

School profile: St Cyprian's is a modern African school with a proud heritage. Nestled on the slopes of Table Mountain, this Anglican school is widely recognised as Cape Town's leading independent girls' school.

It has a strong emphasis on community partnerships and outreach initiatives. It is a happy, cosmopolitan community that caters for students from pre-school to matric with some students staying in the boarding facilities. Excellent cultural and sport accomplishments, as well as academic results are achieved year on year.

St Cyprian's was selected as a Microsoft Innovative Pathfinder school in 2010 in recognition of the range of innovative teaching and learning practices adopted by the school. In 2011, St Cyprian's was asked to remain in the Innovative Schools programme as a Mentor School, giving staff an opportunity to share their ideas, experiences and success stories with other schools.





An innovative school that uses technology to improve learning

The staff and students of St Cyprian's School make regular use of technology to enhance teaching and learning and to create engaging, memorable lessons. Some of these lessons are showcased in this case study and the effects that they have had in terms of improving student results and building 21st century skills are discussed.

At St Cyprian's, teachers are required to incorporate technology into their lessons and then share what they have done with their colleagues, but this is not the reason why technology is incorporated into lessons. In reality these dedicated and talented teachers use ICT because as teacher Louise Clarke says: "I want to get their attention and I want them to enjoy what they do."

SITUATION

HIV and AIDS is a topic that forms part of the Grade 8 Life Sciences curriculum. According to teacher Nicole Wallace it is a difficult topic to teach because it has been covered so often in primary school that by the time students reach grade 8 'they think that they know everything'. To keep her learners' interest and to raise awareness of what it is like to live with HIV and AIDS, Wallace felt she needed a new approach. Students were required to conduct a survey to determine people's bias towards HIV positive people and they were then required to create an awareness campaign using video. Some of the resulting videos are heartfelt and touching portrayals of the difficulties faced by HIV positive people. It is obvious from watching the videos that not only have the students learnt a lot about this disease, but also that they have developed sensitivity around the stigmas faced by those infected. As an added incentive – the best movies created for this assignment were entered into the St Cyprian's Movie Maker competition which recognised students who had used this tool to create engaging films related to their school work.

In Grade 9 English, Mia Salkinder and her colleagues wanted a creative way of assessing their students' comprehension of novels that they had read. In an activity that also exposed students to a new genre, they tasked their classes with producing movie trailers for an imagined film adaptation of a book they had read. Creating a one or two minute movie trailer is a deceptively simple sounding task – yet in order to do this well, one needs to understand the conventions of the genre, a really good grasp of the novel and using a range of creative techniques to ensure that the trailer entices someone to watch the film, without giving away the



plot. In addition to producing a trailer, students were required to keep a Director's Journal. In this, students reflect on the process and challenges of creating their trailers and explain the thinking behind what they chose to include. At the end of the project, students presented their trailers to their classes and from there the best trailers in the grade were presented 'Oscars' at a special ceremony.

Grade 7 Social Science students embarked on a WebQuest to learn more about natural disasters. Each student in a group of four was assigned a specific role: Reporter, eye-witness, meteorologist, or disaster management expert. The students gathered information from their assigned perspective and then used what they had learnt to create a newscast about their natural hazard. Not only did learners become experts on the type of disaster assigned to their group, they also learnt more about other natural disasters through watching the newscasts produced by other groups as well as more about some of the professions associated with news broadcasting and meteorology.

Grade 4 class teachers Kim Jackson and Louise Clarke cover a different novel with their classes every term. To accommodate a range of learning styles and abilities and to add some interest to their study of The Phantom Tollbooth by Norton Juster, they incorporated a range of technology into the lessons. The book tells the story of Milo, a bored little boy who receives an intriguing package through the post containing a tollbooth, which will take him to The Lands Beyond. Learners were asked to predict the adventures Milo would have in these mysterious lands and to create films about them. Unlike simply being required to show that one has understood a book, being required to make predictions allowed the girls to practice and demonstrate one of the highest order thinking skills. Working collectively in groups, they produced artwork and scripts which they then narrated using Windows Movie Maker. Other tasks included

drawing an imaginary castle using Google Sketchup and designing and building their own model tollbooths. At the end of the project, parents were invited to a screening of the films.

Grade 10 English teachers Debbie Smith and Lisa Abrahams believe that "the reading process is as much about the reader as the writer". The reading project that they set up involved groups of three students selecting three novels with a common theme and then blogging about these books as they read them, with each member of the group paying specific attention to plot, character or theme. The resulting blogs show how the students have engaged with the books and reflected on their interpretations of the novels. The questions and answers in the discussion threads show that the blogs have become a virtual book club in which students can ask one another questions and agree or disagree with one another's interpretations in a non-threatening environment. At the end of this project, students were expected to have one-onone discussions with their English teacher about their books, a task accomplished with more flair and confidence after having sustained a conversation virtually on the blog.

SOLUTION

The St Cyprian's students all report enjoying using technology in their lessons. The teachers point out that in activities where students make use of technology, learners who average Cs and Ds for their other work often get As and Bs. They attribute this improvement in marks to the fact that tasks requiring the use of technology often make use of different learning styles and strengths that may appeal to learners who are not as good at taking tests or exams. Another factor at play is motivation; students enjoy the tasks that incorporate technology and as a result they put more effort into them than they might put into a more traditional activity.



