

The TDA Tech Series® click here Presents "Computer Programming"

What Is "The TDA Tech Series® "?

<u>The TDA Tech Series®</u> is our platform for delivering technical and technological skills to our students through innovative partnerships. **#MultiplePathways**

Announcing Computer Programming Lessons (NOW OPEN TO TDA AND NON-TDA STUDENTS)!



In late January 2020, a delegation led by Vice Provost Dr. Raj Mehta and faculty from the School of Education at UC visited The Dow Academy in Mochudi, Botswana. As a culmination of that trip and follow-up visits from members of The Dow Academy team, we were able to offer our 2020 Standard 4 to standard 7 students our very first programming classes. We continued this programme, and we offered Standard 4s, 5s, 6s and 7s programming classes in 2021 as well

as in Term 1 of 2022. In Term 1 2022, students created video games which can be downloaded here.

In Term 2 of 2022, we are happy to once again offer our students computer programming lessons, this time to our **Standard 4 to standard 7 Students**.

Through the TDA Tech Series, we will therefore be offering after-school computer programming lessons for 20 TDA and NON-TDA students in Standard 4 to standard 7. The computer programming course will be led by Mr Albert Chuma, who is the IT instructor for TDA Primary School Students.

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What Is Computer Programming?

Computer programming, also known as "coding", is a way of giving computers instructions about what and how they should carry out tasks or a sequence of tasks. These instructions are known as code. Computer programmers write code to solve problems or perform tasks. Through programming, we can create computer and phone applications (apps), games, websites and all the other technologies we interact with on a daily basis.

Why Introduce Computer Programming @TDA?

Just like reading or writing, coding is basic literacy in the digital age. It is therefore important for

our learners to understand, work, design and influence the technology around them.

Having children learn coding at a young age better prepares them for functioning successfully in the digital age. Coding helps children with communication, language skills, creativity, mathematics, writing, ICT and confidence. Our coding program will teach children computer literacy, leading to an introduction to computer programming.



2022 Term 1 Computer Programming @TDA



In Term 1 of 2022, our computer programming students learned how to design their own video games called "Flappy Bird". They learned about designing characters and sprites, and how to make them move and perform instructions based on coding.

The video games .apk installation files can be downloaded here.

Please click <u>here</u> for instructions on how to install the games.

As always, Covid-19 prevention guidelines will be strictly followed.

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How Will it Work?

Our computer programming lessons will be led by TDA Technician Mr. Albert Chuma, and will be assisted in The Dow Academy classroom by two TDA staff members.

The students will be programming in pairs using laptops powerful enough for the programme. One student will be at the keyboard, while the other student will be assisting and following along on a separate screen. Students will take turns at the keyboard and at assisting. The programming in pairs system has been recommended by our global partners as they found it is the best way to teach students to code. Coding in pairs has become popular as it allows team members to tackle problem solving quickly, while building communication skills and team work. See the benefits of and how coding in pairs works here.

Along with the computer programming course, The Dow Academy has designed a basic computer literacy course to prepare each student to get the most out of the programme. This introductory course will ensure that students of varying computer literacy backgrounds are able to participate in the programming course. This basic computer literacy course will run at the same time as the coding programme.

At the end of this programme, the participating Standard 4 to standard 7 students will obtain a strong foundation in computer literacy, an understanding of computer programming and new insight into a skill they can pursue as a career.



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How do Students Apply?

Interested <u>TDA and NON-TDA Primary School students</u> are eligible to apply.

TDA STUDENTS	NON-TDA STUDENTS
Email a one page typed document to tdatechseries@thedowacademy.org OR	Email a one page typed document to tdatechseries@thedowacademy.org OR
Submit a handwritten letter to your class teacher. The application should describe why the student is interested in the programme, and how they would use the skills they learn to help their community.	Submit a handwritten letter to the TDA Primary School Campus Reception, or send it via WhatsApp to 74017451, with "TDA PROGRAMMING" written at the top of the letter. The application should describe why the student is interested in the programme, and how they would use the skills they learn to help their community.
TDA PARENTS - Please click here to confirm consent for your child to participate.	NON-TDA PARENTS - Please click here to confirm consent for your child to participate.

20 students will then be selected based on the quality of their applications **AND** the parents' completion of the parent consent form.

The deadline for the application is **19 May 2022** and will be strictly enforced. Deadline for payment of **the participation fee of P 1 000 is 26 May 2022**.

When Does it Start and How Much Does it Cost?

Computer Programming Lessons and Basic Computer Literacy Lessons	31 May 2022 - 4 August 2022 14:00 to 15:30 Mondays, Tuesdays and Thursdays
Venue	The Dow Academy Preschool Campus
Cost	P1,000 per student* <u>This is a one-time fee for the</u> <u>whole term.</u>

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