Student Equity and Talent Management Unit (SETMU)

THE TARGETING TALENT PROGRAMME

Pre-university Enrichment Programme for Grade 10-12 learners in South Africa
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According to The World Bank and TIME (May 3, 2019) South Africa is the most unequal country in the world. Inequality is passed down from generation to generation with little change over time (Johnny Miller). The most sustainable way to close the inequality gap is through access to quality education for all, especially the marginalised. Early childhood education is key, however all stages of education are important. I learnt this the hard way when I entered university. Not only was I ill-prepared because of the quality of education I received at primary and secondary education level, but also, studying with learners from a more privileged background who had received a better quality education than I did was intimidating and challenging. I lost confidence in myself. In 2019, this is still a challenge faced by many young learners from rural and township schools. They are ill prepared for tertiary education both academically and socio-economically. Understanding the importance of this, Wits University started the Targeting Talent Programme (TTP) in 2007. The programme supports learners and teachers in formal schooling with a focus on Grades 10, 11 and 12 and the Maths, Sciences, Social Sciences and Finance clusters of subjects. Involving families and the communities the learners come from, is transformative. Wits is not the only beneficiary to the output from the programme. Other beneficiaries include the University of Johannesburg, University of Pretoria and Sefako Makgatho Health Sciences University.

Wits prides itself in its ability to be one of the leaders in the country and the African continent in both academic excellence and transformation. This proves that the two are not mutually exclusive. TTP is one of the contributors to this achievement, combined with transformational servant leadership. Investing in the programme is an investment in sustainable development in our country and the closing of the inequality gap.
INTRODUCTION

Many people are familiar with the words of former President Nelson Mandela who said in July 2013 that, “Education is the most powerful weapon you can use to change the world.” However, fewer people have encountered the important sentence that followed:

“The power of education extends beyond the development of skills we need for economic success. It can contribute to nation-building and reconciliation.”

Sadly, South African education has been and continues to be in crisis. Our children lag behind comparable countries in literacy and numeracy and our schools appear to be unable to prepare young people adequately for the worlds of university and work.

In 2015 the Department of Higher Education and Training released a report that indicated that 47.9% of university students did not complete their three- and four-year degrees, with African students having the highest dropout rate. In effect, only 5% of African and Coloured youth in the 20-24 age bracket in South Africa complete university degrees. There are a number of reasons for this, ranging from schooling that is more focused on passing examinations than on fostering critical and creative thinking to a range of psycho-social problems, arising largely from historical inequities that have not yet been adequately addressed.

Even if the focus and resourcing of schooling and the living conditions of millions of poor South Africans were to improve tomorrow, it would take many years before significantly improved success in tertiary education would be achieved for learners from historically under-resourced communities.

This reality is the context for our proposal, which aims to secure funding for the University of the Witwatersrand’s flagship pre-university programme, the Targeting Talent Programme (TTP), run by the Student Equity and Talent Management Unit (SETMU).

“At TTP I found a home, I found a family, I found self-respect and I found integrity - a couple of things craved by most but found by only a few.”

“South Africa simply cannot wait so long.”
PRESENTING THE TTP

The purpose of the TTP is to promote the holistic development of learners from socially and economically under-served schools in order to substantially increase their chances of gaining access to, and succeeding in university.

The programme consists of three residential sessions a year, one week each in the autumn and spring vacations and two weeks in the winter vacation. During these sessions the learners are divided into small groups, each of which is supported and guided by a trained mentor who is a university student and who lives with them in the residence. By bringing Grade 10, 11 and 12 learners into a long term intervention programme, our experience over 13 years – reaching 2,743 learners – shows that it is possible to help them develop knowledge, skills and attitudes needed to succeed at university before they complete Grade 12. In addition to ensuring that targeted learners perform well in their Grade 12 National Senior Certificate (NSC) examinations, the TTP helps them to acquire the mental habits, discipline, self-knowledge and study skills required for success within the university environment, and ease the transition from school to higher education.

As part of the TTP, Mathematics and Physical Science teachers from the targeted schools undergo professional development – called ‘Educator Enrichment’ – to build their subject-specific and curriculum-specific knowledge, so that they can be better educators in their classrooms. The TTP also maintains relationships with parents, educators, principals and provincial education authorities through annual provincial family workshops.

Since its inception in 2007, TTP has demonstrated substantial successes (covered in more detail in this document). As part of its social justice agenda, the University would like to expand TTP further to reach even more learners.

