

Mancosa launches futuristic iTeach Lab for experiential teacher training

Said to be the first of its kind in the country, the iTeach Lab has officially been launched by Mancosa School of Education. The lab combines elements of Steam (science, technology, engineering, arts and mathematics) in seven unique hubs designed to prepare and empower student-teachers for the 21st century.



In the amphitheatre lab are back, Vicent Moonye, iTeach Lab coordinator at Mancosa's School of Education, middle from left Eric Appelgren, Head of Department - International and Governance Relations at eThekweni Municipality and Dr Khangelani Sibiya, international 2019 Teacher of the Year and guest speaker, and front from left, Cleo Karrim, Academic Programme Manager of the School of Education and Sharon Lortan, Work Integrated Learning Manager at Mancosa's School of Education.

This is also the country's first education institution to have a virtual tour assistant robot, nicknamed Manny, that has been built on augmented reality (AR) principles.

In aligning to the broader societal and technological shifts triggered by 4IR, the School of Education is aiming to revolutionise traditional classroom teaching in a complex school education landscape through bespoke teacher training programmes.

Professor Zaheer Hamid, academic director at Mancosa, said the confluence of new technologies in the fourth industrial revolution (4IR) encourages institutions of higher learning to upskill, invigorate and enhance teacher education to be more relevant in the 21st century.

“The quality of teaching is inextricably linked to the country’s ability to succeed in advancing our economy at the dawn of the 4IR.

“Equipping teachers with educational management and leadership skills ensures that they thrive as educational managers and enjoy a more progressive and fulfilling teaching career.”



The Mancosa School of Education iTeach lab aims to empower and prepare teachers for the 21st century classroom through seven uniquely designed high tech labs that give students hands on exploration with science, technology, engineering, arts and mathematics (Steam).

He said the quality of educators in classrooms is key to raising the quality of teaching.

Innovative, compelling, and interactive methods of teaching in the form of simulated and “live in” classrooms - the iTeach Lab - will expose teachers to various environments, situations, and contexts. The iTeach Lab impresses on producing a hyperfunctioning teacher with the mental fortitude to succeed in diverse teaching environments.

The lab experience

The first of the seven hubs in the iTeach Lab is a collaborative workspace that allows students to explore their creative side, whilst developing both critical thinking and entrepreneurial skills. Here, students will also have access to state-of-the-art technology such as 3D printers and laser cutters, which they can use to build products that will either help simplify learning, or which they can commercialise, thus fostering entrepreneurship.

Visit the YouTube link to watch the virtual tour of the state-of-the-art iTeach Labs <https://www.youtube.com/watch?v=aIC0eaYH3q0>

The colourful strip of imagery on the walls connects students to the virtual world using an AR app. In addition to technology, soft skills are also at the heart of the lab with flexible workspaces strategically placed around the lab to foster collaboration and teamwork.



In the science laboratory lab (from L-R): Dr Khangelani Sibiya, international 2019 Teacher of the Year and guest speaker; Cleo Karris, Academic Programme Manager of the School of Education; Shanon Lortan, the Work Integrated Learning Manager at Mancosa's School of Education; and Vicent Mbonye, iTeach Lab coordinator at Mancosa's School of Education

The coding and robotics hub is designed using international robotics standards and allows the student to interact with IoT, automation, robotics, and various forms of code. In here, you could meet a real virtual robot or build your own.

Enter the maths hub, with its ceiling colours inspired by the Fibonacci sequence, furniture designed using geometry, a floor to ceiling writable wall for visual-aided problem solving and bookshelves resembling mathematic symbols. The maths lab is the ultimate brain gym, designed to restore the fun, magic and creativity in mathematics.

The executive boardroom boasts a corporate professional style for education leadership and management training and development. This is where the next generation of educational policy makers could be developed and equipped to become iconic leaders in the schooling sector.

The Amphitheatre combines Roman architecture with a modern take to literature and is designed to improve the reading, writing and presentation skills of students, in a colourful theatrical setting. Here, students can create their own poetry, write, and publish their very own books or short stories, and get inspired by the history of literature by learning about the evolution of reading and writing, in a virtual format.



Students and teachers get the opportunity to meet a real virtual robot or build their own in the coding and robotics hub.

The culture hub is infused with rich African identities built on diversity and heritage. This is where a student will learn how to incorporate elements of our various cultures to enrich teaching and learning.

The science laboratory is a high-tech environment designed to allow students to experiment with chemistry, physics, biology, and science concepts using a hands-on approach. The laboratory will offer various science kits and tools, to aid with experimentation and understanding of concepts and content.

Watch the virtual tour of the state-of-the-art iTeach Labs below:

For more, visit: <https://www.bizcommunity.com>