Flipped Learning in the Cloud Using Kaltura

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Emerging mobile technologies are changing student learning styles in the 21st Century. Students already access quick and easy visual learning episodes via sites such as YouTube. Therefore OCVC recognised that anytime, anyplace learning was needed to engage our students and keep them motivated. In line with strategic priorities and the flexible delivery of teaching and learning, the College introduced the 4One1 model. A focus of this model is for students to take ownership of their learning. Therefore it was becoming a notable requirement to provide effective learning inside and outside of the College, supporting self-directed learning needs.

Why flipped learning

Flipped learning is changing the classroom delivery and pedagogy and allowing the students to access learning outside the classroom. This has resulted in a cultural shift in education. This method of learning is transitioning from a teacher-centred classroom to a student-centred personal learning environment.

With flipped learning there is a paradigm shift in the learning environment: students are actively doing, rather than passively watching the teacher deliver in the classroom. With this in mind, the ethos of ‘flipped’ dealt with the strategic objectives at OCVC:

- to allow students to become independent learners
- to allow students to take ownership of their own learning
- to motivate and engage the students using blended learning opportunities
- to retain students with continuous and accessible learning beyond the classroom
- to encourage peer-to-peer learning
- to help, support and develop the student to stretch their learning in the classroom, whilst allowing the teacher to challenge the students’ knowledge and understanding
- to develop and re-purpose video content across the curriculum and campus
- to increase visual learning methodologies and bite sized learning on multi-platforms and devices
Areas focused on:

**Current Areas Chosen**
careful consideration was given to the areas selected for pilot purposes, in order to evaluate and ensure that Kaltura was the effective platform for managed video content. It was not just a video store, but an opportunity to evaluate alternative teaching and learning methodologies. The desired outcomes were to identify use of the platform and visual content for:
- flipped learning
- peer-to-peer learning
- assessment with video evidence techniques

It was also important to consider if:
- the objectives of flipped learning were achievable in the curriculum area
- student participation would be mandatory and directed by the teacher
- staff were able to provide time for video development
- staff were risk takers and willing to challenge the learning environment

The areas chosen were: Hair & Beauty (Oxford) and Hospitality (Banbury).

**Hair & Beauty:**
- All massage technique videos produced internally to be delivered through flipped learning and made accessible to the students via Kaltura video platform.
- Peer-to-peer learning, using video, was piloted where students took videos of themselves performing stone massage techniques, which were then reviewed and critiqued by peers and staff.

**Hospitality:**
In order to gather evidence for assessment, the Apprentices filmed examples of working practice in their work environment. The videos were uploaded to Kaltura to be reviewed and assessed by the lecturer.

**Other areas Flipped at OCVC but not part of pilots with Kaltura:**
- Motorsports
- Sports

**Future areas being considered**
- Teacher Training
- Engineering
- Caring and Health
- Public Services
Early findings:

Benefits

- more class time for testing knowledge and understanding
- increased accessibility to learning 24/7
- student motivation increased through participatory learning
- student confidence increased, allowing them to accept critique and stretch and challenge their learning styles
- peer-to-peer learning resulting in increased support in the classroom, with increased peer discussion, involvement and contribution
- a managed platform, controlled by curriculum with directed learning
- development of a video bank of resources that can be re-purposed across curriculum areas

Views from students on the flipped learning

- They love the idea of watching videos on phones, iPads anytime and anyplace
- access to videos and being able to watch repetitively increases confidence to perform tasks
- watching their own videos and receiving comments and reviews from peers, challenges their learning and helps them to develop new skills
- reviewing visual work forces them to learn the concepts of the techniques and to be able to provide constructive feedback to peers
- feel that the teacher has more 1:1 time in class with individuals to test their skills and techniques
- feel more confident to ask questions
- feel that the classroom is more about them!

Impact in terms of quality

Videos are effective, produced with instructional design techniques and cover all aspects of learning. Can be reviewed and re-purposed ensuring all students have opportunities to learn at their own pace. Accessibility to learning is increased and not limited to the classroom. Hair & Beauty feel that the 45 minute demonstrations are delivered to a higher quality on video without interruption and a clear view for all students.

benefits for staff

- a bank of resources that can be re-purposed and used across curriculum
- more time to test and challenge knowledge and understanding
- increased participation from students in class with practical exercises
- repetition of demonstrations and delivery of materials reduced in catch-up and review weeks as students can watch and take ownership of their own learning
Project Challenges and Mitigation Strategy Developed

cost savings

- Re-design the curriculum leading to more directed teaching, reducing class contact time
- flipped learning videos can be viewed at home or in Learning Zones and supported by the Learning Coach. No need for specialist teachers performing demonstrations in class
- bank of resources with cross curriculum delivery reduces need for teaching staff to deliver same subject matter, e.g. anatomy and physiology taught in Caring and Health, Sports and Public Services, Biology etc. one video can be used in all areas, reducing development time for teachers
- one managed platform on the cloud, accessible across campuses, with single-sign on increases procurement, maintenance, support

Issues around development:

in terms of recording in the workplace

- identifying time to record to ensure uninterrupted video
- identifying the staff/students required to perform tasks for video
- identifying the devices that support the platform for shooting and uploading video

resistance to do this work

There wasn’t really any resistance with the pilot areas identified and in some cases curriculum areas put themselves forward to be a part of the flipped learning. Most areas see the benefit of the flipped learning, and the only issue that slows production is ‘time’ for staff to be available for taking the video. Staff did need a refresher in instructional design, and not think of the whole process but the steps it can be broken into.

issues linking with moodle

The Kaltura platform has a plug-in to allow it to be linked with Moodle. However it is advisable to check the configuration and certificate requirements to ensure the two platforms can be configured to work with each other.
Project Challenges and Mitigation Strategy Developed

Expected impact:

Students
Flipped learning is engaging the students with bite-sized repetitive learning to engage them not only with mobile, cloud based learning platforms, but also:
■ encouraging peer-to-peer learning
■ allowing access to learning outside the classroom
■ re-enforce learning and dealing with differentiation in learning
■ highlighted that students are ‘visual’ learners and learn through small bite size learning episodes
■ students supported and encouraged with peer review and feedback opportunities on video
■ students motivated, and engaged with blended learning opportunities
■ students take ownership of their own learning – they can stretch and challenge their learning goals

Staff
■ build a bank of resources that can be used across curriculum
■ save time in class for demonstrations and also repeating demos for students that missed the class
■ concentrate on knowledge and understanding and identify student progress
■ encourage student working in groups to develop employability and enterprise skills
■ develop negotiation, researching, critical thinking skills in students

Future work:

Next Steps
■ roll out the Kaltura platform to all Colleges in OCVC group
■ share resources across campuses to avoid repetitive teaching across curriculum
■ have an OCVC Group YouTube allowing students to share, experience, comment, review learning, events, news – creating a community of learning with visual content

Expected longer term impact
■ learning via cloud anytime, anywhere in small chunks that can be shared, reviewed, and delivered to a greater area, including internationally.
■ offering blended learning via MOOCs to increase profile of OCVC as an outstanding deliverer of learning