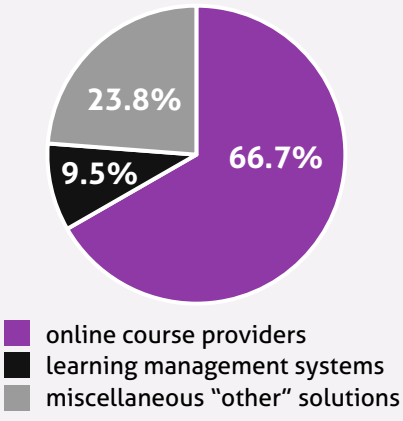
# PROFILE ON EDUCATION IN SOUTH AFRICA

## SA EDTECH OVERVIEW[1,2,3,4]

**42**
edtech start-ups active in South Africa, making up
**8.6%**
of the ecosystem




**Cape Town**
is the biggest hub of edtech ventures, with
**52.4%**
of edtech companies, Johannesburg has
**38.1%**

**26.2%**
of edtech companies have one female founder or co-founder

Only
**19%**
of edtech start-ups have participated in an accelerator

**Edtech provides 12.2% of work**
a figure second only to FinTech, which has a much higher number of organisations in the category. This breaks down to an average of 32.9 jobs per start-up - the biggest average job creation of all major sectors

**24%**
of the government budget dedicated to education and culture ($24.7 billion)

SA's first billion-dollar unicorn was online education business Go1

The value of edtech market expected to reach
**$1.52 billion**
by 2026

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# KEY INSTITUTIONS AND INDIVIDUALS IN GOVERNMENT:

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Department of Basic Education (DBE), responsible for primary and secondary schools.

higher education & training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

Department of Higher Education and Training (DHET), responsible for tertiary education and vocational training.

**Basic Education Minister:** Angie Motshekga

**Deputy Minister of Basic Education:** Dr. Makgabo Reginah Mhaule

**Director-General for Basic Education:** Mr Hubert Mathanzima Mweli

**Minister of Higher Education, Science, and Innovation:** Dr. Blade Nzimande

# INSTITUTIONS OF HIGHER LEARNING IN SA

**28**
**higher education institutions**

**4**
**top universities in Africa (2 in Cape Town)**

Stellenbosch UNIVERSITY IYUNIVESITHI UNIVERSITEIT

University of Cape Town · iYunivesithi yaseKapa · Universiteit van Kaapstad

**50**
**registered TVET colleges (technical, vocational and artisan education and training)**


South African educational technology analysis: https://birguid.co.za/wp-content/uploads/2022/02/Report.pdf

Business model framework for education technology entrepreneurs in South Africa https://sajesbm.co.za/index.php/sajesbm/article/view/472/622

The South African start-up Ecosystem Report: https://disrupt-africa.com/south-african-start-up-ecosystem-report-2022/

South African edtech market summary: https://www.researchandmarkets.com/reports/5670302/south-afri-ca-edtech-market-summary-competitive#:~:text=What%20is%20the%20forecasted%20size,worth%20%241.52%20Billion%20by%202026.

DBE Structure: https://www.education.gov.za/AboutUs/DBEStructure.aspx
DHET Leadership Minister https://www.dhet.gov.za/SitePages/LeadershipMinister.aspx


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# KEY OUTCOMES FOR THE DEPARTMENT OF BASIC EDUCATION

## Outcome 1:

Improved school readiness of children.

## Outcome 2:

10-year-old learners enrolled in publicly funded schools can read for meaning.

## Outcome 3:

Youths are better prepared for further studies and the world of work beyond Grade 9.

