatly benefit from an integrated approach to academic and psycho-social support. A holistic support mechanism helps all kinds of students to benefit socially and educationally, and serves as motivation to learn (Miller et al., 1995). We think the integrated student support model that is based on SI principles will bear fruit.

These factors shaped our understanding of the challenges that face first-year students, and led us to investigate the integrated model of student support we record in this chapter. They also made us focus on an extended orientation approach that goes beyond the first-year period. We found it more effective to decentralise the administration of this extended orientation programme into the faculties (as described more fully in chapter 9). In these initiatives, my colleagues and I have been renegotiating the boundaries of VUT's student support programmes and are now moving towards the "learning communities" spaces.

Grounding the integrated support programme

by Tebogo Kekana

I was appointed in VUT's CAD, as Manager for African Languages Development, in March 2017. My main contribution, in the formulation and recording of our experience as a CAD student support team, was to be a critical reader and to play the role of theoretically undergirding our research and writing process, a responsibility that devolved on me thanks to my experience in writing and research during my doctoral studies and various research publications. My contribution was further enriched by my previous involvement in the Centre for Academic Excellence at the University of Limpopo, where I had been a tutor and a research assistant. It was in the light of these experiences and the similarity of the socio-economic contexts of the two universities that I found the integrated approach to student support quite attractive. I had also developed a certain level of understanding of the academic support principles of supplemental instruction (SI), which we agreed should form the theoretical foundation for our integrated model.

UNDERSTANDING SI

Research studies in education across the globe reveal that students in institutions of higher learning are struggling with their studies due to an array of interrelated and intertwined factors. This challenge has led to a proliferation of intervention measures within the higher education landscape across the world. Supplemental instruction (SI) is one of these measures. SI-based

training is a student academic support programme conceptualised with the idea of helping students in modules or courses generally regarded as having a high risk in terms of failure rates, and thus of helping them to graduate. As shown in the research of Hurley, Jacobs and Gilbert (2006); Congos (2001); Blanc, DeBuhr and Martin (1983); and Latino and Unite (2012), the SI training model is most effective in tertiary institutions when integrated with tutoring and mentoring programmes. Students themselves report positive perceptions of the learning environment and reduced feelings of intimidation (Longfellow et al., 2008), embarrassment or inadequacy (Martin & Arendale, 1992). Student support in this model also demonstrates a positive effect on learning competencies and academic performance (Blanc et al., 1983; Ning & Downing, 2010).

The premise behind SI is that when students are given adequate, relevant, coherent, structured and efficient programmes that support their studies, the higher their chances of success, and as a consequence the better the throughput rates in the institutions of higher learning. The principles of SI draw from cognitive development theory, which emphasises the role of the student in constructing knowledge. Thus, the central idea espoused by the SI-based training programme is student engagement. In an SI-based training programme, senior students who have already passed a particular “high-risk” module are used to facilitate training sessions with junior students just embarking on the module. The senior students are screened and selected based on certain desirable attributes that are both social and academic. In other words, they are students who are doing well academically and are socially stable.

SI sessions are not a replacement of academic lectures but support them. Therefore, students attend both academic lectures and SI-based sessions. The SI-based training sessions are participatory and collaborative, as the senior students/ facilitators in the SI-based training programme do not teach or lecture, but only facilitate. Furthermore, they do not provide answers during facilitation. Working with small groups of students, they encourage engagement: they strive to promote full participation of the students during the sessions.

SI facilitators go through a training process before being appointed to lead groups of students – this process is illustrated in Figure 7.1. Successful facilitators (senior students) can be promoted after a rigorous screening process to become SI leaders, one of the conditions of which is evidence of acceptable pass rates amongst the students who have been facilitated by them in the SI-based training programme. Each SI leader is responsible for training a group of selected facilitators from the overall group of facilitators, to assist them to become better facilitators. SI leaders also assist with student facilitation. The SI leaders themselves are from time to time trained by leader trainers, who also give training to the SI facilitators as and when needed. The leader trainers are staff employed by the institution, whereas the facilitators and the SI leaders are still students, working part-time.

