

Wits MEDICAL SCIENCES ALUMNI

Tracer Study 2012





Wits Medical Sciences Alumnus

'Always felt it was an excellent degree that gave me confidence working in various parts of the world'

Wits Medical Sciences Alumnus

'Recognised abroad as an excellent degree – no problem finding employment'

Wits Medical Sciences Alumnus

'Wits graduates are usually held in high regard'

Acknowledgement

Conceptualisation

Prinola Govenden Nhlanhla Cele

Report Writing

Prinola Govenden (Primary Report Writer)
Shepherd Mpofu (PhD) (Reviewer and Secondary Report Writer)
Nhlanhla Cele (Reviewer and Auxiliary Report Writer)

Data Analysis

Ali Denewade, Administrator of Special projects, Strategic Planning Division

Chief Editors

Rina Minervini, Consulting Language Editor Nhlanhla Cele, Director of Strategic Planning, Critical Reader

Prepared by:

The Quality and Academic Planning Office Strategic Planning Division University of the Witwatersrand 4th Floor, Senate House

Tel: 011 717 1162/1181 *Website:* http://web.wits.ac.za/AboutWits/StrategicPlanningDivision



Table of Contents	Page
ACKNOWLEDGEMENTS EXECUTIVE SUMMARY PREFACE	1 2 3
REVIEW OF LITERATURE	4
CONCEPTUAL FRAMEWORK OF THE STUDY	7
FIGURE 1: CONCEPTUAL FRAMEWORK OF THE WITS EXPERIENCE	7
RESEARCH METHOD	10
AIMS OF TRACER STUDY QUESTIONNAIRE DESIGN POPULATION AND SAMPLE DESIGN QUESTIONNAIRE DELIVERY LIMITATIONS	10 11 12 12 12
PROFILING OF ALUMNI20	13
PERSONAL PROFILE FIGURE 2: AGE BREAKDOWN OF RESPONDENTS COUNTRY OF ORIGIN FIGURE 3: COUNTRY OF ORIGIN CURRENT COUNTRY OF RESIDENCE FIGURE 4: CURRENT COUNTRY OF RESIDENCE YEAR OF GRADUATION FIGURE 5: DISTRIBUTION OF RESPONDENTS BY YEAR OF GRADUATION EDUCATIONAL PROFILE	13 13 14 14 14 14 15 15
EDUCATION LEVELS CAREER PROFILE FIGURE 6: SECTOR OF EMPLOYMENT SPECIAL ACHIEVEMENTS FIGURE 7: BOOKS PUBLISHED FIGURE 8: AWARDS RECEIVED FIGURE 9: LOCAL JOURNAL ARTICLES AUTHORED FIGURE 10: INTERNATIONAL PEER-REVIEWED JOURNAL ARTICLES AUTHORED FIGURE 11: HONORARY DEGREES AWARDED FIGURE 12: INVOLVEMENT IN BUSINESS VENTURES	15 15 16 17 17 17 18 18 18
EDUCATIONAL EXPERIENCE	20
CHOICE OF UNIVERSITY AS A STUDY OPTION FIGURE 13: WITS AS UNIVERSITY OF FIRST CHOICE FIGURE 14: QUALITY OF EDUCATION EXPERIENCE BEST ASPECTS OF WITS EDUCATION	20 20 21 22

	Page
LEARNING CLIMATE	24
ATMOSPHERE OF THE SCHOOL /DEPARTMENT	24
FIGURE 16: SENSE OF SOCIAL ACCEPTANCE IN THE SCHOOL/DEPARTMENT	24
FIGURE 17: GENERAL ATMOSPHERE OF THE SCHOOL/DEPARTMENT	25
INSTITUTIONAL CULTURE	27
FAIRNESS AND FOUALITY	27
FIGURE 18: PRINCIPLES OF FAIRNESS AND EQUALITY	27
FIGURE 19: ANY FORM OF DISCRIMINATION EXPERIENCED	28
PROFESSIONAL DEVELOPMENT	29
CAREER PREPAREDNESS	29
TABLE 1: ADEQUACY OF WITS GRADUATES IN THE WORKPLACE	30
RECOMMENDATIONS	32
CONCLUSION	33
EDUCATIONAL EXPERIENCE (ACADEMIC)	33
FIGURE 20: RESPONDENTS' WILLINGNESS TO GET INVOLVED IN WITS ACTIVITIES	35
REFERENCES	36

| Acknowledgements

The Strategic Planning Division would like to express its gratitude and warm appreciation to the following individuals who contributed to the success of this project:

- Peter Maher: Director of Wits Alumni Relations
- Faculty of Health Sciences

Last but not least, we would like to thank the medical sciences alumni of the University of the Witwatersrand for their invaluable input.

| **Executive Summary**

This study was conducted by the Strategic Planning Division's Institutional Research Unit in 2012. The Tracer Study of Wits Medical Sciences Alumni presents attitudes towards and satisfaction levels with the Wits experience in, specifically, four selected areas: educational academic experience, learning climate, institutional culture and professional development. An online survey was used as the main research instrument to collect data. A total of 210 medical alumni participated in this study. This was a baseline study to provide an initial platform to alumni to contribute to the institutional and educational enhancement of Wits.

Alumni rated the following aspects of the Wits experience as largely positive:

- Wits University as the first choice for many students that seek a Medical Sciences qualification (91.43% respondents chose Wits as the first option)
- The reputation of Wits as an institution is a major draw card for studying Medical Sciences at Wits, followed by Wits' reputation in the Medical Sciences discipline.
- The majority of the sample (88.10%) felt that Wits treated its students with equally and fairly.
- A total of 91.43% of the sample felt that the School made its students feel welcomed
- 92.86% of the sample indicated that the School provided an atmosphere that was welcoming and conducive to learning. With 52.48% showing strong satisfaction.
- Overall the aspects probed about the Wits education ratings showed high satisfaction levels, with most
 achieving 90% or more, namely: course content, teaching staff, teaching style, teaching quality and career
 preparedness. Teaching methods fell only half a percentage short of this level, with 89.53%.
- The top five areas cited as the best aspect of Wits Education by most alumni were: teaching staff, being
 given a solid foundation, academic excellence, career preparedness, and receiving an internationally
 recognised degree.
- A positive rating of 80% of the sample felt they were prepared for their career in terms of language skills and report writing.
- A total of 95 respondents answered the question targeted at Managers who have worked with Medical Sciences graduates. Of these, 77 felt Wits graduates they had worked with were adequate and 18 felt they were not.

Based on the issues red-flagged by alumni, the following areas need further review and assessment in line with the strategic objectives of the University:

- Non-academic support services and career development were flagged as areas that can be improved, both scoring in the 60–70% satisfaction range.
- Discrimination was experienced by 15.71% of respondents.
- The majority of the issues flagged to improve the Wits experience involved curriculum reform.

| Preface

This Tracer Study of Wits Medical Sciences Alumni is the fourth in a series of professions-focused studies conducted across four disciplines of Accounting, Law, Engineering and Medical Sciences. In educational research, a tracer study extends to surveying former students (alumni). The information gained from survey items is useful for the improvement of the institution and increasing its efficiency (Millington, n.d.).

Wits commits to pursuing intellectual elitism as an approach that will nurture world-class leaders in their respective fields of engagement and graduates through professional development and educational programmes that compare with the best in the world, as a critical prerequisite to achieving the University's goal of being a Top 100 university (*Wits Vision 2022*).

The top-ranked world-class universities recognise the benefits of alumni studies to institutional enhancement. The University of Oxford¹ conducts alumni surveys² to measure the effectiveness of university-run programmes.³

Globally best universities view alumni as key stakeholders hence they invest in communication and relationship building with them. The Harvard Alumni Association aims to continue the Harvard experience post graduation and includes the provision of volunteer programmes.⁴ Similarly, Stanford University's⁵ Alumni Association provides opportunities to volunteer, including days of service in communities.⁶

Other higher education institutions worldwide also recognise the importance of alumni and alumni engagement. The University of Indonesia for example, believes 'that integration holds an important role in becoming a World Class Research University'. Hence in 2007 it established its Directorate of Alumni to maintain the relationship between alumni and the university.⁷

Assessing the outcomes of higher education institutional performance has numerous benefits for understanding and promoting alumni satisfaction (Hartman and Schmidt, 1995). A tracer study of medical sciences alumni is beneficial to both the institutional improvement of Wits and its attainment of the *Vision 2022* strategic objectives. Alumni surveys provide higher education institutions with a useful tool for accountability, efficiency, and alignment with public needs ensuring that their education yields maximum economic and social benefits (Cabrera et al., 2003).

¹ Ranked second in The Times Higher Education World University Rankings 2012–2013.

² The most recent survey was the 2012 University of Oxford Alumni Survey.

