“Smart Class” for more effective teaching and learning

Promising Practice

Implemented by: Cayon High School
Where: Federation of St. Kitts and Nevis (specifically St. Kitts)
Status: Launched in February 2022
Summary: “Smart Class” makes use of adequate technology to improve the teaching and learning experience and to reach set objectives in TVET.
Overview

Cayon High School (CHS) is a secondary school which is located within the parish of St. Mary’s, St. Kitts. This school provides secondary level education in a variety of subject areas to students of diverse backgrounds. It prepares students with the necessary education to function in the world of work. CHS has been successful in supporting numerous students to pass the CSEC (Caribbean Secondary Education Certificate) examinations and qualifications.

Description

Evaluating the teaching and learning experience

This initiative is based on resourcefulness to provide a better teaching and learning environment at CHS. The school first evaluated the existing classroom environment by asking teachers and students alike. Several difficulties faced during teaching and learning activities at the school were identified. One of the learning environments that benefited from this initiative was the Technical Drawing room. Although this was equipped with desktop computers, air-conditioning and drafting programmes, the teaching and learning experiences were not optimal. The most pressing challenge was illustrating how to use the drafting programme on the computers as students often required step-by-step instructions from teachers. This necessitated teachers to move from one computer to another to assist students on an individual basis. As a result, students felt frustrated since they had to wait for their turn to be assisted by their teachers.

Seeking alternative equipment for teaching and learning

To improve this situation, the TVET teachers looked for and found TV monitors that were being used for security surveillance and obtained temporary permission to have them installed in the Technical Drawing room. This allowed teachers to link their PC to the monitors which enabled step-by-step instructions being issued to all students at once, hence reaching the students more effectively and efficiently.

Improving students’ access to learning

This temporary solution improved students’ access to learning, together with their behaviour and performance. After observing the positive changes, the school understood that because of the previous lack of technology, certain students were being left behind. The school has acknowledged that other classrooms need to be upgraded to continue improving students’ learning. The Cayon High School has therefore shown that it is willing to improve and ensure that quality education is offered to its students.

Objectives

Cayon High School wants to further its efforts of improving the effectiveness of teaching and the efficiency of the students’ learning experience by outfitting the various TVET classrooms and labs with the necessary tools, equipment and technology. The target groups of this initiative are the TVET students at the school, who are at the centre of the school’s operations, and their teachers as they would be able to teach more effectively.

Addressing the lack of necessary technology for a better functioning student-centred and modern TVET learning environment

The Technical Drawing room at Cayon High School is one of the few in St. Kitts to have TV monitors installed. The use of monitors to help students follow their teachers as they illustrate step-by-step procedures significantly improved the students’ interest, behaviour and performance. After equipping the Technical Drawing room with the appropriate technology, the school has noticed an increase in the students’ interest in the subject area, and more students have chosen to study in this field.
Outcomes and impact

The expected outcomes are the increased interest for TVET subject areas, better reach of various learning styles, different teaching strategies, and more effective learning experiences for the students. CHS aims to make use of additional technology to provide a more holistic learning environment for students by furthering the opportunities for growth, learning of industry-related skills, and focusing on self-development and leadership through different methods such as presentations and projects. Following the upgrade of the Technical Drawing room, student enrolment in the subject area has increased from twelve in 2021 to nineteen in 2022, an increase of 60%.

The expected impacts of the initiative include:

- Students being able to use modern technology and to improve technical and vocational skills;
- Better teaching and learning experiences for TVET teachers and students at Cayon High School;
- Optimized learning environments that can better respond to the needs of the students; and
- Increased student interest in specific vocational fields.

Challenges

Accessing equipment and technology

One of the challenges encountered was access to equipment and technology for teaching and learning. The school was lucky to have successfully sourced the monitors by scouting for under-utilized technology within the school compound, although the use of monitors is only temporary until the schools' security surveillance system is repaired.

Lacking funds to buy equipment

A related challenge was the lack of funding to buy the necessary equipment. CHS focused on being resourceful by repurposing underused equipment. Some of the TVET teachers decided to search around the different departments for anything that could help alleviate its issues and discovered that monitors, which were mounted within the Principal's office for a surveillance system, were not working. The school acknowledged the existing challenges and allowed temporary ownership of the monitors.
Insights

Several departments within schools often need additional supplies. Taking the initiative to search within the school and other departments for underutilized equipment, departments may be able to find solutions that work, even if these are temporary. Instead of only requesting assistance from the ministries, communicating one's challenges effectively and respectfully to colleagues and requesting their assistance, can prove to be successful in creating a better learning environment for TVET students. Additionally, it is important to highlight that having the right equipment for the specific learning environments can help in significantly reducing the teachers' stress levels while increasing the interest and learning of the students.

Next steps

The school is currently in need of additional computers and other equipment such as moveable smart boards, projectors and screens, lockers and cabinets, and comfortable chairs for the different TVET subject areas. The school intends to seek useful equipment, technology, and tools from different departments within the school that may not currently be used. While doing this, the school will work to find more permanent solutions by requesting donations or support from organizations outside of the institution. In the meantime, the school will use temporary solutions to improve the TVET learning environment and to create more promising and rewarding experiences for students.