



HOLY COWS! - COMPUTERS AND COLLABORATIVE PRACTICE



**A Case Study into the MOBLAP Project at
John Paul II High School, Greymouth**

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MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Background

John Paul II High School is a decile four Catholic integrated school in the heart of Greymouth, and currently has a roll of 130 students.

As part of the Mobile Laptops (MOBLAP) project, John Paul II High School was supplied with laptops from the Digital Opportunities Project, which was a joint initiative between the Ministry of Education, ICT supplier ITAS, and the school.

Other Project Participants:

- WestNet ICT Cluster – supported and contributed to effective use of the school’s resources.
- John Paul II High School staff –who embraced the co-operative philosophy, and the management staff who supported inter-departmental cooperation. Special mention to the Religious Studies and English departments for aligning their programme to allow this project to happen.
- Forty-four Year 10 students.

Setting the Scene:

After a Religious Studies (RST) staff member commented how difficult it was to get students motivated and interested in RST, it was decided to combine ICT and English with RST. The aim was to make the RST module called ‘The Teachings of Jesus’ more relevant and interesting to the Year 10 students through using ICT, which most students had a natural interest in.

The crossover of the subjects saw students creating their own movie based on a parable. During RST, students researched their parables using the internet, while in English, storyboards were created and clay animations were built. In the ICT class, students used the laptops to film their interpretation of the parable using the storyboards and animations created in the English class.

Each programme was run concurrently in the three departments, and the skills students learnt during this time became invaluable for further learning. Students were assessed with two unit standards from the Generic Computing Domain. More detail is given on these later.

Unit Plan

Context:

Parables and Animation

Year:

10

Duration:

Term Two – 10 Weeks

Technological areas/context:

Computing, Religious Studies, English

Cross curricular links:

Computing, Religious Studies, English

Project Resourcing:

- The teachers encouraging the Year 10 students to be involved;
- A working school network;
- A pod of five laptops, five port switches, and network cabling;
- The software provided by the Microsoft School Agreement, especially PowerPoint;
- Home Economics Room and clay-making ingredients.

Project Philosophy:

The project was developed along the philosophical lines of the unit NOT being integrated. This meant that each subject teacher taught his or her unit in parallel, and the students were to use their newly acquired skills to transfer their understanding from one subject to another. The unit worked through co-operation. Computers were notorious for crashing and if the computers fell over, through the way the units were managed students were not disadvantaged. The other departments continued as normal with their programmes. This was an important philosophical emphasis. Organising large integrated units in high schools can be difficult because of the fragmented timetables of both students and teachers.

Project Setup:

The original idea came from the Head of Department of ICT, who organised meetings with the different departments to align and to create the unit.

Initially, the project was only aimed at the students who were in the ICT classes. However, seven students who had not enrolled in the ICT class showed an interest in participating. So as not to disadvantage the seven students, the computer classroom was opened at lunchtimes. They were also allowed to come to the Computing Room once they had finished set work in their subjects, or they could sit in the back of other classes where computers were not being used, to get some time on them..

The departments held meetings to plan out the timing of activities and write the project assessment. Students were divided into groups of five, though some students later chose to complete the assessment individually.

Delivery of the Project - Term Two – 10 weeks

A difficulty that had to be overcome was the mismatch in timetabling between ICT and RST. As the unit was based on a RST module on 'The Teachings of Jesus', it was decided to organise the ten groups along the lines of their RST classes. The students were divided into groups of four or five, and students not enrolled in either of the ICT classes formed a single group and worked at lunchtime. There were ten groups in all.

As the unit was not integrated, each of the subjects had their own assessments, but the ICT assessment was written in consultation with RST.

The project had three milestones built into it. The first two milestones marked the completion of the unit standard requirements, and the third milestone involved the compilation of the groups' four one-minute segments to produce the final product of a movie.

Below is what was planned for the ICT subject.

Week	Day One	Day Two
1	Introduction to Animation – look at examples of cartoons, comics	Draw cartoons
2	Animate objects and create movement	Sets & backgrounds
3	Research Parables	
4	Stop-Action – make clay	Create model
5	Flipbooks	Create flipbook
6	Assessment Project – Make an animated cartoon about a Parable	
7		
8		
9		
10	Compilation of Movie	Screening

Introduction to animation

Students were introduced to cartoon drawing with a selection of cartoon clips that had been collected and shown to them.

Stop-Action

Students were given a chance to experience different animation techniques by making cartoon figures out of clay.