³ https://www.alumni.ox.ac.uk/page.aspx?pid=563

⁴ http://alumni.harvard.edu/about-haa

⁵ Ranked joint second position in The Times Higher Education World University Rankings 2012–2013.

 $^{^{\}it 6}\ https://alumni.stanford.edu/get/page/landing/volunteering$

⁷ http://www.ui.ac.id/en/alumni/page/overview

Review of Literature

It is common for higher education institutions to embark on studies of their alumni as a way of assessing if these have been well equipped by the education system they have been through at that respective university. A case in point was a study that used six alumni surveys for the periodic re-evaluation of programme goals and outcomes of six US internal medicine residencies: University Hospital, Boston University; University of California, San Francisco (UCSF) Primary Care Residency Program; University of Minnesota Internal Medicine Program; North-western University Internal Medicine Program; Mayo Clinic Internal Medicine Residency Program; and Rhode Island Hospital (Brown University) (Parrino and Kern, 1994). The study sought to assess the practical value of the training experience for graduates of these institutions. The study noted: 'one principle of continuous quality improvement (CQI) is that the quality of the production process be measured by the performance of its products.'

North Carolina State University used alumni research to obtain an outcomes-based assessment of its veterinary degree programme and to determine whether recently published national gender differences were true for a programme that had always been predominantly female (Bristol, 2002). A survey was developed and mailed to all alumni of the programme. The study concluded: 'The survey was a tremendously valuable source of information. Results provided support for curricular revision.'

Previous studies have shown that alumni surveys can be used for curriculum reform. The University of Malaya used a survey to assess competencies of graduates of its Faculty of Dentistry, as perceived by the graduates and their employers based on a five-year undergraduate curriculum (Razak et al., 2008). All senior dental officers in the Ministry of Health (MOH), representing employers, and all 164 dental graduates of the years 2000, 2001 and 2002 were sent a self-administered questionnaire covering eight areas of competency. The respondents had to rate these areas on a scale of 1 (very poor) to 4 (very good). The responses for each area were then dichotomised into poor (1 and 2) and good (3 and 4). The study concluded 'whilst generally the graduates' level of competency in almost all areas is acceptable or good, there are areas of concern that need to be addressed to further improve the five-year curriculum at the University of Malaya'.

The survey carried out by Stanford University resulted in the university realizing that it lacked a strong tradition of annual giving and this led to the institution embarking on market research of its medical alumni to understand why alumni do not make gifts to their alma mater (Pearson, 1999). The research aimed at discovering these reasons so that they could be addressed. It used focus groups and telephone surveys for data collection.

Researchers identify alumni as an important stakeholder group to provide valuable insights into the strengths and weaknesses of their educational experience (Stout et al., 2004). Successful higher education demands assessment, accountability, and intensive market-driven research to fulfil extensive internal and external needs (Dellow and Romano, 2002).

Alumni surveys elicit individual reflections since graduation about the quality of educational experiences, unlike surveys of other cohorts such as undergraduates, dropouts or graduate students (Moden and Williford, 1988, quoted in Pike, 1993a). The role of alumni surveys in evaluating the quality and effectiveness of education programmes is particularly significant (Pike, 1990, quoted in Pike, 1993a), and they are relied on for this purpose (Pike, 1993a: 66).

Alumni research has been considered a most productive field of assessment for linking accountability and improvement in higher education (Borden, 2005: 62). In educational research the tracer study is referred to as an alumni survey since its target group comprises former students, and the information gained from survey items can be used by the graduates' alma mater and other education stakeholders for curriculum development and reform (Millington, n.d.).

Tracer studies have been conducted by educational institutions for decades (ibid.). The growth of these studies in the United States has been attributed to the number of internal and external demands for assessment (Dellow and Romano, 2002). Alumni surveys have long been used as an effective evaluation tool, a case in point being Ohio University using them as one part of an ongoing programme of institutional evaluation and improvement (Moden and Williford, 1988, quoted in Pike 1993a). This tracer study sought to evaluate aspects of the quality of Wits medical sciences education with the intention of flagging areas requiring improvement. Alumni surveys are used to reach key audiences to have a positive impact on the advancement of higher education institutions (Cabrera et al., 2005). The evaluation of this study was conducted with the intention of advancing the attainment of Wits' strategic imperative to provide high-quality, internationally competitive medical sciences education founded on high academic standards. Higher education institutions have long used alumni surveys to measure learning and for the development of their education programmes (Pike, 1993b: 23). Surveys of alumni perceptions are an important source of data concerning university outcomes (Vailga, 1982). Research has found that dimensions of learning and development are positively related to each other and to satisfaction with higher educational institutions (Pike, 1993b: 23). The present study evaluated dimensions of learning and development through eliciting satisfaction levels and perceptions of key aspects of the teaching model and learning climate at Wits. The satisfaction level of a programme is highly congruent with the effectiveness of learning and development outcomes. In a report summarising United States national results of a college student experience survey, Pike (1989) found that all five dimensions of reported learning and development were positively related to satisfaction.

Tracer studies also enable the evaluation of the results of the education and training provided by a particular institution, examine and evaluate the current as well as future career and employment opportunities/prospects of graduates (Boaduo et al., 2009). The present study also profiled medical sciences alumni with respect to their personal, educational and professional career information.

Satisfaction with and perception of the quality of professional development rendered by Wits was also evaluated in the study. A 2009 study (Griesel and Parker, 2009) undertaken by Higher Education South Africa and the South African Qualifications Authority, which focused on the quality of graduates produced by public higher education institutions in South Africa, highlights that governments in many countries have initiatives focusing on higher education and employment in the workplace. This is due to the mounting pressure on higher education from government and employers to produce graduates who are employable in the sense that they have the attributes, capabilities and dispositions to work successfully. Hence, assessment of the quality

of education in ensuring solid career preparedness is a key higher education area of focus in both the international and national context. For this reason, this study also assessed the degree to which the Wits education provided the necessary preparation for a successful medical sciences career. Alumni were also asked for their views on what they felt Wits graduates they have worked with might lack.

The learning climate and institutional culture are key components in providing a positive university experience and effective education. Higher education institutions must aspire to address and honour cultural diversity in teaching and learning to create an effective learning environment (Chan, 2004). The climate is a major contributor to the overall education benefits. Thus its enhancement to benefit student learning is a central area of concern for higher education institutions (Day, 2009: 9.1).

It has been argued that a learning climate cannot be planned and implemented in a mechanistic fashion as it should be a site of nurturing, sensitivity, flexibility, adaptability, and responsiveness (ibid., 9.11). The Task Force on Higher Education and Society (1999) convened by the World Bank and UNESCO, which brought together education experts from 13 countries to explore the future of higher education in the developing world, noted that a well-qualified and highly motivated faculty [teaching staff] is critical to the quality of higher education. Lecturers' consistent presence and availability to students and colleagues has an enormous influence in creating an atmosphere that encourages learning. Yet few institutions in developing countries enforce or even have, strictures against moonlighting and excessive absenteeism. In many institutions, students face difficult conditions for study (ibid.). This survey also solicited responsiveness to the learning climate, specifically at the school/departmental level, as well as fairness and equality in the institutional culture.

Alumni research is most effective when rooted in a systematic and integrated approach to higher education assessment, which can be described as a culture of evidence that shows 'willingness not only to create measures and collect data on outcomes but also to use this information to redesign practices for improving quality' (National Center for Postsecondary Improvement, 2002). Alumni surveys can be used to help develop a more integrated and better-aligned assessment capacity (ibid.: 71). Tracer study research emanates from a desire to improve the status quo, and hence provides recommendations for improvement (Cabrera et al., 2005).

Conceptual Framework of the Study

This study is premised on the conceptual assumption that there are four target-area determinants to assess satisfaction with the Wits experience and these are illustrated in Figure 1. The study argues that graduate experience depends on the quality of the Wits educational experience, educational experience (academic), institutional culture and learning climate (school/departmental) and professional development. The research instrument was structured to take cognisance of this framework.

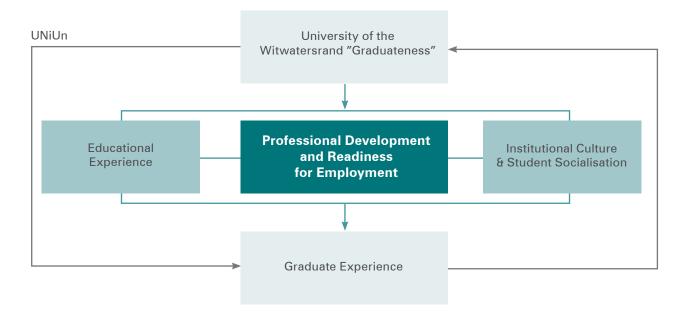


Figure 1: Conceptual Framework of the Wits experience
Adapted from Nhlanhla Cele, Postgraduate Student Experience Survey 2012

Educational experience: The satisfaction level of an academic programme is highly congruent with the effectiveness of programme outcomes. This component explored the satisfaction levels and ratings of the Wits academic experience specifically course content, teaching staff, teaching style, teaching methods, teaching quality and non-academic support as well as career prepardness and Wits career development. It also solicits the best aspects of their Wits academic experience. Alumni perceptions and ratings of their academic education pose oppurtunities for institutional improvement. Literature suggests that Alumni feedback is an effective tool to assess the programme outcome and can be used as part of an ongoing programme of institutional evaluation and improvement.

