

**“Girls
fulfilling
their true
potential”**

Programme Overview

2017



TECHNOGIRL PROGRAMME STRATEGIC PARTNERS

A flagship programme of the Ministry in the Presidency responsible for Women, with the following founding partners:



- Overall programme leadership
- Programme positioning and profiling
- Identify and leverage synergies with various similar government programmes
- Programme custodian
- Strategic programme direction and oversight to align with government mandate
- Programme sustainability



- Alignment of the programme to country education priorities and policies
- Identify and leverage synergies with similar education programmes
- Provision of strategic support to provincial departments of education
- Programme positioning and profiling



- Founding partner
- Alignment of the programme to UN women and children priorities and mandates
- Positioning and profiling of the programme at national and international level



- Develop and implement public relations strategy
- Develop and roll out information technology
- Design and roll out a functional programme database
- Job shadowing host



- Founding partner
- Overall programme management
- Mobilisation of job shadowing host organisations
- Stakeholder management
- Develop and implement funding strategies
- Develop and implement a monitoring and reporting system

The relationship between Uweso Consulting and the TechnoGirl Trust

- Uweso Consulting conceptualised the TechnoGirl programme in 2004
- The TechnoGirl Trust:
 - Was registered in 2013
 - Is registered as a Nonprofit Organisation (NPO)
 - Is exempted from Tax by SARS
 - Was started to allow for financial ease to participating companies
- Uweso Consulting has been appointed by the TechnoGirl Trust to be the implementing partner of the TechnoGirl programme

Programme Context

“ Since its inception in 2005, the Techno Girl programme has identified and placed over 8000 girls in structured job shadowing programmes at various host organisation partners. The ultimate goal of the programme is to expose girls. world of work in Science, Technology, Engineering & Maths (STEM) in order to make informed career choices. ”

- Marginalisation of women in Science, Technology, Engineering and Mathematics (STEM) is a global issue
- Only 30% of global science positions are held by women
- Under-representation of women in Africa is of even greater concern
- The Association of African Women in Science and Engineering reports “only 20% of science academics in Africa are women, while in South Africa it is less than 40%.”
- Enhancing women and girls’ access to education, science and technology to increase education and training investment in science and technology (S&T), information and communications technology, engineering, mathematics and so forth was one of the pillars of the 24th AU summit (December 2015)
- SA a youthful population: young a priority audience for opportunities aimed at economic growth, increased employment and poverty reduction
- The NDP therefore aims to promote initiatives, which offer young people skills development and training opportunities and increased employment prospects
- The NDP advocates an education accountability chain between the classroom and real workplace market needs
- The key result: equitable distribution of skilled, technical, professional and managerial posts across racial, gender and disability groups

Programme Context & Objectives

- In pursuance of the NDP ideals, the Ministry for Women, the Department of Basic Education, UNICEF, the State Information Technology Agency and Uweselo Consulting are implementing Techno Girl
- It is an innovative job shadowing programme to encourage the up take by girls of careers in STEM. Girls are able to experience the world of work in STEM so that they can make informed career choices
- Premised on the principle that exposure to the workplace on a structured, long-term basis contributes towards uptake of STEM careers
- This will lead to sustained employment opportunities for girls and an end to the cycle of poverty for women.

Programme Objectives

To increase the knowledge and understanding of girls on the importance of STEM career fields to enhance economic empowerment

To facilitate access to positive female role models in STEM careers

To improve the knowledge of girls to engage in timeous planning of their future careers

To facilitate access to industry specific networking opportunities during the course of their studies at post school institutions

To increase the completion rate of STEM studies at post schooling institutions

To facilitate access of beneficiaries to job opportunities in STEM industries

To increase the placement rate of beneficiaries in STEM careers

Programme Components

TechnoGirl has two components:



Job shadowing

Job shadowing is implemented on a structured and systematic basis over a period of three years. Girls are placed at a job shadowing host organisation in Grade 9 and attend job shadowing over three consecutive school holidays, annually over the three year period until they pass Grade 11.



Alumni

From Grade 12 onwards, girls join the Alumni programme. The aim of the Techno Girl Alumni programme is to continue support of beneficiaries during their studies and to access job opportunities in their chosen field of study.

Programme Components

Job shadowing: is driven by the requirement to provide girls with access to the world of work in STEM careers. This is particularly necessary for the girl child who traditionally is not exposed to these scarce careers and females in influential positions.

Girls are placed in organisations whose core business activities are focused on scarce career fields and/or occupations where women are under-represented such as engineering, construction, forensic sciences, etc.

Job shadowing is implemented on a structured and systematic basis over a period of three (3) years. A girl is placed at a job shadowing host organisation/ company over three consecutive school holidays, annually, for 15 days per annum over the three year period.

