

**MANAGEMENT OF STUDENT
ADMISSION PROCESS AT THE
UNIVERSITY OF NORTH-WEST -
A CASE STUDY**

B.B. MARVEY

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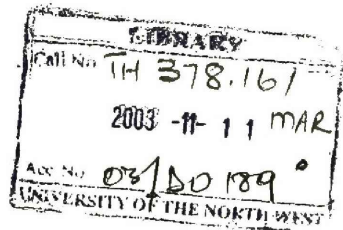
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A mini dissertation submitted in partial fulfilment of
the requirements for the degree of Master of Business Administration
in the Graduate School of Business and Government Leadership

at the

University of North-West

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Date submitted: February 2003



ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

My warmest gratitude to Dr. M.C. Teu for providing guidance and for being so helpful in the accomplishment of this work. To my MBA class colleagues – I have learnt so much from you in and outside class. To my MBA course facilitators – you truly pointed the way. A special thank you to Dr T.M. Thiba of the English department at UNW for doing an excellent editorial work on this manuscript. To God the Almighty – From Him and to Him and through Him are all things; to Him be the glory.

ABSTRACT

MANAGEMENT OF STUDENT ADMISSION PROCESS AT THE UNIVERSITY OF NORTH-WEST – A CASE STUDY

In this study, the management of student admission and registration process at the University of North-West (UNW) was evaluated. The purpose of the study was to determine empirically the challenges facing admission management and the perceptions of students and staff on the admission process.

A thorough literature study of management processes was done and a survey method was used to gather data. The subjects of the study were 57 students and 15 admission staff members (manager academic services, admissions officer, administration officers, senior administration officers, faculty secretaries, examination officer, accounts and finance personnel). The empirical investigation conducted has shown that students, the very customers of collegiate education, regard staff attitude as one of the important attributes that reflects on good management and that in their view admission staff at UNW is lacking in terms of their on-the job attitude.

The findings also revealed that admission staff, on the other hand, finds their attitude to be normal and acceptable. It is for this reason that management faces a challenge of having to come up with a solution that will best address the matter to restore good student-staff relations on campus. As a possible solution to this problem, a staff induction course on customer relations management (CRM) was recommended for all staff involved with student affairs and admissions. This would help clear misunderstandings between students and staff, thus creating an environment of mutual respect and trust. It would, further, go a long way in attracting more students to this university once the basics are in place.

Furthermore, the study revealed a number of issues including online services, student orientation and planning, that need to be addressed to improve the quality of the admission process at UNW. In this regard, the study recommends management to consider utilizing online services to offset long queues and fatigue, to fully engage the counseling centre, faculty officers, deans and departmental heads in the career guidance programme and to foster cooperation and coordination across all operational divisions.

TABLE OF CONTENTS

No.	CONTENT	PAGE
	Abstract	i
	Table of Contents	iii
	List of Tables	vii
	List of Abbreviations	viii
1	ORIENTATION	1
1.1	Introduction	1
1.2	The problem	2
1.2.1	Background of the problem	2
1.2.2	Statement of the problem	4
1.3	Aim of study	4
1.4	Method of research	4
1.4.1	Literature survey	4
1.4.2	Empirical investigation	5
1.4.2.1	Interviews	5
1.4.2.2	Questionnaire	5
1.4.2.3	Sampling	5
1.5	Data analysis	5
1.6	Definition of concepts	6
1.7	Chapter headings	6
1.8	Summary	6
2	NATURE AND SCOPE OF ADMISSION MANAGEMENT	7
2.1	Introduction	7
2.2	Defining the concept "admission management"	8
2.3	Recruiting, admission and registration	9
2.3.1	Recruiting and admissions	9
2.3.2	Registration	12

2.4	Models and theories of management in higher education	14
2.4.1	Management by objectives	15
2.4.2	Total quality management (TQM)	16
2.4.2.1	Defining TQM	16
2.4.2.2	Defining quality	17
2.4.2.3	Process for improvement	18
2.4.3	Management Information Systems (MIS)	20
2.4.4	Integrated Systems Approach to Improving Management (ISATIM)	22
2.4.4.1	Uses of ISATIM standards	24
2.4.4.2	Limitations of ISATIM standards	26
2.4.5	Chaos theory	27
2.4.6	Business Process Reengineering (BPR)	29
2.4.6.1	Background	29
2.4.6.2	Reengineering in business vs reengineering in higher education	32
2.5	Enrolment management at selected colleges and universities around the world	32
2.5.1	Enrolment management model for Parkland College	32
2.5.1.1	History and background of Parkland College	32
2.5.1.2	Parkland College enrolment management model	33
2.5.2	Enrolment management at the University of Calgary	43
2.5.2.1	Background	43
2.5.2.2	Course and programme-level quotas	46
2.5.2.3	Principal issues emerging from the enrolment policy committee's study	47
2.5.2.4	Enrolment management policies and fee-based budgeting at selected Canadian universities	55
2.5.3	Enrolment management at the University of the Western Cape	59
2.5.3.1	History and background	59
2.5.3.2	General rules for admission and registration	62
2.5.4	Enrolment management at the University of Cape Town	68
2.5.4.1	History and background	68

2.5.4.2	Student recruitment and enrolment management	69
2.5.4.3	Registration and enrolment procedures	71
3	RESEARCH METHODOLOGY	72
3.1	Introduction	72
3.2	Research tools	72
3.2.1	Questionnaire as a research tool	72
3.2.2	Questionnaire construction	73
3.2.2.1	Development of questionnaire items	74
3.2.2.2	Format and content of the questionnaire	74
3.2.2.3	Pretesting the questionnaire	75
3.2.2.4	Final version of the questionnaire	75
3.3	Population and sampling	75
3.4	Analysis techniques	76
4	DATA ANALYSIS AND INTERPRETATION	77
4.1	Introduction	77
4.2	Review of respondents	77
4.3	Respondents' profiles	77
4.4	Evaluation of admission management	77
4.4.1	Admission staff's attitude towards students	78
4.4.2	Administration of admission and registration process	81
4.4.3	Planning of admission and registration process	85
4.4.3.1	Views of students on planning of the admission process	85
4.4.3.2	Views of staff on the planning of the admission process	88
4.5	Analysis of statistical mean data	92
4.5.1	Analysis and comparison of statistical mean scores from students and staff data	92
4.5.2	Comparison of the overall mean scores from students and staff data	93

5	SUMMARY, FINDINGS AND RECOMMENDATIONS	95
5.1	Introduction	95
5.2	Summary	95
5.3	Research findings	97
5.3.1	Findings on aim 1	97
5.3.2	Findings on aim 2	97
5.3.3	Findings on aim 3	98
5.3.4	Recommendations	99
5.3.5	Conclusion	100

BIBLIOGRAPHY

APPENDICES:

Appendix A: Student questionnaire

Appendix B: Staff questionnaire

LIST OF TABLES

No	TITLE	PAGE
2.1	Weekly student hours generated in quota and non-quota undergraduate faculties	49
2.2	September preliminary enrolment survey, 1999	51
4.1A	Attitude of admission staff towards students – students' perception	79
4.1B	Attitude of admission staff towards students – staff's perception	79
4.2A	Views of students on the administration of the admission and registration process	82
4.2B	Views of admission staff the administration of the admission and registration process	83
4.3A	Views of students on the planning of the admission and registration process	86
4.3B	Views of admission staff on the planning of the admission and registration process	90
4.4	Comparison of statistical mean scores on perceptions of students and staff	94
4.5	Comparison of the overall mean scores on perceptions of students and staff	94

LIST OF ABBREVIATIONS

BPR	Business Process Reengineering
DSS	Decision Support Systems
EMTF	Enrolment Management Task Force
ERBA	Enrolment Revenue Budget Adjustment
ESS	Executive Support Systems
GPA	Grade Point Average
ISATIM	Integrated Systems Approach to Improving Management
KPI	Key Performance Indicator
MBO	Management By Objectives
MIS	Management Information Systems
OAS	Office Automation Systems
PDCA	Plan-Do-Check-Act
TPS	Transaction Processing Systems
TQM	Total Quality Management
UCT	University of Cape Town
UNW	University of North-West
UWC	University of the Western Cape

1 ORIENTATION

1.1 INTRODUCTION

Colleges and universities are complex organisations managed by a board of trustees, a vice chancellor and other administrators. They have an organizational structure that encompasses a number of academic and nonacademic departments grouped into four general areas: academic affairs, student affairs, advancement or development, and financial affairs (Tellefsen, 1990:1). Each of these areas contributes to the overall mission and vision of the institution. In order to have an effective organisational structure, the structure will have to be clearly defined, understood, and accepted by all stakeholders and constituencies and managed by knowledgeable, and competent personnel (Tellefsen, 1990:1).

To successfully manage an academic organisation, there is need for interactive decision making and cooperation across operational divisions. Such coordination and cooperation are essential in terms of the setting of clear and thoughtful institutional and educational goals, effective strategic planning, efficient use of human, financial and technological resources (Tellefsen, 1990:2). Failure to communicate and collaborate across operational divisions could result in inefficiency and ineffectiveness within various structures of the organisation. Lack of efficiency and effectiveness at operational divisions will, in turn, offset the goals and objectives of the institution.

Of particular interest is the student admission and registration process at institutions of higher learning, especially in South Africa at the time when the country is actively undergoing transformation. South African institutions of higher learning find themselves faced with the challenge of having to compete at a global level. Moreover, the South African educational funding framework, based on planned student enrolments, has placed more pressure on educational institutions in terms of their financial sustainability. Competition for students among institutions of higher learning as a necessary condition for sustainability has become a market force that may offset good management practices

in the interest of more student enrolments. Under the prevailing realities of do or die, it is very tempting that a commitment to excellence may be compromised. In the end, all that will essentially remain will be a motto and mission statement on paper, which lack meaning. The irony of it all lies in the fact that competitiveness requires excellence in service delivery at all levels of the organisational structure. It is for this reason that services and products rendered should be continually evaluated against national and world-class standards so that necessary steps can be taken to bring about improvements on an ongoing basis to ensure competitiveness.

In this study, focus was be on the evaluation of the management of student admission and registration processes at the University of North-West (UNW) with a view to identifying some of the impediments to efficiency and effectiveness. Due to their highly interlinked nature, the admission and the registration functions are treated in this study as an integrated operation.

1.2 THE PROBLEM

1.2.1 Background of the problem

One of the observations regarding student admission and registration at the University of North-West is the issue of prolonged admission and registration of students, which often extends beyond mid-term. Although in principle deadlines are set for late admission and registration of students, in practice the admission and registration process continues almost indefinitely with the result that new students continue to join lectures even after mid-term. Whether this awkward arrangement is properly communicated to other affected operational divisions or not, for example, the academic faculties, remains yet to be answered; and it still is uncertain if the academic welfare of the student, a customer of collegiate education (Aliff, 1998:1), is taken into consideration when such sporadic responses are executed.

Most students registering late during the semester would report timetable conflicts and it is not uncommon to find amongst those registering late, students with poorly designed study programmes. Obviously such students, particularly those who are new at university, would not have received orientation or some kind of academic counselling, prior to attending lectures, which is necessary for the proper adjustment of new students. The implications of the current admission-management practice on student performance, proper planning of academic programmes, institutional image and its commitment to excellence may be far reaching. Furthermore, in the light of the problem at hand, it is uncertain if there exists a healthy line of communication and cooperation across operational divisions, which should be the hallmark of the Total Quality Management as enshrined in the mission statement of the university (UNW Strategic Plan; www.uniwest.ac.za/strategic_plan.htm)

In view of the scenario presented, it suffices to say that this study was guided by the following questions:

- ☐ Is there proper planning that guides the management of student admission and registration process at the University of North-West, or does the management rely on the whims of key individuals and/or sporadic responses to unpredictable external events?
- ☐ Is there an interactive decision-making and cooperation with other operational divisions e.g academic division, student academic advisory?
- ☐ Are the policies and procedures implemented as planned?
- ☐ What are the implications of the current management culture on the achievement of institutional goals and customer satisfaction?

1.2.2 Statement of the problem

In this study the management of the student admission and registration process at the University of North West will be evaluated. In particular, focus will be on the planning and implementation aspects of the admission and registration process with the aim of establishing whether the current management practice is aligned with the vision, mission and goals of the institution.

1.3 AIM OF STUDY

The study sought to achieve the following purposes:

- ☐ To determine from literature the nature and scope of the management of student admission and registration process;
- ☐ To determine empirically the challenges facing management;
- ☐ To determine empirically the perceptions of students and staff on the admission process.

The following hypothesis was investigated:

“There is a significant difference in the perceptions of students and admissions staff regarding the quality of admission process and management at UNW”

1.4 METHOD OF RESEARCH

1.4.1 Literature study

A comprehensive literature study focusing on the following issues was made:

- ☐ Student recruiting, admission and registration;

- ☐ Models and theories of management in higher education;
- ☐ Enrolment management at some selected colleges and universities.

1.4.2 Empirical investigation

1.4.2.1 Interviews

A semi-structured interview was conducted with the manager of academic services. The aim of the interview was to get more information on admission policies, procedures and admission management strategies currently in place.

1.4.2.2 Questionnaire

Two questionnaires were developed and pretested. The first questionnaire was administered to admissions staff and was intended to capture information on admission, the attitude of staff, the admission process and planning. The second questionnaire was administered to students and was intended to capture their perceptions on the attitude of admission staff, the admission process and planning.

1.4.2.3 Sampling

Students and admissions personnel were sampled as prospective respondents to a set of questions that was to be put to them. In this particular instance, stratified random sampling was preferred since students and admissions personnel (managers, admissions officers, faculty officers, secretaries) formed different strata.

1.5 DATA ANALYSIS

Most of the data collected was quantitative in nature and thus computer aided statistical analysis was used. The results were presented in Tables in the form of frequencies, percentages, means and standard deviations.

1.6 DEFINITION OF CONCEPTS

A **student** refers to one who is enrolled for study at a school, college or University.

Admission refers to being selected for a particular study programme.

Registration refers to the process of enrollment as a student at an educational institution.

An **efficient system or institution** is one, which works well, without unnecessary duplication or waste, and within the bounds of affordability and sustainability.

An **effective system or institution** is one that functions in such a way that it leads to desired outcomes or achieves desired objectives.

Quality process is one in which all the steps within the organisation's functions from the beginning to the end work effectively towards the desired goals, with each step adding value.

1.7 CHAPTER HEADINGS

1. Orientation
2. Nature and scope of student admission process
3. Research methodology
4. Data analysis and interpretation
5. Summary, recommendations and conclusions

1.8 SUMMARY

In this introductory chapter, a brief orientation to the study is provided, outlining the problem investigated and the aims of the study. The major focus of the study was to determine empirically the challenges facing management and the perceptions of students and staff on the admission process.

2 NATURE AND SCOPE OF ADMISSION MANAGEMENT

2.1 INTRODUCTION

Public universities continue to experience significant change precipitated by a number of internal and external factors, among them constant turnover in administration, state and provincial government regulations and the general public's perception of higher education value to society (Penn, 1999). Student admission managers occupy a unique position to influence change, and the decisions taken at this level are important enough to catch the attention of the vice chancellor and the governing boards. Penn further argues that as an advisor to the vice chancellor and the governing boards, the admissions manager must have excellent communication skills and extensive knowledge of policies and practices influencing the enrollment of students. The development, maintenance, and continuing enhancement of a conceptual framework for enrolment management and attention to external constituencies affecting enrolment are essential if the admissions manager is to assist with positive institutional change.

The crucial nature of proper management of student admission process cannot be over emphasised. Declining student enrolments is one of the reasons for financial problems at colleges and universities. Hence, Penn believes student admission management, or enrolment management as it is popularly known amongst most authors, is an important factor in assisting institutions to attain stated goals and to remain financially viable.

This chapter presents literature that was reviewed for this study. The aim of the review is to define the concept of student admission management and to study some of the models and theories related to admission management in order to set the theoretical foundation pertaining to the history of admission management and the challenges facing those in management.

2.2 DEFINING THE CONCEPT “ADMISSION MANAGEMENT”

The management of student admission process is known amongst some authors as “enrolment management”. Since the use of the term “admission” is common amongst South African universities, the two terms will be used interchangeably in this study.

Mabry (1987) defines admission management as the process of defining admission goals and establishing procedures to achieve these goals, thereby providing an institution with the mechanisms to control its size, shape and character. Kemerer (1985) points out that enrolment management is a holistic approach, which consists of a number of interdependent activities. These activities include clarification of institutional mission, long-range planning, academic programme development, marketing and recruitment, retention, and career planning and placement. The responsibility for enrolment management begins with the institution’s vice chancellor and extends throughout the institution, with the involvement of faculty being of critical importance. Deans and heads of academic units (HOD’s) also have a significant role in enrolment management. In addition to encouraging central office administrators and others to clarify the mission of the institution, Deans and HOD’s can work with the faculty in re-examining the mission, function and vitality of their own academic units.

Hossler et al. (1990:5) describe enrolment management as an organisational concept and systematic set of activities whose purpose is to exert influence over student enrolments. According to Dixon (1995:7) enrolment management has four primary goals:

- ☐ To define the institution’s nature and characteristics and to market the institution appropriately;
- ☐ To incorporate all relevant campus constituencies into marketing plans and activities;
- ☐ To make strategic decisions about the role and amount of financial aid for students and the institution; and
- ☐ To make appropriate commitments to human, fiscal and technical resources to enrolment management.

Expanded and refined definitions of enrolment management have evolved over the past ten years (Penn, 1999). Bryant and Crockett (1993) as well as Krotzen (1993) state that computerised databases for recruitment and application, and telecounselling have provided tools enabling more efficient management of huge amounts of student data. Enrolment management programmes may vary widely in the way the concept is practiced, but the basic need to manage college enrolment from the point of initial contact through graduation has become increasingly apparent (Penn, 1999).

In this study admission management shall refer to the process of:

- ☐ Defining admission goals and establishing policies and procedures to achieve these goals;
- ☐ Planning how admission process must take place and what resources are needed;
- ☐ Developing a strategic plan that link financial, physical and human resources to desired educational outcomes;
- ☐ Implementing the process and constantly monitoring progress to ensure that goals and objectives are being met.