While teachers point out that their students who usually get As in traditional assignments and exams still get As – in the assignments that make use of technology they may not be at the top of the class as they usually are. This may be because these highperforming students have mastered more traditional test taking, but have yet to master a type of learning that is not as practised as their ability to take tests. Students who regularly score the highest marks in the class also often prefer to work on their own whereas often assignments using ICT are set as group work projects. While this may result in the students who are usually at the top of the class scoring slightly below their personal averages in a group task, the collaborative activities using technology provide invaluable opportunities to develop life skills for working in teams that individual assignments and tests do not offer

BENEFITS

The Life Sciences teacher found that, in some cases 'average' students who have excelled in a technology-based assignment then go on to do better than they usually do in subsequent tests, or examinations. An example of this is Claire and Tina who produced an HIV Aids awareness-raising video called Nandi's Story, a poignant portrayal of someone living with Aids who went on to win the St Cyprian's Movie Maker competition. These two learners achieved 63 and 54 percent for the Life Sciences June exam and 74 and 61 percent, respectively, for the other classwork assignments completed in the year. They were then awarded 84 percent for the video task (in both cases their highest Life Sciences mark for the year). This achievement is something to be proud of, but the more telling result is that by the final examination they scored 84 and 71 percent respectively, an improvement of two grade symbols in each case when compared to the June exams. This may be a case of 'success breeding success' where previously good, or average students now realised that with

some effort they were capable of excellence. Or, as Tina claims: "This project helped get the facts into my head by teaching us and making the movie."

Grades and marks are an important indicator of academic success, but they are not the only indicators of an assignment having been successfully mastered. In some of the tasks set by the St Cyprian's teachers, students were required to master some component of the syllabus but, by completing the assignment, they also used and developed life skills. Without the ability to work effectively in a team, the collaborative task of creating a short film as a group could not have been completed. In compiling their book blogs, the students report learning a lot about literature – but they also talk about how the task taught them a lot about time management and the importance of responding timeously to their friends' blog posts. In the natural disasters, WebQuest, each member of the group knew that she was solely responsible for gathering and reporting a specific type of information and, therefore, learnt to both take responsibility for her own learning and to then work cooperatively as part of a group.

Language teachers know that students produce better texts when the work they are producing has a genuine purpose and will be read by an audience that is not limited to the teacher. Technology makes it easy for texts produced in class to be published and accessed by a wider audience. The Grade 10 English teachers, whose learners kept the book blogs, reported that far more attention was paid to spelling and grammar when they knew that their writing could be accessed by any of their peers. Unlike traditional book reports, the blogs relied on interaction, debate and discussion between three students. To do this well, students needed to get a good understanding of their books and then they needed to be able to put forward their opinions and substantiate these by drawing from the books. This process is not too different to



writing a literature essay, yet what made learners put more effort into this was that they knew that their work would be public and that their two group members were relying on their contributions for their marks. In the case of the Phantom Tollbooth movies (which were shown to parents), the movie trailers (which were showcased at the Oscar ceremony), or the natural disaster newscasts (which were shown to the rest of the class to teach about other natural hazards) the audience was larger than just the teacher, creating an added incentive to present one's best work.

Not every aspect of every project implemented at St Cyprian's has been a resounding success. Both teachers and students talk about the difficulties caused by more than one version of software being used, leading to work done on one computer being rendered unreadable by another. Some students had difficulty in accessing the school's SharePoint from offsite and the importance of having to book a computer venue in advance to ensure that they had adequate time to use the computers. None of these challenges was deemed insurmountable though and the teachers found that with some careful planning and time management as well as support from the Head of ICT, Nina Adams, they were able to solve the problems that occurred.

Plagiarism is a problem in all academic environments and high school is no exception. Computers and access to the Internet make it easy for students to pass off someone else's work as their own, or to find ready-made answers to assignments that they can adapt to suit their specific task. However, a well thought out task can make it impossible for students to find ready-made answers online. The St Cyprian's English teachers who set up the project say that one of the motivations for their reading blog assignment was to prevent students from downloading literature study-aids offline and regurgitating this content in their essays and assignments. While it is true that

students may still turn to study-guides to help them interpret a piece of literature, they are not going to find a ready-made response to a friend's blog post that they can pass of as their own.

St Cyprian's is eager to share its successes with other schools. They do this as a mentor school for the Microsoft Innovative Schools Programme as well as to other schools in the Cape Town area that call on them for advice and who see St Cyprian's as a role model. Adams runs a Tech Blog that records a range of successful projects and ideas that have been implemented at St Cyprian's. The idea is that other schools can access these ideas and use or adapt any that they think will work in their own classrooms. The Tech Blog has also been an important part of marketing the use of technology to other stakeholders at St Cyprian's. Running an effective IT department that includes both physical and human resources comes at a cost and, through the blog, stakeholders can easily see that investing in IT is a good use of budget that is enhancing education.

At St Cyprian's they don't believe in IT for the sake of IT but think that working infrastructure and effective administration that allows easy communication between stakeholders and access to resources, lead to empowered teachers and students.



