

# 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 University of Cincinnati, United States of America 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 2022.

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

In Term 2 and Term 3 2022, our students worked on a number of Scratch-based projects, which are available here.

In 2023, we are happy to once again offer computer programming lessons through the TDA Tech Series® programme, this time to 20 TDA and Non-TDA **Standard 3 to Standard 6 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.



## 2021 Computer Programming @TDA



In 2021, our computer programming students learned about the fundamentals of the SCRATCH programming language.

They were taught what SPRITES were and how to make them move around using block-based code.

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### 2022 Computer Programming @TDA



In Term 1 of 2022, our computer programming students learned how to design their own video games. 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 <u>here</u>.

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

In Term 2 and Term 3 2022, our students worked on a number of Scratch-based projects, which are available here.

#### **How Will it Work?**

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 teamwork. See the benefits of and how coding in pairs works <a href="https://example.com/html/personners/linearing-new-months/">https://example.com/html/personners/</a> to tackle problem-solving quickly, while building communication skills and teamwork.



The computer programming course will be led by Mr. Albert Chuma, who is the IT coding and programming instructor for TDA Primary School Students.

Please click here to find out more about Mr. Chuma.

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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 TDA and Non-TDA Standard 3 to Standard 6 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.



#### **How Do I Apply?**

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

NON-TDA STUDENTS: Email a one-page typed document to <a href="mailto:tdatechseries@thedowacademy.org">tdatechseries@thedowacademy.org</a>
OR

Submit a handwritten letter to the TDA Primary School Campus Reception, or send it via WhatsApp to 74017451, with **"TDA CODING"** 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.

Please click **here** to confirm consent for your child to participate.

The deadline for the application, as well as payment of the participation fee, is **3 February 2023** and will be strictly enforced.

Classes for the programme will start on 8 February 2023 and end on 2 August 2023.

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#### The TDA Tech Series® <u>DEMO WEEK</u>

**TDA STUDENTS:** From **30 January 2023 to 3 February 2023**, students will undergo a "DEMO WEEK". During the "DEMO WEEK", students have the option to take part in a TDA Tech Series® programme of their choice at no cost. During this week, students will be given a chance to choose a programme that suits them best.

This DEMO WEEK will also be open to parents. We want our parents to see and appreciate all the TDA Tech Series® offerings. Please click here to view the DEMO WEEK flyer.

On the last day of the DEMO WEEK, the names of students interested in each programme will be recorded, and parents will be contacted with details on the programme, as well as the participation fee options available for the programme.

If students would like to join the TDA Tech Series® programme, parents must complete a digital consent form for their child to participate in the 2 term long programme. Please click <a href="here">here</a> to confirm consent for your child to participate.

The deadline for the application, as well as payment of the participation fee, is **3 February 2023** and will be strictly enforced.

Classes for the programme will start on **8 February 2023** and end on **2 August 2023**.

#### When Does it Start and How Much Does it Cost?

TDA Coding Dates and Time	8 February 2023 - 2 August 2023 14:00 to 15:30 Monday and Wednesday
Venue	The Dow Academy Preschool Campus
Cost	ONE TIME PAYMENT OF P1,500 per student (Payable before 3 February 2023)
	OR
	TWO TERMLY PAYMENTS OF P900 per student (Payable before 3 February 2023 for Term 1 and before Term 2 2023 starts)
	OR
	5 MONTHLY PAYMENTS OF P400 per student (Payable before 3 February for Month 1 And before the beginning of each month the programme runs)

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