2.3 RECRUITING, ADMISSIONS AND REGISTRATION

2.3.1 Recruiting and admissions

At some universities, recruitment and admission of students are administered by separate organisational units. However, operations are more efficient and effective, particularly at smaller institutions, when these activities are combined into an integrated operation administered by the same director or manager (Tellefsen, 1990:267). An admissions committee should assist the director in formulating admission policies and procedures and in making admission decisions for marginal applicants. The admissions committee should also be involved in reviewing and evaluating the operation of the recruiting and admissions office. Tellefsen (1990:267) believes that the essential standards of good management applicable to the conduct of recruiting and admissions activities should include the following:

- ☐ “The director of recruiting and admissions should be responsible for the development and implementation of a recruiting plan designed to ensure that proper number of applicants from each category of students is recruited and admitted to achieve the institution’s enrolment goals in both overall numbers and student mix. The number of new students required to meet the institution’s enrollment goals is defined in its multi-year plan, as are the mixes of students required to do so. These mixes include the upper and lower-division students, male and female, married and single, residential and nonresidential, local and foreign students, racial mix and the like. What also need to be defined is the number of foreign students to be admitted to various academic programmes and the number that is capable of paying their fees without need for financial aid. It is important to adhere to these standards since failure to do so could result in financial problems. Every effort must be made to achieve recruiting goals in order to achieve academic balance, full dormitories, sufficient financial aid funding to minimize unanticipated costs, the ability to collect assessed charges, and the availability of revenues for planned expenditures. The procedures to be followed in recruiting and admissions should include a regular system of follow-up communication with each applicant, before and after admission, to reinforce the student’s ultimate decision to graduate”.
- ☐ Recruiters should be familiar with the institution’s financial aid plan, policies, application for financial aid and award requirements. They should be provided with financial aid material and forms and should be able to discuss with potential applicants the amount of aid to which they may be entitled.
- ☐ Recruiters should be familiar with the institution’s planned academic programmes to avoid recruiting students whose career objectives cannot be met.
- ☐ The director of recruitment and admissions should be responsible for maintaining records that identify which recruiting activities have been successful and productive and which not. This information should be in the development of future recruiting plans. Activities that have not been successful should be abandoned and modified.
- ☐ The director of recruiting and admissions should be responsible for specifying how much can be spent on recruitment advertising, the message to be communicated and

the target locations. The director of public relations on the other hand should be responsible for the execution of the agreed-on advertising programme.

- ☐ The director of recruiting and admissions should be responsible for supplying the registrar with lists of names of applicants who have been admitted and their high school or college transcripts, their admission applications and their test scores. No student should be allowed to graduate who has not been admitted by the admissions office. Students' personal data to be maintained in the registrar's records should be derived from information provided by the applicants on the application for admission form. Where the admissions office records and the registrar's records are both maintained in the computer, the files should be linked. This linkage permits the automatic updating of the registrar's files with data on applicants who have been accepted for admission.
- ☐ The admissions office should be responsible for notifying the director of financial aid the names and addresses of applicants for admission who have requested financial aid. The admissions office is also responsible for ensuring that all administration documents required to establish eligibility for financial aid awards are obtained and retained on file.
- ☐ The admissions office should be responsible for notifying the director of housing of the number of applicants, both those already admitted and those in the process of being admitted, who have indicated on their applications a desire to live on campus.
- ☐ The admissions office should assist the director of health services in obtaining certification and scheduling physical examinations for students.
- ☐ The registrar should determine the applicability of transfer credits to general education requirements in accordance with established policies. The acceptability of transfer credits in the student's major should be determined by the appropriate faculty in accordance with established policies. The number of credits granted for externally acquired experiential learning should be determined by the chief academic officer based on recommendations from appropriate faculty members. The director of recruiting and admissions should notify the applicant promptly regarding the number and nature of transfer or experiential learning credits that have been accepted for

transfer and the remaining course requirements the student will have to meet in order to obtain a degree.

- ☐ The policies and procedures adopted for recruiting and admissions should include special policies and procedures applicable to the admission of foreign students, nondegree and other special programmes.
- ☐ Unless adequate on-campus expertise exists, the evaluation of the credentials of foreign applicants should be referred to the professional organizations that are qualified to provide such services.
- ☐ Payments received by the admissions office for application fees and tuition or room deposits should be transmitted to the business office regularly, together with the data necessary for that office to properly record such payments.
- ☐ At least once every three years, the director of recruiting and admissions should conduct a study to evaluate the correlation of admissions standards with the students' satisfactory academic performance.

2.3.2 Registration

The function of registration is performed by the Registrar, and among the most important in colleges and universities. Tellefsen (1990:267) outlines the essential standards of good management considered appropriate to the registrar's function in accordance with the integrated systems approach. Below are some of the standards which are applicable to South African institutions:

- ☐ The registrar should be responsible for developing an operating calendar that identifies the dates on which activities related to registering students or recording the results of academic operations will take place. The registrar's operating calendar must be related to the institution's academic calendar;
- ☐ The registrar should be responsible for developing the plan and procedures to be followed in conducting registration. In formulating the registration plan and procedures, he/she should obtain input from students, academic counsellors, instructional department heads, the directors of financial aid, housing, health services,

and recruiting and admission and the chief fiscal officer. The plan and procedures should permit students to complete their registration as quickly as possible while repeating as few steps as possible;

- ☐ The registrar should formulate procedures covering schedule revision, that is, addition or dropping of courses, after registration;
- ☐ When the student deregisters, the registrar should ensure that the student has obtained required clearances, namely, from the library, the housing department, the academic adviser, the student affairs officer and the chief fiscal officer;
- ☐ Following each registration period, and prior to the preparation of enrolment reports, the registrar should make sure that the admissions office, financial aid office, and the students' accounts office have appropriate information about registered students and should arrange for the correction of any discrepancies among their records;
- ☐ The academic record maintained for each student should present sufficient personal data to identify the student and should be a complete and accurate record of all transfer or experiential learning credits, credits granted by departments, and credits earned at the institution. Transcripts submitted by students applying for transfer admission should be evaluated by the registrar for acceptability within established policy for general education credits. The acceptability of transfer credits for the specific requirements of the student's major should be obtained by the registrar from the appropriate faculty;
- ☐ Procedures to be followed in updating a student's academic record, correcting errors in grades or personal data, recording completion of a course, and recording dates of withdrawal, graduation dates, and degrees awarded should be documented;
- ☐ The registrar is responsible for ensuring that students' records are safe from theft, vandalism, tampering, and other catastrophes;
- ☐ Transcript procedures should be developed by the registrar and documented. These procedures should be designed to ensure that transcripts are issued only upon the written request of the student concerned; that payment for such transcripts, if a fee is assessed, is received and that no transcripts are issued to students who have arrears on their records;

- ☐ The registrar should maintain a system of recording encumbrances of academic records based on institutional regulations. This system should provide for the recording of financial encumbrances that prevent students from enrolling for another session, receiving an official transcript of their academic records, or receiving their degrees or diplomas. It should provide for the recording of disciplinary encumbrances that prevent a student from registering for one or more sessions or from ever returning as a student. It should also provide for the recording of academic encumbrances that prevent a student from registering again unless the student is readmitted;
- ☐ Every procedure involved in registration and the maintenance of academic records should be reviewed periodically. The purpose of such review is to identify changes that would increase accuracy or efficiency, reduce costs, enhance student relationships, or provide lead time for revising form and for planning, developing and testing new procedures;

2.4 MODELS AND THEORIES OF MANAGEMENT IN HIGHER EDUCATION

Over the past few decades managers in higher education have been grappling with major challenges threatening the stability and the survival of their institutions. Amongst those challenges are: rising operating and capital costs, increasing legal confrontations, declining student enrolments, shifting emphasis in study fields, an uncertain job market, increased competition for public and private funds and growing public dissatisfaction with the entire higher education enterprise, to name a few (Tellefsen, 1990:xv). In an attempt to face such challenges, many institutions have had to make major adjustments in all areas of their operations and rethink their overall management strategies in the light of new realities.

Tellefsen further states that from time to time colleges have borrowed promising and highly publicized management techniques, such as management by objectives (MBO), management information systems (MIS), total quality management (TQM), integrated systems approach to improving management (ISATIM), chaos theory and reengineering. In some cases, the results have been positive, but in other cases, no positive results have been registered. Some

institutions have used these techniques and begun to prosper; others have only been able to maintain the status quo; still others have lost ground and are threatened. The following discussion will focus on the different management models and theories.

2.4.1 Management By Objectives (MBO)

Management by objectives (MBO) is closely identified with Peter Drucker who popularized it in his book "The Practice of Management" in 1954 (Drucker, www.multimedia.calpoly.edu). With MBO, the employee engages with management in setting his or her own objectives, which need to be specific and measurable within a defined period or time frame. The following examples of objectives clarify the concept better:

- ☐ For a salesperson the objective could be - to increase sales by 20% a month within the next year;
- ☐ For a production supervisor - to have no more than three lost-time accidents on the production line over the next six months;
- ☐ For the leader of a word-processing unit - to meet all the department's needs for word processing with no complaints to my supervisor in the next month;
- ☐ For a media relations officer - to write three press releases that result in articles in the Wall Street Journal over the next year; and
- ☐ For anyone – to participate in at least two self-improvement courses approved by my supervisor in the next year.

Employees might have from three to six objectives at a time. Managers regularly evaluate each worker's success in meeting the objectives. Employees receive rewards like pay raises and promotions based on their success factor. Since the same MBO process is used all the way up the line, the whole organisation is involved in setting and working toward consistent objectives.

According to Drucker, a management consultant and economist, objectives should enable employees to do five things (Drucker, www.multimedia.calpoly.edu):

- ☐ To organize and explain the whole range of business phenomena in a small number of general statements;
- ☐ To test these statements in actual experience;
- ☐ To predict behavior;
- ☐ To appraise the soundness of decisions when they are still being made; and
- ☐ To enable practicing businessmen to analyse their own experience and as a result improve their performance.

2.4.2 Total Quality Management (TQM)

In the past two decades, there has been an unprecedented public demand for higher quality in colleges and universities (Chaffee et al., 1992). External agencies and the public have lost confidence in higher education. Colleges and universities might aspire for quality but to external agencies and the public these institutions fail to achieve quality. Moreover, they spend too much.

To deal with these external challenges, a rapidly increasing number of colleges and universities are borrowing an approach from business called Total Quality Management (TQM) (Comesky et al., 1990; Seymour, 1992; Sherr and Teeter, 1991).

2.4.2.1 Defining TQM

TQM is a comprehensive philosophy of living and working in organisations that emphasises the relentless pursuit of continuous improvement (Chaffee et al., 1992). The approach is characterized by three basic ideas: defining quality, improving the organisation's work performance and improving its administrative system. The fundamental purposes of TQM are to improve quality, increase productivity and decrease cost. Chaffee et al. (1992) identify that an institution that transforms to TQM should embrace the following:

- ☐ A change from asserting that we exemplify quality to a commitment that, no matter how good we are, we can and will continuously improve.

- ❑ A change from promising to offer greater quality in exchange for more money to a commitment that we can and will find ways to increase quality and decrease cost.

For these changes to be fully implemented in higher education, a substantial cultural change would be required throughout an entire institution.

2.4.2.2 *Defining quality*

Quality in design, quality output and a quality process are all necessary components of quality (Chaffee et al., 1992). Quality in design relates to both the output (for example, an academic programme that meets students' needs) and the process (for example, how the curriculum, faculty, equipment, scheduling and other factors combine to effect the programme). Quality output means achieving the desired result, for example, all pharmacy graduates pass their examination for licensure. A quality process means that all the steps within the organisation's functions from beginning to end work effectively toward desired goals, with each step adding value.

In academic organisations, there is much emphasis on quality output (outcomes assessment) and quality in design (curriculum design, transfer of credit). However, not much emphasis is placed on quality process (Chaffee et al., 1992). The emphasis on quality output is inadequate because quality into a product or service cannot be inspected at the end of the line. Once a product is made or a service rendered, the only way to improve it is to do it over. On the other hand, if the process is properly designed and functional, quality is built into the result. At institutions of higher learning, inputs are a favourite substitute for quality. While inputs are indeed significant, they do not create or measure quality. Design, process and outputs are the ones which define appropriate inputs. Proper inputs maximise the system, while improper inputs limit the system. Therefore, it is more sensible to think of inputs as proper or appropriate than as part of the definition of quality.

From the perspective of improving quality, an institution is a collection of processes. Knowing why a process exists is the first step to improving it. Often the purpose of a process is

forgotten and the process is allowed to take a course of its own. For example, many campuses continue to require a dean's signature on a student's registration card, although often the Dean no longer sees the card, much less provides the advisory or regulatory service that the signature was intended to represent. In addition to having a reason for existence, all processes also exist to meet the needs of the people they are intended to serve. An institution must determine the reason for each process, the people it is intended to serve and what those people want and need.

2.4.2.3 *Process for improvement*

TQM offers the conceptual and operational tools for identifying problems, finding their root causes and eliminating those causes (Chaffee et al., 1992). These tools are often called the "quality improvement process". The improvement of quality is itself a process - the process of applying scientific method to one's work. The literature on TQM often refers to this process as the Shewhart cycle or the Plan-Do-Check-Act cycle (PDCA) cycle. First, *plan* - spend adequate effort to understand the nature and causes of a problem by collecting data on it. Use the data to develop a theory for improving the process. Then *do* - try your solution in a limited way to be sure it works. Then *check* to see if the solution worked as intended or whether it needs some revision. Collect data at this stage so you can compare the new process with the old one. Finally *act*; when one is satisfied with the results, one should implement one's solutions permanently in all areas where it is relevant. Whether the experiment works or not, one should go through the PDCA cycle again for continuous improvement.

TQM offers a number of analytical tools to use in the PDCA cycle, including flow charts, run charts, Pareto charts, and cause-and-effect diagrams. According to Chaffee et al. (1992), process improvement is based on several key ideas:

- ❑ One cannot inspect quality into a product or service at the end of the line. Quality requires not just the detection of defects, but also their prevention. It requires elimination of unnecessary steps and assurance of appropriate procedures;

- ☐ All work is a process. The details of organizational processes are important because they are the substance of organisational work that ultimately produces the results. If the details are wrong, the process is wrong. If the process is wrong, the results are wrong. Quality requires attention to detail;
- ☐ One cannot improve a process without data and often the data yields surprises;
- ☐ Common causes of problems are inherent in every process and are not attributable to the worker;
- ☐ Special causes of problems come from exceptions to the normal process. Eliminating them requires detecting them as quickly as possible;
- ☐ Adding steps to a process adds opportunities for new problems. Make each process as simple as possible to improve quality;

Chaffee et al. (1992) further cite some of the fundamental points of view that characterises the administration of an organisation oriented toward TQM:

- ☐ The primary job of administration is to remove the barriers that prevent people from achieving quality work processes. Administrators must listen;
- ☐ When something goes wrong, the most appropriate and productive first assumption is that the process needs improvement. Making this assumption requires changing the habit of blaming the person who is working in the process;
- ☐ The most valuable knowledge about how to improve a process resides in the people who work in the process. Accessing this knowledge requires a supportive climate in which people are free of fear. Taking full advantage of it requires cross-functional teams of people who work at various stages in the process;
- ☐ Cooperation must replace competition as the operating premise of the organization. Supporting cooperation will require many substantive changes;
- ☐ Administrators must entrust the people who work in a process with the opportunity and the authority to improve it; and
- ☐ The value of education and training for all cannot be over-emphasised.

A complete transformation to quality requires top-level commitment, followed by substantial and comprehensive re-education of all personnel. The transformation requires time, effort, and willingness to change. It involves upfront investment, but in the end, it reduces cost by increasing productivity. The quality-driven organisation meets the needs of the people it serves, both within and without.

2.4.3 Management Information Systems (MIS)

In organizations of all types there is an increasing development and use of Management Information Systems (MIS) to inform the decision making process. This is also true for institutions of education with both schools and school systems using MIS for monitoring, improvement and accountability purposes (Gurr, 1997). Those working in school education now need to become informed users of these systems so that the maximum benefit is gained from them.

Information and communication technology is increasingly allowing educational institutions greater access to timely, relevant and detailed information on many of the functions of schools. Information that is more complex can now be collected, analysed and used at both the school and system level. If managerial functions are to be carried out both efficiently and effectively, it is important that high quality information be available to inform decision-making at various managerial levels (Davies and Ellison, 1990:22). An information system should be reliable and provide the following:

- ☐ The right information;
- ☐ To the right people;
- ☐ At the right time;
- ☐ In the right way; and
- ☐ To achieve clear objectives.

Davies and Ellison (1990) describe a framework that links the information systems to the decision-making requirements of an organization:

- ❑ Databank - classifies and stores information, for example, student records;
- ❑ Predictive information – inbuilt assumptions provide for some prediction and inference, for example, spreadsheets are used in allocation of money to subject areas;
- ❑ Decision making – inbuilt assumptions and agreed values provide an information system that makes recommendations to the manager for approval or veto, for example, letting policies for school buildings; and
- ❑ Decision taking – combine information/decision making system that utilises available information to make and communicate decisions, for instance, staff packages.

The decision taking level requires the greatest level of preparation and consideration with respect to the algorithms that are used in making decisions. Laudon and Laudon (1996:18) describe six major types of information systems that incorporate information collection with various levels of analysis and decision-making:

- ❑ Transaction Processing Systems (TPS) – computerized systems that perform and record the daily routine transactions necessary to conduct the business. They serve the operational level of the organization;
- ❑ Office Automation Systems (OAS) – computer systems, such as word processing, electronic mail systems, and scheduling systems, that are designed to increase the productivity of data workers in the office;
- ❑ Knowledge Worker Systems (KWS) – information systems that aid knowledge workers in the creation and integration of new knowledge in the organisation;
- ❑ Management Information Systems (MIS) – information systems at the management level of an organization that serve the functions of planning, controlling and decision making by providing routine summary and exception reports;
- ❑ Decision Support Systems (DSS) – information systems at the management level of an organization that combine data and sophisticated analytical models to support semistructured and unstructured decision-making;
- ❑ Executive Support Systems (ESS) – information systems at the strategic level of an

organisation designed to address unstructured decision making through advanced graphics and communication.

Donovan and Jackson (1991:213) describe how MIS are not simply part of the organisational decision making processes, but have a complexity of function that has various purposes including:

- ☐ Housekeeping – those basic elements, such as payroll and fiscal accounting, that lead to increased efficiency of the day-to-day operations of the organization;
- ☐ Problem identification – systems designed to guide performance;
- ☐ Management support tool – including housekeeping, budgetary and fiscal control, and/or planning;
- ☐ Political and public relations – these may be peripheral to the core function of the organisation and can create what appear to be irrelevant demands on organizational members;
- ☐ Provision of different types of information to different organizational levels; and
- ☐ Multiple purposes and use of information.

2.4.4 Integrated Systems Approach To Improving Management (ISATIM)

The ISATIM approach to management can be closely linked to Tellefsen (1990:xvi) who argues that colleges and universities, like all other organizations, are composed of many interconnected subsystems functioning simultaneously and sometimes even in unison, in support of a broad set of goals and purposes. A problem that seems localised in one subsystem directly or indirectly affects the functioning of the others. Indeed, the cause of that problem may actually lie elsewhere in the organisation. Effective managing of a college and solving all its problems within it, therefore, requires a broad understanding of how the entire system works and how its various parts are related. It also requires integration of efforts and a clear flow of information across all operational areas or subsystems. This approach to college and university management is called the *integrated systems* approach and it provides the foundation upon which ISATIM is based.

