

# PUBLIC ECONOMICS CONFERENCE

## EdTech Case Study - Siyavula

Harnessing learning for data-informed decision making

3-5 SEPTEMBER

2024

**TECHNOLOGY AND DATA**  
FOR ENHANCED GOVERNMENT SERVICE DELIVERY



# Siyavula - adaptive practice platform



Free, **online interactive textbooks** for maths and science - approved by Department of Basic Education.

Available in many formats and readable on mobile devices.



**World-class, adaptive Practice service** which gives learners a practice experience that is:



- Engaging with immediate, targeted feedback
- At the appropriate level of challenge
- Of sufficient quantity
- Sequenced appropriately

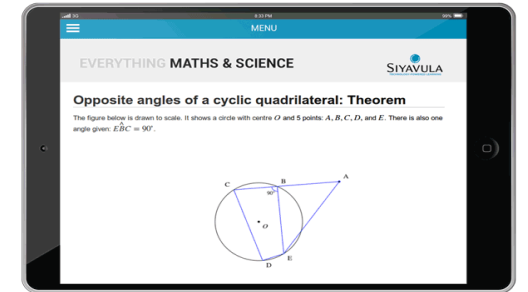
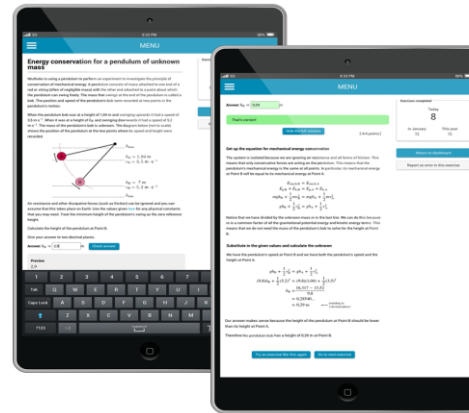


Providing an **optimised practice-for-mastery** experience for learners from component skills to integration of skill to applications in different contexts.

**Free access** to the entire learner product through the Siyavula Foundation.

**Zero-rated** on MTN, Vodacom and Telkom.

Questions are generative, marked automatically and include explanatory solutions.



Sophisticated marking allows more engaging questions.

**Interactive versions of past exam papers** are available for exam preparation.

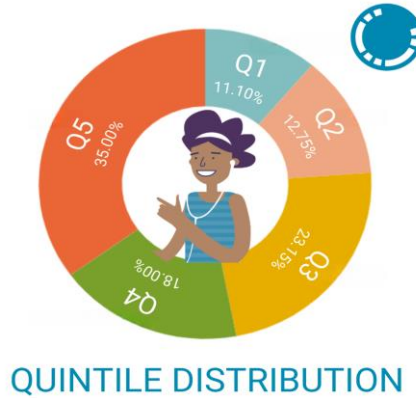
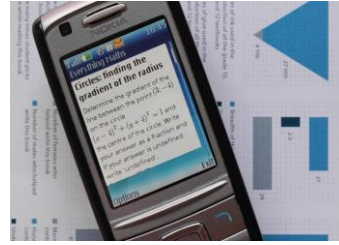
A **motivational framework** has been implemented that includes:

- Goal setting
- Leaderboards
- Multiple national campaigns
- A **My Future** offering:
  - Career guidance
  - Links to scholarships and bursaries



# Platform Traction

1.5 million high school learners (>50% of all taking FET Maths and Science) reading textbooks on the site on phones.



1.5 million learners using Practice in 2023.

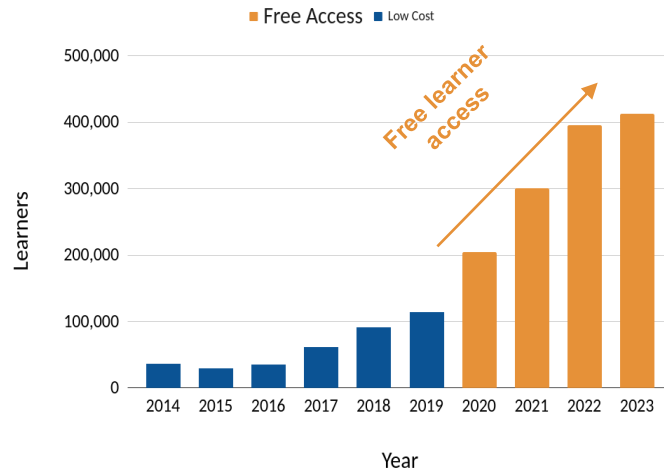
60% from no-fee schools (Q1-Q3) in South Africa, accessed through phones and zero-rating.

25%+ of content mastered means 10%+ school results improvement.