Expected results

It is expected that the programme will enable the girls to acquire the following:

- Knowledge and understanding of the world of work, skill requirements for careers exposed to, appropriate behaviour in the work place
- Increased awareness of the job outputs of careers exposed to and are able to articulate their preferences
- Increased knowledge of planning processes relating to their future studies and careers

The Alumni programme: continues support of beneficiaries during their studies. Membership is open to any girl who participated in the job shadowing programme. Girls enter the alumni programme in Grade 12 and are supported to apply on time for admission to post school education and training institutions.

While completing their post school education, girls are provided with support to complete their studies. This is accomplished through industry networking events, alumni student support groups among other.

Upon graduation, girls are supported to access job opportunities. Agreements to place Techno Girls in jobs are concluded with relevant partners so that programme beneficiaries can be employed in STEM fields.

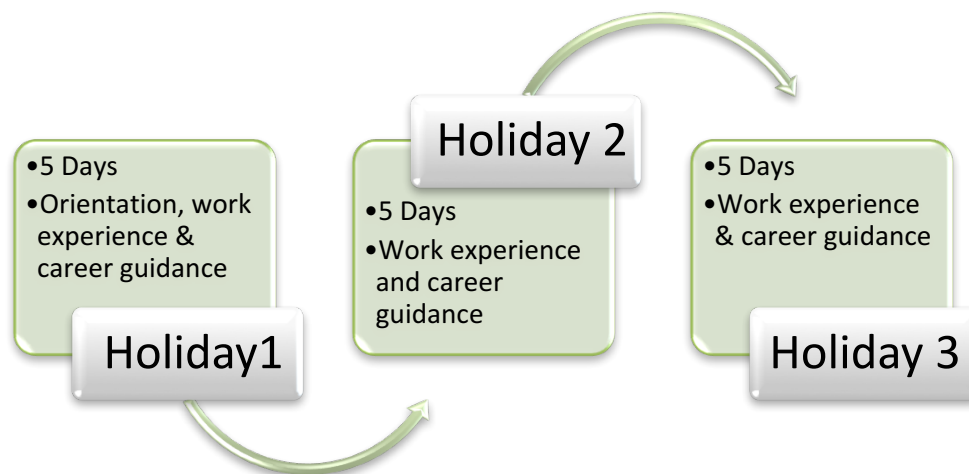
Expected results:

- Grade 12's are supported to apply on time for admission to post school education and training institutions and linked to funding opportunities
- Girls further their studies in STEM fields at Higher Education Institutions
- Programme alumni are provided with access to industry decision makers, stakeholders and prospective employers
- Alumni are supported and mentored to successfully complete their studies
- Girls acquire qualification in STEM fields
- Girls are employed in STEM fields

Job Shadowing

To be effective and have meaningful impact, a job-shadowing programme cannot be a once-off activity. It has to be approached on a long-term, structured and systematic basis.

The girls are placed in a partner organisation for three consecutive holiday periods. This cycle repeats over a three-year period. For example, a girl will enter the programme in Grade 9, continue the programme during Grade 10 and exit the programme in Grade 11:



Phase 1

Entry to alumni

Support students on:

Post school entry application processes

Details of various post school institutions

Information on funding opportunities

Off-site motivational support

Phase 2

Completion of studies

Support on:

Networking sessions with relevant industries

Support cell groups

Facilitate access to institution support programmes

Phase 3

Job entry

Support graduates on:

Access to learnerships and internships

Included on database of employment agencies

2017 Programme Costs

The programme cost, per learner, per annum:

Programme management fee

R2 396, 43 (excl. VAT)

Job shadowing stipend

R2 400, 00 (excl. VAT)

Total annual cost per learner

R4 796, 43 (excl. VAT)

2015 Programme Results

The 2015 Alumni Survey

As girls progress from the job shadowing component of TechnoGirl to the post school education phase, the TechnoGirl programme office makes a concerted effort to maintain contact and update their study and career progress from year to year. Data was collected on the profiles of the 2015 Grade 12's and alumni members who completed their studies during January 2016,

“TechnoGirl has a rapidly growing network of alumni members who attest to the impact of job shadowing on their career choices”

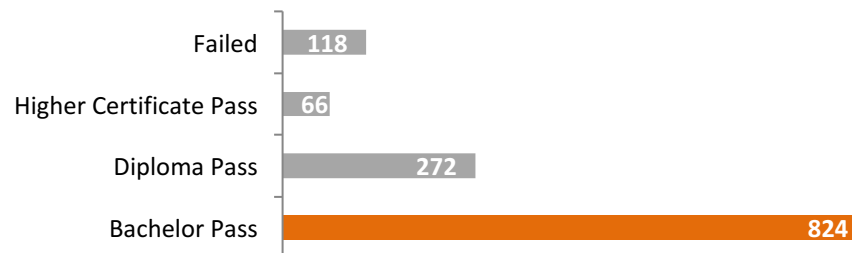
Techno Girls who completed Matric in 2015

