



## **Shifting the inequality dial**

### **Cultivating a Growth Mindset for children and youth**

Policy Brief 2018 | Revised 2022

## Summary

In South Africa, a significant number of learners do not reach grade 12 and as measured by the Western Cape Education Department (WCED), the performance of learners is specifically low in mathematics. To successfully improve student outcomes across the global South, *innovative, low-cost, and sustainable* are key elements for educational initiatives. Ticking these boxes, Growth Mindset (GM) has proven to be an important programme in the Western Cape's educational space, offering a scalable solution.

The Growth Mindset programme was first implemented in 20 schools across the Western Cape. The programme used a combination of five short (3-5 minutes) videos, group discussions and activities to teach learners that they can cultivate a Growth Mindset i.e. that intelligence can grow. Studies show that learners can improve their ability to overcome challenges, resilience and academic results after an introduction to the GM concept. These concepts, embedded into the WCED programme, assist learners in understanding that their intelligence can be developed through effort. The results were promising. The intervention resulted in a 13% more positive attitude towards learning and 10% increase in mathematics results.

2022 update: The programme has since been scaled up across the Western Cape. Over 70 000 learners and 198 of 240 schools have benefitted from the GM programme.

## Key words

Mindset, change, socio-emotional, skills, intelligence, youth, academic, education

## Defining the problem

South Africa's deep-seated inequality and multi-dimensional poverty among a large group of youth in the Western Cape<sup>1</sup> necessitated a school-level response that could begin to shift the inequality dial. Following the vast and numerous impacts of Covid-19, the exacerbated inequality, and the detrimental impact on the mental wellbeing of the youth and their disrupted learning journeys, the GM programme continues to deliver a critical message to learners that centres around a 'can-do' attitude.

The WCED is acting on its responsibility to equip learners with the necessary skills to cultivate a growth mindset – an understanding that one's intelligence and abilities are not predetermined but rather malleable; that the brain can be trained to grow and improve over time. In contrast to a fixed mindset, a growth mindset promotes the possibility for change in one's abilities through persistence and hard work.

**GM, conceptualised and championed by the internationally revered psychologist, Carol Dweck, finds that through improved socio-emotional learning (SEL) comes improved academic outcomes.**

This is what makes GM unique: in contrast to the conventional focus on so called “hard skills” such as mathematics and literacy, GM cultivates so called, “softer skills” such as socio-emotional intelligence, to improve educational quality. This approach seemed appropriate for our context, as it could leverage opportunity for learners from low-income neighbourhoods by attuning their belief that intelligence is not fixed and improve attitudes towards learning.

The appeal to implement a GM intervention here in the Western Cape stemmed from the success of the programme in contexts similar to our own (Macedonia, Peru, and Indonesia), and the cost-effectiveness of it. Furthermore, broader, relevant policy existed within which GM could be embedded. The programme has become a core pillar of WCED's [Transform to Perform \(T2P\)](#) strategy. T2P aims to address the attitudes and values that influence the actions and behaviour of all role players in the Western Cape's education system.

## Intervention design and testing

The objectives of the GM programme were two-fold: to improve learner academic results but also to equip learners with critical socio-emotional skills to carry through to other aspects of their lives – now and later on. The pilot, which was run by the Department of the Premier (DotP), targeted 578 high school learners from Grade 8 and 9, and 558 primary school learners (Grade 3 and 4) in 20 low and no-fee schools. Students were randomized into one of the following groups.

To establish a baseline, students were assessed beginning June 2017 while the endline assessment took place in 2018. Both international and local partners were involved in the GM pilot.

### Control Group

- This group received a Placebo Program
- Students watched age-appropriate National Geographic videos

### Treatment Group

- This group received the Growth Mindset program
- Students engaged with five three-minute long interactive videos over the course of one week
- The videos depicted two friendly monsters (age and race-neutral) during their journey of learning, failing, coping with failure and trying again to succeed
- Afterwards, students participated in reflective exercises
- Each of the five sessions took 30 minutes

<sup>1</sup> 22.8% of youth in the Western Cape are multi-dimensionally poor according to Statistics SA 2011.

These included: the World Bank's Mind, Behaviour and Development Unit (eMBeD, experienced in running GM programmes in developing countries); the University of California, Davis (provided measurement for behavioural dimensions to assess baseline and post-intervention impact); ClassDojo (developed the GM videos); Olico (developed the mathematics assessment to measure impact); YearBeyond and, various schools. As the programme's implementers, WCED were critical stakeholders and learners were of course the dominant beneficiary of the program - the success of the programme relied on their buy-in which is why creating relatable video content is so critical.

## Results

We found that the GM intervention led to a 10% increase in mathematics results among high school learners through a more positive attitude toward learning as the mediator: if the learner attended the three intervention days, their attitudes towards learning improved 13% and mathematic scores improved by 4.36 points (out of 100) in their 2017 final math grade, which was further sustained and improved to a 6.76 point increase in their next math grade. This is equivalent to an 10% and 17% increase in grades, respectively, showing a persistent and increasing effect. Both treatment and control groups were fully comparable across age, grade, school, math, and PERC tests. There was no effect on test scores or grades in primary school students.

Ultimately, the average high school student in the treatment achieved a math grade of 45.76 (out of 100) compared to the average control student who achieved a math grade of 39 – a very large result in the realm of low-cost educational improvements. These results can be achieved by investing less than two dollars (USD) per student and is thus a worthwhile investment in a low-resource context like South Africa.

## Moving from pilot to scale

Transitioning from pilot to scale up required a handover team. As only 4-5 people ran the pilot, it was necessary to train facilitators on how to run the programme in classes. The team also prepared various scenarios to consider the differing access to resources schools may have and how the programme could be run accordingly, and an implementation manual was developed with very specific instructions and checklists for facilitators to follow. The transition relied on the buy-in of WCED from the early stages of GM which entailed ongoing meetings with political and administrative champions.

One success factor of GM (and a useful takeaway for landing future projects in government) relates to sustainability. The intervention was embedded in the departmental planning and budgeting documents which last 3-5 years and therefore guaranteed the project's sustainable implementation.

## Lessons for the future

The insights developed through this project, and the success of the Growth Mindset curriculum point to an opportunity to use new and different approaches to improve academic effort and outcomes. Teaching youth how to foster a GM doesn't just offer a potential solution at low cost to student performance; it can also change how youth approach other domains later in life with crucial consequences for reducing poverty and increasing equity, including improving labor market outcomes.

Overall, GM offers insight into how to land a project government, tips for successful scale up and most importantly the necessity to compliment the narrow focus on academics with SEL which has proven to assist in improving the desired academic results.

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