Students made the clay out of the following recipe:

- 1 cup flour
- ½ cup of salt
- 1tbsp of cream of tartar
- 3tbsp of oil
- 1tsp of food colouring



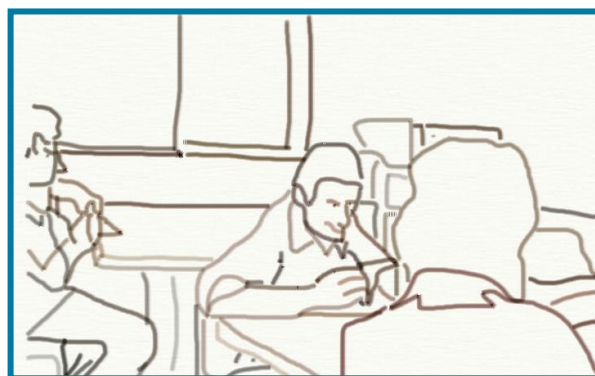
A clay animation figure.

The dough was kneaded into a non-stick ball, and then divided up into portions. Food colouring was tipped onto a stainless steel bench, and the dough portions were kneaded again until the colouring was evenly spread.

Using the clay, students created a clay-model of an object or a current television cartoon character.

Cartoon drawing

Students were shown the stick figure animation found at the following website:
<http://www.stickfigureninja.com/gallery.php?galtype=3&page=1>. Students made stick figures in Microsoft PowerPoint, as the aim was to get the stick figure to kick a soccer ball so that it would bounce.



A cartoon drawing by teacher, Vanessa Pringle.

Animate objects

The bouncing soccer ball stick figure was worked on again to create a soccer match.

Sets and backgrounds

The soccer match was added to by inserting the equipment of a soccer game, such as a goal net and pitch lines. Other objects likely to be seen around a soccer field were also inserted. Along the way, students had to produce a storyboard that depicted the main actions the stick figure made in sequence.

Milestone One: Research Parables (US 18758)

Students were learning about parables in RST. From the fifteen parables studied, students had to pick one to make the movie about. They were given a website to visit, <http://www.faitcentral.net.nz>. To familiarise themselves with the website, students were tasked with finding out the daily cartoon and the saint for the day, and a saint for their birthday. The final task was to find the list of the parables.

Assessment Schedule

You will be marked on the following:

Milestone	Elements	x/✓
Research 18758 Demonstrate navigation skills using a browser (Version 2 – Credits 2)	1. Launch and close a web browser and use browser controls. Evidence of five is required.(1.1, 1.2, 1.3 inclusive)	
	1.4 Webpage content is saved and printed.	
	2.1 Search engines appropriate to the search topic are selected and opened.	
	2.2 Query is formulated and entered.	
	2.3 Hits relevant to the search query are determined and opened. Evidence of at least three hits opened.	
	3.1 Hyperlinks are identified on a webpage.	
	3.2 Hyperlink is opened.	

Research

Section One

Here is a website to start you off – <http://www.faithcentral.net.nz/>.

Tasks

1. You will need to launch the web browser so that you can enter the address for the website. (18758 – PC 1.1, 1.2)
2. In pairs, you are required to fill out the activity task, in which you will be required to explore the website. As your partner looks around the website, tick off the browser controls they use.

Browser Controls	Tick	Browser Controls	Tick	Browser Controls	Tick
Back		Home		Search	
Forward		Refresh		Favourites/bookmarks	
Stop				History	

(18758 – PC 1.3)

Section Two

You will need to look for some information by using the Search Bar and fill out a Research Form to record your findings.

Tasks

1. Open MS Word and create and save a document with the title “Faith Central”.
2. Answer the following questions – type out the questions and answers:
 - a. Using the navigation button “Library” – find out the saint for today and the saint for your birthday. Type out the story for each saint. What is most interesting about the two saints?
 - b. Using the navigation button “Reverend Fun” – find today’s cartoon. Write a paragraph about what the cartoon means.
 - c. Navigate to the Catholic Encyclopedia – use the search bar and search the adverts for information about parables:
 - i. What information does the parable signify?
 - ii. What parables are mentioned on this web page? (18758 – PC1.4)

Section Three

1. Use GOOGLE and search for information about internet research. Find out a way to research that is easy and can find you information that you need. (18758 – PC2.1)
2. Record the keywords you use in the Search Bar (18758 – PC 2.2)
3. Record what web page links you have found that are appropriate. (18758 – PC 2.3)
4. Open the web page link below and skim read to work or to find out what you need to look for when choosing websites to use in assignments. (18758 - PC 3.1)
 - Quality Information Checklist (Quick) - <http://www.quick.org.uk/menu.htm>

