THE MANAGEMENT OF STUDENT SUCCESS IN EXTENDED CURRICULUM PROGRAMMES: A CASE STUDY OF THE UNIVERSITY OF PRETORIA'S MAMELODI CAMPUS, SOUTH AFRICA

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ABSTRACT

For three decades, numerous South African scholars have researched the efficacy of access programmes in providing alternative pathways to careers in Science, Technology, Engineering and Mathematics through foundation provisioning. In light of this, Extended Curriculum Programmes (ECPs) were designed for talented Black students who could not gain access to tertiary studies due to poor schooling conditions caused by apartheid. As scarce skills programmes that receive dedicated funding from government, ECPs are indispensable for redress, transformation, and socio-economic development. Consequently, they could be characterized as high stakes programmes that require a rigorous, evidence-led student success management approach to ensure effectiveness. This article argues for a customized approach to the management of student success for ECPs based on the Institutional Student Academic Development and Excellence Model. Using specific examples, the customized system, dubbed the Mamelodi Referral System, is discussed as well as the circumstances that led to its development. The article concludes with future areas for development and refinement.

Keywords: management, students access and success, extended curriculum programmes, South Africa

INTRODUCTION

The challenges of student access and attendant outcomes in South African higher education became evident in the 1970s when historically White institutions, due to transformational reasons, began admitting Black students, most of whom were from historically disadvantaged schools (Department of Higher Education 2012). With increased numbers of "non-traditional students", the disparities in performance between those from advantaged and disadvantaged backgrounds became apparent, necessitating the introduction of a four-year Bachelor's degree track to run parallel to the traditional or mainstream three-year bachelor's degree programme. For example, the Bachelor of Science degree, BSc, would have two variants, namely, the threeyear BSc degree and the four-year BSc Extended Curriculum Programme, which had lower entrance requirements but the same exit level outcomes and recognition. The additional one year of the four-year programme provides "scaffolding" and additional developmental modules to address the school-university gap (Mumba, Rollnick, and White 2002; Nel, Troskie-de Bruin, and Bitzer 2009; Setlalentoa 2013) hence the name "Extended Curriculum" Programmes. It is expected that after the added twelve months, the students' under-preparedness will have been addressed sufficiently for them to join the mainstream students. As such, the four-year Bachelors programmes are also known as access programmes whereby the curriculum is carefully articulated parallel to the mainstream three-year programmes.

With the rapidly changing institutional demographics since independence in 1994, the focus on student performance has widened to encompass both mainstream programmes and ECPs. This was due to the introduction of a National Senior Certificate examination whose predictive validity for studying at university level, since the first cohort of university students was admitted in 2009, is still unclear (Collier-Reed, Wolmarans, and Smith 2010; Scott, Yeld, and Hendry 2007). The lack of an institutional equivalent to the two-year community colleges found in the United States of America with clearly defined articulation policy and pathways into universities has also resulted in students that should ordinarily be admitted to such two-year colleges being admitted directly into universities. These factors, together with the historical disparities in high school education, have impacted the strategies that universities must adopt to bridge the school-university gap in all 26 public universities.

Internationally, research on student access and success also took root in the 1970s after the publication of the Interactionist Theory of Tinto (1975). This led to higher education institutions intensely focusing on student outcomes and the first-year experience, both internationally and nationally. This focus was also in part due to demands by the public for greater accountability and transparency in the face of fiscal constraints and increased demands for university funding, especially for first-generation students and the marginalised (Dias and Amaral 2014). Cognisant of these challenges, and in line with international trends to adopt dataled approaches, several South African universities embarked on initiatives aimed at effective management of student success at the undergraduate level with a specific focus on the improvement of retention, pass and throughput rates (Ogude, Kilfoil, and Du Plessis 2012; Mkonto 2018; Subotzky 2011).

At the University of Pretoria (UP), Ogude et al. (2012) sketched the challenges in the management of student success in the South African context. They further identified and addressed four weaknesses in the strategic management of student success at universities in South Africa and internationally. The concerted institutional approach adopted at UP to improve student outcomes resulted in a faculty-based¹, student-focused model for the management of student success called the Student Academic Development and Excellence Model (SADEM). Developed by a Steering Committee for Student success, a sub-committee of the University Senate, the SADEM employs developmental research and Systems Theory. It targets all the years of undergraduate study while prioritising the first year. It is underpinned by a systemic metric framework and continuous improvement and comprises institutional and faculty-based projects that target high-impact modules and diverse students to improve retention, pass, and throughput rates.

