

Return of Investment on tertiary education and mentoring support



Gavin MacGregor (UYDF) & Murray Hofmeyr
(Study Trust)

Overview

- Introduction
- Financial Return on Investment (ROI)
- Social ROI
- ROI of mentoring support
- Conclusions

Introduction

- Tertiary education is expensive and often difficult to justify due to low throughputs and mismatched qualifications and skills needed
- Providing mentoring support to students increases these costs even further
- Can the provision of mentoring support be justified?

Financial ROI

Financial data covering the period 2009 to 2015 was analysed to determine the actual costs involved in producing 254 graduates and associated benefits.



**RETURN
ON**
investment

2015 DATA *calculated at current prices*

cost *to train 254 graduates*

R186 MILLION

income tax *paid over a lifetime*

R1,2 BILLION

lifetime earnings *of 254 graduates*

R4 BILLION

Total value of salaries earned by UYDF graduates between 2002 to 2019 per health science discipline

Discipline	No	Salary 2020	Tax 2020	Total Invested
Doctors	132	R495,326,218	R170,995,533	
Specialists	4	R 29,558,903	R 8,782,773	
Pharmacists	39	R 96,205,178	R 22,217,830	
Nurses	41	R 72,892,928	R 10,340,257	
Social workers	13	R 38,680,511	R 5,998,709	
Allied HCW's	142	R294,051,660	R 45,052,323	
Dentists	6	R 23,913,779	R 6,532,395	
Psychologists	6	R 46,995,524	R 12,235,799	
Total	379	R1,068,065,798	R273,872,846	R271,493,166

Socio-economic Return on Investment

- 40 UYDF graduates (2005 – 2015) were interviewed about the impact of obtaining a degree and employment. Extracts:
- *‘Without graduating from university, I would not have had this job. This degree has changed my personality and the ways in which I am viewed by the community members.’ (OT)*

- *'I now have value in my family and in the community ever since I graduated from the university. Working as a radiographer at my local hospital and being the first graduate in my entire family are both of great value.'* (Radiographer)
- *'The house I grew up in did not have electricity or running water. Also, in my entire family, no one had ever owned a car but I have one and I have built myself a house and one for my parents.'* (Medical doctor)

- *‘The opportunity from UYDF has transformed my life and that of my family and the community at large. I now feel the sense of belonging and found my place in middle-class society. My transformation is being used to transform also the health system at our hospital.’ (Dietitian)*

ROI on mentoring support

- Mentoring support costs R20 000 /student/year
- It includes the provision of academic & social support to students through face-to-face meetings with a mentor
- 4-weeks per year work exposure
- Life Skills workshops
- Can this cost be justified?

National Throughput Rates

MEDICAL STUDENT'S THROUGHPUT RATES*

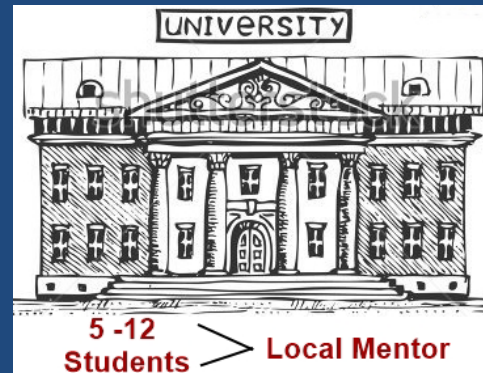
Intake Year	Percentage (%) of students who completed in				
	Year 6	Year 7	Year 8	Year 9	Year 10
Cohorts 2000-2010**	69,7	81,7	86,7	89,4	90,7
UYDF DATA					
2002-2020 178 graduates	82,% (121)	98% (17)	99% (2)	0,5 (1)	0,5 (1)

National Throughput Rates

HEALTH SCIENCE THROUGHPUT RATES (2010 cohort. 4-year degrees)*

Intake Year	Percentage (%) of students who completed in				
	Year 4	Year 5	Year 6		
DHET Cohort 2008	53%	69%	75%		
UYDF 2010	56%	78%	91%		
Difference	3%	9%	16%		

Note: DHET data includes students who matriculated from private and good Model C schools, whilst the UYDF students all matriculated at non-fee-paying schools.



Student
Manager



Provision of
on campus
Mentoring

Comments

- Failure is not only the cost of repeating the year, but year of lost income
- Although mentoring support is mainly focused on assisting students to succeed, students also learn important Lifeskills to help them successfully navigate their higher education journey, manage themselves well (life), & prepare for work
- There are different “levels” of mentoring support from light to intensive

Conclusions

1. Through provision of mentoring support more rural origin health science students complete their qualification, and in less time, than the national average
2. Although provision of mentoring support does increase student costs by around R20 000/student/year its impact is seen in greater throughput (completion) rates and shorter times to completion

Conclusions

3. The mentoring cost represents approximately 10-14% of the current students costs (thus is not large)
4. The investment results in more students completing and in a shorter time – which results in cost savings

Challenge

How can we make mentoring support available to many more students?



Psychologist



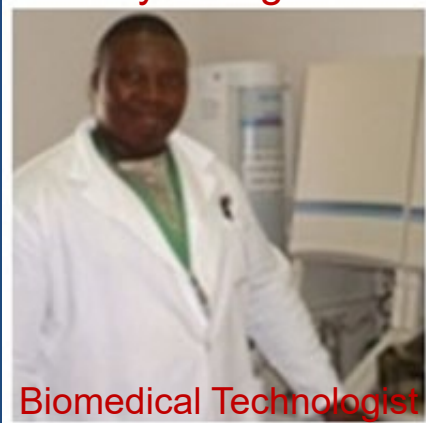
Optometrist



Social Worker



Social Worker



Biomedical Technologist



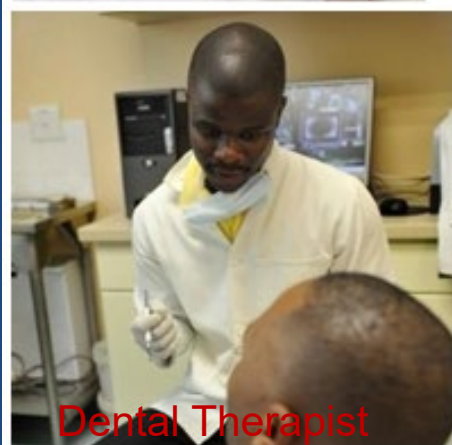
Speech Therapist



Pharmacist



Physiotherapist



Dental Therapist



Nurse



Doctor



Specialist