LEARNING AREA: VISUAL ARTS

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Aim: Create a collective piece of art (e.g. a mural) which conveys the sensory experience students have when they walk to school and around their school community.

New Zealand Curriculum Level 1-2

Lesson Overview

As a class, go for a walk on streets around your school and take note of different things which can be seen, heard, touched, tasted and smelled. Some students could carry magnifying glasses, and others could take cameras/i-pads/tablets to take photos or videos. Teacher to stop at different points along the way and prompt students with questions such as "what can you feel on your skin?", "what can you hear?", "what colours can you see?"etc. Have students close their eyes to focus in on other senses.

The teacher could make notes in a note pad, to then turn into a brainstorm on a whiteboard or on larger paper with the class back at school.

Take student observations and create either a large collective piece of art, or a series of individual pieces, to convey what students experience on their way to school when they walk.

Put a photo or drawing of the student (or class) in the middle of the piece, and use mixed media to convey different experiences around them.

There is plenty of flexibility with how this plan is carried out; adapt it to meet the needs of your class and resources available to you.

Specific Achievement Objective Indicators (Visual Arts)

Developing Practical Knowledge

- Explore a variety of materials and tools and discover elements and selected principles.

Developing Ideas

- Investigate visual ideas in response to a variety of motivations, observation, and imagination.

Communicating and Interpreting

- Share the ideas, feelings and stories communicated by their own and others' objects and images.

Contextual Te Reo

- Toi = art
- Pūrekereke = gust of wind
- Kōkō = wind
- Rā = sun
- Pūāhuru = warm/hot (weather)
- Makariri = cold
- Kakano = colour
- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run

Māori Dictionary

Key Competencies

- **Thinking:** Thinking in a creative and abstract way to construct a visual art piece.
- **Using language, symbols and text:** Visually conveying ideas and feelings through art.

Opportunities for cross-curricular links

- **Literacy (poetry)**:Create a visual poem to enhance artistic art. This could be done as an overlap to the art or next to the art. Could lead to a class art/poetry book being created.
- **Health (healthy communities and environments)**: Discuss links with how our behaviour choices influence the health and wellbeing of a community**.**

Adaptations for different year levels

- **Level 3:** Create a collective map of students journeys to school. Place (or create) an image of the kura with the students in the middle, paint or draw the surrounding streets and use symbols to convey different things felt along the way.
- **Level 4:** Connect with other pieces of art (famous or otherwise), and communicate what it makes them feel and what they see to be messages embedded in the art. Students at this level should be deliberately having a purpose or message behind their creation (e.g. being active, living sustainably, connecting with the world. They should also be explaining what messages, feelings and emotions are being conveyed through their creation.

Other ideas for this lesson

- Can incorporate teaching of hot and cold colours, mixing of primary colours, texture, shape and tone.
- Class could collect items on their walk (such as leaves, litter, sand) to create a collage with.
- Incorporate word art into the art piece – print off typed words which express what students are noticing (e.g. smells like mowed lawns, I hear train bells dinging, I see birds in the tree, I hear leaves crunching under my shoes). This could also be linked in with literacy-poetry work.

LEARNING AREA: SCIENCE

(Planet Earth & Beyond, and Nature of Science)

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Aim: Students think about who creates carbon emissions and how we can change this.

New Zealand Curriculum Level 2-3

Lesson Overview

Students learn about what a "carbon footprint" is, how carbon is emitted into the environment, the effect of this and identify areas of their life that they have control over to minimise their carbon footprint.

Use videos, Connected and School Journals, websites and newspaper articles, to learn about carbon emissions through human behaviour and the effect this has on the environment. Allow students to explore what makes it tempting to choose these behaviours but scaffold them toward understanding the negative consequences this has on the land and for future generations.

For ideas and inspiration, visit:

- Education for Sustainability: http://nzcurriculum.tki.org.nz/Curriculum-resources/Education-for-sustainability/About-EfS
- Science Learning Hub: http://sciencelearn.org.nz/

Discuss what generates carbon dioxide and how it affects our climate. Students to brainstorm emission-generating activities (eg. transport, agriculture, manufacturing and industry). Is it something we can influence, or is it due to other people? Students then draw around their foot on a piece of paper. Colour in each toe depending on how they get to school on each weekday (one toe = one day). Red for car, orange for public transport or car-sharing, green for walking, cycling or scooting. If they travel by car part of the way and then walk, that can be orange.

