

# Bill's Day Out

An inquiry learning programme for Year 6-9 students based around the use of public and active transport modes.









# Aim: Team building/Problem Solving

# **Key Competencies:**

**Thinking:** The students will use both creative and critical thinking processes to make sense of information, experiences, and ideas. They will apply these processes to develop a travel plan that meets the desired outcomes.

**Using language, symbols and text:** Students will work with and make meaning of the maps, timetables, brochures and online resources to help them develop their travel plan/itinerary. They will engage with written and visual forms of texts that will include new symbols and terms in both a paper and online format.

They will present their travel plan in a way that confidently use ICT to provide information and to communicate with others

Relating to others: Students are tasked with interacting effectively in pairs and may need to gather further information from a range of people. This competency includes the ability to listen actively, recognise different points of view, negotiate, and share ideas. By working effectively together, the students should develop an interesting travel itinerary that can be used by others.

# Achievement Objectives: Level Three /Four

# Health and Physical Education:

Level 3: A3 Safety management

• Identify risks and their causes and describe safe practices to manage these.

Level 4: A3 Safety management

 Access and use information to make and action safe choices in a range of contexts

#### Mathematics and Statistics:

In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

#### Geometry & Measurement

- Level 3: Position and orientation Use a co-ordinate system or the language of direction and distance to specify locations and describe paths.
- Level 4: Interpret and use scales, timetables, and charts.

# English level 3 & 4: Listening, Reading, and Viewing

#### Processes and strategies

#### Students will:

 Integrate sources of information, processes, and strategies with developing confidence to identify, form, and express ideas.

# **Learning Intention:**

Work together in a team to solve a problem and design a journey.

# **Special Features:**

This activity needs to be completed using both the internet and paper mapping tools. It should take a minimum of two class lessons plus homework - a maximum of 5 class lessons.

#### **Resources:**

- Access to the Metro online planning tool: www.metroinfo.co.nz or a selection of paper bus timetables alongside the overall network map: www.metroinfo.co.nz/map
- Yellow and/or White pages for address of venues
- Some Christchurch tourism pamphlets







#### Assessment /What would success look like:

The paired students should be working together towards the common goal of successfully planning a journey using both public transport and active transport modes that provides their 'visitors' with an interesting day out. At the next level of success the children would demonstrate how well they worked as a team and reflected upon their methods of data gathering, processing and planning the journey, looking for what they did well and where they could improve. Ultimate success would be the children actually undertaking their journey and reflecting on how well their plan worked in terms of time and efficiency.

# Organisation/Management:

The children need to have access to internet capable computers as well as to a map of Christchurch onto which they can plot the places they would like to visit and the methods of travel to those destinations.

A collection of maps and paper Metro timetables are essential.

#### Activity

# Prior knowledge/experiences:

Discussion & establishing skill level: Have the children in your class travelled by bus before? What are their experiences of using a Metro timetable & map? What places in Christchurch would they like to visit – why, what is of interest in these places?

# Set the scene with the class:

- Introduce the idea of visiting exchange students and discuss what it could be like for them to come to your school and be hosted by the class.
- Ask the students to imagine being an exchange student in a strange city. Discuss how they would like to be treated, what things they would like to see/visit/ experience in the new place.
- As a host, what experiences would they like their visitors to have while in Christchurch? What sights/sites would they show them and why?
- Explain that in the scenario for this assignment, each
  of them will billet at least two exchange students. They
  are to show them around Christchurch BUT that their
  parents/caregivers will not be available to run them
  round so they will have to use public transport as well
  as walking or cycling between some venues and bus
  stops.
- The creation of the journey is to be undertaken with one other student. Together they may have four visiting exchange students to show around the city between the hours of 9am & 6pm when they will need to be back at one of their homes for a combined family BBQ.

#### Comments

As the BES research shows, for learning to be most effective, student's prior experience and knowledge is incorporated into the initial stages of any programme. Other points made in the BES that we should be cognisant of include:

- Relevance is made transparent to students.
- Ways of taking meaning from text, discourse, numbers or experience are made explicit.
- New information is linked to student experiences.