Figure 7.1 The SI-based training model

Having shed some light on the features encapsulated in the SI model that are critical for improving academic student support initiatives in the context of tertiary institutions, we go on to delineate the similarities and variations between VUT's two student support programmes (tutoring and mentoring). It should be noted that these are juxtaposed and contrasted with the conditions required by an SI model, in the process of proposing a new integrated tutoring and mentoring model for VUT that will be more efficient and sustainable. The integrated approach to tutoring and mentoring combines both the academic and psycho-social aspects of student support thus (cognitively) instilling practical reasoning and thinking, and (conceptually) critical thinking, alongside language, communication, life skills and study skills, through the medium of the subject content (Kloot et al., 2008).

INCORPORATING SI THEORY INTO TUTORING AND MENTORING

It should be noted that, in most universities, tutoring and mentoring units represent discrete programmes with no clear linkages. At VUT the two programmes were initially treated as separate entities; but, as coordinators, we have brought about an integration of these programmes through our strongly collaborative approach, our common experiences and our insights.

Here, we provide an overview of the similarities and differences between the SI model and the tutorial and mentoring programmes that are currently in existence at VUT. One major difference between the SI training model and our tutorial and mentoring programmes is that SI emphasises that student groups should be relatively small, while at VUT the groups tend to be larger, especially in the tutoring programme. While at first this difference in group size appeared to hinder realisation of the SI-based approach in our system, we found a way through this challenge

by training our tutors to break the large groups into smaller ones and to facilitate small group discussions that can continue beyond the tutorial session. The mentoring programme generally consists of smaller groups, which helps to promote a more academic level of engagement once the mentoring programme ends.

This interrelationship between the mentoring and tutorial sessions requires careful training, and sustained monitoring and support, so that the facilitation roles are not conflated. Table 7.1 adumbrates similarities and differences between formal SI and our VUT programmes.

Table 7.1 SI ^a principles in VUT ^b tutoring and mentoring programmes		
Core aspects of SI training	Incorporated aspects of SI in VUT practice	
	Tutoring	Mentoring
<ul style="list-style-type: none">- Facilitation is required- Senior students are facilitators- Student groups are small- Focus is on high-risk aspects of subject/ course	<ul style="list-style-type: none">- Facilitation takes place- Senior students are facilitators- Student groups are large- Focus is on all subjects/ courses	<ul style="list-style-type: none">- Facilitation takes place- Senior students are facilitators- Student groups are small- Focus is on all subjects/ courses
	The vision for adapting current SI practice at VUT	
	Tutoring	Mentoring
	<ul style="list-style-type: none">- Provision of space for academic support- The tutor is empowered to give academic support- Lecturers are engaged in the process	<ul style="list-style-type: none">- Provision of psycho-social space- The mentor is empowered to give psycho-social support- Lecturers are engaged in the process
Notes: <i>a</i> Supplemental instruction. <i>b</i> Vaal University of Technology.		

The VUT Teaching and Learning policy (2016) requires that academic support must “be made available to all students as an integral part of the overall academic experience,” and thus the two student support programmes must cater for all students across all the subjects at VUT. The policy in fact refers to “the underprepared and unprepared” students; however, our model seeks to support all students irrespective of their relative academic performance. Furthermore, the new student support training model that we have come up with, and which integrates the tutorial and mentoring programmes, is underpinned by SI principles, and aims to cater for both academic and psycho-social needs of each student. Our underlying premise, drawn from SI, is that all students require these kinds of support. It is our intention to expand our model to cover all students – including postgraduates.

According to our observations and experiences, SI principles can be efficiently and sustainably applied in the context of conditions such as at VUT, where not only institutional resources but also the socio-economic conditions of our students are a serious challenge. Moreover, we see it as absolutely crucial that VUT establish an improved coherent, adequate, effective, holistic and

sustainable student support programme that integrates tutoring and mentoring, as we suggest in our integrated model.