Inside the foot students write things within their control that could help lower their carbon emissions. Outside the foot they can write things they don't feel they can control or influence, or which are other people's responsibility.

Repeat the exercise in a few weeks. Have any of the children turned red to orange or green, or orange to green?

Specific Achievement Objective Indicators

Nature of Science (Participating and Contributing)

- Use growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

Planet Earth and Beyond (Earth Systems)

- Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.

Contextual Te Reo

- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run
- Pūtaiao = science
- Paitini = to pollute
- Kaitiakitanga = guardianship
- Whenua = Land
- Papatūānuku = Earth Mother

Māori Dictionary

Māori Science Dictionary (page translatable)

Science Capabilities for Citizenship

- Gather and Interpret Data
- Interpret Representations
- Engage with Science

http://scienceonline.tki.org.nz/Science-capabilities-for-citizenship

Key Competencies

- **Thinking:** students are required to think critically and to challenge assumptions
- **Participating and Contributing:** students learn about a particular way in which they can actively contribute to the wellness of their local, national and global community

Adaptations for different year levels

- **Levels 1-2:** rank the "environmental friendliness" of different ways of getting to school.
- **Level 4:** Explore environmental impacts of travel beyond simply the mode. E.g. manufacturing methods of cars, bikes, shoes, scooters; what are green cars? Using a carbon emission calculator, students can also calculate their carbon footprint and track this over a period of time.

Opportunities for cross-curricular links

- **Social Studies** – What can governments, local councils and businesses do to minimise their carbon footprint through transport? What can we do to support them to do this?
- **Visual Arts** – students use deliberate art-making conventions to communicate a specific message through their carbon footprints.
- **English (oral language)** – students to apply their science knowledge and create a speech or spoken word poem with the purpose of convincing their audience of the immediate importance of climate change, how daily travel impacts on this, and/or to pursuade behaviour change.

Possible applications or extensions of this activity

- Explore barriers to adopting sustainable transport practices, and importantly, strategies for overcoming these barriers.

LEARNING AREA: HEALTH AND PHYSICAL EDUCATION

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Aim: Students increase physical activity levels and meet a fitness goal

New Zealand Curriculum Level 3

Lesson Overview

Movin'March is a wonderful opportunity to incorporate physical activity and health messages into school life and across the curriculum.

Health and PE lessons could focus on the health benefits of replacing a sedentary car trip to school, with an active alternative.

Teaching points:

- Physical activity can be enjoyable and varied
- Physical activity helps our bodies grow and be healthy
- Physical activity helps us focus and learn during class time

Children require at least 60 minutes per day of moderate to vigorous physical activity to help bodies and minds develop and be healthy. Students could keep a physical activity diary whereby they keep a record of how much time they spend being active every day. This task can be modified by the teacher to suit the year levels and levels of self-management of the students.

Children then think-pair-share to brainstorm ways that they could easily bring in more physical activity into their everyday lives. Teacher to scaffold them towards the topics of active transport, and replacing sedentary activities with active ones.

Students measure their current fitness level (e.g. beep test, number of field laps in 10 minutes, number of star jumps in one minute, number of skipping rope jumps in 1 minute)

Students set a fitness goal based on their initial testing (e.g. I will run 4 laps of the field in 10 minutes, I will complete 5 more star jumps in 1 minute).

Use the WOW (Walk or Wheel) Passport and prizes (from the Movin'March goodie pack) to promote active travel to school.

Specific Achievement Objective Indicators

Regular Physical Activity

- Students will maintain regular participation in enjoyable physical activities in a range of environments and describe how these assist in the promotion of well-being.

Personal growth and development

- Students will identify factors that will affect personal, physical, social, and emotional growth and develop skills to manage changes.