Implemented for the first time in 2011, the SADEM has been institutionalised, resulting in many faculties tracking student performance, especially in modules in STEM careers, such as mathematics, chemistry, and physics, which tend to impede progress in the first year of study. Commonly called gateway modules (Freeman, Haak, and Wenderoth, 2011), Ogude et al. (2012) dubbed them High Impact Modules (HIMs) because of their potential to impact institutional performance indicators such as throughput and pass rates, as well as strategic drivers of universities, such as excellence or sustainability, either negatively or positively. Consequently, monitoring student performance data is often focused on the gateway modules or HIMS, resulting in a field of study globally known as learning analytics, which has grown exponentially since the 1990s (Viberg et al. 2018).

While the SADEM addressed the first year of study of the three-year mainstream programmes, it did not address the four-year Extended Curriculum Programmes. This article aims to fill this gap by arguing for a customised system for the strategic management of student success in the first year of ECPs based on the principles espoused in the SADEM. The principles of SADEM are, namely, to ensure that the system (i) Adopts a systemic approach to the first year of study; (ii) Allows for the location of student success activities within academic rather than support departments; (iii) Links to specific modules through the systemic involvement of

academic staff; and (iv) Can address a diverse student population through appropriate key performance indicators. The focus on ECPs can be rationalised from both a national and institutional perspective. From a national perspective, according to the Department of Higher Education Policy Framework (Department of Higher Education 2012), ECPs have been entrenched in the higher education system with all 26 public higher education institutions offering them, and an average of 12 per cent of actual first-time entering students being placed in extended programmes at contact universities in 2015. As of 2007, 203 state-funded extended programmes were approved for contact universities, increasing to 343 in 2015. ECPs thus provide an opportunity for talented students that come from adverse schooling conditions to enter mainstream STEM careers such as those in the fields of science, engineering, Veterinary Science, commerce, and medicine through an alternative academic route.

At an institutional level, ECPs are strategic programmes that serve to increase the diversity of the students in STEM fields at UP, which is a historically White institution. UP has been offering the programmes since 2008, and they form the nucleus around which the development of one of its campuses, the Mamelodi Campus, located in an impoverished township, can be accomplished. Previously, part of a historically Black Vista University, the township campus was incorporated by UP as part of the reconfiguration of the South African Higher Education System, which was legislated by the government in 2002 (Deputy Minister of Education 2002). It was subsequently designated as an autonomous academic entity (University of Pretoria 2020) equivalent to a faculty, whose vision would be to advance the University's anchor strategy, the Mamelodi Collaborative (MC).² Among others, the MC addresses two strategic goals of the University, namely, the access and success of disadvantaged students in STEM careers, and social responsiveness. Four academic programmes, the BSc Extended Curriculum Programmes in Biological and Agricultural Sciences, Physical Sciences, Mathematical Sciences and a BCom are offered at the campus. In addition, a number of community-based entities, such as the Psychology Clinic, the Business Centre and the Animal Clinic, are based on the campus.

Seeing that ECPs form the nucleus around which the MC was developed, the shortcoming of the SADEM as it relates to ECPs had to be addressed by developing a context-specific model, the Mamelodi Referral System (M-RS). In the sections that follows, we provide the methodology used to "build" the system to address the four principles of the SADEM. We go further to indicate how the whole system and each component is intended to work using specific examples. The article concludes by pointing to future areas of development and refinement of the M-RS.

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ADAPTATION OF THE SADEM TO ECPS AND THE EMERGENCE OF THE M-RS

In the conclusion of their study on the SADEM, Ogude et al. (2012) cite three conditions that underpin the development of a similar model or its adaptation for use in other contexts, including within different faculties in the institution. Firstly, it must be supported by institutional leadership, especially the Deans and the Heads of Department; as well as being overseen by a Senate Committee in foregrounding student success and the first-year experience as a core academic activity. In the case of the ECPs, this condition was met in 2016 when the University took the decision to reposition the campus as an academic entity and appointed a dean.

