



SCHOOL FOR A MODERN WORLD

A new learning centre in Sandton is shaking things up in the education sector

BY SIPHOKAZI ZAMA
PICTURES: FANI MAHUNTSI

DON'T dare say the word "classroom" at this school – it could get you into big trouble. The correct term is "learning hub" and it's where you'll usually find learners lounging on beanbags with their laptops as they learn to code or are taught about cryptocurrency.

And don't go to "the lab" expecting to see students dissecting frogs or conducting science experiments. Instead what you'll find is a cavernous hall with flashing screens and kids playing games.

Believe it or not, eSports form part of the curriculum at Centennial Schools in Sunninghill, Sandton, Johannesburg.

Things are done very differently at this private school, which opened in January. Along with maths, science and other traditional subjects, learners get to do courses in everything from coding, crypto, blockchain and podcasting to music score composition, video-editing and social media.

These are the skills that are needed to produce the next generation of Steve Jobs, Bill Gates and Elon Musk, the school's CEO and founder, Shaun Fuchs, believes.



Nkuli Gamede, Centennial Schools' head of school, and the institution's founder and CEO, Shaun Fuchs.

"The whole idea behind this school is that by Grade 11, you will have students with their own online stores, who've created apps, are trading, and might not even need tertiary education, because we've given them the platform and skills to learn that."

Looking at how fast the world is changing, you've got to wonder if Fuchs doesn't have a point. With research indicating that robots will take over 85 million human jobs globally by 2025, the job market seems more precarious than ever.

And for children who are in primary school now, the world of work will look vastly different when they graduate and embark upon their careers, with the prediction that 65% of the jobs they'll be doing haven't even yet been invented.

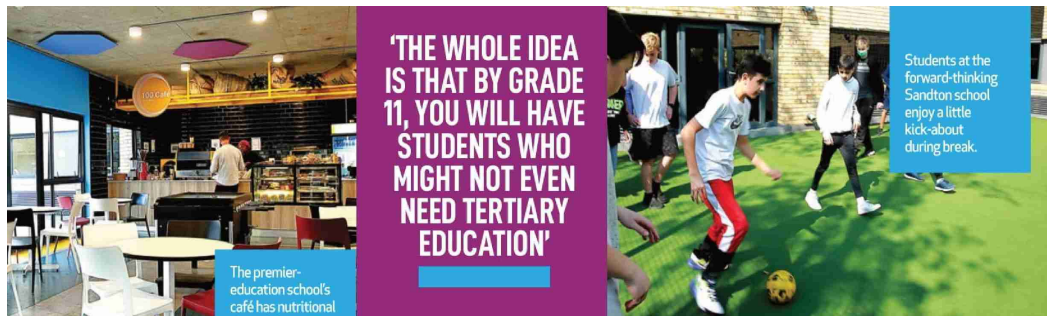
It's a scary prospect – especially as

most parents can't afford the fees charged at schools like Centennial, which start at R94 000 a year. So what can they do to make sure their kids don't get left behind in this fast-changing world?

HELPING YOUR CHILD TO CRACK THE CODE

Understanding key software concepts and coding has become a new literacy, says Demi Swart, coding and robotics manager at iStore Education.

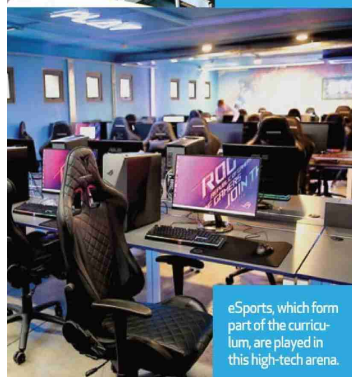
"We are living in a digital world where technology is everywhere – from the social apps that keep us in contact to the systems that make a car run. Coding is present throughout every industry, not just high-tech," she says. "Whether a learner hopes to grow up to be an artist, an engineer, a scientist or even a chef,



The premier-education school's café has nutritional snacks alongside smoothies and coffee.