Professional development: Alumni surveys gather individual reflections since graducation on the quality of education and career prepardness. This cohort have had the unique opportunity to test their Wits education against their career experience. The quality of Wits professional development was also evaluated in the study. The quality of graduates has been a pertinent issue for Governments and Higher Education Institutions and is this a key focus for this study. Wits commits to providing professional development of an exceptionally high standard. Issues of quality career prepardness and views on how Wits helped in career development is probed.

Instututional culture: Wits has enshrined the values of the South African Constitution in its institutional culture. Students should be treated fairly and equally at all times and not discriminated against on racial or gender grounds. An institutional culture of equality and fairness in a Higher Education institution is an important building block for an inclusive and positive environment. This component zones in on expereinces of discrimination as well as perceptions of equality and fairness.

A conducive learning climate is key in fostering a positive Wits experience. Litarature highlights the importance of honouring cultural diversity in teaching and learning. The learning climate is a major contributor to the overall experience and student benefit. Literature shows that a learning climate should be a site of nurturing, sensitivity, flexibilty, adaptibility and responsiveness. Similarly previous studies highlight the importance of a well qialified and highly motivated faculty [teaching staff]. The learning environment can hinder or encourage learning for the students. This aspect explored issues of feeling welcomed and a conducive learning climate and views on the general atmosphere.

Graduateness: While it is a given that there is no consensus in defining graduateness, in this study it is defined to embrace all attributes stated above. Graduateness is not synonymous to exit level competences as defined in outcomes based education, but defines peculiarity and exceptional conditionality where graduates stand out from the pack by being able to live in the future world through current imagination as defined by Makhanya (UNISA, 2010). Graduateness is thus deeper than mastery of subject content and completion of the official curriculum prescribed for learning programmes or meeting basic requirements for professional practice. It is more than possession of field-specific knowledge; shared qualification level competences; and career specific skills. Graduateness embodies attributes that embrace social values, critical thinking skills, functional knowledge, reflective competencies, and an appreciation of diversity and life's complexities as the definitive qualities of a global civil society of the 21st century. This refers to a "high calibre graduate... who possesses, and perhaps even exceeds expectations with regards to the knowledge, skills and attributes needed to be successful in the workplace." (Raymond and McNabb, 1993)

Wits holds the view that graduates produced from this university need to exude particular distinct attributes that separate them from those produced in other South African universities. In the Teaching and Learning Plan 2010-2014, the university stated that graduateness at Wits means more than the ability to pass exams, and includes the development of values such as academic freedom; independent enquiry and trust; depth of knowledge and the value of critical thinking; breadth of knowledge; collegiality; international comparability; social responsiveness; commitment to community service; social inclusivity and intellectual integrity (Wits, 2005). As often articulated in literature that graduateness is a state and extent of graduate readiness expressed through the combination of the following five broad characteristics:

- sound grounding in specialized knowledge domains and the agility to adapt to generic contexts
- the ability to be resilient and caring members of a global civil society
- the ability to think critically and innovatively
- an awareness of their own development needs and future challenges

As reflected in the Wits Vision 2022 Strategic Framework, Wits wishes to produce 'global citizen' graduates which exude the following attributes:

- a rich and in-depth knowledge of specialist knowledge areas
- intellectual integrity, a strong sense of professional ethics and public good values
- · command high level problem solving and critical thinking skills
- have good communication social and business communication skills
- poses functional knowledge across a broad range of disciplines
- have understanding of life's complexities and ambiguities as well as a high level ability to work within these circumstances
- continuous development of cognitive skills through life-long learning
- command transferable skills and functional knowledge for purposes of different employment opportunities
- outstanding interpersonal skills and an ability to appreciate and embrace diversity
- an ability to bring about innovation and constructive change in their professions and in civil society
- leadership skills and an ability to mentor others
- broader understanding of human rights, social justice and environmental sustainability imperatives
- a strong sense of civic and social responsibility
- a distinct ability to think independently and imagine the future as underpinned by a sense of public good and values of global citizenship

Research Method

An electronic questionnaire was created using qualitative and quantitative methodologies. The study used an open survey, with no target response rate. The survey consisted of a single internet questionnaire completed by each participant, which is considered to be the most appropriate method for collecting data on a large scale. All respondents were kept anonymous. The survey was sent to all medical science alumni registered with the Alumni Relations database. The study yielded a total of 210 respondents.

The methodology embedded five key features; questions were designed to elicit the following information:

- 1. Profiling of alumni
- 2. Educational experiences and satisfaction levels
- 3. Learning climate experiences and satisfaction levels
- 4. Institutional culture experiences and satisfaction levels
- 5. Professional development experiences and satisfaction levels.

AIMS OF TRACER STUDY

This tracer study aims to establish an institutional understanding of the experiences and satisfaction levels of medical sciences alumni, with the intention of enhancing the Wits experience. The four target areas of focus are:

- 1. Wits educational experience (academic)
- 2. Wits learning climate (school/departmental)
- 3. Wits institutional culture (fairness)
- 4. Wits professional development (career)8

The study operated within the context of Wits' previously mentioned commitment towards pursuing intellectual elitism as an approach that will nurture world leaders in their respective fields of engagement, and graduates through professional development and educational programmes that compete with the best in the world (*Wits Vision 2022*). The University further aspires to be an institution built on principles of intellectual excellence committed to providing high-quality, internationally competitive education founded on high academic standards, cutting-edge research, public engagement and productive partnership with leading institutions throughout the world (ibid.).

⁸ This study understands 'professional development' as skills and knowledge attained for both personal development and career advancement

In line with the target areas listed above, the study operated within four primary research questions:

- 1. What are the alumni's satisfaction levels and views with regard to the Wits educational experience?
- 2. What are the alumni's satisfaction levels and views with regard to the Wits learning climate?
- 3. What are the alumni's satisfaction levels and views with regard to the Wits institutional culture?
- 4. What are the alumni's satisfaction levels and views with regard to the Wits professional development?

Hence the study was guided by the following four main areas of focus:

Profiling of alumni: Personal profile (gender, age, country of origin, country living in, year of graduation); educational profile (host school/department; educational qualification/s); and career profile (sector of employment, employer, economic status, special achievements, business ventures).

Educational experience: The choice of the University as a study option. Ratings of Wits educational components: course content, teaching staff, teaching style, teaching methods, teaching quality, career preparedness, non-academic support services, career development. Best aspects of the Wits educational experience.

Learning climate: The atmosphere of the school/department and learning climate.

Institutional culture: Fairness and equality.

Professional development: Career preparedness, Wits graduates in the workplace, and Wits producing global citizens.

QUESTIONNAIRE DESIGN

The questionnaire consisted of both open-ended and closed-ended questions. Most questions were framed as closed-ended questions. At the end of the main sections respondents were invited to make any further comments they wished, as well as recommendations. The questionnaire was designed to be completed in 15 minutes and consideration was given to the inclusion of questions relating to the relative importance of the objectives of the study. Initial drafts of the questionnaire were piloted to identify any remaining ambiguities and problems.

The satisfaction data used in the study emanated from questions concerning aspects of the alumni experiences. Participants were asked to rate these aspects, the response options being 'strongly agree', 'agree', 'disagree' and 'strongly disagree'.

Best practices in the design of alumni surveys suggest collaboration among key internal stakeholders such as deans, institutional research and public affairs (Pollick, 1995; Pendel, 1985; Fisher, 1988). The Faculty of Health Sciences was consulted for input into the development of the survey, which assisted in developing the discipline-specific sections of the questionnaire.

The questionnaire also underwent an internal evaluation process, input and approval through structures within Wits (Wits Alumni Relations Office and Strategic Planning Division).

POPULATION AND SAMPLE DESIGN

The survey targeted medical sciences alumni from the University of the Witwatersrand across all years of graduation. It has been noted that when a number of decades of graduates are covered by an alumni survey, it results in a very large number of observations and the ability to examine trends over time in education and career histories (Eesely, 2002). Confidentiality is an issue of both legal and professional importance (Melchiori, 1988), hence safeguards were put in place to ensure the individual identities of the respondents were protected and kept anonymous.

QUESTIONNAIRE DELIVERY

Data collection activities were undertaken during the period of September–October 2012. The information provided by respondents was collated and used to derive conclusions for this study. All Wits medical sciences alumni with an e-mail address with the Wits Alumni Relations database were invited through e-mail to participate in the survey. There was no direct access or face-to-face contact with respondents.