Secondly, the collaboration between stakeholders for collective impact, through formal committees comprising senior academic staff responsible for teaching and learning, ensures an academic rather than a support focus underpinned by continuous and robust interrogation of faculty approaches. In the development of the M-RS, the repositioning of the campus culminated in the approval of three committees, a Senate Committee, called the Inter-Faculty Academic Committee for the Mamelodi Campus; IFAC, a campus-based Teaching and Learning Committee; as well as the Module Co-ordinators Forum. These academic structures oversee, as part of their remit, effective management of student success in the ECPs. The IFAC, being an inter-faculty committee, consists of Deputy Deans of Teaching and Learning and Heads of Departments, all of whom have a keen interest to ensure that students beginning their academic career on campus are well prepared when they transition into the mainstream departments they lead. The IFAC also comprises other stakeholders from support departments such as the Department of Enrolment Services, Department of Education Innovation, Head of Community-Based Research, and a Data Analytics Administrator; all of which are chaired by the Dean of the Campus. All three committees hold regular meetings in which the performance of students in ECPs is systematically discussed and historical data interrogated.

Lastly, the flexibility of the model to accommodate faculty priorities and its alignment with the strategic intent of the university was highlighted as a significant factor for the success of implementation in different contexts. The faculty's priority in the case of the Mamelodi Campus is to ensure the alignment of campus strategy regarding ECPs to the institutional intent and Goal 1 of the UP Strategic Plan, which is to promote student access and success for disadvantaged students.

With the three institutional conditions met, we set out to investigate the following research question:

• How can the SADEM be adapted to enable the strategic management of student success,

the enhancement of a quality first-year experience, and improve performance indicators in the developmental year of ECPs?

Figure 1 is a schematic diagram of the M-RS with a description of how each of the six components were derived using the four principles that informed the development of the SADEM.

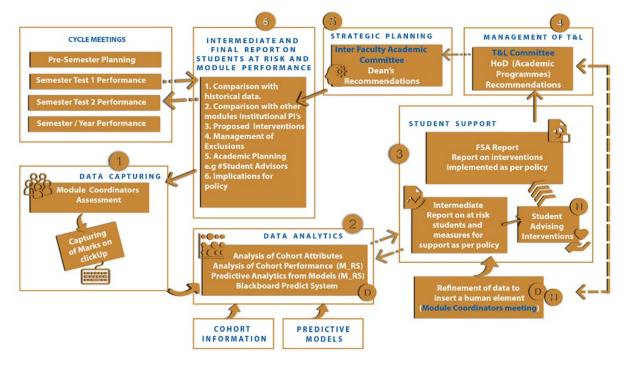


Figure 1: The schematic diagram of the M-RS

The key features of the model consist of six components, namely: 1) Data Capturing by lecturers; 2a) Data analytics (**D**) and 2b) Interrogation of the data to insert a "Human-centric dimension" (**D-H**) by the Module Co-ordinators Forum; 3) Customized student support through student advising; 4) Interrogation conducted by the Head of Academic Programmes and the Teaching and Learning Committee of the report provided by Student Advisors; 5) Interrogation of the trends by the Dean and the IFAC leading to; 6) The generation of management information throughout the year and strategic recommendations after one year and beyond.

Until the development of the M-RS, the Mamelodi Campus did not have a systemic approach to manage student success in the first year of ECPs. As with the SADEM, a developmental research paradigm suited the Campus' intentions as it involved a systemic review of the ECPs, followed by a developmental paradigm in which the efficacy of the ECPs was monitored through the newly formed campus management structure, the IFAC. As we indicated in the SADEM, according to Richey and Klein (2005), *Type I* developmental research aims to develop theory and *Type II* to provide solutions within specific contexts. This is

classified as *Type II* research as it was context-specific, problem-solving, and extremely important in this type of research. Moreover, the research involved practitioners, i.e., the lecturers primarily represented in two campus-based committees, the Teaching and Learning Committee, and the Module Co-ordinators Committee. As far as an integrated approach is concerned, Charlton and Andras (2003, 1) indicate that from a Systems Theory perspective, "The nature of management may be conceptualised as the process by which an organisation, in this case, the campus, generates a global representation of its own processes". This potential to present a global representation of student success initiatives targeted at ECPs provides a framework for evaluating their efficacy to ensure continuous improvement.