Further support is required to fund TTP’s continuation; not only for sustainability, but also to ensure investment in a continuous talent pipeline for the Higher Education and Business sectors within the Science, Technology, Engineering, Mathematics (STEM) and Commerce fields.

TTP helps learners to develop the following attributes required for success within the university environment:

- mental habits
- attitudes
- discipline
- self-knowledge, and
- study skills
WHY THIS PROGRAMME?

The TTP is designed to help learners and their educators overcome some of the challenges they face as a result of a lack of resources and structural problems in the schooling system, particularly in under-resourced areas.

In our experience, once young people are admitted to university there are significant challenges faced by those who come from under-resourced educational and socio-economic backgrounds. Therefore, the programme is designed to help learners develop the strengths that underpin successful performance at university. These include:

- confidence in the use of information technology
- information literacy, including the ability to use a library
- time management and the capacity for self-directed learning
- access to the academic practice and environment of a university
- sound interpersonal skills and self-awareness
- a clear sense of purpose and self-efficacy
- a solid grounding in English, Mathematics and Science

What makes the TTP unique is the holistic approach to the development of learners over a sustained period. We know what it takes to make a successful transition to university and we know how to select exceptional young people from under-resourced schools - those who demonstrate significant talent despite challenging home and/or school circumstances. We also understand the importance of harnessing support from the broader community – parents, educators and education officials.

WHY BE INVOLVED?

This is an opportunity to change the course of many learners’ lives through education. This is a chance to assist in breaking the cycle of poverty. This is a call to contribute to the long-term employability of South Africa’s youth, and to expand university access to a pool of learners with academic potential from across the country.

Beyond all of this, however, this is a very real opportunity to extend beyond the development of skills and economic success, into Mandela’s dream of nation-building and reconciliation.
WHY WORK ALONGSIDE WITS?

In collaboration with Wits University, one of the top universities in Africa, your organisation will be part of an initiative that is informed by extensive experience, is research-based, and has been exhaustively benchmarked against similar initiatives internationally. Wits University is uniquely placed to successfully implement this programme because:

- We are committed to increasing social mobility by enabling learners from under-resourced schools and communities to become graduates and successful professionals.
- We are a university of choice for a large number of school-leavers.
- More than 66% of our students are African, demonstrating our commitment to providing genuine access to previously excluded groups.
- We have solid relationships with many of the schools in under-resourced communities.
- We have a well-established understanding of the needs of students who enter university.
- We have the infrastructure to manage donations ethically and efficiently.

“So much can be said about the changes that the Programme brings, but a few changes that stand out for me is the ability of TTP to give us a vision of our future and cultivate inspiring motivation.”
ACHIEVEMENTS TO DATE

Over the years, since that first group of 267, the TTP has reached 3,005 learners in total, thanks to the foresight and commitment of the following donors:

Donors

- AECI
- merS&T
- bp
- PRimedia
- ETDP SETA
- SANRAL
- Goldman Sachs
- S&T
- IDC
- Standard Bank
- Limpopo
- Telkom

Previous and Current Donors
MEASUREMENT OF SUCCESS

Pass Type
- Bachelors: 94%
- Diploma: 6%

Access rate (Eligibility for admission to higher education) of the 2018 cohort = 100%

**TOTAL 2018 COHORT ALUMNI**: 257
**TRACKED 2018 COHORT ALUMNI**: 254
3 UNTRACKED DUE TO CHANGE IN CONTACT DETAILS

**Tracking Response Rate**: 99%

**STUDYING**: 221
**STUDYING AND WORKING**: 2

**UPGRADING MARKS**: 16

**WORKING**: 3

**GAP YEAR**: 12

Top 3 reasons for taking a gap year:
- Financial constraints
- Self-discovery
- Others not accepted at higher education institutions of choice

Number of TTP students at higher education institutions:
- Engineering: 33 (15%)
- Health Sciences: 42 (19%)
- Commerce: 49 (22%)
- Humanities: 24 (11%)
- Number of TTP students at higher education institutions: 78 (33%)
In 2018, 257 learners graduated from the programme of which 242 received a Bachelor’s degree pass and 15 learners attained a national diploma in their NSC. The total number of distinctions achieved by the TTP learners was 637.

The National NSC matric class of 2018 achieved a 78% pass rate, with 34% of these learners accomplishing a bachelors pass (Department of Basic Education, 2018). The overall TTP learners comprise 0.05% of the total number of NSC matriculants. The matric pass rate for the TTP was a 100% and 95% of these learners achieved a bachelors pass rate. The Independent Examinations Board (IEB) results show that the IEB learners achieved a 99% pass rate and accomplished 91% bachelors pass (Department of Basic Education, 2018).