According to Tellefsen (1990), efficient and effective administrative management can exist only if those involved have a clear understanding of how authority and responsibility are distributed and where they overlap. Concerning the efficient and effective administrative management, Tellefsen argues that in a very small institution, much of the management and decision-making authority may rest with the president or vice chancellor and a relatively small group of senior administrators, but in larger or more complex institutions, authority may be delegated either directly to those who perform tasks or to a small group of people who supervise others in carrying out assigned tasks. In an environment as diverse as that of an academic institution, however, management and leadership are not a straightforward process of top-down decision making.

Tellefsen states that in all areas related to the functions of accumulating and transmitting knowledge, for example, the faculty has considerable authority in determining the policies and procedures that guide it in carrying out the institution's educational mission. This authority is appropriately executed through the faculty's recognised, organised internal structures, such as academic departments or the faculty senate, which are an integral dimension of overall institutional administration. Since decisions related to the curriculum frequently bear on the needs and interests of student affairs, finance and other operational areas, they cannot be made without the involvement and support of the administrators of those areas.

Hence Tellefsen believes successfully managing an academic organization requires cooperation and collaboration across operational divisions.. The four-part structure of academic affairs, student affairs, development and business affairs serves as a general framework for assigning administrative authority and responsibility, but the lines dividing these areas are often blurred.

Administrative overlap is a fact of academic life and is actually desirable for institutional purposes because it necessitates ongoing coordination and interaction among administrators in all four areas. Such coordination and interaction are essential to the setting of clear, thoughtful institutional and educational goals, the capacity for effective strategic planning and the efficient use of human, financial and technological resources.

Those who manage academic institutions thus need not only have special expertise for their immediate administrative roles but also broad understanding of other operational areas; perhaps even more important is their ability to interact across administrative areas and levels. Yet few administrators can meet these criteria, for the increasingly specialized nature of many administrative roles is producing larger numbers of managers who may be well equipped to handle narrow range of tasks but who are surprisingly ignorant of how other parts of their institutions function or how other areas intersect with their own.

Furthermore, Tellefsen believes that students, as well, can contribute to the formulation of sound management decisions, hence their participation should be encouraged wherever it may be appropriate. For example, they could be involved in formulation of policies that affect the student body. This could improve campus morale, increase students' understanding of overall institutional operations and perhaps prevent hostility and disruption when volatile issues surface. Student participation in management could be through their own formally recognized student organisations or by appointment to recognised faculty organisations or committees established by the president. In all instances the students' role should be clearly defined, and their authority to vote, advise, or merely observe should be understood by all participants.

2.4.4.1 Uses of ISATIM standards

ISATIM incorporates a set of standards of good management, which are presented in a book written by Tellefsen (1990) entitled "Improving College Management". These standards were carefully reviewed by ISATIM sponsors, project advisors and participants. They were field-tested by members of the ISATIM teams, who confirmed their value in actual practice. Tellefsen suggests a few ways in which ISATIM standards can enhance the management of colleges and universities:

- ☐ Formulating operating procedures - Each institution should have its own documented policies and procedures that should guide both the conduct and the evaluation of

institutional operations. The ISATIM standards can serve as the basis for carefully crafted policies and procedures tailored to institutional needs;

- ❑ Increasing personal administrative expertise - administrators at all levels can use ISATIM standards as an ongoing reference for improving their daily performance and strengthening their interactions with other departments. The standards help administrators to become more aware of how they should represent their interests to other units, what information and data other administrators need from them in the way of support, and how they themselves can support the work of their colleagues;
- ❑ Training and orientating new staff and trustees - because they provide a comprehensive view of institutional operations, the ISATIM standards can serve as a valuable resource for training new administrators and support staff. Trustees will find these standards helpful in understanding structure, organisation and interdependence of college and university functions;
- ❑ Developing and improving systems, policies, programmes and services - the ISATIM standards facilitate the planning, evaluation, implementation and changing of systems, policies, programmes, and services by clearly identifying key components, tasks, participants and essential supporters of these efforts. The resulting changes are more durable because important constituencies and issues were not overlooked along the way;
- ❑ Monitoring and strengthening key operational areas - Institutional leaders can measure their own operational systems against the standards set out, identify weaknesses and take corrective action;
- ❑ Clarifying administrative roles and developing job descriptions – Tasks and responsibilities are clearly defined and described and can help administrative leaders in designing staff positions, selecting properly qualified administrators to fill these positions, and assigning responsibilities;
- ❑ Conducting institutional self-studies – The standards offer an ideal starting point for examining institutional performance against proven standards of effective management practice and in the light of stated missions and goals.

2.4.4.2 Limitations of ISATIM standards

Although ISATIM standards have been carefully reviewed and field-tested, they are not cast in stone. They have some limitations that should be mentioned. The limitations include the following (Tellefsen, 1990):

- ☐ They were developed for small private colleges and universities, and while most of them are transferable to other kinds of institutions, they may not fully encompass the administrative complexities characteristic of large, multicampus, or public institutions.
- ☐ The processes elaborated in the matrices and the explanatory notes are not as complete or as comprehensive as an institution's own procedural documents need to be
- ☐ The president of each institution has the ultimate power to decide how much authority and responsibility to delegate to others and how to delegate that authority and responsibility. The ISATIM standards were designed for smaller institutions and the recommendations given may not fit the needs of an institution managed in a significantly different way.
- ☐ The recommendations do not take into account political and motivational aspects of institutional management and change. The matrices depict the procedures, events, and linkages that should exist for specific tasks and activities, but they cannot anticipate and accommodate political and emotional reactions to each management step, for example, turf battles and resistance to change.

2.4.5 Chaos theory

The concept of chaos does not suggest the absence of organisation or a disorder in which uncertainty and predictability predominate. Rather, it refers to what might be called ordered disorder (McBride, www.cms.dmu.ac.uk). The idea of chaos is married to that of complexity. Complex systems may exhibit chaotic behaviour, which is not a lack of order, but order of a complexity that is difficult, or impossible to describe in simple terms, that cannot be broken down into simple equations and that requires complex narrative to describe it (McBride, www.cms.dmu.ac.uk). Chaos theory is part of dynamical systems theory, a branch of system theory with a strong mathematical foundation. The concepts may, however, be instrumental

in treating organisational phenomenon in an interpretive manner; they may give a better explanation of organisational behaviour than the more traditional explanations of scientific management because organisations are complex and dynamic phenomena.

The study of chaos theory has been defined as “*the qualitative study of unstable, aperiodic behaviour in deterministic, nonlinear dynamic systems*” (Kellert, cited in Tsoukas, 1998). The terms in the definition of chaos theory are explained below:

Qualitative – Rather than taking a quantitative approach, in which precise variables are measured at a certain point in time, chaos theory lends itself to an interpretive approach in which patterns emerge over time. The interactions of actors within the organisation and their effect on information systems is best served by narrative studies which draw out patterns of behaviour and in which paths of influence can be traced.

Unstable – Many organisational studies and information system studies assume that organisations reach some stable optimal state. Stages of growth for defining the progression of information systems in organisations and software development models such as the Capability Maturity Model assume that knowledge and understanding of the development and use of information systems within organisations progresses stepwise towards an optimal level of maturity. Chaos theory would support the idea that organisations and information technology (IT) structures never settle into a mature, stable situation. Not only can things progress backwards, but also forwards by unpredictable leaps. Small changes in management style, changes in suppliers, small incremental upgrades of software can have unexpected and catastrophic consequences. The effects of small events, be they technological or managerial, have wide reaching effects on the development of IT within the organisation. This is the so-called *iconic, butterfly phenomenon*, where it is imagined that the flap of the wings of a butterfly in South America causes storms in the North.

Aperiodic - Chaotic systems do not manifest any fixed, permanent patterns. Variables associated with the system do not repeat values, although they remain within a fixed, definable space. Such aperiodic behaviour is highly complex and permanently sensitive to small

perturbations. However, it is not in a state of total disorganisation nor is it patternless. Patterns emerge, persist for a while and then die off to be replaced by apparent randomness and then the birth of new patterns. These patterns are dynamic, never exact copies and in a state of flux. Indeed the randomness may not be random, but an expression of patterns which are too complex to perceive.

Deterministic – Chaotic systems are deterministic in a sense that, given the initial conditions, there is one unique endpoint or goal of the system, which can be mathematically derived. Small changes in the initial conditions may generate very different endpoints. Considering an isolated system, in which initial conditions are determined and the system then runs to completion without any further intervention, then the endpoint can be determined. Complexity is magnified with organisational systems where, not only is the system sensitive to its initial conditions, but there is a constant intervention, a constant adding of new conditions, constant environmental change whether resulting from the human actors within the system, organisational effects or external environmental effects. The expression of this in precise mathematical terms becomes humanly impossible and only a narrative description and interpretation can be given. A qualitative approach is demanded in which general patterns are analysed, relationships and transformations are identified, and the process explanations are sought.

Nonlinear - The notion of linear in this context means that the result of action is always proportional to its cause, e.g. if the effort is doubled, the outcome will also double. However most of nature is nonlinear and the progression of chaotic systems, such as organisations, is characterised by changing patterns which never repeat themselves. The progression of these patterns is not linear, rather periods of inactivity may be punctuated by sudden change. Patterns of interaction are developed over time, affected by feedback loops. The history of an organisation does not progress in a linear manner, improving stepwise towards a goal of maturity. According to chaos theory, even if lessons are learnt from previous experience, the recording of those lessons in terms of standards and best practice will not guarantee future success. If the unexpected occur, new patterns will emerge and intentional practice will result in unintended, unexpected effects.

Dynamic – Organisations are dynamic and changing. They are in a constant state of flux, being created, developed and dying. They are constantly learning, changing in response to environmental forces, changing human networks and changing concepts. Chia (1998) identifies a concept of dynamic complexity arguing that there is an inherent fluidity in organisational situations. Human systems are by nature fluid, transient and perpetually changing. Organisations may be described as perpetually changing configurations of relations, which are continuously transforming themselves.

One of the key ideas that follow from chaos theory is that organisational behaviour can emerge in a manner which cannot obviously be predicted and is not easily explained by looking at the isolated behaviour of the individual parts of the system. Chaos theory suggests that the aggregated behaviour resulting from the interaction of simply described constituent parts produces unexpected levels of complexity and novelty. The interaction of business units even with simple individual behaviours results in a complex web of organisational behaviour which is neither easily explainable nor predictable. Simple rules of behaviour may give rise to highly complex structures which no one thought of before (Toukas, 1998).

2.4.6 Business Process Reengineering (BPR)

2.4.6.1 Background

The classic definition of Business Process Reengineering (BPR) is given in Michael Hammer's and John Champy's pioneering book, "Reengineering the Corporation-A Manifesto for Business Revolution" (Hammer and Champy, 1993). The authors define BPR as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed. In the article what is reengineering, BPR is defined as a refinement of an organisational or departmental structure in order to streamline business processes (What is reengineering: www.amazon.com). The goals of a reengineering project may include improving the quality of customer service or increasing cost savings. Regardless of an

organisation's specific goals, the ideal end result is a company that runs as smoothly and efficiently as possible.

According to Greenberg (BPR, www.earthrenewal.org), BPR involves the total creative rethinking of one or more of a company's key business processes. Often this rethinking is triggered by an existing or looming crisis. To be successful the reengineering effort must be spearheaded by at least one senior executive with a strong authority and influence. The executive's authority and influence needs to cut across functional departments. He/she must be a key player in developing the business case, that is, why there is need for change, and finally stating the ultimate goals and vision for the company. He also plays a key role in determining which processes require reengineering. Which process to tackle first is determined by the level of dysfunction, impact on the company and the feasibility of change. Senior management's support is also crucial since the dramatic change often triggers changes in reward/compensation system, shifts in the corporate mission, significant personnel contractor and considerable uncertainty at all levels.

Senior executives should, in turn, appoint process owners responsible for reengineering a specific process. A reengineering team is assembled consisting of those currently working inside the process and outsiders, who are not involved with the process, hence able to bring fresh ideas (Greenberg, www.earthrenewal.org). The process of reengineering itself has no fixed rules, however, Hammer and Champy identified common themes found in reengineering processes. Some of these include:

- ☐ Several jobs are combined into one - Work normally performed by a number of specialists in different functional departments can now be performed by one individual or team. Through shared databases and decision support systems this generalist has access to all the required information and expert systems to make a sound decision.
- ☐ Workers make real decisions - They have a full grasp of the entire process and can take responsibility if a customer is dissatisfied. The worker is expected to be creative, able to work independently and should have a sense of responsibility. The role of managers is more like that of a coach than "bean counters".

- ☐ Work is performed where it makes the most sense - For example, instead of spreading out the product development team over multiple locations and departments, it is now placed under one roof or group. When a team member makes design changes, those changes are immediately propagated to other team members for review.
- ☐ Checks and controls are reduced
- ☐ Reconciliation, and the associated overhead, is minimized – For example in the case of Ford Motor Company invoices are no longer reconciled with what is shipped because a shipment is not received unless it agrees with the original invoice. Furthermore, suppliers are not paid until parts are actually used in production, thus forcing the supplier to deliver quality and to in tune with Ford's production schedules.
- ☐ A case manager provides a single point of contact – When a customer calls with a complaint, one person is responsible and takes ownership for the resolution of that complaint.

Again, according to Hammer, there are a number of common mistakes that a company commits while reengineering key business processes. These include:

- ☐ Trying to fix a process instead of changing it.
- ☐ Ignoring everything except process redesign
- ☐ Neglecting people's values, beliefs and the corporate culture
- ☐ Placing prior constraints on the definition of the problem and the scope of the reengineering effort – For example, defining the problem in the context of the way the company is doing business today, not in the way it will need to do business in the future.
- ☐ Trying to make reengineering happen from the bottom up.
- ☐ Concentrating exclusively on design, to the exclusion of actual implementation through pilot or full-blown projects.

Many of the characteristics of BPR overlap with those of other established methods, like TQM, Human Resource Management (HRM), Socio-Technical System (STS) design and general "Management of change" techniques (Peltu et al., 1996).

2.4.6.2 Reengineering in business vs. reengineering in higher education

While reengineering might apply to business organisations, some authors such as Porter (1993) still had reservations about the application of the concept in higher education. Porter's reservation stems from the following argument – “if we are to reengineer our universities, what jobs, organisation structures, and management systems would we change? What are the critical performance measures that will dramatically improve?” To answer these questions, says Porter, it may help in comparing a business system to a similar model of a higher education system.

Porter does admit, however, that some colleges have taken reengineering-like actions due to competitive or survival threatening situations. However, he argues that such colleges are notably small, private and community colleges and that there might be a correlation between size and type of an institution and its propensity to reengineer. Porter's feeling is that small, private and community colleges might be more likely to reengineer than public and research universities.

2.5 ENROLMENT MANAGEMENT AT SELECTED COLLEGES AND UNIVERSITIES AROUND THE WORLD

Enrolment management models of some of the South African and international universities have been surveyed and presented in this section to serve as benchmarks against which the admission management at UNW will be analysed and evaluated.

2.5.1 Enrolment management model for Parkland College, Champaign, Illinois, USA

2.5.1.1 History and background of Parkland College

Parkland College is a comprehensive community college in Champaign, Illinois, USA. Parkland College was founded on March 12, 1966 and has been granted full accreditation by the North Central Association of Colleges and Schools. It is committed to offering quality programmes to help students achieve their academic goals (www.parkland.cc.il.us). Due to a

commitment to quality, the college continually assesses the goals and objectives of each programme and gathers data to determine how successful it is in meeting its goals and objectives. In gathering data for self-assessment, the support of students, alumni and their employers is solicited. The input from all stakeholders helps the college to refine and improve its programmes to meet high standards in a changing world.

Career programmes at Parkland College are accredited by various professional bodies and these programmes include the following:

Automotive technology, dental assisting, dental hygiene, nursing, practical nursing, occupational therapy, radiologic technology, surgical technology, veterinary technology, hotel/motel management, restaurant management, to name a few. The accreditation bodies include the following: National Automotive Technician Education Foundation, Commission on Dental Accreditation of the American Dental Association, The Commission on Accreditation of Hospitality Management Programs, National League for Nursing Accreditation Commission, The Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association, Joint Review Committee on Education in Radiologic Technology, Commission on Accreditation for Respiratory Care of the Commission on Accreditation of Allied Health Education Programmes, Joint Review Committee on Education of the Surgical Technologist of the Commission on Accreditation of Allied Health Education Programmes. Committee on Veterinary Technician Education and Activities of the American Veterinary Medical Association.

2.5.1.2 Parkland College enrolment management model

A comprehensive enrolment management model for Parkland College was prepared by Alan Seidman (1995) and is presented below.

Parkland College mission and goals

Enrolment management must be linked to Parkland's mission and operational planning goals.

Parkland College's Mission Statement

Parkland College is dedicated to providing for the comprehensive educational needs of its students with accessible and flexibly scheduled programmes and services of high quality. In so doing, the college affords students the opportunity to acquire the necessary knowledge, skills, and guidance for personal development and societal benefit. Further, the college values and works toward the economic and cultural well-being of the residents of Illinois community college district 505. The board of Trustees and college personnel recognise the dignity and worth of each person, the differences and shared interests among individuals and groups, the contributions of diverse cultures, the value of creativity, and the need to rely on reason and cooperation to achieve our goals. These beliefs express a confidence in the college, a commitment to the communities served, and an optimism about the future of humankind.

Parkland College operational planning goals

- ☐ The College will foster a stronger and healthier learning community.
- ☐ The College will foster greater commitment to higher standards of quality in both education and administration.
- ☐ The College will so enhance its leadership role in post-secondary education and community services that it will become recognized increasingly as one of the premier community colleges in the nation.
- ☐ The College will achieve and maintain financial vitality.

Enrolment management primary goals include

- ☐ Stabilizing enrolment (reverse declining enrolment, control growth and plan for fluctuations);
- ☐ Linking academic and student service programmes;
- ☐ Stabilizing finances;
- ☐ Improving services (shorten response time to students, increase satisfaction and reduce

paperwork);

- ☐ Improving access to information (putting our information systems to optimum usage);
- ☐ Reducing vulnerability to demographic changes;
- ☐ Responding to economic forces (expansion, recession, employment rates); and
- ☐ Evaluating strategies (track what works and change what does not work).

Linking Enrolment Management and the Academic Programme

The quality of Parkland's academic programme can only be developed and maintained in a stable enrolment environment. Parkland's products are programmes and services to district residents. Based on these programmes and services, students will make the choice whether or not to attend the college, persist while attending, or drop out of Parkland. Academic policy guides a student's progress through the programmes offered and must be aligned with both recruitment and retention strategies. Enrolment management recognizes that recruitment and retention are continuous processes.

Enrolment management and client relationship

Since students have the freedom to choose the college they wish to attend, enrolment management should establish early on a client relationship with Parkland students, parents and the community. A student's perspective and Parkland's district needs should always be kept in the forefront when developing and offering services, launching new programmes and initiatives and evaluating enrolment management plans. In addition to marketing college programmes, enrolment management should be concerned with creating the best learning and teaching environment for students. Therefore, the Parkland College needs to balance such factors as academic programme development, faculty development, academic policy formulation, recruitment policies and procedures, student life programmes, as well as retention policies and procedures.