The formative evaluations by the Review Committee for the Mamelodi Campus; the baseline data collected for this study, which covered the period of 2008–2015; as well as decisions made by The Teaching and Learning Committee, Teaching and Learning workshops and the Inter Faculty Academic Committee for the period 2016–2019 were all captured in minutes and reports. The student views captured in individual interviews (Ogude et al. 2019), as well as the findings from previous literature conducted in ECPs at the University of Pretoria (Engelbrecht, Harding, and Potgieter 2014; Potgieter et al. 2015) and other institutions provided the rich data from which we could distil the extent to which the UP ECPs could be improved using the framework espoused in the SADEM.

The following weaknesses emerged from the above process: (i) Progression and Transition – there were no intentional steps taken to determine whether the students were on track to transition to their desired programmes after the first year. Additionally, students that had failed the first year were not redirected to alternative programmes or institutions such as vocational colleges through structured memoranda of agreement although they had passed some credits; (ii) Messaging - the messaging was generic for all students, regardless of their intended academic pathway after transition, which was to obtain a pass mark of 50 per cent, whereas the minimum transition criteria in competitive programmes such as Medicine and Econometrics required a minimum average of 70 per cent or 65 per cent respectively in all modules; (iii) Students at Risk – this was implicit by virtue of the programme being a redress programme. However, the risk levels depend on the intended pathway and whether the students can meet the transition criteria. For example, although a student who achieves a 60 per cent average can proceed, they may not transition into the programme of their choice if they do not meet the transition criteria of that particular programme. Such students with a pass mark can still be designated as "at risk"; (iv) Performance Indicators- the emphasis here was on the module pass rates instead of individual student performance. Furthermore, there was no granular data to identify low performing and high performing students to enable customized support; (v) *Student Advising*- this was voluntary and on a "walk-in" basis rather than a nuanced approach based on individual student needs and performance; (vi) *High Impact Modules*- since students in ECPs have to pass all 11 modules they register for during the developmental year, all 11 were designated as gateway or high impact modules. The latter was not explicitly indicated previously.

In an iterative process, the Steering Committee comprising the Dean, the Head of Research and Postgraduate Students, the Student Advisor, and the Data Analytics Expert distilled these challenges and devised ways in which these could be addressed through the M-RS. The draft M-RS and how it intended to overcome some of the challenges was presented to the IFAC, the Teaching and Learning Committee, the Module Co-ordinators Forum and at a national symposium. Following the input from these committees and forums, the M-RS was refined and adopted for use at the campus.

HOW THE M-RS IS INTENDED TO WORK AND THE LINK TO THE FOUR PRINCIPLES OF THE SADEM

Component 1– Data Capturing and the Link to Principle 1 of the SADEM: Adopt a systemic approach to the first year of study underpinned by a metric framework

Previously, data on student performance was captured on lecturer spreadsheets and were not available on the central learning management system. To ensure a systemic approach underpinned by a metric framework, Principle 1 of the SADEM, it was agreed that all lecturers should capture student performance on the Learning Management System ClickUP after predetermined assessments.

Component 2 – Data Analytics and the Link to Principle 4 of the SADEM can address a diverse student population through appropriate key performance indicators

Following the data capturing, the data analytics administrator provides an analysis of module performance. This is a data-led approach denoted by a **D**. Previously, data on student performance, mainly module pass rates, was generated by the Head of Academic Programmes from the lecturers' spreadsheets and sent to the Institutional Planning Office and collected from the University's Bureau for Institutional Research and Academic Planning (BIRAP) where the institutional target of 80 per cent was monitored. The lecturers would then be informed whether their module pass rate was less or greater than 80 per cent. However, over a period of three

years, 2016, 2017 and 2018, we calculated that if this was still the approach used, with an average module pass rate of 85 per cent across the 11 modules and 600, 720 and 834 students respectively enrolled in the ECPs, 15 per cent of students failed. This translated to 325 students who were not redirected to any programme and the loss of R16millon in revenue (approximately \$1m) (based on a R50 000 per annum per student) of state funding. In effect, although the module pass rate of 85 per cent exceeded the institutional target, it was not satisfactory for these high stakes programmes. To overcome this, in addition to the module performance, the data analytics also focused on individual student performance. The argument here is that data analytics in the ECPs need to be granular, need a sense of urgency due to the national significance of ECPs, and should be accompanied by customized student support and monitoring.