Outline of our developing tutorial and mentoring model

At VUT, tutoring and mentoring became integrated through force of necessity, first, because only one academic development practitioner had been appointed in 2012 to revive and strengthen the two programmes. Secondly, when our second academic development practitioner was appointed in 2015 to take charge of tutoring, the two practitioners continued to work together and to develop these programmes in collaboration. Thirdly, both programmes are underpinned by SI principles. In the next section, we explore different aspects of our tutorial and mentoring programmes as they mapped out over time and we demonstrate the appropriateness of how they have been implemented in our context as an integrated whole. In our experience, the value of this integrated approach, and catering for both academic and psycho-social needs of students, is clear.

Conceptualising an integrated student support model

When she took over the tutorial and mentoring programmes, Linda Mandewo conducted research and benchmarked both programmes, which led her to establish the kind of programmes that were likely to address the specific contextual concerns at VUT.

Part of preparing to implement these tailor-made programmes included soliciting buy-in from the faculties. It also meant holding meetings with the Counselling Unit, to ensure that the form of mentoring envisaged (to be administered from CAD) would not encroach on the Counselling Unit's activities. This point is crucial to consider prior to implementation of any new initiatives. Furthermore, building support and securing buy-in for new initiatives without a track record of effectiveness can be a daunting task. However, with persistence, and thus over time, evidence of the effectiveness of the programmes increased support and buy-in, especially from the faculties, confirming the findings of research showing that students who experienced fewer psycho-social challenges had a higher chance of academic improvement (Sugai & Horner, 2009).

The mentoring programme started off in 2013 with 70 mentors who participated on a voluntary basis. Each of these mentors was responsible for 30 mentees, who together formed what we preferred to call a "learning community" (although poorly conceptualised at the time and still undergoing some analysis and development at the time of writing this chapter). This first group of mentors was appointed without prior screening but were supervised by Linda. That she was also responsible for tutor training meant that the workload was heavy to the point of compromising the quality of both programmes. The driving necessity, at the time, was to ensure that both programmes ran, and in such a way as to build evidence of effectiveness in increasing pass and throughput rates: in this way more resources could be committed to the programmes. Table 7.2 provides an overview of the activities of the mentoring programme.

Table 7.2 Activities of the mentoring programme during the academic year

Psycho-educational	Psycho-social/ emotional	Career exposure	Community engagement
<ul style="list-style-type: none">- Motivation for success- Goal setting- Time management- Learning styles- Facilitation skills- Study skills and summarising strategies- Exam/ Test preparation- Diversity- Memory & independent learning skills- Retrieval strategies- Stress management	<ul style="list-style-type: none">- Raising awareness of other outside classroom support services- Feeling safe around the campus- Referral to relevant student support services & structures	<ul style="list-style-type: none">- Mentors identify relevant career & educational organisations- Mentors plan trips to such places for mentees- Mentors invite relevant career motivational speakers	<ul style="list-style-type: none">- Mentors inculcate appreciation of community & value of "ploughing back"- Mentors plan trips to various community organisations where graduates can render their services for a day- Trips to communities offer graduates opportunities to develop ongoing relationships with them

In our opinion, the mentoring programme continues to the present to be generally undervalued as compared to the tutorial programme, which tends to receive bigger resource allocations. The disparity persists despite evidence that attention to the psycho-social needs of students are as vital to improving students' performance as accommodating their academic needs. A number of studies confirm that there is a connection between behavioural problems and academic failure, and this must be given close attention in student support initiatives (Barriga et al., 2002). It began to be demonstrated in our own experience that a well-managed and integrated approach to both academic and psycho-social aspects of students' challenges would yield positive results in terms of their achievements. While the mentoring programme had resources to reach an average of 2 500 first year students per annum, it was felt that the number of students reached could substantially increase once the mentoring and tutorial programmes were merged. We also noted that aspects of the mentoring programme required attention, and this strongly indicated the need for an integrated model for the programmes, which would also be beneficial in securing joint funding and sharing of resources.