Optimum enrolment

Optimum enrollment is defined as the figure that indicates that revenues and expenditures are in balance. It is a number that falls between the maximum and minimum fiscal and physical capacity of the institution. It is a multidimensional concept and can include:

- ☐ Optimum headcount and the institution's physical capacity. This would include full capacity of all classrooms and laboratories;
- ☐ Optimum full-time enrolment. This includes faculty-student ratios and class size;
- ☐ Optimum segmentation. This includes enrolments in specific departments; and
- ☐ Optimum enrollment is an ever-changing number since capital improvements and implementation of different instructional delivery alternative (e.g. distance learning) will affect enrollment. It has been suggested that enrolment goals can be calculated by taking the difference between the current enrolment and the optimum benchmark set by the institution.

Key Performance Indicators (KPI's)

Key Performance Indicators (KPI's) are numerical indices Parkland can use to measure the success of its strategies and tactics or to judge itself with respect to past performances. KPI's should be developed, clearly articulated and agreed upon by all those involved in the enrollment management plan. Examples of KPI's could include:

Recruitment KPI's	Retention KPI's	Operational KPI's
No. of prospects	No. of cohort freshman	Dollar revenue
No. of inquiries	No. of drop-outs	Dollar/responses expenditure
No. of applicants	No. of probation	FTE enrollment
No. of freshman enrollees	No. of persisters	Headcounts

Parkland enrolment management strategies

Parkland enrolment management strategies would include recruitment strategies, marketing strategies, retention strategies, intervention strategies, and information strategies. All these strategies have been fully discussed in the document compiled by Alan Seidman (1995).

Recruitment strategies

Parkland defines recruitment as the process it will undertake to favourably influence a prospective student's decision to attend the College. The recruitment phase begins with identifying prospects. Prospects are students who are legible to attend Parkland. Once the students enrol, recruitment ends and retention begins. Two primary sets of variables will influence the student's decision to enroll at the College:

- ☐ Student variables include ability and interest, socioeconomic background, the influence of significant others, aspirations and goals, and the expectations of the college;
- ☐ College characteristics include academic programme, cost, locations, and reputation or quality

The decision to enrol at a particular college results from a student's analysis of these variables and the perceived congruence between the student needs and priorities and characteristics of the college. The student centred variables can become the prospect search criteria while the college centred variables become the focus of institutional development. One way of increasing enrolments is to increase the number of prospects. Prospects who usually come through referrals of others have a much higher yield rate than those that come from other types of referrals, such as mailing lists. Building an active referral network requires an information system able to record and track students. Ways to increase referrals can include targeted high schools guidance counsellors and faculty, alumni and other significant groups, churches or community organisations. Public relations which provide a positive image of Parkland in the unity can also increase referrals.

Marketing strategies

Marketing is defined as the process of putting the right product before the right audience at the right price. In education, the product is the curriculum, academic programmes and services. When a product appeals to a well-defined segment of the prospect base that segment is called a “niche”. Current niches in Parkland’s prospect base are: specific programme offerings (nursing, health careers), industry training (business training institute), special populations (women returning to the work force, minorities), career changes, and the reputation of the faculty and the College. In addition, the development of Parkland as a premier college offering microcomputer training and distance education are emerging niches.

Finding prospect groupings with common interests and characteristics is called “market segmentation”. Identifying market segments and describing their characteristics is a function of market research. Market research can be used to identify the types of students that attend particular parts of Parkland, such as those enrolled in nursing and those who attend in the evening or at off campus sites.

Market search can also help Parkland uncover new opportunities. It can help identify other market niches and populations and could provide insights into price sensitivity for specialised training programmes. Market research is an integral part of enrolment management. Not only must it contain a solid institutional research component but it needs to be extended beyond a description of student characteristics. Market research needs to be sensitive to the district’s demographics, including lifestyles, purchasing power and buying behavior. Marketing strategies are also an integral part to retention. Students recruited by the college are those that should be retained.

Retention strategies

tion can be defined as a student’s satisfactory progress toward his/her educational activities. Within this context, students who are recruited and enrolled at Parkland should ably expect that the programmes, policies, procedures and interventions necessary for

them to successfully complete their programmes are in place. Recruitment and retention are inexorably linked. It is essential from the enrolment management perspective that recruitment and retention be coordinated. In order to coordinate recruitment and retention, the College must focus on both students and institutional enrolment decisions and the factors that influence them. These factors fall into three broad categories: academic, administrative and student life. Academic factors can be divided into subcategories to include: academic climate (teacher-learning process and faculty- student interaction), curriculum, programmes and academic policy. Administrative service factors can include: service climate (treatment of students), support systems, and administrative policy. Student life factors can include: peer relationships, participation in college activities and student development including career planning and course placement.

It is important to Parkland that meaningful research focuses on the factors which influence student decisions, to ascertain which ones have a positive influence on student retention behaviour. In addition, a key to helping student retention is the ability of Parkland to identify “at risk” students early enough to permit intervention strategies to work.

Intervention strategies

Poor academic preparation, poor study skills, poor self esteem or personal conflict can contribute to academic underachievement. Each requires different intervention strategies. Intervention systems should have diagnostic capability to refer students to the treatment or counseling most appropriate for them to succeed. Parkland should use intrusive intervention with students identified as having special needs. Intrusive intervention would take the form of advising and counseling and would involve prescriptive academic skills and /or tutoring programmes. Freshman orientation and Parkland’s ORN 101 can be very effective in helping a student achieve his or her goal.

In addition, intervention strategies should also focus on faculty and staff. Cross-cultural sensitivity, diversity of learning styles and effective teaching and learning environments, are effective retention initiatives currently being undertaken at Parkland. Research shows that

most students leave college the first year so it is important to emphasise retention and intervention strategies. The key elements in intervention strategies is knowing when and with whom to intervene.

Information strategies

A campus wide information strategy must tie individual systems and data together into a seamless management information system. Data should be captured once at its source and be available to those in need of the information to make decisions. There should be one data dictionary for the College, with each element having only one definition. Technology should be used to provide service directly to students, faculty and staff. Various technological systems can help Parkland improve services, including:

- ☐ Touchtone registration (in progress);
- ☐ Electronic mail (in place);
- ☐ Voice mail (in place);
- ☐ Voice information systems (in place);
- ☐ Computerised ID cards (in progress);
- ☐ On-line advising (in process);
- ☐ In-house publishing on demand;
- ☐ Academic and student bulletin boards;
- ☐ Interactive classrooms (in place); and
- ☐ Information kiosks

Integration across all data systems is a must to link information, course planning and scheduling, faculty planning and management and student financial aid. Data should flow barrier-free, in a useable format to authorized users.

Reengineering

Reengineering is the process of redesigning major processes around information systems. Reengineering is defined as using a modern information system to redesign administrative processes to dramatically increase productivity and performance. Reengineering must be done with a client driven mentality that puts service first. Ideal areas for reengineering at Parkland could include:

- ☐ Developing paperless grading;
- ☐ Bringing on-line advising to faculty offices;
- ☐ Touchtone registration;
- ☐ Computerised ID and library check out system; and
- ☐ Optical imaging.

Reengineering requires partnerships between campus technologists and campus clients focusing on the future. It requires a focus on technology at all levels of the College.

Enrolment management implementation at Parkland

Enrolment management requires the interaction and cooperation between different offices and services of the college. An effective enrolment management can only succeed with support from top-level administration. In addition, an Enrolment Management Task Force (EMTF) is a good fit with the existing Quality Implementation and Environmental Scanning Committees.

An EMTF should be appointed and chaired by a top-level administrator. EMTF subcommittees would include:

- ☐ Counselling, Advising, Assessment and Placement;
- ☐ Financial Aid and Business Services;
- ☐ Admissions, Records and Recruitment;
- ☐ College and Community Relations;

- ☐ Academic Programmes and Services; and
- ☐ Institutional Research

Chairs of sub-committees would form the EMTF and be charged with developing, evaluating and implementing the Parkland College Strategic Enrolment Management Plan. The EMTF would develop enrolment management goals and objectives as they pertain to the college mission statement and operational planning goals. The EMTF through the Strategic Enrollment Management Plan gives some sense of how Parkland expects to reach these goals in an integrated and student centred way.

To ensure continuity an outline should be used to gather pertinent information by each sub-committee. The outline include such areas as:

- ☐ Mission of service area;
- ☐ Staff perception of mission of service area;
- ☐ Review of available literature and research of service area;
- ☐ Service area wish lists (services needed but not provided); and
- ☐ Analysis and recommendations (matching goals with results)

An example of the form and function of sub-committee would be: Admissions, Records and Recruitment Subcommittee.

The sub-committee would be chaired by the director of admissions, records and recruitment. This subcommittee may be broken further into additional subcommittees, for example, one for admissions, one for records and one for recruitment. The functions for the admissions, records and recruitment sub-committee would include:

- ☐ Prospect system development - An automated prospect system should be developed to track prospects and to personalise correspondence in order to maximize student conversion rate from prospect to applicant. An inquiry card should be developed and issued out at every opportunity to anyone interested in Parkland. Faculty, staff and

administrators should be encouraged to carry inquiry cards to distribute when appropriate.

- ☐ Student decision calendar – A calendar of events should be developed in order to maximize student communication and encourage enrolment.
- ☐ Special programmes – Special programmes to supplement activities will include parents' night, inviting high school students to participate in Parkland College's Spring College Day, quarterly guidance newsletter, Special programmes for high school students at Parkland and /or at the high school, invite groups on campus as often as possible, pursue students who are spouses, friends or family members to students and staff at Parkland, recruit international students.

Process and programme evaluation

Process and programme evaluation are essential to the enrolment management process. Evaluation can take the form of surveys, programme reviews, focus groups on service effectiveness, or surveys of student needs and priorities. Evaluation can be either quantitative and/or qualitative.

Remarks

According to Seidman (1995) enrolment management is a powerful tool which takes time, effort and a college-wide commitment to implement. Comprehensive campus cooperation is the heart of enrolment management. It is the integration of many office functions, practices and procedures that is the challenge to make enrolment management work. Enrolment management will optimise enrolments, services and resources. It will make Parkland College a premier institution that puts students first.

2.5.2 Enrolment management at the University of Calgary, Canada

2.5.2.1 Background

Upon its establishment in 1998, the Enrolment Policy Committee at the University of Calgary took on a very large job. Its mandate was to consider the “optimum size and mix” of the student population and to make recommendations to the board of governors about that population, including undergraduate and graduate students, spring and summer session enrollees and those in credit and non-credit offerings (www.ucalgary.ca/VPA/epc). Among its specific tasks, was the charge to consider “the desirable mix of students in quota and non-quota faculties”.

In a draft report of the enrolment policy, the Enrolment Policy Committee at the University of Calgary pointed out the primary objectives of enrolment management and made specific recommendations on how the enrolment system should operate (www.ucalgary.ca/VPA/epc). In one communication by Ronald Bond, the Vice President (Academic) at the University of Calgary, which was directed to the university community, the Vice President mentioned that it is important that the Enrolment Policy Committee’s draft report on enrolment management be viewed within the context of the overall strategic direction of the University of Calgary. Specifically, this report should be viewed as one part of the move to a fully integrated strategic direction for the university. It is designed to converge with and to complement the considerations, recommendations, and achievements of the Direct Entry Review and Implementation Committee, the Undergraduate Curriculum Redesign initiative and the work of the Task Force on lifelong learning. It is also intended to be a key document in the discussion about an Academic Plan for the University of Calgary. Mindful of the demographic projections available, the Enrolment Policy Committee anticipates a decade of unprecedented potential growth for the post-secondary institutions in the province of Alberta, particularly at the University of Calgary. It also recognizes constraints on the university’s potential growth. Among the major constraints to be acknowledged are the availability of space and ectations for the institution to be accessible. The Vice President further stated his sentiment

that there was no point in providing access to an inferior educational and research environment and that planning at Calgary must be predicated upon that truism.

As Ronald Bond indicated, the enrolment management as designed by the Enrolment Policy Committee at the University of Calgary has three primary objectives:

- ☐ To treat enrolment management as a proactive strategic opportunity that can shape the positioning and the image of the University of Calgary, while enhancing academic quality;
- ☐ To coordinate the vision and academic planning for the University of Calgary so that enrolment and enrolment growth are managed deliberately, by design, not by accident; and
- ☐ To enable individual faculties and departments to implement the institutional vision at local levels by linking the attainment of enrolment targets to funding incentives.

The specific recommendations contained in the report from the enrolment policy committee are as follows:

- ☐ That the University of Calgary, with reference to its Strategic Direction, establish both institutional targets and enrolment corridors for each Faculty;
- ☐ That the University, through the Enrolment Policy Committee, conduct a study of graduate enrolments and their relationship to undergraduate enrolments in a research-intensive institution;
- ☐ That the University of Calgary appoint a Director of Enrolment Services in the division of student and academic services;
- ☐ That the University of Calgary establish consistent approval and monitoring mechanism for the management of institutional and faculty-specific enrolment corridors in order to ensure that all faculties are contributing to institutional objectives by adhering to the approved enrolment targets;
- ☐ That the University planning committee and the University Budget Committee explore and develop models for a fee-based budgeting system and determine the viability of making such a system the basis of budgetary allocations at the University;

- That the administration of Post Degree Continuous learning programmes, spring, summer and special session offerings be the responsibility of the faculties teaching the courses. Such registrations will be included in the enrolment corridors of the teaching faculties.

Through a process of discussion and data-gathering, the Enrolment Policy Committee eventually came to the conclusion that it needed to sharpen the very focus of its terms of reference in order to deal first and foremost with quotas. The principal rationale for its emphasis on quotas is that they have been and still are the *de facto* method of managing enrolments at the University of Calgary. Before going on to consider other aspects of its mandate, the Committee's first undertaking, it believed, had to be an examination of the quotas used at the University of Calgary to curtail and channel enrolments and, less obviously perhaps, to match enrolments to available resources.

2.5.2.2 Course and programme-level quotas

The University of Calgary has controlled its admissions to undergraduate degree programmes since 1988 by establishing a minimum matriculation average for fresh students seeking entrance to the Faculty General Studies and by setting a minimum Grade Point Average (GPA) for admission to non-quota programmes (www.ucalgary.ca/VPA/epc). Much of the process of controlling admissions is predicated on the fact that many undergraduate programmes admit a pre-determined number of students through a formal GFC approved quota. For faculties, the chief vehicle for managing enrolments at the University of Calgary during the last decade has been quotas, defined broadly as *any mechanism used to limit or control the flow of enrolment into and through the undergraduate programmes offered*.

While the University of Calgary has *de facto* ways of managing enrolments and enrolment growth, it is clear that enrolment management at the University of Calgary has derived neither from a comprehensive set of policies and procedures nor from a set of institutionally understood values. Faculties, departments and programmes have been largely left to their own devices to determine the ways in which students would register in and move through their

programmes. Over time, faculties and departments have developed a complex accretion of regulations, procedures and practices for dealing with enrolments at local levels.

2.5.2.3 *Principal issues emerging from the Enrolment Policy Committee's Study*

The practice of 'controlling' admission numbers through the use of quotas in some of the academic programmes has given rise to several issues and problems:

☐ *Distribution of institutional instructional effort*

A measurable outcome of educational activity in quota faculties is typically the number of declared majors (or the number of graduates), since most of the teaching done in quota faculties is done in-house to that faculty's own students. In non-quota faculties, on the other hand, a very large service role makes the number of course and section enrollees taught a more reliable metric of educational activity. Table 2.1 reveals the distribution of institutional instructional effort over the faculties offering credit instruction.

Furthermore, the quota and the non-quota faculties differ from one another in their ability to engage in immediate-term and long-range planning and in their ability to allocate resources internally. This phenomenon was noted in the report of the sub-committee to investigate barriers to progress through degree programs which came to the

... realization of a dichotomy between the "quota" and "non-quota" Faculties, with the "Arts and Sciences" Faculties becoming de facto the "non-quota" faculties and having no effective ways to govern their own program admissions due to a lack of mid-level management of enrolments. What we mean by this is that the University has a global enrolment target (X) and the combined total enrolments of the quota faculties are also a target number (Y). This latter number (Y) is also effectively linked to progress through programmes, but in those faculties the budget can be allocated in a rational way to deal with this. The non-quota enrolment total is manifested only as the difference between the

global and quota totals ($X - Y$) and has no structure to it. Individual courses may be capped because of resource limitations, but the programmes generally are open-ended with respect to admissions (provided that individuals meet the minimum admission requirements) and their structure is unpredictable on a year-to-year basis. Thus, we concluded that most of the major entanglement issues revolve around patterns within and demands upon the non-quota faculties. While the quota faculties (both direct admission and those accepting students after one or two years in a non-quota faculty) can plan effectively for the future development of their curricula, since they are largely self-contained beyond the preparative component, the non-quota faculties will find this difficult because of the combined effects of internal and external demands. The quota faculties impact upon the non-quota faculties, and the latter further impact upon each other.

Table 2.1 WEEKLY STUDENT HOURS (WSH) GENERATED IN QUOTA & NON-QUOTA UNDERGRADUATE FACULTIES BY FACULTY OF STUDENT REGISTRATION FALL 1998

FACULTY	TOTAL WSH	WSH GENERATED BY OWN UNDERGRADUATE STUDENTS	PERCENT
QUOTA			
Engineering	36 918	34 770	94.2%
Kinesiology	6 883	5 334	77.5%
Law	3 636	3 512	96.6%
Management	30 564	16 301	53.3%
Nursing	6 330	5 855	92.5%
Social Work	4 239	3 145	74.2%
TOTAL	88 570	68 917	77.8%
NON-QUOTA			
Fine Arts	15 368	8 681	56.5%
General Studies	11 230	7 593	67.6%
Humanities	33 175	6 079	18.3%
Science	97 694	29 669	30.4%
Social Sciences	63 293	24 216	38.3%
TOTAL	220 760	76 238	34.5%
GRAND TOTAL	309 330	145 155	46.9%
Note: Data excludes Education and Medicine. Fine Arts is listed as a non-quota faculty but has quotas for admission to some majors.			

☒ *Distribution of institutional financial resources*

A serious question about resource allocation for the "quota" and "non-quota" faculties is implicit in the data on Weekly Student Hours presented above. Some Faculties generate considerably more tuition income than others. Put another way, some Faculties receive much

more money, proportionately, from the government's base operating grant than others. For example, in 1997-98, the Faculty of Social Sciences generated from tuition fee (and for general revenues) 69 cents for each dollar it spent in its operating budget. The Faculty of Engineering, on the other hand, generated from its tuition revenues 30 cents for every operating dollar it budgeted. Similarly, the Faculty of General Studies took in fees totalling 68% of the budget on which it operated, whereas the Faculty of Fine Arts took in 31%. Hidden in these budgeting arrangements is a system of cross-subsidization of university activities that is probably not understood by Faculty, students, members of the Board of Governors and others. This cross-subsidization reflects at least two obvious facts: 1) some Faculties run programs that, by their nature, are more expensive to operate than others; 2) revenues from robust enrolments in non-quota Faculties tend to underwrite teaching and research activities in smaller quota Faculties. Furthermore, these facts are complicated by a third: some Faculties are considerably more research-intensive than others, and thus expend more institutional resources than others on their research activities; in turn, they tend to generate more revenue than others through externally sponsored research activities, the commercialisation of intellectual property and so on.