To date, TTP has had total number of 2645 alumni that have participated in the programme from 2009 – 2019. The TTP model design has been implemented for the past 13 years and has yielded considerable impact in the lives of learners; their families; school communities and their university access rates.

The TTP Alumni | Number of learners in the programme (n)
--- | ---
2009 | 267
2011 | 75
2012 | 369
2013 | 171
2014 | 281
2015 | 516
2016 | 239
2017 | 221
2018 | 257
2019 | 249
**Total** | **2645**
<table>
<thead>
<tr>
<th>Year</th>
<th>Mampe Mabelane</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Graduated from the programme</td>
</tr>
<tr>
<td></td>
<td>Attended Glen Cowie Secondary School</td>
</tr>
<tr>
<td>2015</td>
<td>Completed a Bachelor of Medicine and Surgery, at the University of Cape Town</td>
</tr>
<tr>
<td>2018</td>
<td>Gained employment as a Medical officer, at the Limpopo Department of Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Kaone Ntlamelle</th>
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<tbody>
<tr>
<td>2011</td>
<td>Graduated from the programme</td>
</tr>
<tr>
<td></td>
<td>Attended Tigerkloof Combined School</td>
</tr>
<tr>
<td>2016</td>
<td>Completed a Bachelor of Commerce (Honours) in Business Finance, at the University of the Witwatersrand</td>
</tr>
<tr>
<td>2018</td>
<td>Gained employment as a Financial Advisor, at Discovery</td>
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<tr>
<th>Year</th>
<th>Chanty Mathebula</th>
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<tbody>
<tr>
<td>2012</td>
<td>Graduated from the programme</td>
</tr>
<tr>
<td></td>
<td>Attended DZJ Mtebule High School</td>
</tr>
<tr>
<td></td>
<td>Completed a Bachelor of Business Studies (Honours) in Actuarial Science in 2016, at the University of Cape Town</td>
</tr>
<tr>
<td>2018</td>
<td>Gained employment as an Actuarial Analyst, at Discovery Life</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>2013</td>
<td>Graduated from the programme</td>
</tr>
<tr>
<td></td>
<td>Attended Ladysmith High School</td>
</tr>
<tr>
<td>2015</td>
<td>Completed a National Diploma in Radiography, at the Durban University of Technology</td>
</tr>
<tr>
<td>2018</td>
<td>Gained employment as a Ultrasonographer, at the Department of Health</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Graduated from the programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended Fred Norman Secondary School</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Completed a National Diploma in Radiography, at the University of Johannesburg</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Gained employment as a Community Service Radiographer, at the Department of Health</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>2015</td>
<td>Graduated from the programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended Derek Kobe Senior Secondary School</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Founded the Spache Group, where he is CEO</td>
<td></td>
</tr>
</tbody>
</table>
# TTP Alumni Highlights

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Education</th>
<th>Career Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Damien Sebe</td>
<td>Graduated from the programme</td>
<td>Attended Phahama Senior Secondary School</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018 Completed a degree in Science in Computing,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>at the University of South Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018 Gained employment as an Audio Engineer,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>at Flying Phoenix Productions</td>
</tr>
<tr>
<td>2017</td>
<td>Ntando Mkwanazi</td>
<td>Graduated from the programme</td>
<td>Attended Njeyeza Secondary School</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018 Studying a Bachelor of Health Sciences in</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dental Surgery, at Sefako Makgatho</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Health Sciences University</td>
</tr>
<tr>
<td>2018</td>
<td>Trully Kheswa</td>
<td>Graduated from the programme</td>
<td>Attended Njeyeza Secondary School</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018 Studying a Bachelor of Health Sciences in</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Speech-Language Pathology, at the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of Cape Town</td>
</tr>
</tbody>
</table>
CURRENT TTP LEARNER SUCCESS STORY

Current TTP Grade 11 learner, Lenox Baloyi from Hluvuka High School participated in the 39th annual Eskom Expo for Young Scientist International Science Fair (ISF), 2019 and was awarded the following:

- a special award called the Hendrik van der Bijl Award with a cash prize valued at R7 000;
- the RADMASTE award which is a box of laboratory equipment, and;
- A bronze medal for his participation.

