



Vaal University of Technology

QUALITY PROMOTION UNIT

EXCERPT: STUDENT DROPOUT AT THE VAAL UNIVERSITY OF TECHNOLOGY

(NOT FOR CIRCULATION)

The reader should take cognisance that this document is an excerpt of the study, the complete study is available on request from the Quality Promotion Unit.

1. INTRODUCTION

The drop-out rate of students at institutions of higher learning in South Africa is relatively high (Baumgart & Johnstone, 1977:553). On national level, the National Plan for Higher Education or NPHE (2001) established certain benchmarks for graduation or throughput rates. These were superseded in March 2007 by enrolment and output targets for all institutions of higher learning to be attained by the end of 2010 (Visser & Subotsky, 2007:3). South Africa had a graduation rate between 1993 and 1998 of 15% which is of the lowest in comparison with universities on international level (NPHE, 2001: 18). There is an annual loss of R1.3 billion in government funds on students who were unsuccessful in completing their studies. The high levels of drop-out rates at institutions of higher learning should also be understood against the tendency nationally and internationally of the “massification of education” and, with regard to universities in South Africa, against the background of the new dispensation of higher education of a post- apartheid era. Scott, Yeld and Hendry (2007:23-29) state that there is a small pool of “adequately prepared” candidates for higher learning. Increasing the intake of students at universities will result in a corresponding increased intake of the proportion of less-prepared students.

The NPHE (2001) emphasises the need to increase both the participation and graduation rates of black students and in particular African students. The enhancement of throughput remains a priority for the Department of Education. Graduate output in the old South African Post - Secondary Education (SAPSE) was a factor, which is still applicable in the new funding formula, for determining the funding of universities (Department of Education, 2001), i.e. the new funding framework connects funding to the number of graduates that an institution produces (Letseka & Maile, 2008: 2).

Many institutions with a tendency to high drop-out rates have not been able to translate what they already know about their student retention into interventions that have led to substantial success with regard to student persistence and graduation (Tinto, 2006:5). There is an enormous amount of research available with regard to student retention and success on international level, but in Africa and South Africa it is still in its infancy (Subotzky & Prinsloo, 2011:178). Institutions such as the University of South Africa (Unisa), University of the Western Cape (UWC), University of Stellenbosch (US) and Tshwane University of Technology (TUT) conducted ongoing studies on student success.

It is imperative for the Vaal University of Technology (VUT) to understand the generic factors that might have an impact on the high drop-out rate of its students, this may inform the development of a conceptual framework that will guide the institution's interventions to address its high student drop-out rate. This might entail continuous processes for problem detection and appropriate actions that will ensure a higher success rate and a significantly lower drop-out rate. It is also imperative that the VUT should translate its knowledge on what we know about student success at the VUT into action. This study focuses on the student's first year of study as it is viewed as the most vulnerable time in terms of academic failure. According to McInnis (2001), the first year is the time that students experience social, emotional and financial problems. It is also the time in which students should be supported in their movement through the phases of separation, transition and integration or incorporation (Tinto, 1988).

This study was informed by the literature study and completed research available with regard to student success on international as well as national levels. This study takes into account Tinto's

(2002:3) warning with regard to studies on student success at institutions of higher learning as “context-specific”. The assumption in this study is, therefore, what works in one context is not necessarily relevant in another context. According to Martinez (2004:1) the nature of studies on student success is either investigations in the factors that have an impact on drop-out rates or solutions to the problem. This study wishes to understand the generic factors that have an impact on drop-out rates, the interventions of some of the institutions of higher learning in South Africa to enhance students’ success, and development of a conceptual framework which is suitable for implementation at the Vaal University of Technology (VUT).

The following is a concise version of the findings and recommendations of the study, including the findings on absenteeism as a possible variable for student success at the VUT. Information on the in-depth study (e.g. empirical study, literature study, etc.) can be found in the comprehensive output on the dropout study “Student Dropout at the Vaal University of Technology: A Case Study” (Brits, Hendrich, Van der Walt & Naidu: 2011).

2. SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

2.1 Establishment of Study Team

The study team was established by the DVC: Academic and Research in 2011, and comprised two student support counsellors, a data analyst of the institution and a member of the quality promotion unit as study coordinator. The team decided to focus on the 2010 cohort students, because of the availability of statistical data, as well as the availability of qualitative management information of the 2010 cohort students. The team decided to utilise quantitative, as well as qualitative information in order to triangulate findings and to identify the possible major factors for student drop-out at University.

2.2 Findings and Recommendations

The following is a summary of the findings and recommendations with regard to this study, these findings and recommendations should be read in conjunction with the detailed discussion of the above-mentioned comprehensive output:

FINDING 1

93% of the first-year students, who dropped out, are of South African citizenship, while 7% are international students

FINDING 2

The majority [i.e.90%] of the students are from the Black student population

FINDING 3

61% of the first-year students, who left prematurely, are males. By comparison, 39% of the female population dropped out.

FINDING 4

The age group in which the most drop-outs occurred, were from the 20 – 29 years age group, namely 52%

FINDING 5

First-year students, who did not stay in official VUT student residences, had by far the highest drop-out percentage, namely 95%. By comparison, only 5% of the students who stayed in official VUT student residences dropped out.

FINDING 6

84% of the first-year student population in 2010, who were not NSFAS recipients, left prematurely, while only 16% of the students who were NSFAS recipients dropped out.

FINDING 7

The main campus had the highest drop-out percentage in 2010, namely 57%, while the satellite campuses totaled 43%

FINDING 8

First-year students who obtained a performance average of 50% and above, showed a higher drop-out percentage [i.e. 54%], than the students who performed below 50 percent [i.e. 46%] of the student population under investigation

FINDING 9

The faculty with the highest drop-out percentage, is the Faculty of Engineering [37%], followed by the Faculty of Management Sciences [29%], the Faculty of Human Sciences [20%] and lastly, the Faculty of Applied & Computer Sciences [13%]

FINDING 10

There is evidence of good relationships between lecturers and students but also strong evidence of a lack of sufficient student-lecturer interactions.

FINDING 11

Students are either self-motivated to complete their studies or receive their motivation from their parents, lecturers, family members or are motivated by their socio-economic circumstances.

FINDING 12

Participants that were first-generation students experienced a lack of understanding or empathy from their family members for the demands of being a student at an institution of higher learning.

FINDING 13

There were participants that were not motivated for the studies due to the fact that the VUT was not their first choice institution of higher learning or the fact that they did not study what they initially intended to study.

FINDING 15

The late payments of NSFAS funds can contribute to early termination of studies.

FINDING 16

Early termination of studies can occur due to the fact that students are not able to pay outstanding accounts.

FINDING 17

Students that came from families with a relatively low economic status category of family background are more likely to drop out .

FINDING 18

Students that are not successful in their application to study a specific course due to entry requirements are more likely to be less motivated.

FINDING 19

Students should be informed with regard to the availability and location of academic support services on campus.

FINDING 20

Potential VUT students should receive sufficient information on the different career opportunities, the range of VUT courses and general VUT information such as registrations, fees and entry requirements in advance.

FINDING 21

There are lecturers that implement unacceptable teaching and learning methods (reading from text books, no sufficient feedback on assessment, etc.) which is a transgression of the VUT teaching and learning principles of social constructivism.

FINDING 22

Teaching and learning and effective communication between student and lecturer can be hampered if lecturers have “foreign accents” or if they are not proficient in one of the major South African black languages (Sotho, Zulu or Xhosa).

FINDING 23

Resident accommodation provides a better study environment (study space, close to facilities and support) for students and alleviates problems such as transport.

FINDING 24

Student access to computers and printers, as well as the VUT’s high frequency of IT technical-related problems, contributes to teaching and learning problems.

FINDING 25

A campus that is not clean and has a lack of proper facilities, contributes to an environment that is not conducive for effective learning.