The main drawback of mail surveys is low response rates, but Stevenson, Walleri and Japely (1985) recommend using multiple follow-up mailing to non-respondents to bolster response rates (Cabrera et al., 2005). After the survey was e-mailed to alumni, various steps were taken to promote it. Details of the survey were posted on the Alumni Relations LinkedIn account, which has 4 805 members, Alumni Relations Twitter account and Alumni Relations link on the Wits website. The survey was also mentioned in *TheEdge* newsletter (for Wits alumni) and the Wits news e-letter. A follow-up e-mail was sent to alumni a week before the closing date to persuade them to participate in the survey.

LIMITATIONS

Low response rates have been noted as a drawback in conducting alumni surveys (Eesley, 2012). The Wits Alumni Relations office has reported that approximately 5% of alumni e-mailed by Wits University open their e-mails. Hence the response rate of the study was affected by this; however, the sample size was sufficient to conduct a strategic assessment within the remit of the study.

Profiling of Alumni

The first section of the report profiles the sample according to personal characteristics, education and career credentials.

PERSONAL PROFILE

The analysis of data by gender shows that 73% participants identified themselves as male and 25% as female. 9

In terms of age, Figure 2 below provides the age breakdown of the sample. It reveals that the majority (88.57%) were over the age of 40. The next largest group of 4.76% were 35–39 years old, followed by 3.81% who were 30–34. Only 1.9% of the sample fell within the age group 25–29 years old.

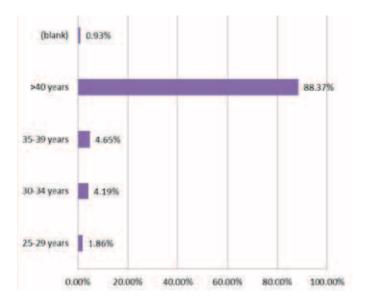


Figure 2: Age Breakdown of Respondents

Although the bulk of the sample was not recent graduates, the study benefited from the views of highly experienced and seasoned medical science practitioners.

 $^{^{\}rm 9}$ 2 % of the sample did not answer this question

COUNTRY OF ORIGIN

Figure 3 below illustrates that 86.67% of the sample originated from South Africa. Of the foreign alumni, 3.81% came from the United Kingdom (UK), 2.38% from Zimbabwe, and 1.48% from Zambia. The study achieved good continental representation: Africa (South Africa, Zimbabwe, Zambia, Democratic Republic of Congo, Nigeria, Mauritius), North America, Europe (Portugal, Poland, Cyprus, the UK), and Asia (Iraq).

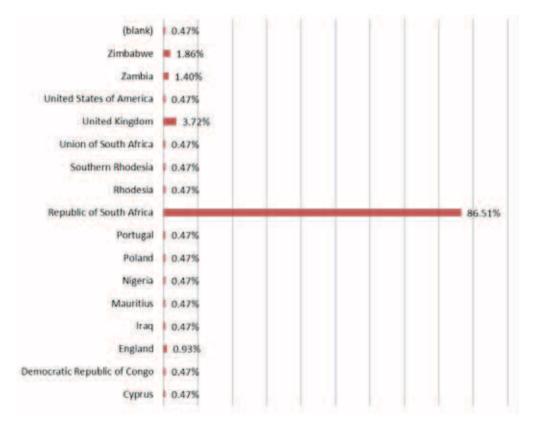


Figure 3: Country of Origin

CURRENT COUNTRY OF RESIDENCE

While data shows that the majority of participants were of South African origin 986,51%), it further shows in figure 4 that Over half of the sample (60%) were living outside South Africa at the time of the study. The study suggests that the majority of graduates in medical sciences have opted for careers outside of South Africa.

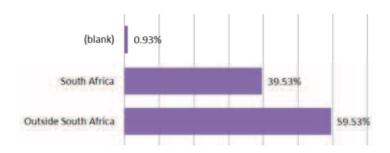


Figure 4: Current Country of Residence

YEAR OF GRADUATION

The study targeted all medical sciences alumni, hence survey participants represented a spread of graduation years. Figure 5 below gives a breakdown of the sample's years of graduation. Results reveal a fair representation of graduates for the different decades. Of the 210 respondents, 66 graduated before 1969 and 39 in the 1970s. In the 1980s, 59 alumni graduated, and, most recently, 40 respondents graduated in the 90s and 19 in the past 10 years.

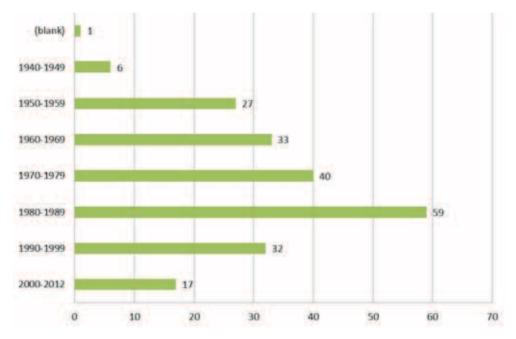


Figure 5: Distribution of Respondents by Year of Graduation

EDUCATIONAL PROFILE

Education Levels

The majority of the sample held the degree of Bachelor of Medicine (MBBCH), and many initially studied for a Bachelor of Science (BSc) and then studied for a MBBCH. Some respondents also had a PhD and/or MBA, and were fellows of various institutions, for example, the FACP (Fellow of the American College of Physicians) and FC Paed (SA) (Fellowship of the College of Pediatricians of South Africa). Other qualifications mentioned included BSc Nursing, and Honorary MD.

Career Profile

The sectors of employment of the respondents can be seen in Figure 5 below. Results show that the largest number of the sample were employed in the government sector (25.24%), followed by the corporate sector (7.62%), and the 6.67% who indicated they were entrepreneurs. Non-governmental organisation (NGO) employment accounted for 3.81% of the sample. Just under half of the respondents (40.48%) indicated they were working for sectors outside those mentioned by selecting the 'other' option.

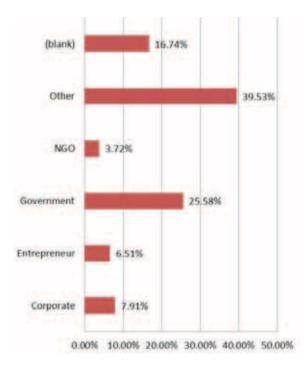


Figure 6: Sector of Employment

While Medical sciences alumni surveyed indicated that they self-employed and or retired, most were employed by a spread of employers, including international and local universities. Employers of the sample include:

- Groote Schuur Hospital
- Harvard Medical School
- Broward Hospital
- Health Canada
- Hospital for Sick Children, Canada
- Mayo Clinic, Rochester
- International SOS
- Partner in a radiology practice
- Ampath
- Astellas Pharma
- Baylor, Dallas
- Biotech Entrepreneur
- Dubai Media Incorporated
- Discovery Health
- Gauteng Department of Health and Social Development
- Albert Luthuli Hospital
- Pfizer
- Rahema Moosa Mother and Child Hospital
- Queensland State Government
- University of Kwazulu-Natal (UKZN)
- University of Cape Town (UCT)
- University of California
- University of Florida
- University of Toronto
- US Federal Government

Special Achievements

Participants were also asked about special achievements that were highly regarded in the medical profession, specifically books published, awards, local journal articles, internationally peer-reviewed journal articles, honorary degree/s, and business ventures. According to the data shown in Figure 7 just under a quarter of the sample (23.81%) had published books.

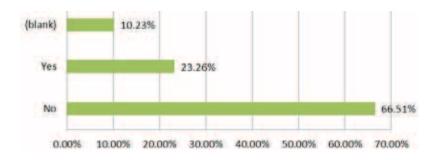


Figure 7: Books Published

As Figure 8 below indicates, just under half of the respondents (46.19%) have won one or more award/s.

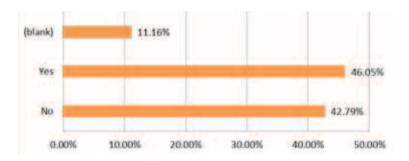


Figure 8: Awards Received

The participants were asked to mention any other recognition they have received in the medical community. The medical alumni mentioned several highly commendable awards and other forms of recognition, most notably:

- Emeritus Orthopaedic Surgeon
- Regarded as the father of biotechnology industry in South Africa
- Douglas Medal Most Outstanding Surgical FCS 1992
- Lifetime Achievement Award/APGAR Award/AAP Education Award
- Past President American Society of Transplantation
- Editor in Chief of journals
- Previously Head of Surgery
- Westlake Award for Clinical Excellence
- International committees
- Chair in Urologic Oncology
- President Cyprus Surgical Society
- President of SA Orthopaedic Association
- Teacher of the Year University of California Medical School
- Novartis medal for FC Psych (SA)
- Fellow of Brunel University, London
- Fellow of Royal Society of Medicine

- South African Medical Association (SAMA)
- South African Society of Obstetricians and Gynaecologists (SASOG)

More than half of the sample (53.33%) has written local journals article/s, as depicted in Figure 9.