☐ *Student access to programs*

Because of quotas, students continue to be turned away, sometimes in substantial numbers from the programs of their choice. Table 2.2, taken from a submission the Registrar is required to make annually to the government, indicates the extent of this phenomenon in the Fall of 1999.

The University of Calgary turned away 1458 qualified students from the programs of their choice in the Fall of 1999. Not all of these students remained at the University of Calgary, and those that did will include those whose main motive is to find another way into the programme originally sought and will include those who may be mismatched with their current mme.

Table 2.2 SEPTEMBER PRELIMINARY ENROLMENT SURVEY, 1999

Quota Program	Comments
Management (B.Comm)	There were 1,032 applicants for 510 positions. The cut-off GPA average was 3.15 compared to 3.12 in 1998.
Engineering	There were 207 qualified applicants refused admission. The high school average required for admission increased as described above. The GPA for transfer students went from 2.00-2.75 to 2.25-2.99 depending on the specialization you wanted.
Fine Arts	A total of 58 qualified applicants to Art, Drama and Music were refused entrance.
General Studies (Communications Studies Major)	A total of 82 qualified applicants were refused admission. The GPA went from 3.03 in '98 to 3.16 in '99
Kinesiology	A total of 63 qualified applicants were refused admission. Required high school average is 75.0% and the GPA for Transfer Students was 2.90.
Nursing	A total of 105 qualified applicants were refused admission to the four year Conjoint Nursing program. High school average was previously described
Science (Biological Science Major)	A total of 179 qualified applicants were refused admission to 312 positions in 2nd year. The GPA required was 2.79 for admission.
Science (Geology)	A total of 47 qualified applicants were refused admission. Cut-off GPA was 2.85.
Social Sciences (Psychology)	A total of 127 qualified applicants were refused admission. Cut-off GPA was 3.00 in '99 as compared to 2.90 in '98.
Social Work	A total of 68 applicants were refused admission. Cut-off GPA was 3.00 as compared to 2.50 in '98

Please note that the number of applicants indicated below includes both internal and external applicants seeking admission to quota programs. ['Qualified' applicants are those who met the posted minimal standard for their preferred program.]

☐ *Public perceptions of how the University of Calgary manages enrolment*

If members of the campus community find the array of information analysed in this report complicated and bewildering, what do prospective students, parents and guidance counsellors of it? How do we justify to the public we serve the profusion of devices we use to curtail control enrolments?" One example of the way in which the policies and procedures at the city of Calgary give rise to confusion has to do with the differential treatment of

transfer students and first-year students coming straight from secondary school. Quotas affect and are perceived by prospective high school students and transfer students very differently. Specifically, prospective students coming from high schools tend to perceive the University of Calgary as accessible, especially to those with good grades.

However, transfer students and existing University of Calgary students are often moving toward entrance to programmes with limited enrolments and are acutely aware of the restrictions on enrolment because of quotas. For many of them, the University of Calgary is perceived as elitist and inaccessible. This perception stems in part from different entry requirements for students migrating to such programme from within the University of Calgary and those transferring to them from a college. To compound the problem, there is variation among faculties regarding accessibility; there are quite different policies and quite different messages delivered to prospective students to about accessibility.

To be specific, Engineering favours and protects University of Calgary students by allowing them to move from first to second year with a GPA as low as 1.50 while requiring a 2.25 – 2.99 GPA for transfer students (depending on area of specialization) who wish to enter either 2nd or 3rd year Engineering. Management, on the other hand, requires a 3.15 GPA from either a University of Calgary student or a transfer student wishing to enter the Faculty at the third-year level. While Management's policy appears to treat all would-be students consistently, the perception among some students and many faculty members is that a 3.15 GPA is much easier to attain at a college than at a University such as the University of Calgary. Thus, unlike Engineering's policy and practice, Management's policy and practice arguably give preference to transfer students.

The University of Calgary's strategic direction affirms, "We must be a focused institution with a marketing strategy and a global presence." The work of the Enrolment Policy Committee reaffirms this need and highlights the importance of the University of Calgary's exercising strategic choices in order to define and defend a policy for admitting and enrolling students within the post-secondary educational system in Canada and particularly in Alberta.

The active management of enrolment has long been ignored as a proactive positioning, marketing, and recruitment tool. The Enrolment Policy Committee is convinced that proactive, coherent and consistent enrolment management policies can assist the University of Calgary to select students for programmes by design and not by chance.

Perhaps inadvertently, the University of Calgary has transmitted very confusing messages about accessible programmes, elite programmes, scarcity of supply and abundance of demand to the public served. Many misperceptions of the University of Calgary can be traced to complex, confusing and changing enrolment and admission policies. A consistent, rational and intelligible policy must be developed and communicated broadly and clearly. The Prospective Student Office and the Office of International Recruitment and Marketing need to be involved in the development of enrolment goals and enrolment policies that are based on universally accepted principles for enrolment limits and enrolment growth. The personnel in these two offices are most directly in touch with potential students, with parents and with counsellors and to do the jobs we ask them to do for us, they must be able to clearly explain our policies and procedures.

In addition, because the University of Calgary lacks a clearly enunciated retention strategy both for students planning to register and for those already enrolled, it might be that the most economical and efficient mechanism available is being overlooked. As is pointed out elsewhere in this report, it takes less money and less effort to retain a student already at the University than to find a new student.

□ Impact of government funding policies

The reduction of funding to the post-secondary institutions in Canada has led to the necessity to take advantage of 'envelopes' of funding provided by the government. However, the availability of these funds and the constraints surrounding their use further exacerbate the challenges of managing enrolments. The Access Envelope would appear to be the government's principal vehicle for addressing the growth expected in Calgary and other parts of the University of Calgary's traditional catchment area. By linking funding to their

preferred disciplines and programs (e.g. information communications technology), the Ministry of Alberta Learning itself induces expansion of institutional capacity in some areas and not others. These areas of expansion may or may not be correlated with the areas identified as priorities or as areas of strength by the university itself.

The government of Alberta also uses other funding policies to shape both policy and practice at universities and colleges:

- ☐ By emphasizing, through the Learning Enhancement Envelope and the notion of Campus Alberta, cooperative and collaborative undertakings among institutions in the system, the government provides other kinds of incentives;
- ☐ The Performance Envelope is based on performance in the categories of both learning and research; in the former, institutional growth is expected at a rate of c. 1.3% net per year and student satisfaction is a major determinant of tier one funding through the envelope;
- ☐ Finally, the Tuition fee policy should be noted, which limits not only the rate of tuition fee increases, but also caps the ratio of total tuition fees collected to an institution's operating budget (30%). This policy impinges on our ability to introduce differential fees, were we to decide to do so.

The University of Calgary's enrolment policies will have to be geared, at least in part, to the government's agenda and the government's preferences respecting the size and mix of student population. While many of the government's policies seem restrictive, its outside tuition policy allows some latitude in the development and delivery of economically feasible programmes, while at the same time, focusing institutional enrolment goals.

☐ *Capacity and infrastructure issues*

According to the government's own Facilities Accommodation Capabilities Study, the University of Calgary is already at or above its physical ability to accommodate additional enrolments and programmes. Enrolment planning must be linked to the definition of needs for

teaching, research and other kinds of space and facilities. The setting of enrolment policies and the management of enrolments in a period of expected growth must go hand in hand with the development of a Campus Plan that is already underway. Capacity is also an issue for faculty and staff, who have seen the university enrol more and more students during a period of deep budgetary reductions that have resulted in fewer faculty and staff resources. Most students and staff believe with justification that the University is now at a point of saturation.

Given the environmental scan with which this report begins and the shortlist of questions to which that scan gave rise, the Enrolment Policy Committee believes that the current strategy of managing enrolments through a disparate array of uncoordinated practices, some at the course level and others at the programme level, is no longer viable for the University of Calgary, as it prepares for another decade of enrolment growth. The recommendations are predicated on the conviction that alternatives to the status quo should be explored. However, before arriving at the recommendations, enrolment policies and practices used by other research-oriented Canadian universities were examined.

2.5.2.4 Enrolment management policies and fee-based budgeting at selected Canadian Universities

The Enrolment Policy Committee confronted often the inseparability of questions about enrolment limitations and questions about resource allocation. Either tacitly or overtly, the most frequent justification for the use of quotas has been the unavailability of resources to meet students' demand for access to programs or courses of their choice. The committee has concluded, therefore, that the management of enrolment at the University of Calgary must be linked to the management of the institutional resources that are distributed to and used by the faculties and departments. This must be done within the context of the strategic direction of the University. Institutional resources will follow the academic direction of the university.

In this section, a description is given of the way in which several other universities in Canada have created a nexus between resource allocation and enrolments. The Enrolment Policy Committee's view is that time has come for the University of Calgary to carefully consider

the *pros and cons* of such systems. Its analysis suggests strongly, however, that there are more advantages than disadvantages to systems of the sort mentioned here. In this respect, their views are compatible with those found in the Peitchinis Report on "fee-based budgeting systems" (1996).

McMaster: Here is an account of the way in which McMaster University administers a fee-based budgeting system (information supplied by Fred Hall, associate Vice-President (Academic) at McMaster University.

Ontario operates on a corridor funding formula. McMaster was very high in the corridor and there was little incentive for units to take on more students because there were no rewards. So we agreed that all students admitted above the corridor would be treated under the excess tuition formula. Each Faculty was given an annual target for new admissions and for overall enrolment in the Faculty. 'Analysis and Budgeting' determines the FTE count of students and declares how many students each Faculty has registered above their 'corridor.' The split of the tuition for these students is 65% to academic support and 35% to the centre for support. For example, if tuition is \$4000, the Faculty would receive \$2600 and the central administration would receive \$1400 for each student above corridor. Faculties use this 'soft money' for short-term appointments, bridging funds for retirements, new recruitment initiatives, and improvements in the Faculties. Some went further and gave a share directly to the Departments who took on more students and offered large enrolment courses.

Part-time students are counted in the formula, but summer school is treated separately. The Faculties receive 65% of tuition for each student registered in their courses and basically run the show. Our summer school enrolments have not decreased as significantly as other Ontario universities and, in fact, in some Faculties there are increases. Visa students are treated separately as well. Faculties can recommend their own fees and set a standard overhead per student. This is designed to let Faculties assess demand, desirability of programs and their own

cost/capacity. So a base line of tuition (roughly equivalent to the domestic rates—undergraduate and graduate) is retained centrally to support international recruitment activities and the rest goes to the Faculty.

Behaviour of Faculties did change when this was put in place. They became more involved in recruitment/retention because they could see the rewards. Some Departments also changed their attitudes, because this represented a new revenue stream and provided an opportunity for them to contribute to the overall academic well being of the Faculty. When new appointments are considered, course enrolments are an important factor in the equation."

Dalhousie: Since the '80s, Dalhousie has used arrangements that appear to be similar to those used at McMaster. Here follows the information supplied by Sam Scully, Vice-President (Academic) at Dalhousie University (www.ucalgary.ca/VPA/epc):

Dalhousie has an Enrolment Revenue Budget Adjustment (ERBA.) Each Faculty has an enrolment baseline (1988 levels) upon which the bulk of its budget is based. Any growth (or decline) in enrolment during a year is reflected by a budget adjustment (up or down) in the subsequent year. That budget adjustment is an amount that runs from 50% to 100% of the tuition paid (or not paid) by the new enrollees (or the lost enrollees.) Dalhousie has seen almost no government New Program funding for many years. All program enhancements have been "self-funded" based upon incentive sources such as ERBA income. The baseline for all Faculties includes graduate studies; so all Faculties have been able to go after ERBA funding. The operation of this policy is a "soft" administrative system involving the Deans, the Registrar, and the Vice-President (Academic.) The degree to which individual Faculties have benefited from the ERBA has depended as much on decanal leadership and creativity as anything else.

Lethbridge: The Peitchinis Report provides some detail on the workings of the "Instructional Fee Allocation Model" at the University of Lethbridge. What follows is a summary of that model, which was introduced in the budget year 1993-94 and is still in place there.

The model is a method of allocating instructional fees (tuition and materials and services fees per course) to each of the Faculties that actually earn them. Using the base year of 1993-94, the University budgeted for each unit on the basis of average instructional fee revenue generated by that unit in the previous three years. In each year after the base year allocation, the focus in budget management has changed to the increments/decrements in instructional fee revenues. Increments are credited to the units in full – the increment associated with increase in course enrolment, and the increment derived from increases in fees. Faculties have been given wide latitude in the expenditure of funds, although since the funds are taken to be "soft money," their expenditure cannot create continuing appointments. If a Faculty's tuition revenue falls below the budgeted amount, it has the choice of managing the shortfall temporarily, using its carryover, if any, or other resources available to it, or of borrowing from an Enrolment Management Reserve (which is set at 3% of the total instructional fee revenue). The Instructional Fee Revenue System effectively shifted the crediting of course fees from faculties of registration to faculties of instruction. As a result, the Faculty of Continuing Education is no longer responsible for Summer School and Intersession credit courses.

University of Saskatchewan: This system, also described and assessed in the appended Peitchinis Report clearly resembles the system employed at the University of Lethbridge and has features of the system used at Dalhousie.

Baseline fee revenue is established for each College, based on the income the College would have earned from its courses and programs in the previous two years. Baselines are adjusted to reflect general tuition increases. Each College retains the baseline tuition revenue generated by enrolment in both its undergraduate and graduate courses. If enrolment exceeds the baseline established, the

College receives 80% of the tuition revenue, with the other 20% going to the central coffers for re-distribution to other units affected.

2.5.3 Enrolment Management at the University of the Western Cape, South Africa

2.5.3.1 History and background

The executive summary as was presented on the 29 August 2000 covers both the historical background and the important aspects surrounding enrolment management at the University of the Western Cape (UWC). Following is the executive summary as at 29 August 2000 (www.uwc.ac.za; Equitable Access Through Enrolment Management)

The University of the Western Cape (UWC) is a state funded autonomous South African institution, established in 1960 - the high noon of Apartheid - as a university for people classified as "Coloured". There is broad recognition of its efforts throughout the 1970s and 1980s, to repudiate the ideological terms on which it was founded. Through its mission and history UWC has earned a reputation for providing meaningful access to all applicants, particularly to educationally disadvantaged students and reforming its curricula to serve the needs of the broader communities in which it was located.

Amidst fluidity and change, UWC's overall strategy has been marked by a strong orientation to the future as encapsulated in its motto, Respice Prospice: drawing on our past in shaping our future. Academic activities, research and planning have intensified as the university positions and enables itself to meet the dual challenge of reconstruction and development, and of quality, competitiveness and growth in a global economy. Locally, the imperatives of equity, redress and development form essential components in the reconfiguration of the South African higher education system. As a medium-sized university with strong undergraduate and graduate teaching and research programmes UWC remains equally committed to issues of quality, equitable access and equity of outcomes.

South Africa's higher education institutions, and particularly those negatively affected by apartheid policies, face a formidable array of challenges as they strategically position themselves within the rapidly changing and competitive policy environment. Student enrolment has dwindled nationally leading to a severe under-representation of students in higher education. While harsh economic conditions deny many learners from impoverished communities access to higher education, very few non-traditional learners are afforded a 'second chance' to access higher education through lifelong learning opportunities.

Amidst these challenges, UWC is severely constrained by circumstances of acute budgetary constraints, reduced state subsidies and escalating student debts. In response to such external pressures of enrolment decline and related financial squeezes, UWC has already applied tough decisions - including contraction of some programmes and staffing levels. But in a context of fiscal uncertainty, any further drain of its intellectual expertise is likely to negatively impact on the quality and image of the university.

This project proposal, 'Equitable Access through Enrolment Management', forms an integral part of UWCs Enrolment Management and Student Development plan. The broader aim of this plan is to manage the overall size and shape of the university and stimulate future enrolment growth based on a coherent and well-planned participation strategy that supports the university's mission, ethos and strategic academic, financial, and student development goals. The purpose of this funding proposal is to implement key enrolment management strategies, which are geared to increase the participation, retention and success rates of under- and postgraduate students and to enhance the planning, monitoring and management capacity. Equally important is to account for the project's performance against pre-defined goals and to sustain the project beyond the funding period. Linked to notions of academic and economic viability, the proposed project is conceptualized around eight broad 'turn-around' strategies, aimed to:

- ❑ *Increase access to higher education by providing advisement to Grade 10-12 learners and subject-specific school teacher support;*
- ❑ *Widen access to non-traditional learners through the recognition of prior learning and tests for academic potential;*
- ❑ *Reduce the high attrition rate of students, particularly first-time entering students, and improve their progression and completion rates through academic, supervision and professional support to students;*
- ❑ *Base planning, decision-making and resource allocation on pertinent and accurate information, a clearer understanding of the students' needs and enhance UWCs capabilities to manage and sustain such efforts beyond the external funding cycle;*
- ❑ *Leverage student hardship through financial aid, linked to service learning and through work-study mechanisms that can align human resources to strategic goal attainment;*
- ❑ *Improve the satisfaction level and quality of students' life on campus through professionalised administrative and support services;*
- ❑ *Support the recruitment, retention and progression rates through marketing, advocacy and educational material support material and account for such successes and expenditures through open communication strategies; and*
- ❑ *Increase the employability rate of graduates through career development and graduate job placement opportunities*

For UWC the challenge of equity and access is clear: During the year 2000 when it celebrates its 40th anniversary and beyond the university must build on its critical strengths in an innovative and dynamic fashion and in a manner that ensures the distinctive characteristics which make this a very special university.

2.5.3.2 *General rules for admission and registration*

On an annual basis the Senate at UWC determines the closing date for enrolment. The registration office subsequently develops a schedule of prescribed registration dates. All students are expected to register on pre-determined dates. Only registered students may attend classes, submit assignments, write tests and examination in subjects officially recorded.

Senior students

All senior students are informed by letter during January every year regarding their registration. These letters are coordinated and dispatched by the Registration Office. The procedures and information sent are as follows:

- ☐ A wishlist, indicating the subject(s) for which a student qualifies to register is sent to his/her postal address;
- ☐ The letter accompanying the wishlist contains the following information:
 - How and where the student should mark the subjects for which (s) he wishes to register;
 - Where the list should be returned to (Registration Office) so that the information may be provisionally recorded;
 - The closing date for the submission of the list;
 - The prescribed payment and method of payment;
 - The information will be activated upon receipt of the prescribed payment;
 - Where to collect his/her registration printout, and check for timetable clashes; and
 - Where to validate his/her student card

New first year students

The registration of new first year students takes place during their orientation period. Dates of registration for specific study programmes are outlined within the orientation programme. During their registration process, peer-facilitators normally assist new first year students. However, it is still the student's responsibility to ensure the correctness of his/her

registration. To ensure that their registration proceeds smoothly students require the following:

- ☐ Documentary proof of matriculation exemption type;
- ☐ Certified copy of identity document; and
- ☐ The prescribed deposit payable by students, which includes the registration fee.