## Outcome 4:

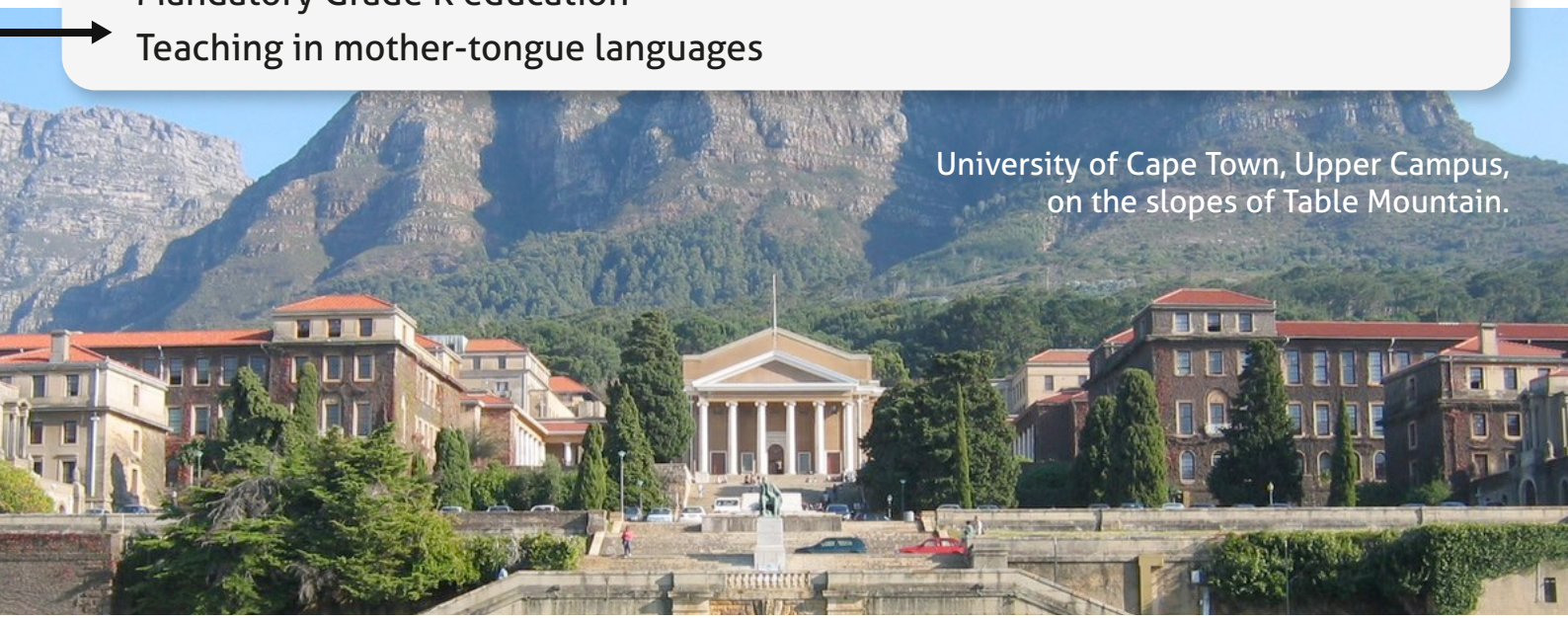
Youths leaving the schooling system are more prepared to contribute toward a prosperous and equitable South Africa.

## Outcome 5:

School physical infrastructure and environment that inspires learners to learn and teachers to teach.

# NEW INITIATIVES PLANNED FOR 2023:

- Push for learners to stay in school and pass Grade 12
- Equip learners with entrepreneurial skills for the job market
- Educational tools to assist learners with the Grade 9 General Education Certificate (GEC), which allows learners to have a qualification before Matric – to be rolled out in 2024
- Coding and robotics proposed for Grade R to Grade 7 curriculum in 2023
- Mandatory Grade R education
- Teaching in mother-tongue languages



University of Cape Town, Upper Campus, on the slopes of Table Mountain.

*Department of Basic Education Annual Report 2021-2022: https://www.gov.za/documents/department-basic-education-annual-report-20212022-19-oct-2022-0000*

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# KEY CHALLENGES FOR EDTECH COMPANIES TO SOLVE

## GOVERNMENT:

- Regulatory frameworks for online schools are still in development
- Insufficient or inadequate ICT policies to allow simplified rollout and use of edtech
- Government allocations / budgets not focused on performance
- Poor learner performance at public schools
- Lack of buy-in from school governing bodies (SGBs) can restrict edtech rollout

## SCOPE:

- Huge geographical location and scope: South Africa has nearly 26 000 schools, 400 000 teachers and close to 13-million learners

## INVESTMENT:

- Risk-averse local investor base
- Most edtech solutions are non-profit and reliant on funding

## SOCIAL:

- Limited access to technology with high data costs
- Unequal education:
  - Gap in test scores between the top 20% and the remaining 80% is wider than in almost every other country.
  - 85% of learners attend poorly funded, dysfunctional schools vs 15% who attend functional, wealthy schools
- Poverty, crime, and other social issues
- Lack of infrastructure to support edtech
- High cost of living and inflation – parents struggle to pay fees of private schools
- Skills gap between secondary and tertiary schooling
- Lack of resources/cost effectiveness of solutions
- Gaps in early-child development (ECD) including lack of literacy
  Number of students qualified to attend university exceeds university quotas
- Vocational training options within schools and beyond basic education are insufficient and often undervalued by teachers and parents
- 750,000 out-of-school children