The following issues gave impetus to our view that an integrated model stood a better chance of success than two separate programmes:

- Poor visibility of the mentors across the campus as the programme was not well promoted during orientation.
- No pamphlets/ posters during orientation to alert first year students to the availability of the mentoring programme.
- Poor accessibility of the programme owing to time-table clashes with mentees' classes.
- Poor attendance at those mentoring classes that ended late (especially after 17:00), as limited transport options are an issue for mentees.
- Communication barriers, especially for mentees who do not have smartphones.

There is a strong case to be made for our integrated model in respect of addressing the issues above. Our integrated model could ensure the following:

- Allocation of a slot in the timetable for both programmes.
- Equivalent roles for mentors and tutors.
- Equal access to lecturers for advice and guidance, by both tutors and mentees.
- A holistic benefit ratio for students.
- A more even allocation of resources.

The challenge facing us when we mooted an integrated model involved integration at the level of materials development for training, and continuous development of both tutors and mentors. While integration was fairly manageable at a theoretical level (as SI became the underlying theory), at a materials development level the challenges were quite complex. The following key issues became central in simplifying things for us:

- Definition of the tutor and mentor roles and responsibilities.
- The differing use of facilitation and questioning techniques in the two programmes; in each, these techniques are used in vastly different ways because the expected outcomes are different, thus lending different weights to each programme.
- Understanding diversity and inclusivity, and how to deal with them, in both programmes.
- Dealing with difficult situations in both programmes.
- Giving constructive feedback to mentees.

The guidelines for the two programmes had been developed separately: our integrated model demanded that we combine them. This has proved to be extremely difficult as there are no comparable models across the globe that we could trace in the literature. You could say we were trailblazing in this area.

There were also practical problems relating to our integrated model, as the tutorials involved facilitating large groups while mentoring catered for small groups: our design of the training guidelines had to take this issue into account. While VUT Tutorial policy declares that a tutorial group session should not exceed 30 students, the reality is that tutors operate with much larger groups. If the policy guidelines could be followed, both programmes would thrive on the small group facilitation.

Part of training in the integrated model would include preparing facilitators (tutors and mentors) on how to establish ground rules in sessions, how learning works, addressing and responding to cultural and language diversity, challenges of inclusivity, the cultivation of writing skills, and also the effective use of visual and other aids to improve attention and understanding.

The duration of training for tutors and mentors – customarily two to three days – would not be long enough for our integrated model: we recommend three to five days to allow for training on aspects common to both kinds of facilitation, as well as time for training on unique aspects of each mode of facilitation. Training of tutors and mentors had always included mock facilitation classes, which were evaluated by other colleagues within the Centre for Academic Development together with the existing tutors and mentors. This aspect of training would remain part of our integrated model. One of the ways of dealing with large classes, as with tutorials, is to encourage tutors to break the large groups into smaller ones and to allocate tasks to each smaller group,

with each smaller group then reporting back to the large group to wrap up. Under our integrated model, this would mean that tutors target specific areas of difficulty in the subject instead of trying to facilitate all aspects of the subject. This way, tutors would work closely with lecturers and monitor students' performance for areas of difficulty. Observation of live sessions, which have always formed part of the tutorial system, would be extended in our integrated model to cover the mentoring programme. A summary of the challenges in our facilitation programmes is presented in table 7.3 below.