5. Open the web page link below and do the quiz on Internet Safety.
- *Yahooligans Savvy Surfing Quiz –*
<http://yahooligans.yahoo.com/parents/kids/quiz.html> (18758 – PC 3.2)

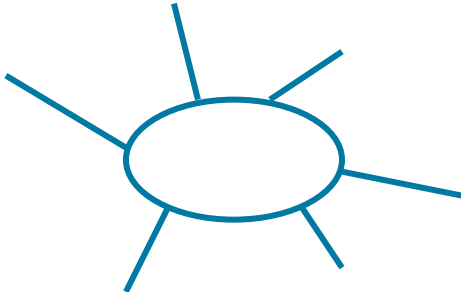
Hand in (evidence)

You will need to submit:

- *The activity task*
- *The Research Form*

Research Form

Brainstorm Keywords



Website Address:

Website Title: _____

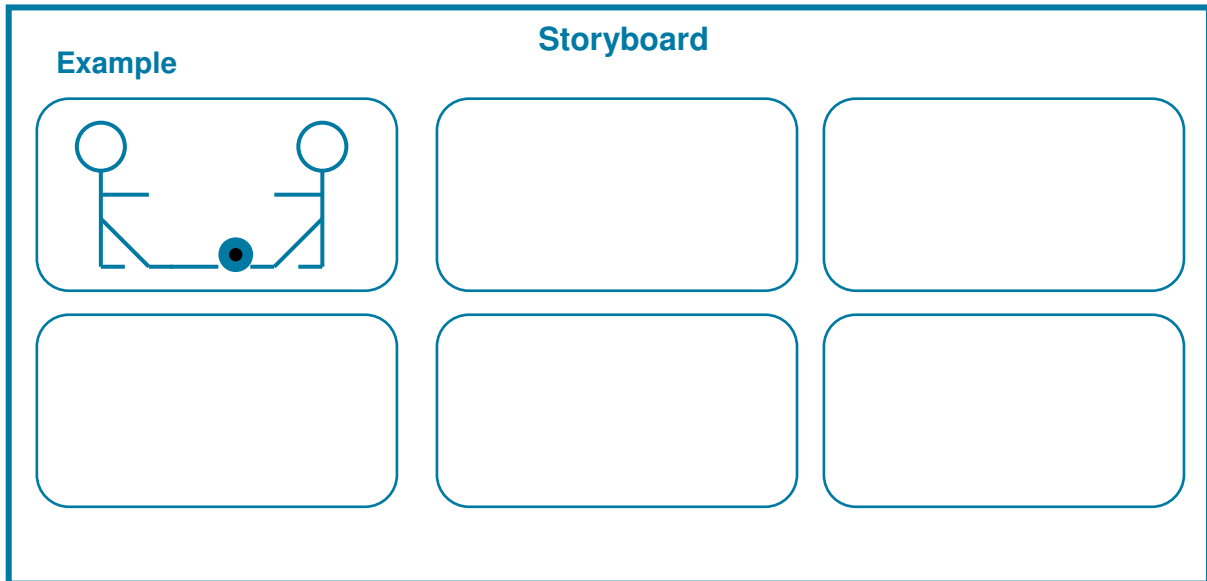
Author: _____

Copyright Date: _____ **Date Accessed:** _____

Type of Source: **Online** **Book** **Magazine** **Video**
(Circle one of the above)

Flipbooks

Students built their own stick figure animation by incorporating at least two figures in an action or event. They had to produce a storyboard for it. See an example of a storyboard below.



By week six RST had covered the 'Parables' module. In the English class, student groups either made their own master storyboards or were given a master storyboard template. The parable was divided up, and each student in the group was responsible for producing a segment of animation for their part of the parable. Each student had to be knowledgeable about what they were producing as they were not in their groups for the ICT class. This was difficult at times for students who were not organised, but leadership skills were displayed by the student who took charge of the project. The laptops were located in the RST classroom so students could make a start on the drawing of the parables.

When students started their ICT assessment in week six, some students chose to start working by themselves. This meant the timing for the individual movies stayed at one minute, and the overall movie length for the group movies was adjusted to the number of students in the group. Students had to pick a parable that was short, and the majority chose "The Good Samaritan", while others chose the "Mustard Seed" or the "Prodigal Son".

Students were not allowed to use the 'Custom Animation' function in Microsoft PowerPoint, instead slides for each action had to be made, duplicated and morphed until a smooth movement was produced. The storyboards reflected the main movements of the animation, but not every movement, so they were able to use their master storyboards.

