Case Study: Use of the BBC micro:bit in the National Telecommunications Regulatory Commission’s (NTRC’s) Annual MyApp Summer program 2018

The MyApp program took place from July 16th – August 10th, 2018. In the program we had 19 students enrolled between the ages of 12 and 18. None of the students had any previous programming knowledge before enrolling in the program.

The MyApp program is a summer program that teaches mobile application development using the Android mobile platform. The program started in 2014 and has been running successfully for the past 4 years.

With regards to using the micro:bit in the MyApp Summer Program positive feedback was received from both the instructor and students using the device.

It must be noted that the top ten (10) students from the program were given micro:bit devices to take with them on the conclusion of the program. Five of these students were interviewed with regards to their experience using the micro:bit and whether or not they have continued using the device subsequent to completing the program.

Feedback from the instructor regarding the use of the micro:bit by the students:

1. **What was the students initial reaction to be introduction of the micro:bit**
   The students were intrigued by the device as they described it as “part of a motherboard”. After hearing that they would be programming they were even more excited.

2. **Did they enjoy learning using the device**
   Yes, the students enjoyed learning about the micro:bit. They were all more involved in using the micro:bit controllers as they had physical devices in their hands and were able to see their code come to life.

3. **Do you think the use of the device made their learning of the android programming easier**
   Yes, using the micro:bit controllers aided tremendously in learning how to program. This was due to the drag and drop interface used in programming micro:bit controllers, which helped the students visually see how the code works.

4. **Did the students express any feelings or sentiments regarding the use of the device**
   All of the students expressed their preference to the micro:bit controllers over the android programming as it had more visual engagement. This may be due to the fact that the majority of the students had never done any form of programming before.
Feedback by the students regarding the use of the micro:bit

- Chris Pollard – He indicated that he used it about 3 – 5 times since the program has ended. He likes having his own micro:bit as it helps him to learn different programming skills easily.

- Osley Ollivierre – He indicated that he used it once since the program has ended. He also indicated that receiving the micro:bit for being one of the top students makes him feel capable of learning how to program.

- Eli Davis – He indicated that he uses it 2 – 3 times a week. He really likes using his own micro:bit because it allows him to practice his JavaScript.

- Zeanna Alexander – She indicated that she uses the micro:bit occasionally when she is bored. She also indicated that she just likes to use it.

- Alvania Simmons – She indicated that she uses it once a week. She likes using it because she has the knowledge of how to program it.

Picture of Students that were enrolled in the NTRC MyApp Summer Program 2018

Conclusion:
The BBC micro:bit was a welcomed inclusion to the NTRC’s MyApp Summer Program. As indicated by the students themselves, the micro:bit increases their confidence and ability with regards to learning to program.