Registration procedures

New first year students are expected to:

- ☐ Ensure that the prescribed registration payment is made via the cashiers, in the Banking Hall, or via electronic payment;
- ☐ Proceed to the faculty's registration venue and produce the registration receipt and receive registration and faculty enrolment forms;
- ☐ Complete the course and subject enrolment form by circling the subjects they intend enrolling for; and to
- ☐ Ensure that the form is signed and taken to a registration point at faculty.

Verification of information (All students)

All students, whether they used the wish-list or traditional format of registration are expected to observe the following guidelines:

- ☐ At the registration point they should inform the official if any personal details have changed such as their address, marital status, etc.;
- ☐ They should check the correctness of the statement issued indicating the choice of subjects;
- ☐ They should verify if all the information taken up is correct and that there are no timetable clashes;
- ☐ They should ensure that their registration forms are handed to the official at the next point and that their student card validated (Senior students only). New first year students should attach a certified copy of results and ID document. The documentation

will be sent to the Records Office to be placed on the student's personal file. The registration office and the records office should co-ordinate this process;

- ☐ New first year students and senior students without student cards should acquire student cards; and
- ☐ Students must ensure that certified copies of their identity documents are attached to their registration forms. Students without identity documents may register, but copies of ID's should be submitted before the end of the first semester.

Adjustment to registration

Only in exceptional circumstances will a student be allowed to change to another degree programme. Students may only use this opportunity once.

Modules/subject changes or termination

Subject/ module changes will only be allowed in exceptional cases. Students should ensure that the subject(s)/ module(s) chosen are correct. The registration office can only consider subject changes at dates as advertised during the registration period, and after consultation with the relevant department. If a student intends to change or terminate a subject(s) or module(s) already entered on their record they should proceed as follows:

- ☐ Collect a subject amendment form at the Registration Office, or at the Faculty Office. Complete the form as follows;
 - ☐ Use side one for adding a module(s)/subject;
 - ☐ Use side two to delete a module(s)/subject(s);
 - ☐ Complete the form as per example on the notice boards;
 - ☐ Enter the correct codes as per faculty enrolment form;
 - ☐ Make sure that all information is entered correctly;
 - ☐ Make sure that there are no timetable clashes. If there are clashes, the amendment will not be processed; and

- ☐ The Faculty Officer will retain the form and forward it to the Registration Office to be processed.

Thereafter, it will be sent to the Records Office to be placed on the student's personal file. Registration amendments for the second semester will take place from the commencement of the second semester as advertised in the General Calendar. It is the student's responsibility to ensure that his/her registration is recorded correctly. A student who has not registered for a subject, but attended classes, submitted assignments and wrote tests and/or examinations will forfeit all marks obtained.

Late registration

The registrar may grant approval for late registration under the following circumstances:

- ☐ Owing to illness immediately preceding or during the period of registration; provided that a satisfactory medical certificate, specifying the nature and the duration of the illness, is submitted; or
- ☐ Owing to domestic circumstances, such as the death or serious illness of a close relative at the time of or immediately preceding registration period; provided that satisfactory proof of such circumstances shall be produced; or
- ☐ Owing to any other circumstances which may justify such registration, provided that satisfactory proof of such circumstances shall be produced.

The student submits his/her application for late registration to the Registration Office. The Registration Officer will inform the student of the outcome of the application. No academic concessions will be made for students who register late. Students who are allowed to register late shall only be able to do so on specific Thursdays between 14:00 - 16:00 unless prior arrangements have been made.

Second semester registration

This will only be allowed if the outstanding courses enable the student to be promoted or complete the study programme. Only certain faculties offer undergraduate programmes for new enrolments in the second semester. Students may commence with certain postgraduate studies in the second semester.

Termination of modules/subjects

- ☐ Any changes in a student's enrolment must be recorded at Student Administration, Registration Office. Changes will only be allowed within the prescribed official registration period;
- ☐ Termination of modules/subjects can be done throughout the academic year, and students will be levied accordingly. Students terminating a subject may not add a new subject/module unless it is within the prescribed period;
- ☐ It is the student's responsibility to ensure that his/ her registration is recorded correctly; and
- ☐ A student who has not registered for a subject, and passed the subject will forfeit all marks obtained.

Simultaneous registration

Simultaneous registration refers to a type of registration whereby a student officially registers at the university and intends to register at another university for non-degree purpose for one subject only towards a current degree/diploma programme in terms of rule A.15.3. To expedite applications for simultaneous registration faculty officers may approve applications in the following circumstances:

- ☐ Time-table clashes;
- ☐ Should the prescribed subject not be offered part-time; and
- ☐ Due to other circumstances acceptable to the Faculty Board.

After approval has been granted, the application should receive condonation. When approval has been given, the faculty officers should also indicate in writing to the student that the subject will be recognised and the procedure to follow.

Application procedure

- ☐ The student should apply before the prescribed closing date directly to the Faculty, normally before 31 January each year;
- ☐ The Faculty Officer considers the application in terms of the above circumstances. If the application is approved, the prescribed form should be completed and duly signed by the Faculty Officer, and counter signed by the Registrar, or his nominee; and
- ☐ A copy of the letter should be sent to the record section for filing on the student file for future reference;

Registration at another university

When a student registers at another university and does not register at UWC, but intends to have the subject/module (s) recognised, he/she should apply before the time for such approval and it is not deemed as a simultaneous registration.

In the event of the student passing the subject he/she should register the following academic year. If the student fulfils the requirements for the study programme, the degree/diploma will be awarded during the September graduation ceremony. An academic record may be issued to the student as an interim arrangement.

2.5.4 Enrolment management at the University of Cape Town, South Africa

2.5.4.1 History and background

The University of Cape Town (UCT) is a vibrant academic community of some 16 000 students and 4 500 members of staff. UCT is a comprehensive university offering a full range of undergraduate and postgraduate programmes.

The mission of UCT is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society (www.uct.ac.za/general/stratp12.htm; Strategic Planning Framework). Educating for life means that its educational process must provide:

- ☐ A foundation of skills, knowledge and versatility that will last a lifetime, despite a changing environment;
- ☐ Research-based teaching and learning;
- ☐ Critical enquiry in the form of the search for new knowledge and better understanding; and
- ☐ An active developmental role in our cultural, economic, political, scientific and social environment

In addressing the challenges facing the society, UCT plans to come to terms with the past, be cognisant of the present and plan for the future. Central to its mission are the following:

- ☐ Recognition of its location in Africa and its historical context;
- ☐ Claiming its place in the international community of scholars;
- ☐ Striving to transcend the legacy of apartheid in South Africa and to overcome all forms of gender and other oppressive discrimination;
- ☐ Becoming flexible on access, active in redress, and rigorous on success;
- ☐ Promoting equal opportunity and the full development of human potential;
- ☐ Striving for inter-disciplinary and inter-institutional collaboration and synergy; and

- ☐ Valuing and promoting the contribution that all its members make to realise its mission.

2.5.4.2 *Student recruitment and enrolment management*

The vision of UCT is a single coordinated process of student recruitment and enrolment, ensuring a quality learning experience for a diverse and talented student body and producing highly skilled graduates. The enrolment priorities as envisaged at UCT are as follows:

- ☐ A coordinated well-managed process with strategic marketing of degree programmes;
- ☐ A culture of student learning;
- ☐ A diverse and talented student body, at both undergraduate and postgraduate levels, from all parts of the country;
- ☐ A successful student body drawn from the entire South African society;
- ☐ An appropriate international student enrolment to contribute to UCT's world-class vision;
- ☐ An optimal financial aid and scholarship strategy; and
- ☐ A student housing environment for a world-class University

The following are the enrolment objectives for UCT:

- ☐ All student admission matters managed in a single process with clearly defined executive responsibility;
- ☐ A comprehensive student recruitment and enrolment management process ensuring (through co-coordinated and synergistic use of programme selection, student financial support and housing places) that the student body reflects the twin goals of excellence and equity;
- ☐ Appropriate support structures and services for graduate services;
- ☐ Better promotion of more effective recruitment for graduate programmes;
- ☐ A strongly promotive learning environment, which is accessible to all students;
- ☐ Moderate growth in student numbers in the short-term, optimised through the programme planning process on a bottom-up basis and designed to ensure effective

teaching and learning and maximum total scholarly output within overall resource constraints;

- ☐ Within the total student enrolment, moderately decreased enrolments in the broad humanities area, and slightly increased enrolments in commerce, engineering, health sciences and science programmes, aiming for an overall student ratio of Humanities: 32.5; Commerce and Management: 25; and Science, Engineering and Health Sciences: 42.5 (from the 1997 ratio of Commerce: 23%, Sciences: 42% and Humanities: 35%);
- ☐ Continued commitment to ensuring access and success of talented students from disadvantaged backgrounds;
- ☐ Recruitment of more than 50% of cohorts of particularly talented prospective students in the country (identified, for example, from the top qualifiers in national Mathematics, English, Science and Computer Science Olympiads, and other similar competitive listings);
- ☐ Aiming for an increased proportion of postgraduate enrolments at honours, masters and doctoral level to above 25% of the total student enrolment by 2002 (from 20% in 1997);
- ☐ Aiming for an increased overall proportion of black graduates by 2006 (from 37% in 1996), and with particular emphasis on programmes in which black graduation rates are currently low;
- ☐ Aiming for an increased proportion of women graduates of total graduates by 2002 (from 46% in 1996), with particular emphasis on programmes in which female graduation rates are currently low;
- ☐ Consequently increased proportion of black students and women registered for postgraduate programmes;
- ☐ Increased proportion of full-time international students: by 2002 (from 11% in 1997);
- ☐ Increased numbers of fee-paying study abroad undergraduate students, registered for suitable semesterised courses across all Faculties;
- ☐ A financial aid and scholarship strategy for undergraduate students to provide financial support for talented students from financially disadvantaged backgrounds and for very good students with limited means and to provide competitive scholarships to the most

outstanding prospective students in the country appropriate scholarship support for postgraduates;

- ☐ Provision of student housing appropriate to the needs of various students, with the goal of increasing the proportion of students in student housing by 2002;
- ☐ A code of conduct to ensure a supportive and enabling culture of learning in all residences; and
- ☐ Management procedures (including regular audit) for student housing to ensure that all residences support a culture of learning and are of a good physical and environmental standard

2.5.4.3 Registration and enrolment procedures

Application for admission can be done by any one of the following methods:

- ☐ Via electronic forms;
- ☐ By paper-based forms;
- ☐ By telephone;
- ☐ By fax;
- ☐ By e-mail; and
- ☐ In person

Students intending to register at UCT are encouraged to submit their completed application forms as early as April of the year preceding entry. Early offers are made to applicants on the basis of Grade 11 (standard 9) and /or Grade 12 (standard 10) school results. Applications are usually accepted until mid January of the year of registration. Applications received after this date are only accepted at the discretion of the Faculty concerned and are considered only if there are places available. Application will usually be cancelled if all the necessary documents have not been submitted on end January.

3 RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the method of the study, expounding on such aspects as rationale behind the methodology employed, research approach and what steps were taken to ensure the validity and reliability of the data. As outlined in the first chapter, this study was initiated and driven by the need to comprehend the challenges facing management and the perceptions of students and staff on the admission process. It is also within the scope of the study to identify factors which might have a direct implication on administrative efficiency and effectiveness.

3.2 RESEARCH TOOLS

In this study, two basic instruments were used for data collection, namely, questionnaire and personal interview. According to Borg and Gall (1989), these are the two most commonly used instruments for data collection in a survey research. In the empirical investigation of this study, the questionnaire and semi-structured interviews were employed as data-collection tools.

3.2.1 Questionnaire as a research tool

Using the questionnaire as a research tool has several advantages as those identified by Legotlo (1994:162-163):

- ☐ Low traveling and subsistence costs;
- ☐ Questionnaires are identical, thus the stimuli provided are identical;
- ☐ Respondents can be reached from near or far;
- ☐ Respondent's anonymity is respected;
- ☐ The method is time-saving since many respondents can be reached within a reasonable space of time;

- ☐ The questionnaire is easy to process due to its carefully structured and pre-coded format with few open-ended questions used.

Although the use of questionnaire has several advantages, it is equally important that great care be taken in its construction and administration to make it easy to complete and to attract responses that are more favourable. A number of factors have been identified as fundamental in securing a good response rate to a questionnaire (Cohen and Manion, 1985:108; Borg and Gall, 1989:430), namely:

- ☐ The questionnaire must look easy and attractive;
- ☐ It must have clarity of wording and simplicity of design. Clear instructions should guide the respondent;
- ☐ The contents should be arranged in such a manner as to stimulate and maximise co-operation;
- ☐ Questions dealing with a related issue should be grouped together by way of employing a sublettering approach;
- ☐ It is important that the questionnaire be pretested.

3.2.2 *Questionnaire construction*

Borg and Gall (1989:430-431) outline some of the essential guidelines in constructing a questionnaire and they are:

- ☐ Clarity – phrases used should mean the same thing to all respondents without inviting biases;
- ☐ It is preferable to use short sentences;
- ☐ Negative items should be avoided;
- ☐ Questions which require the respondent to respond to two separate ideas with a single answer should be avoided;
- ☐ Biased questions should be avoided.

3.2.2.1 *Development of questionnaire items*

The questionnaire was designed primarily to gather information regarding:

- ☐ The efficiency of student admission management;
- ☐ The impact and effectiveness of the admission process;
- ☐ The attitude of admissions staff towards customers of collegiate education.

The approach employed in developing the questionnaire included:

- ☐ Thorough examination of issues raised in the literature regarding models and approaches to enrolment management at other world-renowned tertiary institutions;
- ☐ Incorporation of issues of vital importance which are of relevance to the UNW community

Structured questions were used to gather information regarding the student admission process and management at UNW. Respondents in this study were faculty secretaries, faculty officers, admissions officers, personnel in academic services, and students from various faculties.

3.2.2.2 *Format and content of the questionnaire*

Two sets of questionnaires were constructed and administered, one for admission staff and the other one for students (see Appendix 1A, 1B). Each questionnaire was divided into four sections. The purpose of the first section of the questionnaire was to gather biographical and demographical information about each respondent. The second section was intended to gather information with regard to the attitude of admissions staff towards students, the customers of collegiate education. The third section was intended to gather information regarding the efficiency of the admissions process. The fourth section was designed to gather information on the quality and effectiveness of the planning behind student admissions.

3.2.2.3 *Pre-testing the questionnaire*

This is a pilot study intended to acquaint the researcher with the gaps and flaws that need attention before the major study is embarked on. It offers the researcher an opportunity to pre-test the instrument.

To determine the ambiguity and flaws, the questionnaires were each pre-tested on a sample of 10 respondents ($n = 10$) with five respondents being staff members involved with admission from the UNW Business School and five respondents being students. The respondents were asked to comment on other points that might need to be considered to improve the instrument. The pre-test results were then scanned and the suggestions from respondents were incorporated in the final version of the questionnaire.

3.2.2.4 *Final version of the questionnaires*

The first questionnaire designed for the admissions staff, hereafter referred to as staff questionnaire, was administered to 15 staff members who are usually involved with student admission. These include admissions officers, administration officers, senior administration officers, faculty secretaries, examination officers, accounts and finance personnel. A semi-structured interview was secured with the manager for academic services. The second questionnaire designed for students, hereafter referred to as student questionnaire, was administered to 57 students including some members of the Student Representative Counsel (SRC).

3.3 POPULATION AND SAMPLING

The survey population was drawn from within the University of North-West. The sample was divided into strata in which personnel involved with student admission formed the one stratum while students formed another stratum. Having partitioned the sample into different strata, respondents were then selected by random sampling method.

3.4 ANALYSIS TECHNIQUES

In analyzing the data, simple statistics was used; this includes frequency distribution, percentages, averages and standard deviation. Results were presented in the form of tables, graphs and charts depending on the outcome of the study.

4 DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter reports on the results of the empirical investigation conducted to determine the efficacy of the student admission process at UNW. In this investigation, information was gleaned from respondents through questionnaires and interviews for purposes of determining the following: the perceptions of students and staff on the admission process and the challenges facing management. The qualitative and quantitative data collected through the investigation are summarized and discussed in this chapter.

4.2 REVIEW OF RESPONDENTS

In this study, 72 questionnaires were distributed to respondents and 100% of the questionnaires were usable. Of the 72 questionnaires, 57 were administered to students and 15 to admission staff (administration officers, faculty administrators, admissions officer, secretaries, manager academic services)

4.3 RESPONDENTS' PROFILES

Student population was drawn from various faculties, namely, Agriculture Science and technology, Commerce and Administration, Education, Law, Human and Social Sciences. Students belonged to different levels of study ranging from first year to post-graduate level.

4.4 EVALUATION OF ADMISSION MANAGEMENT

The purpose of the study was to evaluate student admission management at the University of North-West. The variables considered in this study were perceptions on factors contributing to effective management of the student admission process and respondents' perceptions on new approaches that could possibly improve the current system of admission management.

The respondents were asked to give their opinion on the following factors that impact on effectiveness and efficiency:

- ☐ Attitude of admission staff towards students
- ☐ Administration of the admissions/registration process
- ☐ Planning surrounding admissions and registration

This section reports on responses made regarding factors that have a bearing on the effectiveness and efficiency of admissions management at the University of North-West.

4.4.1 Admissions staff's attitude towards students

Tables 4.1A and 4.1B illustrate the respondents' perceptions regarding the attitude of admissions staff towards students during admissions and registration. In particular, Table 4.1A illustrates the views of students regarding staff attitude during registration and admission while Table 4.1B reflects the views of admissions staff on their very own attitude towards students during registration and admission.

Item 1 *Helpful*

Table 4.1A shows that 54% of students disagree or strongly disagree that admission staff is helpful during admission and registration. On the other hand, 86.6% of admission staff agree or strongly agree that admission staff is helpful during admission and registration (Table 4.1B). The contrast between the two groups of respondents is relatively predictable. While students, as customers or recipients of services, show dissatisfaction regarding staff helpfulness, those who are offering services feel they are doing their best in this regard. The results seem to raise more questions than answers: Could it be that students are too demanding and less appreciative? Or is it that the staff is trying to portray a good picture of themselves? These are questions still to be answered.