'THE WHOLE IDEA IS THAT BY GRADE 11, YOU WILL HAVE STUDENTS WHO MIGHT NOT EVEN NEED TERTIARY EDUCATION'

Students at the forward-thinking Sandton school enjoy a little kick-about during break.



eSports, which form part of the curriculum, are played in this high-tech arena.

Nikki Bush, a human potential and parenting expert.

"These subjects form part of general knowledge and help shape an understanding of how the world works," she explains.

Traditional subjects still have a place but not traditional approaches to teaching and learning, Swart says.

"If these subjects are taught in a way that is inquiry-based, relevant and not rote learning, the knowledge will build our learners for the future," she says.

It's also time to introduce new subjects like podcasting and gaming, says Fuchs whose school boasts an eSports arena with 30 state-of-the-art gaming machines.

eSports help foster all the things entrepreneurs need, such as strategic thinking, managing success and failure, time management, working with others and social skills, he says.

Fuchs recalls how he was able to use gaming to teach his Grade 8s about the horrors of World War 1.

"I put the trench warfare syllabus into the Minecraft world, and they navigated that and learnt about what it was all about. In the June exams, that was the one section where the majority of the students got full marks."

HOW TO GET STARTED

Parents who can't afford devices or data can start with unplugged coding activities using simple household items rather than a computer.

At teachyourkidscode.com there are free games for ages four and upwards, including one where kids can learn about the basic building blocks of code such as algorithms, loops and debugging using a deck of cards and some small toys.

There are also a number of local organisations that teach children how to code for free (see box, right) as well as online international resources such as codeacademy.com and freecodecamp.com – and parents who would like to learn can join too.

Outside of the computer labs, Swart says project-based learning is another great way to enhance creativity and innovation.

"When learners are posed a question and need to come up with a creative solution, they will work together considering all outcomes, eventually creating something amazing," she says.

American parenting writer LeeAnn Mason says ultimately one of the best skills parents can teach their children is how to solve problems.

She says parents can foster curiosity and a hunger for innovation by asking questions like, "How would you make this better?" or "Why do you think it happens this way?"

"Identify problems then work with your child to break them down into manageable parts. Make a list of the tasks needed to resolve the problem," she writes on the education website signing-time.com.

"Practise brainstorming and sharing ideas. Ask your child what they think about the problem and encourage them to find a solution on their own." □

CODING FOR KIDS

There are courses available in SA for children – either in-person or online – and in some cases they're provided free.

■ Africa Teen Geeks (africateengeeks.co.za)

Offers robotics and coding programs designed to help learners take a leap into the digital future. Based in Johannesburg, they target learners and teachers at primary and high-school levels and also provide additional classes in science, technology and maths.

■ GirlCodeZA (girlcode.co.za)

They offer online courses as well as in-person GirlCoder workshops to teach participants how to become developers. They also have a GirlCoder Club, which is a nationwide network of volunteer-led, weekend coding clubs for high-school girls.

■ Quirky30 (quirky30.co.za)

Through their affiliation with the CoderDojo program, they have a global volunteer-led community of free programming clubs for young people between the ages of seven and 17, where they can learn to code, build a website, create an app or game, and explore technology in an informal, creative and social environment. They have a campus in Langa, Cape Town.

EXTRA SOURCES: BUSINESSINSIDER.CO.ZA, SLEEPFOUNDATION.ORG, GET3GAPINTS.CO.ZA, THECONVERSIONPOINT.COM, LEADTRACY.CO.ZA

there's little doubt that software will play an even bigger role in their life than it does today.

Our children need to be equipped or they might not cope in the workplace of the future, Swart warns.

"We need to teach our students high-level cognitive skills that can't be automated. We also need to teach them how to master robots so they are not mastered. Learning coding and robotics does just that," she says.

Coding isn't just for learners who want to pursue a career in IT or as a web developer – it is relevant for everyone, Swart adds.

"When students learn how to code, they're learning creativity, collaboration and problem-solving – skills all learners need regardless of their career paths. They gain experience breaking big problems down into smaller parts. They need to test, debug and try again which helps them persist through difficult challenges."

TIME TO CLOSE THE BOOK ON OLD-SCHOOL SUBJECTS?

Although the world is rapidly evolving, there's still a need for traditional subjects like history, biology and geography, says