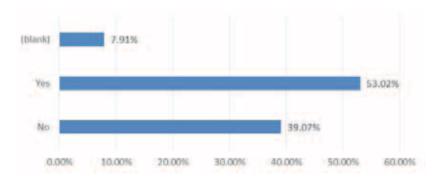


Figure 9: Local Journal Articles Authored

Additionally, a large number of respondents indicated they have written internationally peer-reviewed journal article/s (58.57%), as shown in Figure 10.

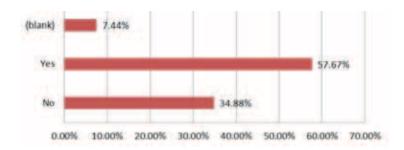


Figure 10: International Peer-reviewed Journal Articles Authored

Figure 11 reveals that 4.76% of the sample have been awarded honorary degree/s.

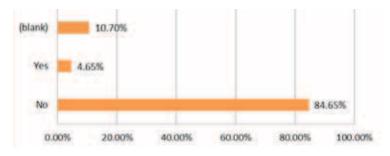


Figure 11: Honorary Degrees Awarded

Figure 12 shows that 20.95% of the sample have business ventures.

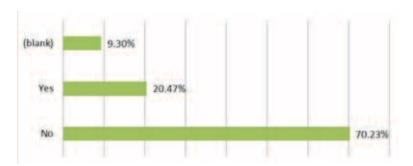


Figure 12: Involvement in Business Ventures

Those who indicated they have business ventures were asked to name these. Replies included:

- Property development
- Private practice
- Private radiology practice
- Medical services company and medical facilitating company
- Own clinic
- Sechaba Medical Services
- Consultancy for emergency medical and risk assessments
- Medical practice
- Creative writing and computer medical software design
- Partner Lancet Labs
- Founding partner Health and Development Africa (Pty) Ltd

Educational Experience

The next section of the report gauges the respondents' views about and their satisfaction levels with their academic educational experience at Wits. The study surveyed whether the University was the first study option, why they chose Wits for a medical sciences qualification, satisfaction levels with selective components of the education they received, and lastly their memorable experiences on Wits education.

CHOICE OF UNIVERSITY AS A STUDY OPTION

Figure 13 below reveals that for the majority of the sample (91.43%) Wits was their first option of university to attend.

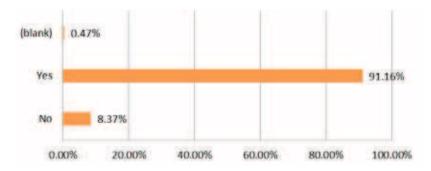


Figure 13: Wits as University of First Choice

This issue was taken further by asking why they chose Wits as a place for study. Results are shown in Figure 14. The overall reputation of Wits (29.05%) was the leading reason, followed by Wits' reputation for medical sciences (23.33%) and then the location of the institution (22.38%).

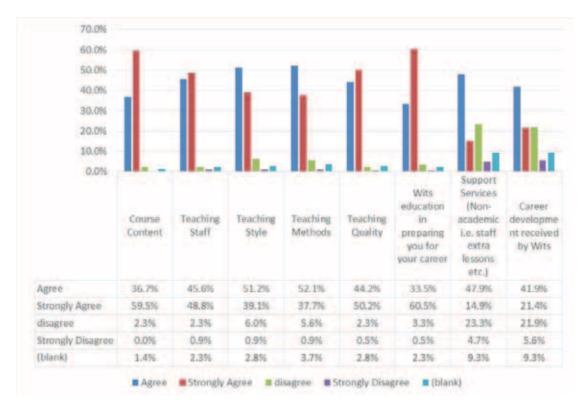


Figure 14: Quality of Education Experience

Medical alumni rated selected aspects of their Wits education such as course content, teaching staff, teaching style, teaching methods, teaching quality, career preparedness, non-academic support services, and career development received at Wits. Results are summarised in Figure 14 below.

The following conclusions were derived regarding selected aspects of Wits education:

Course content: Most respondents were satisfied with this aspect (96.19%) with only 2.38% indicating dissatisfaction. A high 60.48% showed strong satisfaction.

Teaching staff: This aspect also revealed high satisfaction levels with 94.12% showing a positive response, and 48.52% indicating strong satisfaction.

Teaching style: This garnered positive results with 90.47% suggesting satisfaction, and 39.52% strongly satisfied.

Teaching methods: Almost the same level of approval was achieved with a satisfaction rate of 89.53% and 38.10% strongly satisfied.

Teaching quality: The quality of teaching garnered commendable satisfaction levels with 94.29% of the sample, and of this group, more than half (50.48%) were strongly satisfied.

Wits education in preparing you for your career: According to 93.81% of the sample, their Wits academic education adequately prepared them for their medical sciences career.

Non-academic support services: Although more than half of the sample (62.38%) was satisfied with Wits' non-academic support services, this is a fairly low level and this suggests that there is need to improve the Wits educational experience.

Career development: 63.33% of the sample was satisfied with aspects of Wits' career development. This component suggests a great potential for enhancement.

Overall the aspects probed showed high satisfaction levels, with most of them achieving 90% or more, namely: course content, teaching staff, teaching style, teaching quality and career preparedness. Teaching methods fell only half a percentage short of this level, with 89.53%. Non-academic support services and career development were flagged as areas that could be improved, both scoring in the 60–70% range.

BEST ASPECTS OF WITS EDUCATION

Medical alumni were asked to comment on the best aspect of their Wits education. The top five aspects cited were: teaching staff, being given a solid foundation, academic excellence, career preparedness, and receiving an internationally recognised degree.

The quality of the teaching staff was mentioned by a significant number of respondents:

- The quality of some of the teachers was superb!
- The calibre of my teachers and role models and the quality and breadth of clinical care I was exposed to.
- Teaching staff and enormous exposure to an extraordinary variety of clinical medicine.
- Interactive, pleasant, skilled and professional academic staff.
- Excellent academic environment with top lecturers and clinical material.
- I had some of the most outstanding teachers in the Medical School during my student years.
- Employs the highest quality of lecturers and professors.

Many medical alumni felt that the best aspect of their education was that it gave them a solid foundation:

- This education still is the foundation of my successful medical career.
- The superb training I had at Wits allowed me to have a successful career in Canada and the UK I had a strong and superb foundation upon which to grow.
- Excellent preparation as a physician.
- Thorough foundation in clinical medicine, excellent clinical hands-on exposure, good support group of students.
- Was able to hold my own with graduates from other universities.

Academic excellence was also mentioned frequently:

- Camaraderie; challenges set; standards set; organisation of courses and degree; expert mentorship.
- High standards, certain blocks and content were well prepared. Appreciate the emphasis on lecturers being taught how to lecture.
- One of the best medical and clinical educations imaginable. I have taught extensively in the US and think the education I received was truly magnificent.
- I received an excellent academic degree from wonderful teachers.
- Academic excellence.
- $\bullet \ Clinical \ training \ in \ medical \ school, \ vigorous \ a \ cademic \ standards \ and \ a \ ccountability.$
- Excellent quality of education and clinical exposure.

Many comments involved career preparedness:

- Great career preparation.
- Outstanding teaching. Set me up for a successful career.
- It prepared me to be a good doctor.
- The finest preparation for advancement of my career as an orthopaedic surgeon.

- Provided the stepping stones to further my career.
- My education was mostly first class and I was well prepared for my career. I hope current students get the same.
- A good preparation for a career in medicine.

Many alumni appreciated receiving an internationally recognised degree:

- The social life and an internationally recognised degree at the time.
- The international reputation and high academic standard one knew one was getting.
- Felt like I received a good education that would stand me in good stead wherever I go in the world.
- The standard was high. I went to work in the UK for 8 months as a young graduate and as a Wits graduate I was treated with utmost respect and was able to do far more than colleagues of similar level to me.

Other best aspects discussed involved diversity, the course content, and practical experience, such as rural and hospital experience. Notable comments:

- Multi-cultural. Encouraging learning and growth while embracing diversity.
- Plenty of good practical exposure to a broad range of pathologies and conditions.
- Excellent content and teaching.
- Hands-on experience and improved my overall powers of observation.

Learning Climate

The learning climate has a significant bearing on a positive university experience and the effectiveness of education. As discussed above in the literature review, higher education institutions must aspire to address and contribute towards the cultural diversity in teaching and learning to create an effective learning environment (Chan, 2004). The climate is key to the overall education benefits (Day, 2009: 9.1). The next section of this report discusses the responses of medical sciences alumni to the atmosphere of their respective schools/departments as well as atmosphere of the learning environment.