Table 4.1A ATTITUDE OF ADMISSION STAFF TOWARDS STUDENTS – STUDENTS' PERCEPTION

ITEMS	SD		D		A		SA		ABS	
	f	%	f	%	f	%	f	%	f	%
1. Helpful	14	24.6	17	29.8	15	26.3	11	19.3	-	-
2. Approachable	17	29.8	13	22.8	20	35.1	7	12.3	-	-
3. Patient	24	42.1	19	33.3	8	14	6	10.5	-	-
4. Timely	29	50.9	13	22.8	11	19.3	4	7	-	-

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Table 4.1B ATTITUDE OF ADMISSION STAFF TOWARDS STUDENTS –ADMISSION STAFF'S PERCEPTION

ITEMS	SD		D		A		SA		ABS	
	f	%	f	%	f	%	f	%	f	%
1. Helpful	-	-	1	6.7	5	33.3	8	53.3	1	6.7
2. Approachable	1	6.7	1	6.7	5	33.3	6	40	2	13.3
3. Patient	1	6.7	-	-	7	46.7	5	33.3	2	13.3
4. Timely	1	6.7	-	-	7	46.7	6	40	1	6.7

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Item 2 *Approachable*

According to Table 4.1A, 52.6% of students disagree or strongly disagree that admission staff is approachable during admission and registration. On the other hand, 73.3% of admission staff agree or strongly agree that admission staff is approachable during admission and

registration (Table 4.1B). There is also a contrast in opinion on this issue between the two respondent groups. While the majority of students feel that staff is unapproachable, staff say just the opposite.

Item 3 *Patient*

Table 4.1A shows that 75.4% of students disagree or strongly disagree that admission staff displays patience during admission and registration. On the other hand, 80% of admission staff agree or strongly agree that admission staff is patient during admission and registration (Table 4.1B). In this instance too, the reason for a contrast in opinion seems obvious.

Item 4 *Timeliness*

According to Table 4.1A, 83.7% of students disagree or strongly disagree that admission staff respond timeously to their needs during admission and registration. Staff on the other hand (86.7%), agree or strongly agree that admission staff respond timeously to the needs of students during admission and registration (Table 4.1B).

In all items related to staff attitude, there is a sharp contrast of opinion between students and staff. Most students rate the working attitude of admission staff as undesirable and below average whereas most admissions staff, being subjects under evaluation, tend to overrate their work ethic.

Item 5 *Open ended (Refer to Appendix A and B)*

As an open-ended question, respondents were also asked to suggest any other gesture or attribute which in their opinion, could enhance student satisfaction. Apart from the already asked attributes, some students suggested that admission staff should show some degree of respect when serving their student clients. From this it implies that students perceive respect from staff as an important gesture that can help enhance good customer relations.

4.4.2 Administration of admission and registration process

Tables 4.2A and 4.2B illustrate the respondents' perceptions regarding the efficient administration of admission and registration process. While Table 4.2A illustrates the views of students regarding the administration of admission and registration process, Table 4.2B captures the views of admissions staff on the same subject.

Item 6 *Student orientation programme*

On the question of whether the student orientation programme helps students to adjust to university, 56.1% of students responded positively (Table 4.2A). In the same manner 60% of staff agreed and strongly agreed that the orientation programme helps students' adjustment to university. Thus both groups of respondents agree on the positive impact made by the student orientation programme offered at UNW. The results imply that student orientation programme at UNW is so far serving its purpose and is fundamental to the adjustment of first year students at the university.

Item 7 *Adequacy of services*

Table 4.2A shows that 68.4% of students disagree and strongly disagree on the question of whether adequate services are available to help student decide on what career to follow. In the same manner 60% of staff disagree and strongly disagree on the question of whether adequate services are available to help student decide on what career to follow. Thus both groups of respondents agree on lack of adequate services to help students decide upon a career. The results imply that very little is done in guiding students towards relevant career paths and that management has to look into this issue seriously in future. This could possibly have a positive impact on student throughput.

Table 4.2A VIEWS OF STUDENTS ON THE ADMINISTRATION OF THE ADMISSION/REGISTRATION PROCESS

ITEMS	SD		D		A		SA		ABS	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
6. Student orientation programme help students adjust to university	11	19.3	13	22.8	21	36.8	11	19.3	1	1.8
7. Adequate services are available to help students decide upon a career	24	42.1	15	26.2	12	21.1	6	10.5	-	-
8. Student handbooks are reader-friendly	6	10.5	19	33.3	23	40.4	9	15.8	-	-
9. Admission and registration process is efficient	21	36.8	22	38.6	10	17.5	2	3.5	2	3.5
10. Student on-line services are needed	6	10.5	4	7	10	17.5	36	63.2	1	1.8
11. Dates for admission and registration are sensitive to students' academic needs	10	17.5	21	36.8	10	17.5	12	21.1	4	7

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Item 8 *Student handbooks*

Table 4.2A shows that 56.2% of students agree and strongly agree that student handbooks can easily be understood without need for help. On the contrary 53.4% of admission staff feel student handbooks are not reader-friendly (Table 4.2B). Seeing that 56.2% of students agree that student handbooks are reader-friendly, it may then be concluded that student handbooks are fairly written in a manner that affords students to read and interpret them with minimal assistance. A significant number of students though (43.8%) still feel handbooks are not reader-friendly. Though not in majority, the number is significant enough to suggest that more attention is needed in reviewing student handbooks to ensure that they are easy to read, to use, and to interpret with minimal need for help from staff. This is the sentiment shared by most admission staff members.

Table 4.2B VIEWS OF ADMISSIONS STAFF ON THE ADMINISTRATION OF THE ADMISSION/REGISTRATION PROCESS

ITEMS	SD		D		A		SA		ABS	
	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
6. Student orientation programme help students adjust to university	2	13.3	3	20	5	33.3	4	26.7	1	6.7
7. Adequate services are available to help students decide upon a career	3	20	6	40	4	26.7	-	-	2	13.3
8. Student handbooks are reader-friendly	4	26.7	4	26.7	6	40	1	6.7	-	-
9. Admission and registration process is efficient	6	40	5	33.3	4	26.7	-	-	-	-
10. Student on-line services are needed	1	6.7	2	13.3	3	20	9	60	-	-
11 Dates for admission and registration are sensitive to students' academic needs	1	6.7	1	6.7	6	40	6	40	1	6.7

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Item 9 *Efficiency of admission and registration process*

On the question of whether the admission and registration process is efficient or not, 75.4% of students indicated that the registration process is not efficient (Table 4.2A). The same sentiment was shared by admission staff where 73.3% of them disagreed and strongly disagreed with the statement that admission and registration process was efficient (Table 4.2B). Thus both groups of respondents agree that there is inefficiency in the administration of the admission and registration process. What it means, basically, is that there is currently a strong lack to produce the desired effect with the input (staff, time, energy, etc.) provided. The results, therefore, call for management to look more seriously into the issue of service delivery and to review their operational strategy to optimize outputs.

Item 10 *Student on-line services*

Table 4.2A shows that 80.7% of students are in favour of having student on-line services that will relieve the admission staff of the load of handling all paper work, and free them to do other important administrative issues. 80% of admission staff are also in favour of on-line admission and registration services (Table 4.2B). The results, therefore, clearly advocate for the introduction of fully-fledged on-line admission and registration services. It stands to reason that this might be one good strategy to address the issue of long queues encountered during registration, which so many respondents have complained about when asked to provide any other aspect of the admission and registration process that needs improvement. Besides long queues, on-line services will also reduce excessive fatigue on the part of staff and thus address a number of issues linked to staff attitude towards students at registration.

Item 11 *Scheduled dates for admission and registration*

In response to the question of whether dates for registration and/or admission are properly scheduled so as not to interfere with the academic process, 54% of the students disagreed (Table 4.2A). On the other hand, 80% of admission staff agreed that dates for registration were properly scheduled to suit the academic needs of students (Table 4.2B). In the opinion of most students, therefore, scheduling of dates for registration is not as satisfactory as the staff purports. Although respondents were not required to give their reasons, it may well be that students are basing their judgment on the past practice where new admissions and registration were allowed to continue up to mid-semester with new students continuing to join classes late during the semester. Although this was a profitable practice on the side of management and the institution, this same practice lacked sensitivity for the academic needs of students. In the first place classes are disrupted and secondly, since syllabi would be far advanced at mid-semester, students receiving admission during this time would always have difficulty catching up with what is lost and coping with what is remaining. The result would, therefore, be poor performance, high failure rates and in some cases even high dropout rates.

Item 12 *Open ended (Refer to Appendix A and B)*

As an open-ended question, respondents were asked to suggest other ways in which the admission and registration process can be improved. Some respondents raised a concern about long queues that need to be addressed and the fact that early registration and on-line services are needed to help speed up the process and avoid disruption of classes. As mentioned in Item 10, long queues are undesirable since they lead to excessive fatigue for both students and staff. Ultimately they trigger tempers and set a stage for confrontations out of irritation.

4.4.3 Planning of admission and registration process

Tables 4.3A and 4.3B illustrate the respondents' perceptions regarding planning of admission and registration process at UNW. While Table 4.3A illustrates the views of students regarding the administration of admission and registration process, Table 4.3B captures the views of admissions staff on the same subject. However, questions given to different groups were different on this aspect since the two groups were not equally knowledgeable on the subject. This discussion will, therefore, first present the views of students followed by those of staff regarding the planning of the admission process.

4.4.3.1 *Views of students on the planning of the admission process*

Students' views on some key issues related to planning of the admission process have been captured in Table 4.3A and are discussed below.

Item 13a *Management of admission and registration process*

In response to the question of whether management of the admission and registration process shows proper planning, 73.6% of the students disagreed and strongly disagreed (Table 4.3A). This response does suggest that in the opinion of most students, management of student admission at UNW is rather sporadic and crisis-driven rather than it being guided by laid down policies and procedures.

**Table 4.3A VIEWS OF STUDENTS ON THE PLANNING OF THE
ADMISSION/REGISTRATION PROCESS**

ITEMS	SD		D		A		SA		ABS	
	f	%	f	%	f	%	f	%	F	%
13a. Management of admission process reflects proper planning	21	36.8	21	36.8	13	22.8	2	3.5	-	-
14a. Admission policies and procedures are strictly adhered to	13	22.8	23	40.4	17	29.8	3	5.3	1	1.8
15a. Career advice is available during registration	20	35.1	17	29.8	8	14	10	17.5	1	1.8
16a. Timetables usually reflects no time clashes	21	36.8	16	28.1	11	19.3	6	10.5	3	5.3
17a. Consultation and cooperation of between all divisions is encouraged	13	22.8	19	33.3	14	24.6	7	12.3	4	7

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Item 14a *Admission policies and procedures are strictly adhered to*

As customers of collegiate education, students were asked to comment on whether in their opinion admission policies and procedures are strictly adhered to. In response to the question above, 63.2% did not support the statement that admission policies and procedures are being fully implemented (Table 4.3A). This response seems to be in harmony with their opinion regarding proper planning, in which most students responded that there was no proper planning associated with the admission and registration process.

Item 15a *Career guidance during registration*

On the question of whether career guidance is offered during registration, 64.9% of the students denied (Table 4.3A). If the majority opinion is taken to be true, then it does mean that most students go into study programmes ill-informed. The implications of insufficient or lack of professional academic advice could then be far costly if this problem is left to continue

unattended. The symptoms of such a system are usually high failure rates, low throughputs, high dropout rates, high government subsidy costs and a costly venture for the students and parents. Ways and means of curbing this problem must be found and implemented with minimal delay. Perhaps, as suggested by most respondents in previous sections, this is another problem which might be addressed with the introduction of computerized or on-line services like some of the universities, for example, Parkland college, are already doing (cf. 2.5.2.1).

Item 16a *Timetable clashes*

IN response to whether timetables were usually without clashes, 64.9% of the students disagreed (Table 4.3A). This, therefore, implies that most students pick up problems with their timetables most of the time. This, of course, could be the result of some unavoidable circumstances like in the case of students repeating courses or taking courses from many other faculties. However, the problem could most likely be offset if coordination and cooperation could be fostered between different operational units including the admissions office, the office of the academic planner and the academic faculties.

Item 17a *Consultation and cooperation between all concerned operational divisions*

Asked whether consultation and cooperation between all concerned operational divisions was encouraged, 56.1% of the students disagreed (Table 4.3A). Lack of consultation and cooperation often leads to frustration during admission and registration due to the fact that students are usually not provided with the same information at different points of the process line. This results in a student having to be tossed back and forth between two process points, something that could be avoided had there been consultation and cooperation in the first place. According to Tellefsen (1990) cooperation and coordination between all concerned operational divisions is of prime importance in getting the whole system running efficiently.

Item 18a *Open ended (Refer to appendix A and B)*

On the open ended question in which respondents were asked to suggest other ways in which services could be improved, the following suggestions were made:

- ☐ That registration should be decentralised and be handled at faculty level;
- ☐ That admission of students must be guided by class timetable.

The reason for suggesting decentralisation of admission might have come from the anticipation that this would then offset long queues. However, whether there is enough capacity in terms of staff and facilities to handle the process is still another issue to be looked into. That admission should be guided by class timetable is a valid point, which implies that timetabling should be done well before registration in consultation with all concerned units. At registration students should, then, select courses guided by the timetable so that clashes are avoided. Although timetable clashes might be avoided this way, this approach might not be perfect either and will definitely need support from all stakeholders.

4.4.3.2 *Views of admission staff on the planning of the admission process*

The views of staff on some key issues related to planning of the admission process have been captured in Table 4.3B and are discussed below.

Item 13b *Policies and procedures*

In response to the question of whether there are policies and procedures governing the management of the admission and registration process, 73.3% of admission staff agreed (Table 4.3B). Policies and procedures are a necessary tool to guide the process and to ensure that everyone receives the same treatment. Of course, whether or not these policies are implemented and enforced is a totally different matter.

Item 14b *Admission policies and procedures are strictly adhered to*

On the question of whether admission policies and procedures are strictly implemented as planned, 53.4% of the staff agreed (Table 4.3B). Although most staff members agreed that policies and procedures are implemented as planned, the response was nevertheless not as impressive as the response obtained under Item 13b, where 73.3% staff agreed that policies and procedures are present. It thus shows that a significant proportion of staff (46.6%) feel that policies and procedures are not really implemented in the strictest possible manner. The same question was asked to students and 63.2% of them did not agree that policies were strictly adhered to. It, therefore, means that somehow, some rules and laws are overlooked with personal discretion and favours becoming the order of the day.

Item 15b *Strategic plan linking financial, physical and human resources to desired educational outcomes*

In response to whether a strategic plan existed that link financial, physical and human resources to desired educational outcomes, 46.7% of the staff disagreed, 40% agreed and 13.3% reserved their comments (Table 4.3B). Judging from the response, it appears this was one of the most difficult questions, with a significant number of staff reserving their comments. The general response from admission staff, the very people who make the first contact with students, does not speak well of the state of planning in the organisation of such a magnitude as UNW. It would have been expected that much as head-counts were important for the survival of the organisation, even the quality of the product served would be taken more seriously. However, it does appear from the response given, that only head-counts are taken into consideration and not so much of the quality of education that students and the community would aspire for at the end of the day.

Item 16b *Interactive decision-making*

On the question of whether there existed an interactive decision-making between students, student affairs, academic departments and other related divisions, 60.9% of the staff agreed

(Table 4.3B). Like consultation, interactive decision-making lies central in getting systems running efficiently.

Table 4.3B VIEWS OF ADMISSIONS STAFF ON THE PLANNING OF THE ADMISSION/REGISTRATION PROCESS

ITEMS	SD		D		A		SA		ABS	
	f	%	f	%	f	%	f	%	f	%
13b. There are policies and procedures in place	2	13.3	-	-	5	33.3	6	40	2	13.3
147b. Admission policies are strictly adhered to	3	20	4	26.7	4	26.7	4	26.7	-	-
15b. A strategic plan exists that links financial, physical and human resources to desired educational outcomes	1	6.7	6	40	6	40	-	-	2	13.3
16b. Interactive decision-making between students, student affairs, academic departments and other divisions are encouraged	2	13.3	4	26.7	5	33.3	4	27.6	-	-
17b. Admission services are constantly evaluates against set standards	3	20	6	40	4	26.7	2	13.3	-	-
18b Admission and registration dates allow for proper planning by other functional units	4	26.7	2	13.3	5	33.3	3	20	1	6.7

Key: SD = Strongly Disagree D = Disagree

A = Agree

SA = Strongly Agree

ABS = Abstention

Item 17b *Constant evaluation of admission services*

Asked whether there was constant evaluation of admission services against set standards, 60% of staff denied (Table 4.3B). If services are not constantly evaluated against set standards, it is certain that very little of corrective measures will be taken to effect improvements in order to ensure that results are obtained as initially projected in a properly managed system.

Item 18b *Admission and registration dates*

In response to the question of whether admission and registration dates allow for proper planning by other functional units, 53.3% of the staff agreed (Table 4.3B). On this issue also, 6.7% of the respondents reserved their comments. This same question is also closely related to the question in Item 11 in which 80% of the staff agreed that admission and registration dates are sensitive to students' academic needs against 54% of students who disagreed. Seeing that other functional units were not consulted on this matter in particular, it is difficult, therefore, to take a conclusive stand given only one side of the story. What may be emphasised, however, is that it is important that proper planning be followed in making admissions and that other functional units (academic departments, housing, library, etc) be consulted regarding the projected student numbers per faculty. This will allow these units to plan properly well in advance and to ensure that there is sufficient physical and human resource capacity to handle the projected numbers.

Item 19b *Open ended (Refer to Appendix A and B)*

Responding to the open question in which respondents were asked to suggest other ways in which services could be improved, the following suggestions were made:

- ☐ Management should copy systems that are already efficiently working like those of UNISA and RAU;
- ☐ Staff induction courses are needed;
- ☐ The admissions office should adhere to the set deadlines;
- ☐ Once rules are laid down, the administrators should enforce and refuse to enter into negotiations to the contrary.

To suggest that management needed to visit other progressive institutions does imply that respondents feel that the current system of managing admissions at UNW lags behind and need to be improved dramatically to bring it to par with the best in the country. That staff induction courses are needed implies that respondents, who are themselves part of

admissions staff, feel that they are under-trained or under-prepared to handle all the stress and demands that are posed by the task before them. That admission staff should adhere to set deadlines means that some respondents feel deadlines for registration are at times undermined, thus making registration to prolong for a longer period than the one originally set. Finally, that admissions should enforce rules and refuse to enter into negotiations implies that some respondents are aware of cases in which rules and policies were undermined through negotiations with other parties, thus making the system to be vulnerable to many other problems as those indicated earlier.

4.5 ANALYSIS OF STATISTICAL MEAN DATA

Statistical mean data from the empirical investigation is presented in Table 4.4 and a comparison is made between mean data for students and staff on their perception of admission management.

4.5.1 *Analysis and comparison of statistical mean scores from students and staff data*

Table 4.4 shows the mean scores for various management-related issues collected from students and staff. From the results, it can be seen that items with mean scores of 2 and below need serious attention by management. From the mean scores, students have ranked *online services* very high (3.36), implying that students feel strongly that on-line services are essential for admission purposes. On the contrary, the lowest mean score of 1.82 was assigned to staff timeliness. That means in students' view, staff does not respond to their needs in time. The mean for overall impression of students regarding admission management at UNW was at 1.8. This implies that in students' view, the standard of admission management at UNW is very poor. This calls for management at UNW to seriously look into improving operational systems currently in place.