## TEACHERS:

- Limited teacher training
- Teachers underpaid and overworked
- Training of teachers / teacher perceptions – teachers need to be able to understand and use edtech effectively
- Teachers lack technical skills and knowledge to rollout edtech solutions

## APPROACH:

- Lack of personalised learning
- Limited data collection and retention
- Privacy issues / protection of children's rights when using data-driven technologies
- Bias embedded in existing data must be removed
- Licencing fees and subscriptions for software and platforms are costly
- AI applications and tools to benefit teachers are still in development
- Content needs to be localised and contextualised to be relevant to learners
- Limited access to quality and standardised content
- Assessment targets specific skills

# PRIVATE SECTOR: THE GOOD, THE BAD AND THE UGLY

## The good:

- Government drive to increase ICT integration within schools = Increased uptake of edtech.
- New data centres in SA established by multinational tech companies like Amazon Web Services (AWS) = increased adoption and usage of tech.
- Better tools facilitate improved collaboration between learners and educators - Moodle, Blackboard, Google Classroom.
- Hybrid models to deliver edtech content: Employed by more education institutions.
- SA edtech market expected to grow at 16.9% compound annual growth rate to reach $1.52 billion by 2026.

## The bad and the ugly:

- Edtech not accessible to most – costs must decrease.
- **HOW?**

  Various players along the supply chain can partner to scale and reduce unit costs.
- Lack of skilled teachers, supportive policy, and relevant content
- **SOLUTION?**
- Create an enabling environment for the effective rollout and use of edtech.
- Infrastructure challenges :
  - 23 471 public schools
  - 20 071 have no laboratory
  - 18 019 have no library
  - 16 897 have no internet
  - 239 have no electricity
  - 37 have no sanitation facilities at all.
- **SOLUTION?**
- Develop better infrastructure, taking into account energy and water challenges.

# STRATEGIC OPPORTUNITIES

**New era of start-up-corporate-government collaboration and engagement for Africa's tech ecosystems**

**South Africa leads the way, with mutually beneficial partnerships between incumbents and new entrants entrenched in many areas, including education.**

## *Other opportunities include:*

Rise in demand for post-school education and training

High cost of conventional degrees and training programmes

Increased penetration of mobile technology

Increasing cross-institutional collaboration

Blended / hybrid learning becoming the norm

Proliferation of open-education resources

Well-developed ICT sector in SA with ministries for basic and higher education releasing guidelines for use of ICT in education to promote adoption of edtech

Content development for learning platforms

Training of teachers on edtech implementation and integration in classrooms or hybrid models

Requirement for better after-sales / customer service support

Opportunities along value chain including development of content, training educational practitioners and the supply of hardware and software

# ADDENDUM:

## EDTECH COMPANIES IN SOUTH AFRICA[16]

**GetSmarter:** This online learning platform provides short online courses in collaboration with some of the world's most renowned higher education institutions. It was also the largest acquisition of an SA edtech company when US edtech giant 2U acquired GetSmarter for $103 million.

**Go1:** SA-founded online education business, the first start-up in SA to reach a $1bn valuation and unicorn status, is a corporate education content hub for on-demand training and resources.

**Curro Holdings Limited** is an SA education company that focuses on operating independent preschools, primary schools, and high schools. It has grown to become the largest network of schools in South Africa & a listed company with a market cap of $282 million. The company started as a single farm school and its organic growth exceeded expectations.

**Snapplify:** An online marketplace for educational resources and services, Snapplify is the largest aggregator of digital content in Africa; has the largest network of independent booksellers in Africa; and is home to the largest community of teachers in Africa. Over 1400 educational institutions use Snapplify, while education businesses and governments make use of their edtech products. Snapplify raised $2 million in Series B funding from Knife Capital and Hlayisani Capital.

**SPARK Schools:** This chain of independent private schools in SA utilizes a blended learning strategy for elementary school students to provide them with an internationally competitive education. SPARK schools is valued at $29.55 million and has raised $11.7 million.

**Valenture Institute:** one of SA's biggest edtech success stories, this virtual high school is headquartered in the United Kingdom but operates out of South Africa. The institute was awarded $7 million in Series A funding in 2020 from GSV Ventures to establish additional campuses in South Africa.