Milestone Two: Project Assessment (US 2792)

As a team, students created a cartoon movie based on a parable. The movie was to be a minimum of four minutes long, with each team member responsible for one minute of the cartoon. The parable could be set in either modern or biblical times.

Assessment schedule

You will be marked on the following:

Milestone	Elements	x/√
Graphics 2792 Produce computer graphic documents using templates	1.1 The plan identifies the purpose of the documents, their intended audience, and specifications.	
	1.2 Graphics documents are produced from the template to meet the specifications.	
	1.3 The documents are saved to files, using program tools available for the	

(Version 5 – Credits 2)	task.	
	2. Review and print documents in conformity with the plan and the consistent with template's page layout.	

Making the cartoon movie:

In English, you will be covering scripting and storyboard making. In RST you will be researching different parables then you will create a paper version of a storyboard of your parable. Use the storyboard you have developed in RST to make your digital movie from it in ICT.

Project scenario

You are asked to make a cartoon movie for your Parish's Sunday Children's Liturgy, based on a parable you have studied. (This could be a modern version or from the traditional Biblical text).

Task 1

As a team, you will need to create a plan that shows the digital movie as a whole.

The plan is more specific than the storyboard. It will explain:

- What characters are in the frame and what actions the characters are meant to be doing.
- What the background and scenery looks like.
- Who is speaking and what are they speaking about.
- What music is playing and when.

Your team needs to divide the movie into four parts of no less than one minute. These divisions need to be shown on your plan, and the parts for which each team member is responsible. (2792 - PC 1.1)

Task 2

As a team member, you will need to produce at least one minute of the movie, by yourself. You can make your clips using MS Paint, Art Rage or any other drawing package you have available. You will need to attach your drawings to MS PowerPoint to make a presentation movie, or you can import them into Windows Movie Maker. You may use your own hand-drawn cartoons and scan into the computer. (2792 PC 1.2)

Task 3

You will create the individual slides and a movie file which is one minute long. You may include speech and music. You can create your own music, or if you use pre-recorded music then you must include the details in the credits of your movie. (2792 – PC 1.3)

Task 4 - Individual report for progress (diary)

Over the term, you will have the opportunity in the last 15 minutes of class to meet with your team members. During this time, you are to review what you have produced to that point. You will need to print off in black and white - drawings, slides, or clips that you have produced, and have it dated and pasted into your diary. Compare to the storyboard and write comments over the documents to show changes. (2792 PC 2.1, 2.2)

Hand in (evidence)

You will need to submit:

- The created movie file and the individual slides for each of the clips.
- The storyboard and plan indicating your part and the overall movie concept.
- The diary entries including your printouts with the changes specified.

Milestone Three: Compilation of Movie

Once students had made their one minute slideshows, they combined the parts into one big movie in Windows Movie Maker. The software allowed for smooth editing, and students were able to record audio and lay it in the appropriate places in their movie. The students were unable to complete this milestone due to technical difficulties at the start of the term.

Stick it together:

In preparation for the screening, you will need to meet with your team to assemble your movie. You will need to place the four minutes of movie files into one file and smooth out the beginnings and ending of each part so that they flow as one movie.

Hand in (Evidence):

You will produce:

- *Files of the individual milestones including all working documents produced during planning and discussion, plus a diary of production including notes made after discussion with teachers.*
- *A digital movie collated from individual planning work ensuring all your team is noted in the credits.*

Marking procedure:

This milestone will be marked by yourself and your fellow class mates.

Each member of the audience will have an agreed evaluation sheet, where they will rank your movie on a scale of one to five, where five is excellent and one is below standard.

Presentation of movie:

You are to mark the student's presentation by the following criteria.

You are to circle the appropriate mark for each criterion. One does not meet the standard; five meets the standard and is excellent. Three is meets the standard and is achieved.

Marking Criteria	Mark
Overall movie impression	1 2 3 4 5
Drawing quality	1 2 3 4 5
Sound effectiveness	1 2 3 4 5
Storyline	1 2 3 4 5

Problems encountered in the delivery of the project:

There were a few computer network problems that slowed the process, so students spent this time making their clay models instead. In the evaluation, students commented that they were disappointed they were not able to screen their movies because the term ended a week prior to the project's completion.

Timetable restrictions and resources in use at the same time:

This particularly affected RST and will be an issue again in 2006. A way around the problem is the teachers will alternate components of the modules taught during day one or two, so that the students can have access to the resources.