The performance in individual modules was thus analysed to determine the number of students that obtained <30 per cent, <40 per cent, <50 per cent, 51–59 per cent, >60 per cent, >75 per cent and >90 per cent. In this rigorous approach, the students that failed were labelled "drop-outs with potential" and were enabled to use the credits they had acquired to articulate to another type of institution, such as vocational institutions. In this case, the loss to taxpayers' funds was minimised. The granular performance indicators are also appropriate for students with diverse career interests and meets Principle 4 of the SADEM as it enables assistance for a diversity of students. We thus developed a nuanced referral policy which takes into account not only module pass rates, but also individual student performance, including high and low performing students. All these students would then be advised based on whether their performance meets the academic criteria of the intended academic pathway when they transition to mainstream. Besides module and student performance, and any other historical data.

Component 2 b and Link to Principle 2 and 3 of the SADEM: Location of student success initiatives in academic rather than support services and Link to specific modules and involvement of academic staff

The systemic approach continues in Component 2b (D-H). Previously, lecturers did not engage in any systematic follow-up discussions regarding the data to enable themselves to affect continuous improvement. The Module Coordinators and the Head of Academic Programmes evaluate the data to identify trends in module performance and whether there may be systemic problems with the modules themselves rather than assuming poor performance on the part of the student. This evaluation ensures that the support that is given is sensitive and contextualized to students' academic needs (Liu et al. 2016). The participation of academic staff meets Principle 3 of the SADEM, which is to ensure that the system allows for the location of academic activities within academic rather than support services, as well as Principle 3 on the systemic involvement of academic staff.

This process also inserts a "human-centric approach", denoted by the **H**. For example, if performance in a particular module is either very high or very low compared to previous years, aspects such as whether the curriculum has been changed, whether the module is taught by a new or novice lecturer, or whether the admission criteria changed (amongst others) are explored. For example, the students registered for BCom, and BSc enrolled in the same precalculus module, WTW 133. In analysing the global performance of the modules, this module always had a lower pass rate, averaging 75 per cent. In 2017, more than 50 BCom students failed this one module. Since students in ECPs have to pass all modules to proceed, a further investigation which involved the disaggregation of the WTW performance by academic stream, BSc or BCom, indicated that the average for the BSc students was similar to that in other modules >85 per cent, while that for BCom was 65 per cent or less. On further investigation, this problem related to module and cohort characteristics rather than being a reflection on individual student performance. The problem was traced back to the fact that the admission score for mathematics for the BCom students was a minimum APS of 3 (40-49%) while that for BSc was 4 (50–59%). This is an example of an outcome from the Module Co-ordinators Meeting. The recognition of this problem means that student advisors became cognizant of the challenge should a BCom student perform badly in WTW 133 and satisfactorily in all the other modules – thus inserting a human centric approach.

In another example, module X had the following unusual performance over a three-year period: 85 per cent, 83 per cent, 65 per cent. The problem here was the introduction of a new curriculum and this too would be taken into account during advising, and an investigation on the curriculum was initiated immediately. As such, when the data is referred to student advising, the Student Advisors put the poor performance of the module into perspective when advising individual students. At the same time, the Module Coordinator responsible for the discipline would immediately start exploring ways to intervene to address the specific curriculum problem.

In the SADEM, we indicated that HIMs receive concentrated attention for the improvement of curricula, pedagogy and assessment (Ogude et al. 2012). In the ECPs, the academic model is such that all modules employ specialised teaching and learning, which includes intensive academic and psychological support for students; they are slower paced; they comprise small group learning; they are typically not larger than 50 students in a group, which is in contrast to mainstream modules in which HIMS such as mathematics can have as many as

600 students per class. Students thus have more time to engage with the subject content, lecturers, and tutors to develop a thorough understanding of the content. In order to remedy possible gaps in school knowledge, pedagogically trained lecturers are employed to deliver content using various methods. Teaching and Learning workshops and the sharing of good practice are hosted throughout the year for lecturers. Additional modules, such as Language and Study Skills and Academic Information Management, are offered to facilitate the integration of skills and disciplinary knowledge, thus helping students to cope at university by acquiring the discourse of the discipline, as well as study skills. Student support is provided through not only tutoring, as is the case in mainstream, but also through peer mentoring, career guidance and counselling.