FINDING 26

Study load can be a factor that contributes to early termination of studies

FINDING 27

There is a need for the implementation of a policy on class attendance/absenteeism

FINDING 28

The early warning system is not utilised effectively to identify and track at-risk students

The following recommendations can be considered by the institution:

Recommendation 1: EARLY ASSESSMENT OF FIRST-YEAR STUDENTS

Ensure that all first-year students are assessed during the first 6 weeks in order to identify at-risk students. NBT/GSAT tests should be taken by all first years and the results should be accessible to the relevant staff. Staff members should be trained on the utilisation of the early warning system of the VUT.

Recommendation 2: AWARENESS OF A STUDENT'S "AT-RISK STATUS"

Students should be aware of their "at-risk status". Their parents and the relevant academic and support staff should be informed as early as possible. The at-risk students should also know the possible factors that might have an impact on their performance and the actions that they can consider in order to enhance academic success.

Recommendation 3: DEVELOP STRATEGIES TO INSTITUTIONALISE THE PRINCIPLES OF INVITATIONAL EDUCATION

Student-lecturer relationships that are mutually respectful and supportive can be developed by introducing the principles of Invitational Education. Invitational Education provides a framework to transform the fundamental character of the institution and centres on the four guiding principles of respect (everyone is able, valuable and responsible to be treated accordingly), trust (education is a cooperative and collaborative activity), optimism (people have untapped potential) and intentionality (creation and maintaining of "inviting" places, policies, processes by staff and

students that are intentionally inviting with themselves and others by focusing on respect, trust, optimism and intentionality.

Recommendation 4: IMPLEMENT STRATEGIES THAT WILL ENHANCE THE INTERNAL AND EXTERNAL ASPECTS OF STUDENT MOTIVATION

Practices that help students to feel that they are valued such as strategising with at-risk students, the adoption of effective teaching styles, informal student-lecturer interactions, positive feedback to students, the creation of open and positive class atmospheres, an environment that is conducive for effective learning, etc., should be considered.

Recommendation 5: IMPLEMENT NEW INITIATIVES WITH REGARD TO THE FUNDING OF STUDENTS

Regarding the post-registration variables, the lack of financial support is the second highest reason for premature departure at the VUT. Therefore, strategies should be put in place to alleviate the problem by developing a communication plan to reach potential students at schools and provide information on funding available for tertiary studies and in scarce skills training. Relevant documents should be accessible (online). NSFAS officers should be visible and available to assist applicants during registration period. An electronic agreement form system should be considered in order to process and administer NSFAS funding. NSFAS officers should receive training.

Recommendation 6: IMPLEMENTATION OF THE NEW LANGUAGE POLICY AND RELATED INITIATIVES AT THE VUT

The development of African languages at university is a national imperative according to the 2008 Report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions. Initiatives such as policies and strategies should address the feeling of marginalisation by English second language speakers on campus. The current development of a new language policy and the implementation of strategies to enhance multilingualism at the VUT may address the problem.

Recommendation 7: IMPLEMENTATION OF THE TEACHING AND LEARNING MODEL OF VUT

The social-constructivist approach of education followed at VUT makes it imperative for all academics to engage students in learning activities (learn-by-doing). This active learning approach will eliminate the proliferation of the use of text books as the only source of teaching. Implementing an appropriate assessment strategy will ensure that timeous feedback is given to students.

Recommendation 8: THE ESTABLISHMENT OF A FACULTY FIRST-YEAR ROUND TABLE BASED ON A MULTIDISCIPLINARY APPROACH

The establishment of a First-year Roundtable should be considered as a multidisciplinary approach to discuss and realign/adjust the initiatives of the VUT as a process in enhancing academic success. Staff (academic non-academic, and professional support units) and students should deal with all the activities that impact on the academic success of the first-year students. This forum may ensure that first-year students, support services and academics complement each other. Meetings should be conducted at least once a semester. Gaps and duplication of initiatives can be avoided by means of a well coordinated system and informed stakeholders. This approach will enhance the institution's knowledge of the student and the students' knowledge of the institution.

Recommendation 9: REVISION OF THE RESIDENCE POLICY AND APPLICATION PROCEDURES

As is clear from the quantitative study, the most urgent matter that needs to be addressed is the high drop-out rate (i.e. 95%) of the first-year students who make use of private accommodation. Every effort should be made from the start to ensure that strategies are put in place to positively integrate first-year students (particularly non-resident but also resident students) into the academic and social communities of the VUT, as this enhances retention. Furthermore, urgent attention should also be given to the building of more VUT residences. First-year students should receive priority for residential accommodation. The current policy should be revised.