#### Instructions

Provide the student teams with the instruction sheet for 'Bill's Day Out'.

Plan and acquire information

Outline the importance of planning the day out beforehand so that the guests can be provided with an itinerary. The instruction sheets offers steps to help them through the various stages but it is important that their planning is SMART – simple, manageable, accessible/affordable, realistic, timely.

- 1. Places to visit: here it is important the students recognise the need to be realistic as to what they could do in a day using public transport combined with walking and/or cycling. Four activities or venues may well be enough and they need to justify, in their itinerary note why these places are interesting to visit.
- 2. Risks: Take the opportunity to discuss possible risks that they may face during the day out. What could those risks be and how might they avoid or overcome them safely i.e. carry a small first aid kit, know road rules etc? [Health].
- 3. Location and mapping: Once the students have worked out where they would like to go they plot them on a city wide bus network map or on Google map http://www.google.co.nz They then consider if it is possible to visit each of these places in a day given the time it may take to move between them & how long they may be at each venue. This is where guidance may prove useful and where they may decide to visit different places in order to manage the timing. To reduce the number of bus changes they may need to make they may like to consider the efficacy of using high frequency routes like the Orbiter or Blue Line. The places they could visit using these routes need to be considered should they prefer not to do too much walking or cycling between places.
- 4. Timing and costs: As the teams work out which buses they would need to catch and whether they also need to cycle or walk they need to be cognisant of the timing in order to be back at base in time for the family BBQ. They will also need to work out how much it will cost to use the buses (www.metroinfo.co.nz/info/Pages/Fares.aspx) and whether entrance fees need to be factored into their budget. Mapping, number knowledge and measurement skills will be further developed here. [Measurement processes].

# **Achievement Objectives: continued**

# **Key Competencies**

Students will learn problem solving skills while sharpening critical thinking skills. They will be learning to follow step by step instructions and working within a paired or group environment; a much needed skill as they continue their educational path and one day join the work force!









#### Present:

The presentation style of the itinerary is in the hands of each team. A chart is provided as an idea of what may be included in an itinerary but the linear format should not restrict their imagination. The itinerary just needs to be easy to read and understand and could include pictures or be an app for a smart phone! [Communication medium – English]

# Reflect and Evaluate [Metacognition]:

Once the students have completed the planning task take the time to review what they have done. The following questions are provided as a guide and can be done individually or as a whole class activity.

- a. Describe the things you enjoyed about undertaking this journey planning
- b. Outline what aspects you may have struggled with or found difficult to do.
- c. If you were to do this project again, what things would you do differently, and how or in what ways?
- d. What advice would you give to the Metro team that may help them improve either their online planning tool or particular bus routes?

#### Share

Feel free to share your students' journey plans/ itineraries with us via email [education@ecan.govt.nz], through your school's website or class wiki, or on our Facebook site Environment Canterbury Education for Sustainability

# The importance of reflection:

In order to reinforce learning, regular reflection cycles are useful. Reflection sessions not only provide an opportunity for the students to share what they have understood so far but also enable the teacher to ascertain whether appropriate learning is occurring. The art of a useful reflection session is in the questions posed. This site on asking Socratic Questions has some useful starter questions www.tbc.school.nz/elearning/localsites/i-learnt.com/Thinking\_Socratic\_Questioning.html



# Risk Management: People, Environment, Equipment.

The risk involved in this main activity is low but should a teacher decide that the children will actually undertake their journey then many more risks will be involved. Parental involvement and engagement would be essential here as well as a high level of trust in the children. Environment Canterbury can offer the use of Metro Cards should a real journey be feasible; each school would need to determine their own RAMs for themselves.