With respect to academic staff, the academic staff in ECPs previously did not have a forum to discuss student performance in all modules or per academic stream. This takes place in 2b (D-H). In the development of the SADEM, we identified what Tinto (2006/2007, 5) refers to when he says, "Though it is true, as we are often reminded, that student retention is everyone's business, it is now evident that it is the business of the faculty (academic staff) in particular." It was with these observations and this statement in mind that we decided that academic staff should have a distinct and prominent role in the M-RS.

Lecturers in HIMs form a community of practice and meet each semester in an action research cycle involving the identification of HIMs, workshops to discuss changes, implementation, feedback sessions and preparation for the next cycle in a process overseen by a Deputy Dean. However, in the ECPs, the interrogation is done initially by the Module Coordinators Forum after each major assessment, and then through the cycle by the Teaching and Learning Committee and then the IFAC.

Component 3 and the Link to Principle 4 of the SADEM: Appropriate Performance Indicators and support of a diversity of students

In Component 3, the Faculty Student Advisors (FSAs) receive an intermediate report on at-risk students and identify measures to support them as per policy. They then record the student advising interventions undertaken on the FSA Dashboard and produce a final report on the interventions implemented and the trends observed with that assessment for an individual or a cohort of students. In the SADEM, student sub-groups were identified based on whether they were enrolled in HIMs as well as whether they were identified as being at-risk. This was done using the Student Academic Readiness Survey (Lemmens 2011). With ECP students being defined as technically "all at risk" since it is a redress programme, a further level of categorization of the ECP students was necessary to suit the context. This level resulted in the

development of a contextualized Referral Policy to systematically address the diversity of students within the ECPs and support them accordingly.

According to the referral policy, students are categorised as (a) Low-Performing Students (LPS) – any student that performs below 50 per cent in one or more of the modules within an academic stream. This category is further subdivided into 40 < x < 49 LPS 2, and < 40; LPS 1 – these students are provided comprehensive support comprising individual and generic groups sessions, as discussed below. In line with the spirit of the SADEM in which the E stands for Excellence and the D for Development, which encourages support for both Developing and Excellent students, we identified category (b) High-Performing Students (HPS) who are supported on an individual basis to excel. They also receive generic support. The average-performing students, those that achieve between 51-74 per cent, who are usually the highest in number, receive group sessions of generic support and no individual support. If these students improve or perform worse than before, they can be transferred to either the high or low performing groups, as did the students in the SADEM who could move between risk categories.

The generic group sessions provided for all students comprises: Goal setting, Time management, Study techniques, Examination preparation, Stress management, and the Success stories of Mamelodi Alumni. Individual Support for high performing students comprises assistance to apply for competitive bursaries; assistance to qualify for the Golden Key Society, a prestigious student organisation comprising the top 15 per cent of performers in the University; career guidance; and study methods. The individual sessions for low performing students comprise: Career Guidance – alternatives to Plan A, which is the career path they may wish to follow but are not performing to the standard set for that field. They are then advised to consider a Plan B or C, which could be another programme within the BSc or BCom or external to the university, study methods, parental support, coaching for academic identity development, or referred to other forms of support services such as clinical services if they have systemic problems in that regard. Below are examples of the careers that students in the various streams may wish to follow and alternative programmes they may be advised to consider based on their performance, starting with the first set of assessments.

For the Biological Sciences Stream: high Performing Students (average of >75% in all modules) qualify for dentistry, medicine, veterinary science, and veterinary nursing. If they achieve 60–74 per cent, they could transition to Allied Health Sciences, such as nursing or occupational therapy. Students obtaining less than 60 per cent can transition to a BSc programme, while the ones that attain below 50 per cent can be advised to enrol in another institutional type and be credited for the modules they passed.

In the BCom Stream Economic and Management Sciences: high Performing Students >75

per cent qualify for econometrics and economics. Those attaining 60–74 per cent qualify for accounting, investment management, statistics, and financial services, while students obtaining below 60 per cent can transition to other BCom programmes such as business management.