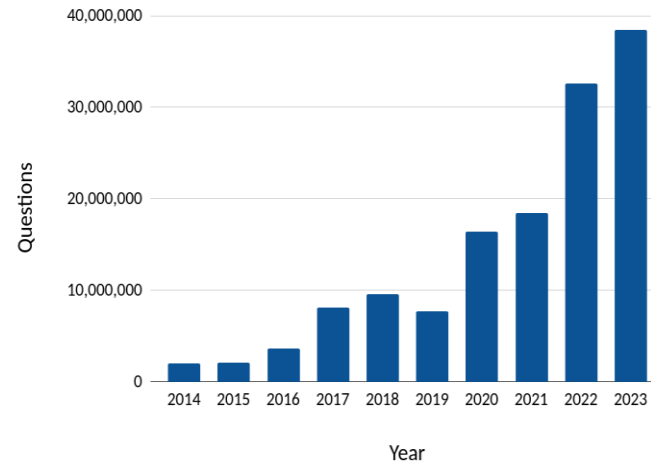


30,000+ registered teachers on Siyavula with 8,000 active from over 7,000 schools and organisations with active learners using Siyavula.

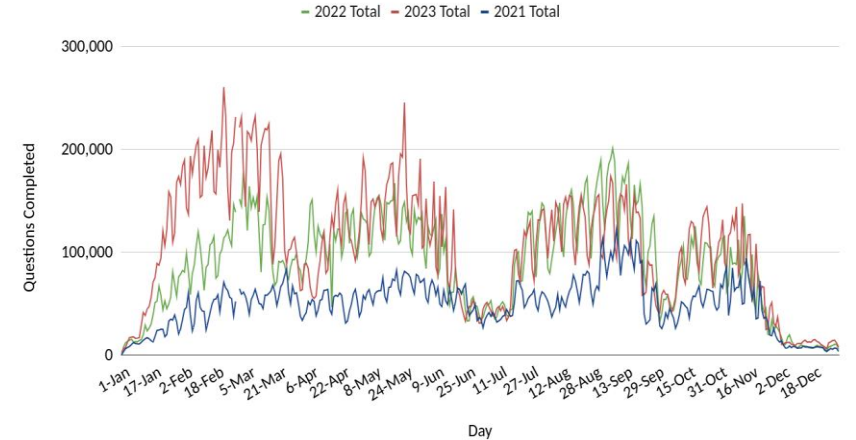
South African Learners Actively Using Practice Services



Questions Completed



Siyavula Daily Questions Completed in South Africa



# Opportunities through EdTech

*“...how governments can leverage technology and data analytics to enhance their operations and improve public services”*

**Opportunity 1** - the majority of learners have access to a mobile device, PBOs to be zero-rated on all mobile networks under ICASA regulations

- the majority of learners in high school can benefit from using EdTech over mobile devices

**Opportunity 2** - comparing the same question items responses in initial attempts in formative assessment to a 27k-learner baseline assessment yielded results that were statistically indistinguishable.

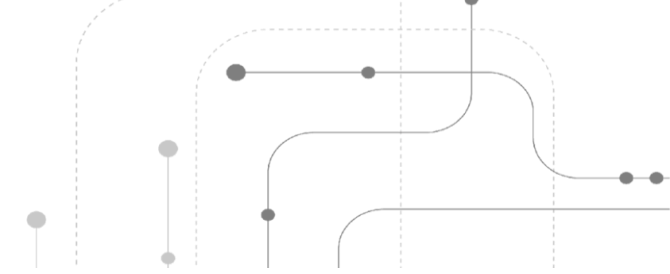
- formative assessments via web are faster, cheaper and as effective as baseline assessments
- just unlock formative assessment via mobile-friendly web platforms

**Opportunity 3** - over 100 EdTech orgs operating in SA already, each is collecting assessment records and could, in principle, send a digital assessment record to a data warehouse.

- requiring zero-rated EdTechs that are working in schools to submit a basic assessment record whenever a learner completes a task provides a massive, federated data collection platform for data-informed decision making

**Opportunity 4** - the best engagement is seen when a motivated individual encourages learners to engage, combining Opportunity 3 with the PYEI participants provides an opportunity for them to drive engagement

- capacity that can support usage is being deployed and EdTech data sharing provides a way to measure the increased impact that these youth are having on learning by driving engagement.



# Details

## Vision

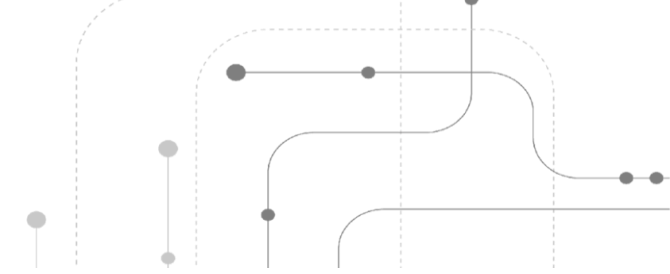
A world in which learning is **celebrated** and **pursued**; education is **accessible**; curiosity is **embraced**; sharing is **fundamental** to our being; and technology is **empowering**, for each and every individual, each and every day.

## Mission

Our mission is to **champion** a love of maths and science by creating **rich, integrated learning experiences** for people **everywhere** through the use of **science** and **technology**.

## Goal

*By 2030 help 10 million aspiring learners from Africa per year to set and reach their Maths and Science goals with us.*



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# THANK YOU