**iXperience** partners with high schools, universities, and corporates to create courses that are paired with internships. In May 2021, the start-up raised $2,5 million in Series A funding from Kalon Venture Partners and Caleo Private Equity.

**Reflective Learning:** identifies backlogs for individual learners via online assessments and provides personalised courses to bridge the gaps, with learners catching up three to six grades in a single year. The application, which works on a smartphone or computer, was the South African finalist in the Global EdTech Start-ups Awards.

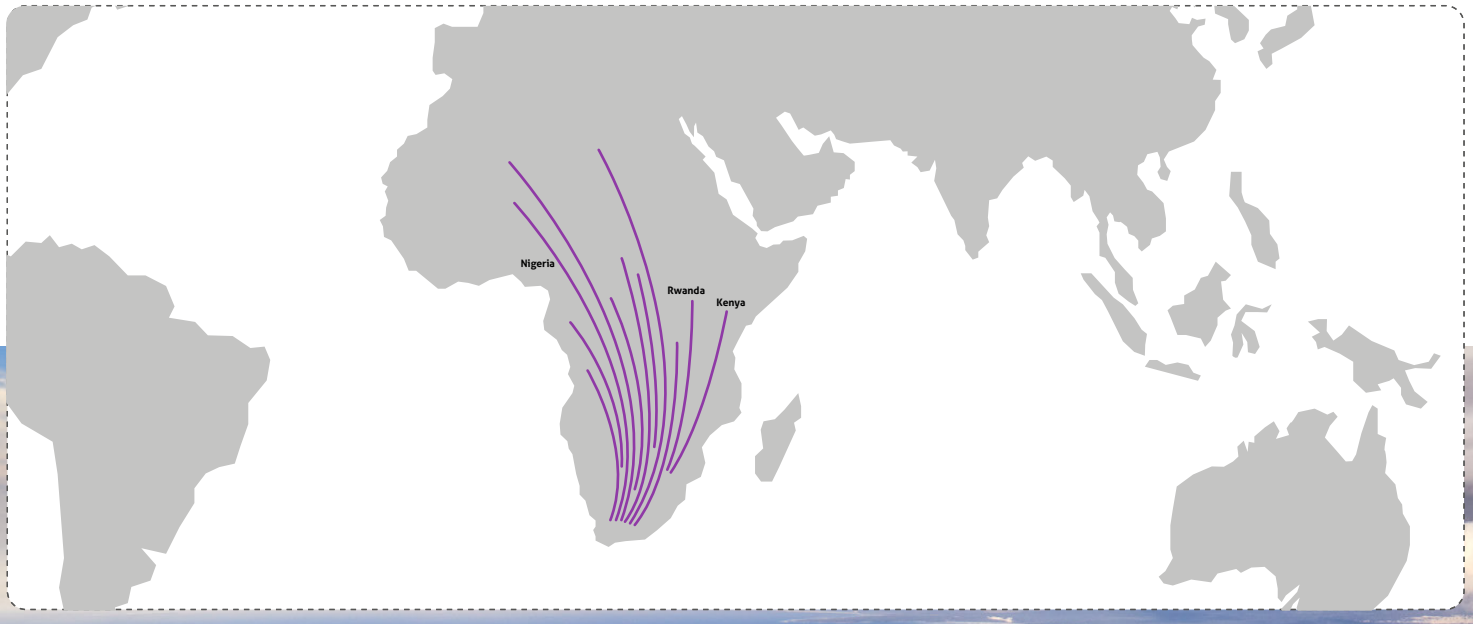
**The Student Hub:** This start-up created a learner-centric online learning platform that digitises TVET content to provide courses and gamified learning on engineering, business, carpentry, financial management and more. It also allows students to explore colleges and crowdfund their studies. Its recent funding from Naspers in 2020 increases its overall investment to over $3 million.

**Enko Education** based in Johannesburg, South Africa is an African-wide network of international secondary schools that operates 13 schools in 8 countries. universities. The start-up has raised $10.5 million in total funding since 2013, including its series B funding of $5.8 million Series B from a pool of private and institutional investors.

**FoondaMate** is a chatbot that makes education accessible to students in developing countries using Facebook and WhatsApp. The AI-powered studying platform has announced that it has raised $2 million during a round of seed funding.

[16] *CB Insights: https://www.cbinsights.com/company/getsmarter/ (name of company)*

# South Africa is the gateway into 54 countries in Africa

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