Get Students Switched On

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Teachers sometimes worry that having more technology in the classroom will cause students to lose focus. Not true, says Mdm Chen Siyun – in fact, technology is the key to getting students engaged.

Through my journey on the quest for holistic education, I discovered that technology is the perfect vehicle to achieve student outcomes and facilitate differentiated learning for different abilities of students. Our students are surrounded by technology in their daily life and we should make use of this medium to engage and connect with them. Technology is a great enabler to get students' attention in class. It allows them to explore information beyond the classroom and collaborate with students around the world. I strongly believe that technology is the key to effective lesson delivery in a 21st century classroom.

To engage students who are unmotivated is an issue that teachers face every day. For our Normal (Technical) [N(T)] students, we use technology to engage them and help them overcome learning obstacles.

The school has a reading programme where we set aside time for students to read every morning. To support N(T) students who were not engaged in their reading (for example, there were some who held their books open and did not read at all, while others were restless and whispered to one other behind the covers of their books), their form teacher and I conducted a quick survey in Semester 2 in 2012 on the students' disengagement during their reading period to find out that the reason was that they faced obstacles in their reading.

To help the students overcome their obstacles, I came up with a pilot programme, initiated later that year, of using the functions in tablets. Tablets have an inbuilt text-to-speech function that enables the device to read aloud to students, and allows them to check the dictionary easily. The outcome of this change was positive. The teachers observed that the whole class was engaged with reading from their tablets. From the qualitative data from interviews with the students, students expressed their love for the use of tablets for their reading. One student said that it was so much easier now that he could find out the definition of the words straight away on the tablets. He could understand the stories better now, as compared to before, when he would not even use a dictionary to check the words. Now, the tablets have been integrated into English curriculum. Students collect vocabulary words from articles they read, and share them in a class vocabulary list, which is a collaborative document. They can use these words in class for compositions, cloze passages and other class work.

In view of the success of this programme, we took a step further in early 2014 to see how we can use technology to engage N(T) students with learning disabilities such as dyslexia and Attention Deficit Hyperactivity Disorder (ADHD), and help them to overcome learning obstacles. We piloted a programme where selected students would stay back one afternoon a week for this extra intervention. We wanted to develop them into self-directed, reflective learners, and empower them with the skills to overcome their learning disabilities on their own.

Every session, students were given some time to write down their goals and reflect on their progress. Students listed down both academic and life goals, such as "I want to be able to speak better" or "I will improve on my Mathematics". Students would break down these goals into realistic steps. These would be monitored by form and subject teachers using the ICT tool 'OneNote', and students would adjust their strategies to improve based on feedback from their teachers. A student in this programme used to create mischief in his Information and Communication Technology (ICT) class by deleting his friends' work. After writing down his personal goal, which was to be an ICT teacher, he listed down the steps to work towards that. One of these steps was to help the teacher in ICT class. He went around the class helping his classmates with any technical difficulties they were facing. He is now a model student who helps his friends out, both in and out of class.

During this after-school programme, students read and wrote on tablets. Students reflected on articles they had read and wrote journal entries about issues they were going through in their lives. Using tablets helped them overcome their fear of writing, because it allowed them to use tools like spell check. Students particularly enjoyed having a password-protected section for them to do journaling, which gave them the option to share the password with any teacher they were comfortable sharing their thoughts with. Journal writing became an avenue for some students to express the frustrations they were facing in their lives. While I was conducting the programme, I observed that students who were very private and not comfortable talking to teachers, became very open about sharing in the journal.

We also tried to excite and engage them through the use of the Xbox, where they could overcome their self-consciousness by seeing themselves on screen as avatars with their body language recorded. This helped them to overcome their shyness when presenting to the class. With the playback feature of the game, students were able to observe their performance with less self-consciousness and improve on their next oral presentation. Due to the nature of the device as well, students were generally very excited to do oral presentations, as compared to before when they always dreaded oral presentations.

To develop their confidence and deepen their understanding of writing and oracy skills, the students often complete peer reflections in the online notebook of their friends' writing and oral presentations, with rubrics to guide them. They took their role of helping their peers to improve very seriously. We witnessed many incidents

where students who fought just moments before ended up giving thoughtful and helpful reviews and feedback to each other. For example, students would follow the rubrics to give accurate scoring of their friends' performance and give helpful advice such as "Interesting story written. However, student needs to be more careful with grammar." The exercises taught them to place their responsibilities ahead of their own differences. For these students who had issues with controlling their emotions and expressing the right behaviour, it was a huge achievement.

Overall, we received positive feedback from students, teachers and parents from this programme. Teachers observed that students were behaving better in class, with conscious efforts to achieve the goals they had stated in the programme. Parents gave feedback on the positive changes that they observed in their children. For example, one parent commented that her child (whose personal goal was to speak better) made an effort to speak up more at home and was better at expressing himself. Students themselves requested for more of these sessions per week. This programme started from an extra afternoon set aside for selected students, in addition to the usual remediation classes and is now integrated as part of the whole class' English remediation every week.

With the easy affordances of technology around us, the use of ICT in lessons gets increasingly easier to implement for teachers and students. The new generation of students are digital natives and we should leverage on the same platform to engage them. Technology enables us to work effectively as a workforce and we should teach students to harness the power of technology for their own learning as well. In order for technology to be integrated effectively into lessons and improve student outcomes, the capacity of teachers is a key factor to consider. Teachers are important lesson designers and facilitators in the classroom, and thus, they are the key to effective use of technology in the classroom.