ATMOSPHERE OF THE SCHOOL/DEPARTMENT

Results depicted in Figure 16 below reveal that 91.43% of the sample felt welcomed by their school/department.

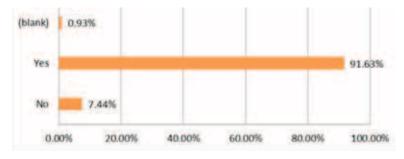


Figure 16: Sense of Social Acceptance in the School/Department

This issue was further probed by asking the sample whether they felt that the general atmosphere of the school/department had been welcoming and conducive to learning. Figure 17 reveals that more than half of the sample strongly agreed that it was (50.48%). Overall 92.86% indicated positive satisfaction levels.

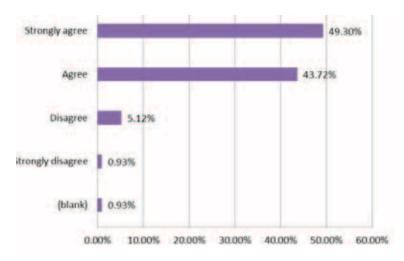


Figure 17: General Atmosphere of the School/Department

Respondents were also asked to describe the general atmosphere of the school / department with qualitative comments. Results show that these descriptions were largely positive in nature. Typical comments were:

- Friendly and helpful;
- Great all inclusive considering it was at the height of apartheid;
- · Academic;
- Diverse;
- Volatile and exciting;
- Exuberant;
- · Excellent;
- Busy, content, committed;
- · Competitive;
- Free and emancipating;
- Emphasis on teaching;
- · Supportive, energetic, engaged;
- · Collegial;
- Good environment to learn and live;
- High expectations of students, competitive, exciting;
- A bit intimidating but a sense of pride to be there;
- Good, intensive but great education compared to North American medical schools;
- Highly competitive but a great learning experience;
- · Formal, professional, efficient, engaging;
- Seriously committed to high teaching standards and research.

The comments with negative undertones involved race and religion; for example: 'In general it is friendly, however as a foreign student I saw people grouping according to their race or religion.' Alumni who mentioned the race issue were students during the apartheid era. One alumnus described the atmosphere as 'pretentious'.

The sample was also asked to describe the general atmosphere of the learning environment. Noteworthy responses include:

- Informative;
- Warm;
- · Excellent;
- Good and competitive;
- Stimulating;
- Dedicated;
- · Passionate;
- Excellent high expectations for excellence;

- Disciplined, organised, well-qualified lecturers;
- High academic standard and achievement;
- Encouraging and interactive;
- Top class;
- Very structured;
- · Comfortable;
- Very conducive;
- Professional;
- · Constructive;
- Awesome;
- Fantastic;
- Tough, lots of work;
- Efficient, conducive to learning;
- Achievement oriented;
- Rigorous;
- Intellectually stimulating;
- · Conducive but could be made better;

Negative comments were: 'tense', 'pressurised', 'mediocre', 'good but threatening at times', 'average', 'overly aggressive at times', 'tense and different depending on socioeconomic status'. Overall the descriptions of the learning climate were largely positive in nature.

Institutional Culture

The institutional culture of a higher education institution can be understood as its personality; in addition, every school/department has a culture of its own. This section explores the principles of equality and fairness in the culture of Wits as an institution and its learning climate. The principles of fairness and equality are firmly enshrined in the South African Constitution, and are sacrosanct values that must be respected by higher education institutions. South Africa's democracy was founded on the values of: 'Human dignity, the achievement of equality and the advancement of human rights and freedoms as well as non-racialism and non-sexism' (Republic of South Africa, 1996: ch.1 s.1[a]).

The attainment of democracy for South Africa in 1994 saw many heroic measures being instituted by the State so as to transform the social terrain of higher education, and this transformation has necessitated that all students, regardless of racial differences, access higher education in increased numbers (Machingambi, 2011: 1).

As maintained in the 1997 Department of Education White Paper 3 the principle of equity as a form of social inclusion requires fair opportunities both to enter higher education programmes and to succeed in them. In other words, failure by the institutions of higher learning to strike a balance between equity of access and equity of outcomes leads to the continued exclusion of historically marginalised groups from participating in the broader economic and social spheres of life (ibid.: 17).

FAIRNESS AND EQUALITY

88.10% felt that Wits is a university that adheres to principles of fairness and equality that treats its students fairly and equitably. Figure 18 summarises these results.

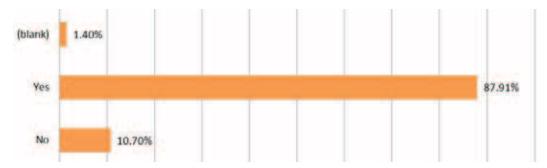


Figure 18: Principles of Fairness and Equality

The alumni were asked whether they had experienced any form of discrimination during their time at Wits. 15.71% of the sample answered 'yes', as can be seen in Figure 19.

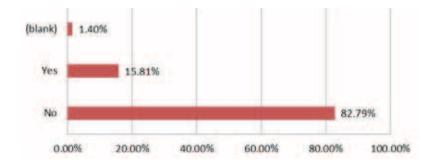


Figure 19: Any Form of Discrimination Experienced

Those who selected the 'yes' option were asked to specify the kind of discrimination experienced, and the results were: gender 9%, racial 76%, and 'other' 15%. Those who selected the 'other' option were asked to give reasons for the discrimination. These answers included: economic, the public frowning on students not enlisted for war and racial discrimination in South African society as a whole during apartheid.

The entire group of 15.71% of respondents who indicated they had experienced discrimination were also asked to describe their experience. Incidents of racial prejudice were mentioned by respondents who were students at Wits during the apartheid era; for example, being excluded from social activities like swimming and white students being treated preferentially. Many alumni also mentioned that they were excluded from hospitals during the apartheid era. Also mentioned was the gender bias of academics who made offensive remarks about women's abilities and career opportunities pre-1994. Anti-Semitism was mentioned by one respondent. A careful examination of results reveals that the racial and gender discrimination transpired during the apartheid era.

Professional Development

Producing quality graduates through professional development is a key focus of Wits' strategic imperatives. An assessment of the professional development offered to students by the University is necessary to examine the quality of career preparedness. This section considers alumni views on Wits adequately preparing respondents for the medical sciences profession. The level of success achieved by the University's academic education in adequately preparing alumni for a medical sciences profession was viewed with satisfaction by with 93.81% of the sample.

CAREER PREPAREDNESS

The medical alumni were asked how Wits had helped them in their career. Many respondents felt that their Wits medical qualification had international recognition and was well respected in places such as the UK and North America and that they had an all-round solid foundation for a successful medical career that would enable them to work in any country. Wits' - reputation was also mentioned as aiding in the advancement of their careers. The most notable responses included the following:

- Always felt it was an excellent degree that gave me confidence working in various parts of the world.
- World recognition.
- Recognised abroad as an excellent degree no problem finding employment.
- Opened the door to many opportunities.
- · Excellent reputation and training.
- Degree obtained acceptable worldwide.
- Worldwide acceptance.
- Formed fundamental basis of my chosen career path.
- Allowed me to get a job at Harvard Medical School.
- Very good all-round education.
- · Wits graduates are usually held in high regard.
- Good technical training and encouragement of innovation and social responsibility enabled me to access further educational and career opportunities.
- Great reputation.
- Enormously. In the US, Wits graduates were highly regarded.
- Excellent basic medical education which has been highly regarded in other countries where I worked UK and USA.
- Wits graduates are very well thought of in North America.
- Made me a very successful physician.
- I got a job instantly and we had world-class teachers.
- A degree internationally accepted.
- Felt well qualified for any country in the world.

When asked if Wits adequately prepared them for the workplace requirements, approximately 80% of the sample felt that they were well prepared. Respondents who have managerial experience were asked if they felt that the Wits graduates they have worked with were adequate. Results are depicted in Table 2 below.

	Count	%
No	18	8.57%
Yes	77	36.67%
(blank)	115	54.76%
	210	100.00%

Table 1: Adequacy of Wits Graduates in the Workplace

A total of 95 respondents answered this question. Of these 77 felt that the Wits graduates they had worked with were adequately trained and 18 felt they were not. Furthermore, the 95 respondents were asked to provide qualitative comments about the attributes they felt Wits graduates lacked. A substantial number of their responses suggested that Wits medical graduates were generally good but lacked the global perspective and international exposure, mentorship, empathy, communication skills, management skills, thinking skills such as logical thinking and developing original thought and research skills.