In addition, in 2018 Lenox entered a competition called the Envisionit Prize competition for all South African schools dealing with water harvesting systems with his ‘Solar Desalination’ project. At the award ceremony which took place at the on the 3rd of October, at Hyatt Regency in Johannesburg, Lenox won second place out of all the other projects in South Africa.

In addition he won a cash prize of R30 000 and was the recipient of a bursary valued at R270 000 to study at a university after completing grade 12.

Lenox had this to say to the SETMU team

“Thank You SETMU for your contributions academically because our school does not have a fully functional lab but with the help of the experiments and Research classes I attended at Wits, I applied the lessons learnt to do a report for my project and it helped me a lot to win these competitions.”
The research component of SETMU seeks to link directly into the University's 2020 strategic framework to contribute to the development of Wits as a leading research-intensive University. By implementing these research projects learners are able to assist communities in their respective areas, which ensures that the impact of the Programme itself is far reaching. It also assists the learners stretch their knowledge base and then assist the communities.

The overall purpose of the project was to find the needs of the community and identify its problems through analysing how the community is built and the facilities it has. The research design of the project done by the research team was distributed equally amongst the members of the group. Thereafter, information obtained was gathered altogether to combine it, which it had obtained from different sources. Then the research team analysed the findings of the results obtained from different sources such as interviews, questionnaires, surveys also from interpreted data collected. From the results it has shown there is a great need of facilities that need to be fixed. The research team with reference to the labour law amendment could not implement on their original plan. However the principal initiated that the plan be implemented differently and since this plan was different from the research’s team original plan it was tried but unfortunately the objective couldn’t be reached.
The study assessed the needs of the Giyani High School. The goal of the study was to identify the needs of the community and identify the need that affects the learners academic performance the most and find out how the lack or inadequate supply of the identified community need, affects student’s academic performance. The study examined the needs in detail to identify the problem that affects learners the most. Data on community needs was derived mainly from questionnaires given to teachers and learners, as well as a group discussion and individual interviews with them. The sample for the study consisted of 30 learners from grade 8-12, six learners from each grade, there were 3 boys and 3 girls [who were] randomly selected. Additional information was obtained from internet sources. It was hypothesized that lack of school uniform is the social issue that affects learner’s academic performance the most, but the hypothesis was proven wrong. Unhygienic toilets was the social issue that affected the academic performance of learners the most. The school has tried several times to fix the issue of unhygienic toilets. The need that was yet to be addressed is the lack of uniforms. Research we conducted we found that lack of proper school uniform contributes to absenteeism and lowers the self-esteem of learners. Therefore the social issue we decided to address was lack of school uniform. The name of the project is #50 shirts aimed to raise to about at least 50 shirts. Note that this was not restricted to only shirts but any other part of the school uniform was also accepted. The ways in which awareness about the donation of school uniform was raised [was through] posters and public speaking where the announcements were made in each and every class from Grade 8-12 Initially the date at which the school uniform was to be donated was on the 13th of February 2019. However the Educator’s strike which took place on the 13th of February 2019 meant that the learners could not come to school to donate school uniform, hence the date was postponed to the 17th of February. [In total] 18 shirts; 6 trousers; 6 jerseys and 4 tunics were donated.
Glen Cowie Secondary School is currently facing a drastic academic decline. Through interviews and questionnaires, it was found that the academic decline is all due to the major reason which is sharing textbooks in a large number of groups where the learners cannot get a chance to use the textbook for their test or exam. The group found out that the old library has textbooks which could be used by the learners. Teachers could not grant the learners the access because they think that the textbooks are too few and that the learners will damage all the textbooks. The group came up with a solution to improve the old library by making the books accessible and making sure that there are people who will take care of the library. Through fundraising and asking for donations as a contingency plan, they will help make money for the project to buy all the equipment needed.
In our Grade 10 assignment, we researched our community, UJ Metropolitan Academy. Our sample, consisting of 15 learners from our community, were required to participate in an interview and complete a questionnaire. We analysed the data we received by means of qualitative and quantitative methods. Our hierarchy of needs in our needs assessment revealed that the top 5 needs (in order of importance) within our community were the need for: Youth Empowerment, a designated transportation service, an increased use of technology in the maths and science classes, increased language diversity and the creation of a renewable water source. We therefore decided to establish the first Youth Empowerment Group within our community because it is the most important need in the community. We identified that in order to achieve our aim, which is to establish a Youth Empowerment Group, four key goals would need to be achieved first. Mrs Nkosi has agreed to facilitate our project. However, we are unable to use her classroom as our venue. Thus, our contingency plan, which is to use our community’s auditorium, is necessary. In addition, Mrs Natanya Laurie is no longer able to assist us due to other commitments as of February 2019. In the meantime, Muhluri Sambo has agreed to do motivational talks and we have approached the principal of our community, as well as City Year, to offer their services to our project. We have fully completed our third and fourth goals and have met our deadline. In conclusion, we have implemented our contingency plan; recycling of paper, cans and plastic as well as cardboard. This waste will be disposed of in the larger recycling bins behind the school. It has been communicated with us through the office that the company that sponsored the bins will collect the waste once every month and we are currently communicating to ensure this does occur. The Eco-Warriors have additionally undertaken to clean up the school every fortnight on a Wednesday to ensure the cleanliness of the environment.
In order to find the main problems affecting our school we did a qualitative research with all the grade 10 learners to find out what was the main cause of the poor performance. We found out that the sharing of textbooks was the main issue as some learners could not study when they get home or study early to study for their tests and exams. We then took this issue to the RCL committee and tried to come up with a solution that would at least decrease the high failing rate in grade 10. We then did casual days twice a month and collected R 2,000 from all learners who were supporting us but that did not help us as we only made R 200 during that three month period. We had to put our contingency plan into action which is finding sponsors who will help us financially. We were in need of 30 Oxford Successful Physical Science Textbooks of grade 10 so according to the quotation we received from the principal we discovered that one Oxford Successful Physical Science textbook cost about R 207.00 therefore 30 books would cost us R 6,410.00 including transport costs. Our project was funded by Mr. Zwelakhe Mguni the CEO of Benguela Global Fund Managers. He delivered 30 Physical science textbooks to our school and we also collected some of the books from the drop outs to increase try and decrease the shortage rate. Our project is not sustainable as we will be leaving Ngwathe Secondary next year but we have advised the educators to assess the learners ability in subjects like Physics and Maths before letting them choose a stream. This will not only decrease the low performance in lower grades but it will help learners to identify their strengths and weaknesses.
The purpose of this project is to get to know the community, which we have chosen, through research and identifying what needs there are in the community. This was done by conducting qualitative and quantitative methods which included engaging with the members of the community through questionnaires, interviews and surveys. The sample used was 6 learners per grade and they were chosen randomly. From there we set out to try and figure out the greatest identified need amongst the members of the community. We found out that the common or major need was the need for sports first aid kits and this has a negative impact on the learners and their livelihood, as they get injured during matches and don’t get immediate assistance. This mostly leads to absence at school due to them having to go to the doctor- leading to them falling behind with their school work.