Table 7.3 Summary of challenges experienced in the tutoring and mentoring programmes

Tutoring	Mentoring
<ul style="list-style-type: none">- Academic departments do not cooperate in terms of appointing tutors in time to train them- Tutor training groups are small, and this taxes the Coordinator, who must repeatedly do the same training over a long period in order to accommodate all the tutors- Tutorial groups include too large a number of students- It is difficult to find appropriate venues for tutorials- Tutors experience lack of supervisory support in performing tutoring activities- Perceived salary inequities result in tutors preferring to become mentors	<ul style="list-style-type: none">- Academic departments do not cooperate in the process of recruitment of senior students to be appointed as mentors- Mentors found that attendance at mentoring sessions, which are voluntary, was erratic- Mentoring sessions dealing with popular or “at risk” topics had to cope with a larger number of attendees than usual- It is difficult to find appropriate venues for mentoring sessions- Mentors' working hours often interfere with their own academic commitments- Mentors are expected to give support to mentees even during periods of unrest on campus

Our proposed integrated model

A diagrammatic representation of our integrated SI-based Tutoring and Mentoring model is demonstrated in Figure 7.2:

Figure 7.2 Our model for integrated student support

The emphasis of our model in Figure 7.2 is the idea of collaboration: in order for an academic student support programme to work effectively and in a sustainable manner, the three groups of facilitation stakeholders (lecturers, tutors and mentors) should work together in a coordinated manner. A summary of the aspects that are involved in such a model are presented in Table 7.1.

In our mentoring and tutoring model, underpinned by SI, the roles of each group of stakeholders are very critical. A principal role of the tutor is referral. Should tutors discover or observe that one of their students has a problem that is psycho-social in nature, the student must be referred to the mentor, whose role is to address that challenge; in the same way, the mentor refers a student with academic challenges back to the tutor. Another role of tutors is to identify the barriers to learning experienced by students with physical or learning disabilities, and refer them to the lecturer, who will in turn refer them to the relevant support service. Once a student's support needs have been assessed, feedback is provided to the lecturer, who then consults with the tutor on how to continue supporting the student, based on the need.

In our model, with respect to inclusivity, we do not want to view disability as an abnormality, but to make efforts to establish inclusive support strategies for our students' success (Moriña, 2017). Thus the referral role of each facilitation group is very crucial in this integrated model.

CONCLUDING REMARKS

A bold attempt to revive and re-establish student support at VUT was made by the appointment of Linda Mandewo at CAD in 2012; and the subsequent appointment of Sibongile Hlubi in 2015 initiated the collaborative process in which the two colleagues began to merge their expertise and experiences to build up the VUT student support system, leading to an informal integration of the tutoring and mentoring programmes. However, it was not until a writing retreat, out of which this book was born, that the two colleagues reflected critically on their practices and had a moment of epiphany, a realisation of a greater reality that they had been immersed in. That greater reality was the fact that they had already developed a framework of integration for the two support programmes. As a result of further writing retreats and the inclusion of Tebogo Kekana in our team, the integrated model became more apparent and we sought to ground it more formally in the internationally recognised model of academic support called supplemental instruction (SI). It was clear at this point that our integrated approach to these programmes was not only a promising way forward, but also represented a significant departure from the existing implementation of academic support programmes in "silos." As the VUT student population continues to grow, and embraces larger numbers of students from disadvantaged backgrounds, an integrated system of academic and psycho-social student support will become an increasingly important tool to improve VUT's throughput and pass rates.

We hope that the insights we have shared in this chapter will be a helpful tool to colleagues in other institutions of higher learning experiencing similar challenges in providing student academic support. The insights that we have gained in working together led us to develop an SI-based model in which not only our practices, but all other facilitation stakeholders, initially participating only on the periphery, can now be integrated meaningfully into the support programme and contribute towards its success at VUT. Our model represents an upgrading of the student academic support model that was initially in place at VUT.

Ultimately, this chapter underscores the importance of research into student academic support programmes in institutions of higher learning, and has thus attempted to contribute to the existing body of knowledge on student support in educational discourse, particularly in the context of typical local constraints, and the need to improve throughput rates. We hope that the insights we have shared in this chapter will ignite further research projects on SI-based student academic support programmes in similar contexts.

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