Following below are some of the skills alumni felt were critical to be imparted to graduates before they join the workplace world:

- Experience and knowledge about outside world. Out of Africa;
- International exposure;
- A better understanding of various groups/communities in the country; cultural tolerance;
- Theory in general. Medical students are very confused and muddled;
- · Lack of mentorship;
- Communication skills;
- Empathy;
- · Business skills, practical and broad legal knowledge, communication skills;
- Poor academic standards, unable to think logically;
- I trained surgeons most were UCT graduates. Wits graduates mostly good in my experience;
- In medicine the two skills which are limited are training in financial management and being taught how to teach;
- Management skills would have been good. I had to do a lot of management in my previous post and did not cope well. Practice management for doctors would [help];
- Integrated National Health Policy issues;
- New Wits medical grads appear to lack collegiality, tend to be loners, also lack boldness;
- Most graduates I have worked with have not been provided with the basic approaches to research or the ability to develop original thoughts;
- Thinking, skills development, drive, motivation. They come out with their medical degrees with a sense of automatic entitlement, no idea that it takes years of hard work and dedication to develop a practice and build a relationship with the hospital they work in or the clientele they need to attract and manage superbly;
- Worldwide perspective. Access to international journals and conferences;
- Clinical experience and confidence in procedures;
- · Research experience and skills;
- Need greater social accountability;
- Generalisations are not apt but generally the level of work ethic, loyalty and fulltime application to the task requires attention;

- Overseas opportunities;
- Possibly a few lack integrity;
- No business exposure in medicine;
- A sense of being a proud "Witsie";
- Training in health economics and health care funding including private health care;
- Broad exposure to global exposure;
- Ability to put theory into practice;

Wits aspires to produce graduates who are well equipped and can confidently apply their skills both locally and internationally. As discussed previously, 86.67% of the sample originated from South Africa but only 39.05% currently live in South Africa. This suggests that 47.62% of the sample have left South Africa; most of them presumably by emigration, and are now Wits global citizens. Figure 21 below provides details of where they are living.

Recommendations

Alumni research has been argued to be one of the most productive assessment technique for higher education improvement and is frequently used by the alma mater concerned for reform. This study is a step towards using alumni surveys as an ongoing programme for institutional evaluation and improvement. However, alumni research is most effective when it is used as a culture of evidence that not only collects data outcomes but goes a step further to improve quality by making recommendations for improvement. This section discusses the recommendations given by the sample group of medical sciences alumni. Since this study also gave medical sciences alumni the opportunity to flag areas they felt needed improvement with regard to the Wits experience, it is therefore to consider this under recommendations. The majority of the issues flagged involved curriculum reform.

Conclusion

The study aimed to establish an institutional understanding of how medical sciences alumni experienced and rated the University of the Witwatersrand experience.

EDUCATIONAL EXPERIENCE (ACADEMIC):

- 91.43% of the sample chose Wits as their first option to study medical sciences. The leading reasons for this choice were: the overall reputation of Wits (29.05%); Wits' reputation for medical sciences (23.33%); and the location of the institution (22.38%).
- Most of the aspects of the Wits educational academic experience probed in this study showed high satisfaction levels. Course content, teaching staff, teaching style, teaching quality and career preparedness scored higher than 90%.
 Teaching methods fell half a percentage short of this level with 89.53%. Nonacademic support services and career development were flagged as areas that could be improved with percentages of satisfied alumni for both being in the 60s.
- The top five citations for the best aspect of the Wits education were: teaching staff; being given a solid foundation; academic excellence; career preparation; and receiving internationally recognised qualification/s.
- The majority of the issues flagged as requiring attention in order to enhance the Wits experience involved curriculum reform.
- The following few recommendations, require further attention, based on Alumni input for curriculum reform,: include medical ethics, medical and medico-legal report writing, more practical lectures and less academic aspects, more small groups and problem solving, earlier integration of language and communication skills, more case studies, more mentoring and guidance, incorporate modern teaching methods, teach ethical and professional conduct, more clinical experience less time spent on rural visits and more time allocated to bedside clerks and teaching, offer extra support to weaker students regardless of race.

Professional development (Career):

- According to 93.81% of the sample, their Wits academic education adequately prepared them for their medical sciences career.
- 63.33% of the sample was satisfied with what Wits had provided to them by way of career development; therefore, this component also has potential for enhancement.
- The sample felt that Wits had helped them in their careers through international recognition and was well respected in places such as the UK and North America,

- and also felt they had been given an all-round solid foundation for a successful medical career that would enable them to work in any country. Wits' great reputation was also mentioned as aiding the advancement of their careers.
- Since graduation, 47.62 % of the sample have left South Africa and are now Wits global citizens.
- Although approximately 80% of the sample felt they were well prepared for their career in terms of language skills and report writing, 16.67% of the sample felt they were not, which reveals an area that can be enhanced.
- Of the total of 95 respondents with managerial experience who indicated that
 they had worked with Wits graduates, 77 felt that graduates performed adequately
 in the workplace, and 18 felt otherwise. A substantial number of qualitative
 responses demonstrate that Wits medical graduates were generally good, but
 lacked in some of the following aspects: the global perspective and international
 exposure; mentorship; empathy; communication skills; management skills;
 thinking skills, such as logical thinking and developing original thought; and
 research skills.

Learning climate (School/Departmental):

- 91.43% of the sample felt welcomed by their school/department.
- Respondents were also asked to describe the general atmosphere of the school/ department and learning climate with qualitative comments. Overall, these descriptions were largely positive in nature such as 'friendly and helpful' and 'exuberant'. Attention needs to be given to negative undertones of this atmosphere which was said to be 'tense' and 'overly aggressive at times'.
- The atmosphere of the learning environment was mainly referred to in positive terms like 'informative', 'top class' and 'very conducive'.

Institutional culture (Fairness and Equality):

- 88.10% of the sample felt that Wits adheres to principles of fairness and equality in its treatment of its students.
- 15.71% of the sample indicated that they had experienced discrimination. This was broken down into gender (9% of this group), racial (76%) and 'other' (15%) discrimination. These respondents were also asked to describe their experience of discrimination, and it became evident that most of gender and racial incidents were due to the racial and gender prejudice that transpired during the apartheid era. Nevertheless, the University cannot afford to become complacent in this important area.

Higher education institutions that engage in relationship management with their alumni may expect long-term relationships and higher levels of support and loyalty, and overall can better withstand the cyclical nature of aggressive challenges and environmental change (Harrison et al., 1995). Understanding and promoting alumni satisfaction provides numerous benefits in assessing the outcomes of higher education institutional performance programmes (Hartman and Schmidt, 1995).

The alumni who participated in this study were asked if they were interested in getting involved with University activities such as mentorship and finances. Figure 22 below shows that 34.36% of the sample is not open to getting involved with University activities. Just under a quarter of the sample (i.e. 24.71%) would like to get involved in enhancing the reputation of Wits, and 19.31% would be interested in mentorship. These were followed by 10.04% who would like to be involved in curriculum development. Interest was also shown by 7.72% of the sample who would like to be involved in donating money, and, lastly, 3.86% with an interest in capacity building.

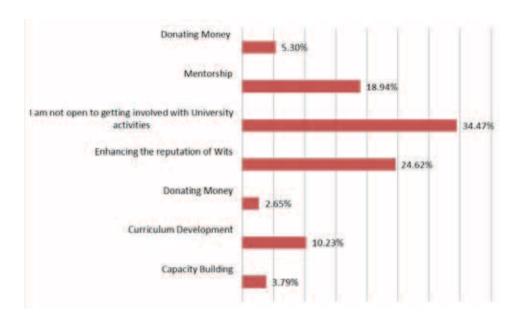


Figure 20: Respondents' Willingness to Get Involved in Wits Activities

The University needs to put in place mechanisms to ensure that platforms are provided for alumni to get involved in these areas. A high-level relationship management strategy for alumni must be developed to cultivate long-term relationships and loyalty to enhance Wits as an institution, and the overall Wits experience. This study is a starting point in giving medical sciences alumni a platform to provide input into the attainment of Wits' strategic imperatives and enhancement of the experience offered by the University.

References

Aldridge, Susan and Jennifer Rowley (1998). 'Measuring customer satisfaction in higher education'. *Quality Assurance in Education* 6(4). 197–204.

Baldwin, G. (1994). 'The student as customer: The discourse of "quality" in higher education'. *Journal of Higher Education Management* 9(2). 131–139.

Bell, M.L. and W.C. Emery (1971). 'The faltering marketing concept'. *Journal of Marketing* (October). 37–42.

Boaduo, N.A-P., J. Mensah and S.M.B. Babitseng (2009). 'Tracer study as a paradigm for the enhancement of quality course programmes development in higher education institutions in South Africa'. Paper presented at the Educational Colloquium, University of North West, Potchefstroom, South Africa, 20–21 August 2009.

Borden, Victor (2005). 'New directions for institutional research'. *Alumni Research in the United States and Europe* 126.