Recommendation 10: REVISION OF THE EFFECTIVENESS OF THE EARLY WARNING SYSTEM AND THE IMPLEMENTATION OF AN EARLY WARNING POLICY

The revision of the current system should be considered which includes the evaluation of the fitness of the IT system, the effectiveness and impact of the implementation of NBT and GSAT (aptitude) initiatives, the implementation and impact of the tracking system followed by a process of adjustments and remedial actions. The outcome of this exercise should inform the development of a policy enforcing the capturing of test marks at least 10 days after assessments should be considered. The training of staff to effectively utilise the system is imperative.

Recommendation 11: THE INSTITUTION SHOULD DEVELOP A POLICY ON CLASS ATTENDANCE AND ABSENTEEISM

Further research on absenteeism at VUT should be considered as well as the development of a policy and strategies to deal effectively with class attendance.

Recommendation 12: THE INSTITUTION SHOULD CONSIDER THE DEVELOPMENT OF A HYPOTHETICAL FRAMEWORK FOR THE UNDERSTANDING AND ENHANCEMENT OF STUDENT SUCCESS AT THE VUT

The development of a framework on student success should be informed by the literature study with special reference to the systems theory, the readiness theory, the transition theory, the longitudinal model of Tinto, the psychological model of student retention and Spady's sociological model. As already mentioned in this study, the mutual responsibility of student and institution is imperative in the transformative process of student success. As discussed earlier in this study (Tinto, 1988:439) the process of student departure refers to the first phase of the concept "university journey". Subotzky and Prinsloo (2011:185) refer to numerous interactions between student and institution during this journey as the "student walk". The interactions between student and institution should be mutually constitutive. The recommendation is that the VUT should develop a hypothetical framework on the notion of student success through a collaborative process.

Recommendation 13: ENSURE THAT THE STUDENT SUPPORT SYSTEM CONTRIBUTES TO THE TRANSITION OF FIRST-YEAR STUDENTS FROM A PHASE OF SEPARATION TO INCORPORATION AS NEW MEMBERS OF VUT

Mechanisms should be in place in order to support students in their “separation” phase when they depart from their past associations (high school environment) and adopt the behaviours and norms that are appropriate to the new institutional membership (VUT student). During the transitional stage, the student should learn the knowledge and skills that are required in order to succeed as a member of VUT. An example is the Tutor System VUT that must be expanded in order to include all first-year subjects.

3. PRE-STUDY ON ABSENTEEISM

This study was also a pre-study to determine the perceptions of staff and students on absenteeism as a possible contributing factor towards student success. According to the literature study, students who attend classes regularly are more likely to be successful in their studies than the students that are frequently absent. It is sometimes necessary for lecturers to rework with students that were absent. This is a waste of time and a waste of valuable resources. Students that are frequently absent are missing peer-lecturer interactions and the lecturer/tutor’s clarifications of concepts which cannot be successfully replaced by means of reteaching (Williams, 2000). The literature study mentions the following possible factors that contribute to absenteeism with reference to the studies of Mayer and Mitchell, Weller, Williams, Marburger, Wadesongo and Machingambi:

- Courses/subjects are not interesting or challenging
- Student has a negative self-image
- Student has a lack of interest in studies
- Inadequate teaching skills
- Poor student-lecturer relationship
- Non-attendance due to part-time jobs (financial reasons)
- Non-attendance in order to catch-up with assignments, tests, etc.
- Lack of student motivation

- Social reasons – students in company of friends and peers
- Distance from university
- No confidence in lecturer

Interviews were conducted with eight lecturers that were representatives of each of the Faculties at the Vanderbijlpark campus to determine the perceptions of staff and students on absenteeism as a contributing factor for student success at the VUT. All lecturers were of the opinion that absenteeism is a factor for lack of student success at the VUT. Lecturers that have large classes indicate that they are not using registers because it is time consuming. It seems that lecturers with smaller classes are more likely to take regular roll-calls. Forty questionnaires (ten per faculty) were furnished to staff members in order to collect more specific information with regard to absenteeism at the VUT. The following table gives a summary of the outcome of the survey. The first row of the table indicates the questions with a summary of the answers of the respondents in the columns.