In addition, from Table 4.4, it can be seen that staff ranked *helpfulness* the highest. This means that staff feels strongly that they are helpful to students during admission and registration. On the contrary, the lowest mean of 1.87 for efficiency implies that staff view the admission and

registration process as inefficient. The mean for overall impression by staff regarding admission management at UNW was at 2.0. This implies that in the view of staff, the quality of admission management at UNW is poor.

The item, which was commonly rated high by both students and staff, is *online services*. This means both students and staff see the extreme importance of employing online services for admission and registration purposes. On the other hand, both groups rated administrative efficiency and the overall impression very low, implying that in the opinion of students and staff, administrative efficiency is lacking and the overall standard of admission management is very poor. Thus contrary to the original hypothesis (cf. 1.3) there was a fair agreement in the perceptions of students and admission staff regarding the overall quality of the admission process and management at UNW.

4.5.2 Comparison of the overall mean scores from students and staff data

Students and staff were asked to respond to same questions on *staff attitude* and *registration process*. Table 4.5 gives overall mean scores for students and staff on their perceptions regarding staff attitude and the quality of registration process. From the results, it can be seen that the mean score on *staff attitude* from student data (8.4561) is much less than that obtained from staff data (12.8571). This implies that students view the attitude of admission staff towards students as being less satisfactory compared to staff members who view their attitude towards students as satisfactory. The mean score for students on the *overall quality of the admission/registration process* (14.5263) was about the same as that of staff (14.8667), implying that both students and staff view the quality of the admission and registration process in about the same way.

Table 4.4 COMPARISON OF STATISTICAL MEAN SCORES ON PERCEPTIONS OF STUDENTS AND STAFF

Item No	Item	Students' view			Staff's view		
		Rank	Mean	SD	Rank	Mean	SD
1	Helpful	5	2.40	1.067	1	3.50	0.650
2	Approachable	6	2.30	1.034	4	3.23	0.927
3	Patient	8	1.93	0.997	4	3.23	0.832
4	Timeliness	10	1.82	0.984	2	3.36	0.633
6	Student orientation	3	2.57	1.024	6	2.79	1.051
7	Adequacy of service	7	2.00	1.035	8	2.08	0.760
8	Student handbooks	2	2.61	0.881	7	2.27	0.961
9	Efficiency	9	1.87	0.840	10	1.87	0.834
10	Online services	1	3.36	1.017	3	3.33	0.976
11	Registration dates	4	2.45	1.048	5	3.21	0.893
18/19	Overall impression	11	1.80	0.890	9	2.00	0.961

SD = Standard deviation

Table 4.5 COMPARISON OF THE OVERALL MEAN SCORES ON PERCEPTIONS OF STUDENTS AND STAFF

Subjects	Staff Attitude		Admission Process	
	Mean	SD	Mean	SD
Students	8.4561	3.44378	14.5263	3.52088
Admission staff	12.8571	3.18306	14.8667	3.50238

SD = Standard Deviation

5 SUMMARY, FINDINGS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents a brief summary of the study and incorporates recommendations and conclusions drawn from the major findings of the study.

5.2 SUMMARY

Chapter 1 gives the background of the problem and outlines the aim of the study and a statement of the problem. A concern is expressed about admission management that will ensure that there is proper planning that guides the process of admission and registration and that there is an interactive decision-making and cooperation with other operational divisions to ensure a smooth running of the admission/registration process and excellent customer service.

Chapter 2 outlines the nature and scope of admission management. A survey done on the literature gives sufficient background and clarity on the concept of student admission management, laying down some models and theories as guiding tools towards achieving the most efficient admission management system. Captured in this study are management models and theories such as Management By Objectives (MBO), Management Information Systems (MIS), Total Quality Management (TQM), Integrated Systems Approach to Improving Management (ISATIM), Chaos theory and Business Process Reengineering (BPR). Also reflected in Chapter 2 are management systems already in place at some world-class institutions.

What seems to be emphasised by most authors is the issue of interactive decision-making and cooperation across operational divisions. Such coordination and cooperation is seen to be central to the setting of clear and well thought-out institutional and educational goals, as well as ensuring effective strategic planning, efficient use of human, financial and technological resources.

Furthermore, according to some world-class institutions, the primary goals of admission management should include:

- ☐ Ensuring that student head-counts are stabilised or increased over the years;
- ☐ Linking academic and student service programmes;
- ☐ Improving services by shortening response time to students and reducing paperwork;
- ☐ Improving access to information; and
- ☐ And evaluating strategies with the sole purpose of eliminating what does not work and tracking what works.

Students' perspective and community needs are also seen as issues of prime importance when developing and offering services, launching programmes and initiatives and when evaluating enrolment management plans. This approach has been used by some world-class institutions to strengthen their competitiveness and thus ensure long-term sustainability.

Chapter 3 outlines the method of study and describes research tools that were used in collecting data. Chapter 4 reflects the presentation of data and a discussion of the results of the study. From the data presented it can be concluded that students and staff hold different views on certain issues that are fundamental to the smooth running of the admission process, for example, admission staff attitude towards students. According to student opinion, the attitude of admission staff leaves much to be desired. Some of the students recommend that staff serving on admissions should receive proper induction before carrying on out their duties. Admission staff on the other hand views their attitude towards students as normal and acceptable.

The findings also revealed areas of common view between students and staff. Both groups, for example, had very close rating for the quality of the admission process and shared about the same overall impression regarding the outlook of the admission process. In the view of both students and staff, admission management at UNW is not at a desirable standard and thus a number of correctional measures need to be taken.

This study has, therefore, led to a number of important findings that are fundamental to the improvement of student admission and registration management at UNW.

5.3 RESEARCH FINDINGS

5.3.1 Findings on Aim 1

With regard to the first aim, namely, to determine from literature the nature and scope of student admission process, the following findings were made:

- ☐ That admission management is known amongst most authors as enrolment management and that the two concepts can actually be used interchangeably (cf. 2.2);
- ☐ That the scope of admission management varies from institution to institution with some institutions separating recruitment, admission and registration. However, operations seem to be more efficient and effective when these activities, particularly at small institutions, are combined into an integrated operation and administered by one director or manager (cf. 2.3.1);
- ☐ That from time to time colleges have borrowed promising and highly publicised management techniques and have weaved these techniques within admission management. Such techniques or models include MBO, MIS, TQM, ISATIM, Chaos theory and BPR (cf. 2.4);
- ☐ That admission management's primary goal should include: stabilising enrolments, linking academic and student service programmes, stabilising finances, improving services, improving access to information, reducing vulnerability to demographic changes, responding to economic forces, evaluating strategies (cf. 2.5.1.2).

5.3.2 Findings on Aim 2

Regarding aim 2, namely, to determine empirically the challenges faced by management, the empirical investigation revealed that students, who are the customers of collegiate education, view admission staff as lacking in terms of their on-the job attitude. Staff attitude is strongly

seen by students as an important factor in promoting good customer relations and making the admission process an enjoyable experience. The findings also revealed that admission staff, on the other hand, find their attitude to be normal and acceptable. Management at UNW, therefore, faces a challenge of having to come with a solution that will best address the matter and restore good student-staff relations on campus.

5.3.3 Findings on Aim 3

Regarding aim 3, namely, to determine empirically the perceptions of students and staff on the admission process, the empirical investigation revealed that both students and staff share the same view on the overall outlook of admission process. Generally, both groups agree on a number of issues that need to be addressed to improve the quality of the admission process at UNW. Among the issues that need to be addressed by management are:

- ☐ Student orientation programme: Students and staff agree that the orientation programme is essential in helping new students adjust to university. From the responses to the open question, the respondents expressed the need to have experienced personnel on board, in particular, the senior students.
- ☐ Career guidance: Both students and staff agree that career guidance services are not adequate and that management should look into improving those services.
- ☐ Online services: Both students and staff agree that online services are a necessity and could help address the problem of long queues and fatigue during registration.
- ☐ Registration schedules: Students believe that admission and registration should be done early at the beginning of the semester to avoid class disruptions. However, most staff found no problem with how registration dates were scheduled, except that some of them felt that management has to stick to the set deadlines.
- ☐ Planning: Generally, both students and staff felt that there was very little indication of good planning done by admissions management. Most respondents supported the idea of management adopting an interactive decision-making policy that will ensure cooperation and coordination across all functional divisions and stakeholders.

5.3.4 Recommendations

Recommendation 1

Special training on customer relations management (CRM) is needed for all staff members who engage in student affairs and admissions.

Motivation

The training will help clear misunderstandings between students and staff, creating an environment of mutual respect and trust. This will, further, go a long way in attracting more students to the university once personnel knows how to treat customers.

Recommendation 2

A good turnaround strategy is needed that will look into:

- ☐ Placing more knowledgeable staff on the student orientation programme;
- ☐ Fully engaging the counseling center, faculty officers, deans and departmental heads in the career guidance programme;
- ☐ Properly scheduling admission and registration dates to avoid disruption of classes;
- ☐ Utilising online admission and registration services to offset long queues and fatigue;
- ☐ Ways of fostering cooperation and coordination across all operational divisions.

Motivation

- ☐ The purpose of the orientation programme is to provide reliable information, thus more experienced and knowledgeable personnel should do the job;
- ☐ The purpose of career guidance is to help students crystallise in their minds what career they are fit for in the light of their academic track record. This requires well

informed personnel of the caliber of counselling professionals, faculty officers, deans and HOD's;

- ❑ Proper scheduling of admission and registration dates will help avoid students joining classes late during the semester or class disruptions. Such events could have a negative impact on student academic performance and on the overall throughput;
- ❑ Online services are used in a number of world-class institutions and have proved to be very customer-convenient in terms of saving time and offsetting fatigue associated with long queues;
- ❑ Cooperation and coordination across all operational divisions is essential in terms of the setting of clear and thoughtful institutional goals, effective strategic planning and the efficient use of human, financial and technological resources.

5.3.5 Conclusion

In today's competitive world it is important that colleges and universities be effectively managed at all levels. Like in any other organization, to successfully achieve the goals and objectives of the educational institution it is important that planning be strongly guided by need analysis and customer views on services rendered. It is revealed from this study that students, being customers of collegiate education, find the administration of student admission and registration process at UNW lacking in a number of ways. From the findings made in this study, it would be to the interest of management at UNW to embark on a turnaround strategy that will look into addressing some of the concerns raised by students and staff to make sure that the university offers a good learning and social experience and that it continues to attract more headcounts each year. Also important is for the quality of services to be continually evaluated so that the systems used can be upgraded on a regular basis to match those of an institution desiring to entrench itself as one of the best in the continent.

BIBLIOGRAPHY

- ALIFF J.V. 1998. Are students customers of collegiate education? **A paper presented at the annual meeting of the Georgia Academy of Science**, 25 April 1998, 75th Savannah, GA
- AMAZON.COM. What is reengineering? **Amazon.Com**. www.amazon.com
- BOND R. 2000. Enrolment management by design. **The Draft Report of the Enrolment Policy committee, University of Calgary**. <http://www.ucalgary.ca/VPA/epc>
- BORG L.G., GALL M.D., 1989. **Educational Research, an Introduction**. New York: Longman
- BRYANT P., CROCKETT K. 1993. The admissions office goes scientific. **Planning for Higher Education**. 22(1): 1-8
- CHIA R. 1998. From complexity science to complex thinking: Organisation as simple Location. **Organization**, 5: 341-369
- CHAFEE E., SHERR L.A. 1992. Quality: Transforming postsecondary education. **Eric Digest**, (ED 350972)
- CORNESKY R.A. 1990. **Improving Quality in Colleges and Universities**. Madison, Wis: Magna Publications
- DAVIES B. ELLISON L. 1990. Management information. In Davies B., Ellison L., Osborne A., West-Burnham J., 1990. **Education Management for the 1990's**. London: Longman
- DIXON R.R., Ed. 1995. Making enrolment management work. **New Directions for Student Services**, No. 71. San Francisco: Jossey-Bass
- DONOVAN F., JACKSON A.C. 1991. **Managing Human Service Organisations**. Sydney: Prentice-Hall
- DRUCKER P.F., 1954. **The Practice of Management**. New York: Harper
- GREENBERG L.J., Business process reengineering: Constantly adapting to change. **Earthrenewal**. <http://www.earthrenewal.org/bpr.htm>
- GURR D. 1997. The development of information systems in education. **ACEA National Conference Proceedings**. http://staff.edfac.unimelb.edu.au/david_gurr/papers/mgt_inform/
- HAMMER M., CHAMPY J. 1993. **Reengineering the Corporation-A Manifesto for Business Revolution**. Harper Collins
- HOSSLER D., BEAN J.P., and Associates (Eds.). 1990. **The Strategic Management of College Enrolments**. San Francisco: Jossey-Bass
- JEDAMUS P., PETERSON M.W., and Associates. 1980. **Improving Academic management**. San Francisco: Jossey-Bass Publishers

- KELLET in TSOUKAS, H. 1998. Complexity and organisation theory. **Organisation**, 5: 291-313
- KEMERER F. 1985. In MABRY N.T. 1987. Enrolment management. **Erich Digest** (ED 286558)
- KROTSSEN M.V. 1993. Designing executive information systems for enrolment management: In Developing systems for higher education, Glover R.H., Krotsen, M.V., eds **New Directions for Institutional Research**, No. 77.. San Francisco: Jossey-Bass
- LAUDON K.C., LAUDON J.P. 1996. **Management Information Systems: Organisation and Technology**. NJ:Prentice-Hall
- LEGOTLO M.W. 1996. Some elements of research: student handbook. **Education** (University of North-West)
- Mc BRIDE N. Chaos theory and information systems. **Chaos, Complexity and Information Systems** . www.cms.dmu.ac.uk/~nkm/CHAOS.html
- MABRY N.T. 1987. Enrolment management. **Erich Digest** (ED 286558)
- PELTU M., CLEGG C., SELL R. 1996. Business process reengineering: The human issues. Bprc: Forum 4 Proceedings. <http://bprc.warwick.ac.uk/forum4.html>
- PENN G. 1999. Enrolment management for the 21st century: Delivering institutinal goals, accountability and fiscal responsibility. **Eric-HE Digest series EDO-HE-1999-4**, www.Eriche.org
- PORTER J.H.; Business reengineering in higher education: Promise and reality. **Educause**. www.educause.edu/ir/library/text/cem934a.txt
- SHERR L.A., TEETER D.J., Eds. 1991. TQM in higher education. **New Directions in Institutional Research**, No. 71. San Francisco: Jossey-Bass
- SEIDMAN A., Parkland College enrolment management model. **Collegeways**. http://collegeways.com/article_enrollment_management.
- SEYMOUR D.T. 1992. **On Q: Causing Quality in Higher Education**. NY: ACE/McMillan
- TELLEFSEN T. E. 1990. **Improving College Management**. San Francisco: Jossey-Bass Publishers
- THE SOUTH AFRICAN WHITE PAPER ON HIGHER EDUCATION. Policy and law online news. 1997. www.polity.org.za
- UNIVERSITY OF CAPE TOWN. Strategic planning framework. 2002. www.uct.ac.za
- UNIVESITY OF NORTH-WEST. Strategic plan. 2002. www.uniwest.ac.za/strategic_plan.htm
- UNIVERSITY OF THE WESTERN CAPE. Equitable access through enrolment management. 2000. www.uwc.ac.za/about/instplan/santed/proposal/proposal0.asp

APPENDIX A

Evaluation of Admission/Registration Management at UNW

This questionnaire is part of an independent study to evaluate the admission process at UNW. The outcomes of this research will inform management on issues of critical importance with regard to student admission.

Faculty: _____ Year of study (e.g. First, Second, etc.?) _____

Kindly evaluate each of the elements below by making a cross ☒ in the appropriate box on a 1-4 rating scale. Explanation of codes appears below:

1 = strongly disagree	2 = disagree	3 = agree	4 = strongly agree
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The attitude of admission and student affairs staff towards students	1	2	3	4
1. Helpful				
2. Approachable				
3. Patient				
4. Respond to student needs and requests with minimum time delay				
5. Any other gesture or attribute that, in your opinion, may enhance student satisfaction:				
Admission/Registration process	1	2	3	4
6. Student orientation programme help students adjust to university				
7. Adequate services are available to help students decide upon a career				
8. Students handbooks/calendars are reader-friendly				
9. Admission and registration process is efficient				
10. Student on-line admission services are needed				
11. Dates for admission/registration are sensitive to student's academic needs				
12. Any other aspect of the admissions/registration process that, in your opinion, needs improvement:				
Planning	1	2	3	4
13a. The management of the admission process reflects proper planning				
14a. Admission policies and procedures are strictly adhered to				
15a. There is someone during registration to help me plan my career				
16a. My class time table usually reflects no time clashes				
17a. Consultation and cooperation between students, student affairs, academic departments and other divisions is encouraged				
18a. Any other relevant information that may help improve our services at UNW:				
Your overall impression of the quality of Admission/Registration services at UNW: Poor (1) Fair (2) Good (3) Very Good (4)				

APPENDIX B

Evaluation of Admission/Registration Management at UNW

This questionnaire is part of an independent study to evaluate the admission process at UNW. The outcomes of this research will inform management on issues of critical importance with regard to student admission.

Designation: _____ Years of experience on the current job? _____

Kindly evaluate each of the elements below by making a cross ☒ in the appropriate box on a 1-4 rating scale. Explanation of codes appears below:

1 = strongly disagree	2 = disagree	3 = agree	4 = strongly agree
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Your attitude (as administrator) towards students	1	2	3	4
1. Helpful				
2. Approachable				
3. Patient				
4. Respond to student needs and requests with minimum time delay				
5. Any other gesture or attribute that, in your opinion, may enhance student satisfaction:				
Admission/Registration Process	1	2	3	4
6. Student orientation programme help students adjust to university				
7. Adequate services are available to help students decide upon a career				
8. Students handbooks/calendars are reader-friendly				
9. Admission and registration process is efficient				
10. Student on-line admission services are needed				
11. Dates for admission/registration are sensitive to student's academic needs				
12. Any other aspect of the admissions/registration process that, in your opinion, needs improvement:				
Planning	1	2	3	4
13b. There are policies and procedures in place to guide the admission process				
14b. Admission policies and procedures are strictly adhered to				
15b. A strategic plan exists that links financial, physical and human resources to desired educational outcomes				
16b. Interactive decision-making between students, student affairs, academic departments and other divisions are encouraged				
17b. Admission services are constantly evaluated against set standards				
18b. Admission/registration dates allow for proper planning by other functional units				
19b. Any other relevant information that may help improve our services at UNW:				
Your overall impression of the quality of Admission/Registration services at UNW: Poor (1) Fair (2) Good (3) Very Good (4)				