A total of **1391** girls who completed the job shadowing phase of TechnoGirl sat for the Grade 12 National Senior Certificate examinations in 2015. In preparation for this report, information on their Grade 12 results was obtained from **1280** (92%) of beneficiaries who were contactable. As evident in Chart 1, 91 % of the beneficiaries passed the examinations. A total of **824** (64%) achieving a Bachelor Pass, **272** (21%) a Diploma Pass and **66** (0,05%) a Higher Certificate .

A total of **140** beneficiaries who passed the examinations are in the process of upgrading their results in order to meet the entry requirements of their chosen field of study. The status of the **118** girls who failed Grade 12 is as follows:

Failed, doing supplementary exams	Failed, upgrading results	Failed, repeating Grade 12	Failed
49	63	2	4

Chart 1: The majority of girls (64%) achieved Bachelor Passes





2015 Programme Results

A key result of the TechnoGirl programme is to emphasise the relationship between future career options and academic achievement in key subjects. Moreover, the programme also seeks to increase the uptake of STEM-related subjects. It is therefore significant to note that the Techno Girl Class of 2015 achieved a total of **315** distinctions in STEM subjects as indicated below.

- Mathematics **(70)**
- Life Sciences **(91)**
- Physical Science **(51)**
- Computer Technology **(6)**
- Mathematics Literacy **(6)**
- Engineering Graphic Design **(3)**
- Accountancy **(39)**
- Business Studies **(37)**
- Electrical Technology **(2)**
- Geography **(7)**
- Economics **(3)**

2015 Programme Results

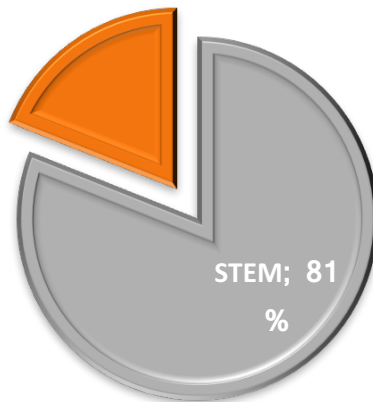
Analysis of study choices of 2015 Grade 12s

Key measures of success of the Techno Girl programme include the extent to which beneficiaries apply on time for admission to post school education institutions and the extent to which they take up studies in STEM fields. At the time of reporting, a total of **782** Grade 12s applied for admission on time and have been accepted at post school education institutions.

Of these, **636** (81%) have registered for further study in one of the STEM fields, while 19% registered in non-STEM fields. Only **42** girls applied too late for admission whereas **21** did not apply for admission to further studies. **Four** beneficiaries were admitted to learnerships, **one** in the field of boiler making, **one** in the field of energy renewal, **one** in mining and **one** in Information Technology.

Below follows an analysis of the various STEM study fields that 2015 TechnoGirl Grade 12's have registered for:

Chart 2: The vast majority of girls have registered for studies in STEM



2015 Programme Results

TechnoGirls who completed their post school education in 2015

Of the girls that could be contacted at the time of the survey, **46** programme alumni were scheduled to complete their under-graduate degrees at the end of 2015. Of these, **14** (30%) graduated at the end of 2015, while a further **14** (30%) could not be contacted at the time of reporting. The balance of **18** (40%) failed to graduate and have to repeat modules or the academic year. The status of the graduates are as follows:

- Four graduates are commencing with their Honours Degrees
- Three graduates have taken up full-time employment in 2016
- Seven are in the process of entering the job market

From the survey data it is evident that the girls experienced significant benefit from their participation. TechnoGirl exposed them to a variety of careers during job shadowing and it is also evident that exposure to role models in the workplace and the motivational aspects of job shadowing had a significant effect on the academic performance of the beneficiaries. This is underscored by the 2015 Grade 12 pass rate that is considerably higher than the national average.

Data on the career choices of the girls also attest to the fact that the job shadowing experience empowered girls with the knowledge, skills and attitudes to enable them to take up careers in STEM fields. This had led to 88% of girls taking up studies in STEM.

It is evident that participation in job shadowing has been a life changing experience for the vast majority of the girls. They have made smart choices by selecting careers that are in demand and required to support economic growth. This will go a long way towards ensuring their sustained employment over the long term and in so doing their own economic status, and in all likelihood that of their immediate families, will be improved.



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