The following are some of the responses of the interviewees (staff and students) on their perceptions with regard to absenteeism as a possible factor:

INTERVIEWEE RESPONSES (STUDENTS):

During the interviews it was clear that the participants are of the opinion that they attended lectures on a regular basis, except for the following individual's responses:

- “I couldn't attend classes on the days that I work shifts...I had to arrange with my boss sometimes.”
- “We sometimes came to school (VUT) only to study or to complete our work... the availability of printers and computers was always a problem.”
- “I played too much...I was not serious, there was for me not enough time for studies.”

RESPONSES FROM THE LECTURERS

The following table is a summary of the responses of the staff feedback on absenteeism (questionnaire):

SUMMARY: ABSENTEEISM AND ITS IMPACT ON THE DROP-OUT RATE AT VUT

Is absenteeism a possible factor?	Class register is taken	Motivate your answer for absenteeism	What is the main reason for absenteeism? Opinion	How can the problem be resolved?
<p>Most lecturers feel that absenteeism is one of the main factors in student performance.</p>	<p>Registers are regularly taken.</p> <p>In some cases registers are not taken due to too large classes.</p>	<ul style="list-style-type: none"> • Students' attitude seems to be a problem. • Students make the wrong choice on registration and realise that they cannot manage. • Students who miss out on teaching are not able to perform in exams and tests. • Transport is a problem for Educity students. • Fridays and tests days for other subjects result in poor attendance. 	<ul style="list-style-type: none"> • Culture of teaching and learning is at its lowest. • Lack of personal and subject interest of students exists. • Part-time jobs affect students' attendance. • Students who are repeating feel that they do not have to attend, since they know the subject content. • No punitive measures for students are in place. • Students need to undergo a paradigm shift from school learner to university student. • Students are irresponsible. • Test results are manipulated to meet the throughput rates, hence students are not interested and feel that they will pass in any case. 	<ul style="list-style-type: none"> • Management must support Staff in this struggle and not side with students. • Impress upon students the value of attending classes. • Implement rigorous policies on attendance (70-75% class attendance compulsory). • Provide lecturers with skills to monitor class attendance and to deal with at-risk/ absent students. • An attitudinal and behavioural analysis of the type of students needs to be undertaken. • Student as well as lecturer feedback on class teaching is very important. • Assign a relevance and grade for class attendance. • Students must take responsibility for own actions. • Prevent the clashes of subjects early. • Counselling should be made available. • Introduce finger printing technology for attendance. • University must address absenteeism as a matter of urgency.

The outcome of this survey on absenteeism informs the recommendations of the study i.e. the development and implementation of a policy and research on absenteeism which will be conducted in 2012 at the VUT.

3. CONCLUSION

The purpose of this study was to collect information by means of a literature study and an empirical study to identify the primary factors for a relatively high dropout rate at the VUT, it was also a pre-study on staff and students' perceptions on absenteeism as a contributing factor on student success. This study investigated concepts with regard to student success, collected qualitative and quantitative information from drop-out students of 2010 as well as staff and students that took part in institutional quality evaluations during 2010 (satisfaction surveys) in order to understand a complex phenomenon such as student success and drop-out at the VUT. The study utilised the collected information and data to inform the development of a framework that will be suitable for understanding the student journey from a phase of disassociation to incorporation and membership of a first-year student in a new dimension (higher education at the VUT).

This study confirms the statements of Hall (2001) and Prinsloo (2009) with regard to the complexity of finding "the" factors that might contribute to drop-out or student success. This study concurs with the literature study that the variables with regard to student success/drop-out are complex and multiple. The myriad of variables operate on individual student level, on institutional level, as well as on supra-institutional level. The outcome of this study should inform policy development and refinement, planning and implementation of initiatives that will address the recommendations of the study. The prioritisation of recommendations is highly commended. The team is positive that the implementation of recommendations will yield the desired expectations.

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