Lucaya International School
Independent learning in the flipped classroom

When working to develop a new concept school in Bali, Indonesia, maths teacher, Stephen Powell-Peterson wanted to introduce a truly functional flipped classroom; the model that enables students to learn theoretical information independently, in the classroom or at home and apply what they learn during school hours (Zownorega, 2013). Since this time, Stephen has worked in several international schools, currently in the Bahamas via Kuwait and Singapore. Here Stephen explains the proven benefits of this essential ingredient to any learning strategy and how he has seen this model delivered so successfully in international schools across the world.

SP: The constant emphasis of the core subjects and demands to strive for ever higher standards puts pressure on teachers to deliver an in depth, structured, and pre-planned learning environment. A brunch of knowledge and learning experiences as such.

SP: However, it is interesting to consider that within this rigid learning structure, students can take less and less responsibility for their own learning, they lose the opportunity to develop those vital skills that they will need later in life. The school curriculum hasn't changed to any significant level for many years, just the delivery. Today, teachers are forced to provide learning content in line with curriculum and the students have to understand and retain that knowledge. But if the world around us changes and we do not, how are our students going to be prepared for the jobs of the future? Too much teacher-centred instruction can not only be boring for students, but it also doesn't allow them to express themselves, and direct their own learning.

Autonomous learning

SP: When creating the school for Bali, we had a good set of ingredients; face to face teaching, text books, and assessment questions but the missing piece of the jigsaw was an online resource that enabled the flipped classroom to happen effectively and simply. The reason I am so passionate about this 'flipped learning' aspect of students' lives is because it is based on engaging higher-order cognitive strategies for problem- solving and group work, all skills that today's industry requires of its employees. it also enables time for individual guidance by the teacher, the humanity needed in every place of education.

SP: By introducing an immediately effective flipped classroom aspect of learning delivery, I feel teachers are better placed to help their students develop the skills they'll need in their future careers. According to qualitative findings, the flipped classroom method had positive contributions to students' self-directed learning readiness. It allows them to express and pursue their curiosity with minimal guidance. Many schools have high levels of technology in the classroom, others don't. However, the issue for teachers is that today's generation that is born and raised in the technology age has different cognitive constructs, interest areas, and habits than the previous generation (Kula and Erdem (2004). Prensky (2001) used the concepts of 'digital natives' and 'digital immigrants' to describe the generational differences between today's children and their teachers in terms of technology. Now, the most important problem experienced in education is the efforts of digital immigrant teachers who try to teach something through old-fashioned methods and materials to digital natives, who speak a completely different language. Digital natives are used to accessing information rapidly; they can do more than one thing at a time; in general, they prefer visual materials to written texts (Prensky, 2001).

SP: This is the brunch of content they appreciate and the freedom to autonomously explore while having confidence in their direction and necessary outcome.

The flipped classroom

According to Verleger and Bishop (2013), this flipped classroom model supports individual learning by enabling students to access the information they want in the place and time they want through the video records they have (Talbert, 2012).

SP: After all students love not being beholden to teachers!

SP: In search of these video records, I was aware of the breadth of content on the internet with varying degrees of quality and authenticity. However, it was going to take me a long time to research every video available for each learning objective to ensure it not only was factual but that it covered the right aspects of learning required.

SP: After much research both online and at shows, I came across GCSEPod when it won its first BETT Award, which offered highly engaging three to five-minute video 'pods' demonstrating all the learning objectives across all curriculum areas, with related questions. It fitted perfectly with my desire for the last independent piece of the learning

jigsaw: a very affordable resource that would be ideal for the flipped classroom model; for school work, homework, and revision.

SP: The system directs students along their own learning pathway, providing more learning 'pods' if they aren't answering questions correctly or moving them on to the next level if they are.

Knowles (1975) defines self-directed learning as the process of being able to attempt for learning, defining one's own learning needs with or without getting help from others, setting learning goals, identifying sources for learning, choosing and applying the right learning strategy about the information to be learned, and assessing the learning outcomes.

Using GCSEPod

SP: Since that eureka moment of finding a truly practical flipped classroom model in GCSEPod, I've worked in several schools and fully recommended (almost insisted on) its use to them all. I always start by just getting it in the students hands. Let them feel the power of their freedom. This encourages the first adopter teachers to get interested. I then sit down with each teacher in each department to show them how it can be used and from there I can see it fly. Taking Chemistry as an example, it offers the ideal way to explain complex concepts such as molars. Once the students have watched the videos in or outside the classroom, it's so much easier for them to grasp the concept on their own rather than just sitting and listening to a teacher or reading from a book.

SP: In physics it could be the concept of forces that a student is wanting to understand. Sometimes they may have had a lesson on this in class and use GCSEPod to consolidate their learning as homework or watch the video 'pods' before a lesson so they can come to class with a level of understanding and in turn, engage more comfortably with the classroom activities.

SP: This model of learning is also ideal for those subjects that have the greatest volume of content and/or get squeezed out of their amount of classroom time: biology for instance.

With pressure on schools to achieve high grades in core subjects, biology is often the poor relative in terms of class time. To a certain extent our international students could use the video 'pods' by themselves with no other learning and pass their IGCSE in biology.

It's not all about technology

SP: It is important to remember however, that technology is only part of the variety of how to deliver a curriculum that sets children on their future career path.

SP: 10-15 years ago, ICT was going to solve everything, it was new and exciting; students were engaged and excited by the digital learning content. Today when I give children books to read rather than an eBook or online learning activity, they almost respond with relief. There is no doubt that they thrive on this independent model of learning but, they want to absorb it how they choose. It's about having a combination of learning tools; sometimes they want technology, other times they want text books or hands on learning.

SP: What GCSEPod offers is another dimension of learning that until students have it they don't realise how good it is to have. The video pods and associated questions support learning in whatever format it has been consumed. In English literature for example, the student may have

'To Kill a Mockingbird'. The short video pods provide additional information of the key story lines and often missed sub-plots that really expand their understanding of and absorption in the story.

Revision

SP: Whether it is the revision of a particular learning concept as homework or full revision before exams, such online, self-directed learning is ideal. The teacher can easily create learning or revision play lists, on calculus for example, providing the students with invaluable, rich independent learning content. But it is when they leave the classroom and manage their own learning that you start to see them devote much more time than you could have reasonably asked for!

Results

SP: The excellent reporting on GCSEPod shows that our high achievers (the top 33 per cent of students) and bottom level (33 per cent) generally used the system the most and without much direction, they also therefore showed the greatest progress. The middle group are less inclined to adopt this learning strategy independently because they don't have as strong a "need" but once we get the teachers blending it into the Schemes of Work, setting Assignments and pre-exam revision playlists they then start discovering the comfort the extra resource brings. The pod profile through the year shows exactly where they seek the extra help or advancement.

SP: My legacy for students and teachers in the independent schools I have worked at across the world has been GCSEPod a flipped classroom model working incredibly well, with the growing epidemic of poor and unverified information on the Internet, schools do require high quality effective learning content to save teachers' time, improve student knowledge and provide students with the skills they'll need for their future careers.

SP: Keep up the good work GCSEPod. You have made being a teacher simply better.