In the BSc Mathematics Sciences: students that attain >75 per cent qualify for actuarial sciences, those that attain 60–74 per cent for mathematical statistics and applied mathematics, and below 60 per cent – any BSc Programme. Those that attain less than 50 per cent could consider an alternative academic programme or enrolling in a vocational institution.

Component 4 and 5 and the Link to Principle 3 of the SADEM: Systemic Involvement of Academic Staff

In Component 4, the report from the Student Advisor is tabled and interrogated at the Teaching and Learning Committee together with the report on module performance, and recommendations are made to the IFAC. In this way, the M-RS explicitly links student support to academic discussions that happen in the Module Coordinators Forum and the Teaching and Learning Committee to generate management information for continuous improvement and, lastly, at a strategic level in the IFAC and Senate. The focus in the Teaching and Learning Committee shifts from an emphasis on module performance to the performance per academic stream. Fanghanel (2007) and Marshall et al. (2000) concur that it is at departmental level that many policies and plans for the enhancement of learning and teaching must be operationalized and enacted. In the case of ECPs, it is within the four ECP academic streams that contextualized plans and policies have to be developed, implemented and monitored. Fanghanel (2007, 16), in particular, cautions that "institutions ought to be mindful of providing scope for departments to adapt institutional policy for their needs since they are the locus of the enactment of change." In line with this thinking, academic streams were used as the focus since they speak to the Referral Policy and are a direct measure of the contribution of ECPs to the different academic careers and redress required in the diverse disciplines.

In Component 4, in addition to the lecturers, the Teaching and Learning Committee has institutional representation from support departments such as Student Enrolment Services. Thus, the focus is on students at risk and whether there should be policy changes based on observations of the module, academic streams and individual or cohort performance. For example, in the case of the pre-calculus module, WTW 133, the staff members from the enrolment services would participate in relation to the different admission criteria, which could be amended. The final decision by the IFAC was, however, to recommend to Senate the development of a module, mathematics for BCom students – BAM 133, which has been introduced as of 2020. The first major cycle comprising at least two major assessments ends

with the first semester examinations. The IFAC considers possible policy recommendations to Senate after each major cycle, which results in implementation and continuous improvement.

Component 6: Implementation of the M-RS and Designation of Institutional Projects and future directions

In the SADEM, a Senate Committee for Teaching and Learning approved institutional priority projects and the Deans, supported by the Deputy Dean and Heads of Department, decide, and implement faculty projects based on the strategic objectives, possible impact and available resources in a dynamic process. As with the SADEM, implementation is an on-going and dynamic process. The IFAC prioritises projects to recommend to Senate based on the tracking of module and student performance. In 2020, for example, the module performance of most mathematics modules was the lowest, which caused the IFAC to institute a mathematics proficiency test prior to the commencement of lecturing.

CONCLUSION

The M-RS is thus a context-specific referral system customized for the developmental year of the ECPs. It was derived from the Student Academic Development and Excellence Model, SADEM. It was first implemented in 2019 and its implementation will be monitored to determine its efficacy in the effective management of ECPs. It supports a holistic approach that leverages the expertise of all staff members involved, ranging from course coordinators, lecturers, faculty student advisors to the Dean's office and the IFAC to achieve student success. All these individuals feed data into the student support management tool to enable a 360-degree picture of the students' wellness within the ECP. Through various assessment cycles, they also feed the trends observed to inform policy changes institutionally by the Senate through the IFAC. It is envisaged that in the future, ECP students will be flagged and managed as a cohort into the second year of study and beyond. Predictive analytics for the context of the ECPs and learning analytics will also be explored to determine their usefulness.

At the time of writing this article, just one year after the M-RS was implemented, the University had adopted an online teaching and learning continuity plan due to COVID 19. As such, the M-RS may need to be adapted to this environment. We shall monitor and report on its adaptation and implementation within this context at a later stage.

NOTES

1. Faculty in this article refers to an academic entity often referred to as a "College" in the United States of America. The term academic staff is used to refer to teaching and research staff instead

of faculty, which is the term used in the USA.

2. The Mamelodi Collaborative comprises five thematic areas: Building Educational Pathways; Science and the Urban Environment; Leveraging the Arts and Culture; Economic Development and Entrepreneurship; and Strong and Healthy Neighbourhoods. The MC was approved by the Executive of the University. (par 11.3.1 of Rt 444/17: 1 August 2017; Rt 467/17).

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