In order to solve this problem, we sought out sponsors and held fundraisers to accumulate first aid kits.
HOW THE TTP WORKS

To increase the academic, social and psychological preparation of academically talented learners for admission to South African universities, the TTP provides for the following activities:

- The identification of schools to partner with the TTP in selecting learners with high potential who are in Grade 10, at a time when Matric subject choices are made;
- A residential, on-campus educational programme of deep immersion and enrichment in Maths, Science and Language, designed to develop both the cognitive skills and dispositional attributes required for university-level study;
- The provision of systematic support to learners’ teachers and families, so that they have the capacity to encourage learners in their studies;
- Orientation and transition programmes;
- Appropriate interventions at school level to build the capacity of learners and educators, particularly in Maths, Science and English;
- The provision of educator support activities to enable them to better understand the transition to higher education, empowering them to teach in ways that facilitate this access;
- Assisting learners with life skills development and career choices;
- Involving families, schools and communities in supporting learners’ commitment to success.

Furthermore, the TTP implements a holistic and comprehensive programme of interventions in order to ensure that learners with potential are given every opportunity to succeed.

For instance, selected participants in the programme are required to attend three contact sessions per year for the duration of the two or three year pre-university programme.

The contact sessions are implemented as follows:

- **March/April** and **Sept/Oct** – Maths and Science school-based curriculum interventions (one week residential per session)
- **June/July** – University-based enrichment curriculum (two week residential)
www.wits.ac.za/setmu
https://youtu.be/MAvE0cbjhoY
https://youtu.be/9UGjLffUu8
https://youtu.be/k7G_NbrT1j8
https://youtu.be/p_EUIh1ahNI
https://youtu.be/2cRyzUI4-UI
https://youtu.be/U_GWThPsrAk
https://youtu.be/oe5YMF6dWos
https://youtu.be/8zZrYgAgOHo/