David G. (2002). 'Using alumni research to assess a veterinary curriculum and alumni employment and reward patterns'. *JVME* 29(1). © 2002 AAVMC.

Bruggink, T.H. and S. Kamran (1995). 'An econometric model of alumni giving: a case study for a liberal arts college'. *American Economist* 39(2). 53–60.

Cabrera, Alberto, David Weerts and Bradford Zulick (2003). 'Alumni survey: Three conceptualizations to alumni research'. Available online: http://www.education.umd.edu/EDHI/about/faculty_pages/cabrera/Three%20conceptualizations%20to%20 alumni%20survey-v2.pdf (Last Accessed 10.10.12)

Cabrera, A.F., D.J. Weerts and B.J. Zulick (2005). 'Making an impact with alumni surveys'. In D.J. Weerts and J. Vidal (eds). *Enhancing Alumni Research: European and American Perspectives*. New Directions for Institutional Research No 126. San Francisco: Jossey-Bass.

Centre for Education Policy Development (CEPD) (n.d.). http://www.cepd.org.za/

Chan, Elsie (2004). 'Embracing cultural diversity and enhancing students' learning environment'. Faculty of Human and Social Development, University of Victoria. Available online: http://www.cdtl.nus.edu.sg/link/nov2004/le.htm (Last Accessed 10.10.12)

Day, Kate (2009). 'Creating and sustaining effective learning environments'. All Ireland Journal of Teaching and Learning in Higher Education Institutions 1(1). University of Edinburgh.

Dellow, A.D. and R.M. Romano (2002). 'Editor's Choice: Measuring outcomes: Is the first-time cohort appropriate for the community college?' *Community College Review* 30 (2). 42–54.

Eesley, Charles E. (2012). 'Discussion of alumni surveys, their use and limitations existing Alumni Survey Datasets'. Alumni surveys as a data collection methodology. Available online: http://tubagus.staf.narotama.ac.id/files/2012/03/Alumni-surveys-as-a-data-collection-methodology.pdf (Last Accessed 10.10.12)

Fisher, M.B. 1988. 'Surveying your alumni'. In G.S. Melchiori (ed.). *Alumni Research: Methods and Applications*. New Directions for Institutional Research No 60. San Francisco: Jossey-Bass. 25–39.

Griesel, Hanlie and Ben Parker (2009). 'Graduate attributes: A baseline study on South African graduates from the perspective of employers'. January. © Higher Education South Africa and the South African Quali cations Authority, 2008. Last Accessed: 10.10.12) http://www.saqa.org.za/docs/pubs/general/graduate_attributes.pdf (Last Accessed 10.10.12)

Group of Eight Australia (2012). 'The importance of international education for Australia'. Last Accessed: http://www.go8.edu.au/university-staff/agreements/the-importance-of-international-education-for-australia (Last Accessed 10.10.12)

Hagne, P. (2002). *Market Research: A Guide to Planning, Methodology and Evaluation*. 3rd ed. United Kingdom: Kogan Page Limited.180–181.

Harrison, W.B., S.K. Mitchell and S.P. Peterson. (1995) 'Alumni donations and colleges' developmental expenditures: Does spending matter?'. *The American Journal of Economics and Sociology* 54(4). 397–409.

Hartman, David E. and Sandra L. Schmidt (1995). 'Understanding student/alumni satisfaction from a consumer's perspective: The effects of institutional performance and outcome'. Research In Higher Education 36(2).

Hiemstra, R. (ed.) (1991). *Creating Environments for Effective Adult Learning*. San Francisco: Jossey-Bass. http://www-distance.syr.edu/leindex.html

Kumar, V., K.N. Lemon and A. Parasuramen (2006). 'Managing customers for value'. *Journal of Service Research* 9(2). 87–94.

Machingambi, Severino (2011). 'Is access to higher education a sufficient condition for social equity in South Africa? A critical analysis'. *Access and Equity in Higher Education South Africa*. Walter Sisulu University.

Mael, F. and Ashforth, B.E. (1992). 'Alumni and their alma mater: A partial test of the reformulated model of organizational identification'. *Journal of Organizational Behavior* 13(2). 103–123.

Melchiori, G.S. (1988). *Alumni Research: Methods and Applications*. New Directions for Institutional Research No 60. San Francisco: Jossey-Bass Publishers.

Millington, Claire (n.d). 'The use of tracer studies for enhancing relevance and marketability in online and distance education'. Barbados Community College. Retrieved 1 October 2012. Available online: http://wikieducator.org/images/e/e1/PID 424.pdf (Last Accessed 10.10.12)

Moden and Williford (1998) National Center for Postsecondary Improvement (2002). 'Beyond dead reckoning: Research priorities for redirecting American higher education'. Stanford Institute for Higher Education Research. Available online: http://www.stanford.edu/group/ncpi/documents/pdfs/beyond_dead_reckoning.pdf (Last Accessed 10.10.12)

Parrino, Thomas A. and Donald C. Kern (1994). 'The alumni survey as an instrument for program evaluation in internal medicine'. *Journal of General Internal Medicine* 9 (February).

Pearson, J. (1999). 'Comprehensive research on alumni relationships: Four years of market research at Stanford University'. *New Directions for Institutional Research* 101, Spring 1999. San Francisco: Jossey-Bass Publishers.

Pendel, M. (1985). 'Beyond Gallup'. Currents 11(8). 40-42.

Pike, Gary (1989). 'The performance satisfaction relationship revisited: specification and testing a structural model'. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Pike, Gary (1993a). 'The relationship between alumni satisfaction and work experiences'. University of Missouri-Columbia. *Research in Higher Education* 35 (1). 105 – 123. DATED 1994.

Pike, Gary (1993b). 'The relationship between perceived learning and satisfaction with college: An alternative view'. *Research in Higher Education* 34(1).

Pollick, A.M. (1995). 'Survey Sence'. CASE Currents 21(7). 50-54.

Razak, Ishak A., Raja Latifah RJ, Nasruddin Jaafar, Abu Hassan Mi, Norintan Ab Murat (2008). 'Assessing the competency of University of Malaya dental graduates: Employers' and graduates' perception. *Journal of Dental Education* 8(72). 364–369.

Republic of South Africa (1996). Constitution of the Republic of South Africa Act No 108 of 1996. Available online http://www.info.gov.za/documents/constitution/1996/a108-96.pdf (Last Accessed 10.10.12)

Sadler, E. and K. Barac (2005). 'A study of the ethical views of final year South African accounting students, using vignettes as examples'. *Meditari Accountancy Research* 13(2). 107–128.

Scott, P. (1995). *The Meanings of Mass Higher Education*. Buckingham: Open University Press.

StatsSA (2011). Mid-year population estimates 2011. Available online: http://www.statssa.gov.za/publications/P0302/P03022011.pdf (Last Accessed 10.10.12)

Stevenson, M., R.D. Walleri, and S.M. Japely (1988). 'Designing follow-up studies of graduates and former students'. In P.T. Ewell (ed.). *Assessing Educational Outcomes* 47. San Francisco: Jossey-Bass. 81–93.

Svensson, G. and G. Wood (2007). 'Are university students really customers? When illusion may lead to delusion for all'. *International Journal of Education Management* 21. 17–18.

Task Force on Higher Education and Society (1999). 'Higher education in developing countries: Peril and promise'. Available Online: http://www.tfhe.net/report/Chapter1. htm (Last Accessed 10.10.12)

UN-Habitat *State of the World's Cities 2012/2011: Bridging the Urban Divide*. Nairobi. Available online: http://www-distance.syr.edu/leindex.html (Last Accessed 10.10.12)

Vailga, M.J. (1982). 'Structuring the perceived outcomes of higher education'. Paper presented at the annual forum of the Association for Institutional Research, Minneapolis.

Wits Facts and Figures 2011/2012 brochure.¹⁰

Wits (n.d.). Internationalisation Policy. Johannesburg.

Wits (2010a). Wits Vision 2013.

Wits (2010b). Wits Vision 2022.

Wright, Eric Olin and Joel Rogers (2010). *American Society: How it Really Works* . New York: W.W.

Norton. 'Chapter 10 Thinking about fairness and inequality'. 1. Available online: http://www.ssc.wisc.edu/~wright/ContemporaryAmericanSociety/Chapter%2010%20 --%20inequality%20&%20fairness%20--%20Norton%20August.pdf (Last Accessed 10.10.12)

Data are extracted from the University's Business Intelligence Data Warehouse and they reflect the annual Higher Education Management Information System (HEMIS) student, staff and research data submitted to the Department of Higher Education and Training. The 2011 and 2012 data are preliminary HEMIS figures.



University of the Witwatersrand





For more information contact:

The Quality and Academic Planning Office Strategic Planning Division University of the Witwatersrand 4th Floor, Senate House

Tel: 011 717 1162/1181

Website: http://web.wits.ac.za/AboutWits/StrategicPlanningDivision