Time	Mode of transport i.e. bike or bus no. & time	Where	Itinerary/Activity
e.g. 9.02am	Bus #140	Outside school gates on Major Hornbrook Rd, Mt Pleasant	Bus to the central Bus Interchange to walk to the Bridge of Remembrance





# Student instruction sheet

# **Bill's Day Out**





# Plan a journey for visiting exchange students

You have a group of exchange students coming to visit your school. You have offered to billet at least two and to show them around Christchurch BUT your parents/caregivers are not available to run you round in the car so you have to show them around using public transport and walking or cycling between some venues and bus stops.

You will work with one other student to create the journey. Together you may have four visiting exchange students to show around the city between the hours of 9am & 6pm when you will need to be home for a combined family BBQ.

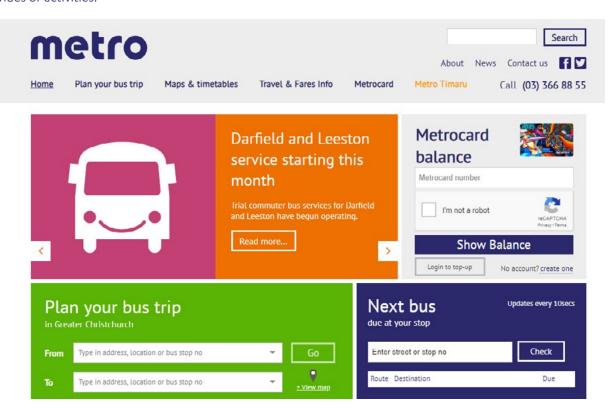
# Plan and acquire information

Before they arrive you and your partner will need to plan the day out and provide them with an itinerary. Use these steps to help you work out how you will get between venues and activities.

1. Decide which places you'd like to take them to or show them. Don't get carried away as you only have a day so you don't want to tire them out completely – 4 activities or venues may well be enough. Write a brief note explaining to your visitors why these places are interesting to visit.

# Geometry and Measurement

- 2. Think about where each of these places are in relation to each other
  - plot them on a city wide bus network map or on Google map www.google.co.nz
  - Consider if it is possible to visit each of these places in a day given the time it may take to move between them & how long you may like to stay at each venue. If it looks like it may be problematic, you may decide to change one or two venues or activities.







- 3. Now work out which bus you would need to catch either on your street or within walking/cycling distance from home to take you to your first venue/activity. Once you have that figured you work from there with timing and other forms of transport you may take. Note: The most useful buses for getting to key places may be the high frequency routes like The Orbiter or Blue Line.
- 4. Budget: work out how much the journey will cost you all. The Metro website has information about ticket prices and most venues like museum or pools will have information about entrance fees etc.

# Health and Physical Education English: Process and Strategies

5. Safety: Your visitors need to be kept safe. Think about where things could get tricky on your journey. Identify possible risks and provide suggestions as to how these may be avoided or managed.

#### **Presentation**

Prepare an itinerary and information sheet for your guests. The chart on the next page gives you an idea of what you may include in your itinerary but PLEASE don't be restricted by the linear format. You can present your itinerary in any way you like but it does need to be easy to read/understand for you and your exchange students. You could include pictures or it could be an app for your smart phone!

#### **Reflect and Evaluate**

Now that you have completed the planning task, review what you have done using these questions as a guide.

- Describe the things you enjoyed about undertaking this journey planning
- Outline what aspects you may have struggled with or found difficult to do.
- If you were to do this project again, what things would you do differently, and how or in what ways?
- What advice would you give to the Metro team that may help them improve either their online planning tool or particular bus routes so that it would be easier to get to places of interest?

#### Share

If you're really happy with your journey plan and itinerary then please do share it either through your school's website, class wiki or on our Facebook site – search for: Environment Canterbury Education for Sustainability

Time	Mode of transport i.e. bike or bus no. & time	Where	Itinerary/Activity
e.g. 9.02am	Bus #140	Outside school gates on Major Hornbrook Rd, Mt Pleasant	Bus to the central Bus Interchange to walk to the Bridge of Remembrance