Timing of the process:

The decision to cut milestone three from the programme was necessitated by computer complications and no applicable unit standards attached to the milestone. The dividing up of the project into milestones gave students a series of completion points to work towards. It also gave students not doing ICT a chance at achieving the majority of the milestones. Three levels of completion were offered to the nearest milestone. Subsequently, four out of the five students took advantage of the opportunity and completed the whole project, while others undertook the minimised version. The computer glitch meant that the final milestone was not undertaken.

Quality of drawings:

A co-operative alignment with the Art department is needed to upgrade the quality of the students' drawing skills. Adobe Photoshop will be introduced to the ICT students in term one, so they are better prepared for the intensive graphics work required for term two.

Computer meltdown:

The school server died on day one of term two. As an emergency stop gap, the ITAS server was put to work across the entire school. The server break down affected the project and shortened it by a week, and meant students missed out on combining their slideshows into cohesive movies and screening them in front of their classmates.

Students not co-operating as groups:

Several students chose to do the project on their own. Students who remained in groups tended to work individually, and presented the same part of the story rather than different parts of the story. For example, when students chose the parable "The Good Samaritan", several students in the group chose to create the man being beaten up, but few showed the other parts of the story.

Stories:

Seven students gave up their lunchtimes voluntarily during term two in order to participate in this project. These students were disadvantaged as they hadn't taken ICT as an option. Although they had less time than the other students, they met and produced movies of the same quality or in some cases better than those in the timetabled classes.

An evaluation was completed by staff and students about the project. Students commented how much they loved the ability to make movies on the laptops, as the laptops were the only computers in the school that had sound and music facilities. They also said they would like all their classes to be run similarly to the English/ICT/RST class. The students said they preferred working on the laptops. The students were motivated and maintained that motivation into the next semester.

Students' comments:

- "I didn't muck around on the Internet – I mean I got my books out and did work – no joke."
- "It was alright/ we learnt good skills."
- "We disliked it cause we done the same thing over and over."
- "The PC's kept losing our files."
- "We would feel better if we saw the end product."

One of the RST teachers commented that the student's interest was maintained throughout the unit. The classes had been more enjoyable because the students had learnt to work together co-operatively.

Staff comments:

A debrief was held and the following comments were made:

- RST: “All on task. Students were motivated, some of the assessment needs to be re-worded”
- ENG: “Need to go over the terminology and identify features.”
- ICT: “No one gave up, the end point was not clear.”

The merits of working in teams or as individuals were discussed. Some students prefer to work individually, which is fine as long as they make the decision to work on their own early on. Students will still be required to work in teams in other activities. However, it was identified that there needs to be a more supportive approach towards students working in teams, and that ICT staff should be doing some team building activities to encourage togetherness.

Benefits over Previous Assessment Approaches:

A benefit for the staff involved was that other departments could see the success of the project. Both the English and RST departments remarked on the ease with which the project was set up, and other departments expressed a desire to be involved in future projects. Inter-departmental cooperation will also assist the school in meeting its annual goal that ‘every student is to have at least two assessment or assignment opportunities using ICT’. The goal will now be more achievable as departments will teach to their subject strengths.

The project also provided students with the opportunity to achieve Unit Standards. Two unit standards were offered – *18758 Demonstrate navigation skills using a browser*, and *2792 Produce computer graphic documents using templates*. Every student gained either both or one of the unit standards.

Future plans or intentions for the project:

For 2006:

- Adobe Photoshop will be introduced in term one for Year 10 students, with the aim of increasing the quality of their artwork. By using Photoshop, students will be more familiar with the programme in time for the senior option of Print Design.
- To raise students’ artistic abilities and gain more expertise there will be greater cooperation with the Art department. The school has some very able artists, and nurturing their skills will increase the quality of their work.
- Cooperation with the English department will be strengthened. From the camera shots to scripts, there is a strong English base to this activity. Media studies has recently been introduced as an option to senior students, and with the ICT department having an AV Conferencing suite with School Zone, teaching students to use the equipment could be integrated with this co-op connection.
- Students to be encouraged through storyboarding work to present their chosen parables more cooperatively.
- Smaller student groups may be introduced, which may lead to better co-operation.

Overall Evaluation of the Project:

The project was driven by one of our Year One PRTs. The alignment of the timetable meant the project could not work as an integrated unit. By using the laptops to support the students, all the Year 10s had access to the computers. The cooperative nature of the unit allowed each programme to be taught concurrently, and to reach their own objectives without a detrimental effect to the other departments

Having teachers from RST, English, and ICT working cooperatively on the same topic, meant students had teacher expertise in each subject, with ICT used to string all the learning together. The students also learned that subjects are not taught in isolation, and skills and knowledge learnt in one subject can be transferred to another.