Contextual Te Reo

- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run
- Whakapakari tinana = physical fitness
- Hauora = health / wellbeing
- Kori tinana = physical workout

Māori Dictionary

Key Competencies

- **Managing self:** Students motivate themselves to push their physical activity limits; they adopt a "can-do attitude" when setting personal and realistic fitness goals.

Adaptations for different year levels

There is a lot of scope to adapt these ideas for different levels.

- **Levels 1-2:** Focus on how the body feels before and after exercise. Physical activity messages should focus on the enjoyment of exercise and being active, as opposed to the fitness goal messages. Emphasise how fun it is to make an active journey to school. Go for a class walk around the community and do some exercises in a local park (or similar area)
- **Level 4:** Students incorporate health measurements (such as heart rate and strength measurements) into their fitness tracking. Students also inquire into how to promote and support physical activity across the school.

Opportunities for cross-curricular links

- **Numeracy** – the opportunity exists for students to keep track of their physical activity in a variety of ways. For example, students could add up the total distances they walk (for example) each day over a given period (e.g. two weeks).
- **Numeracy** – students could also keep record of their progress towards meeting a fitness goal which requires regular measurements. This can then be communicated on a line graph. Alternatively, the class could be grouped categorically on a different type of graph.
- **Human Biology** – explore how the body responds to vigorous physical activity. How is the heart rate measured, and why does this go up and down at different points of exercise? Why is it important that we warm up and stretch our bodies before and after exercise? Why do we find ourselves huffing and puffing during hard exercise?

Other ideas for this lesson

- Explore barriers to adopting active transport habits (e.g. live too far away, not enough time in the morning, parents drop off on the way to work, no one to walk/bike/scoot with, roads too busy)
- Discuss solutions to the above barriers (e.g. find a drop off point near school , get up earlier, walk/bike/scoot with a friend, join a walking school bus (older students can help run this), discuss safer routes to school with teacher/principal/student council)
- Steadily increase active travel to school throughout Movin'March and get WOW Passport stamped
- Organise Pedal Ready cycle skills sessions at school to learn how to ride bikes safely and confidently (www.pedalready.org.nz)

LEARNING AREA: LITERACY (Poetry Writing)

Lesson Aim: Drawing on the sensory experience of getting to school, students write a simple poem using interesting adjectives and adverbs.

New Zealand Curriculum Level 2

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Overview

Drawing on the five human senses, students create poems to describe their journey to school. Students will learn about nouns, adjectives, verbs and adverbs (or simply describing and doing words), and simple ways of writing a descriptive sentence – for example "I hear the train barriers ringing"; "The birds sing loudly"; "The road works smell like dirt".

The complexity of the poem can be individualised for student ability. Examples include: one line for each sense, and sequenced descriptions of different events and things.

Teachers of younger classes may wish to organise a class walk around the block before starting this to model what senses and vocabulary can be used. Take some magnifying glasses – tamariki will be delighted with what they can find!

Students should be given the opportunity to supplement their poems with drawing and art to help them visualise their ideas.

Specific Achievement Objective Indicators

Ideas

- Forms and expresses ideas and information with reasonable clarity, often drawing on personal experience and knowledge.
- Begins to add or delete details and comments, showing some selectivity in the process.

Language Features

- Uses a large and interesting bank of high-frequency, topic-specifc, and personal-content words to create meaning.
- Writes legibly with increasing fluency when creating texts.
- Gains increasing control of text conventions, including some grammatical conventions.

Contextual Te Reo

- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run
- Whenua = Land
- Taiao = Natural world, environment
- Moni = money
- Whakapakari Tinana = Physical exercise
- Tapuwae waro = carbon footprint
- Hauora – health, wellness
- Tairongo = Sense
- Rongo kakara = Smell
- Rongo whaka pā = Touch
- Rongo Tāwara = Taste
- Whakarongo = Listen
- Titiro = Look

Māori Dictionary

Specific Achievement Objective Indicators (Continued)

Structure

- Organises and sequences ideas and information with some confidence.
- Begins to use a variety of sentence structures, beginnings and lengths.

Key Competencies

- **Thinking:** Making the connections between language and the world.
- **Using language, symbols and text:** Using language and visual art to convey abstract ideas.

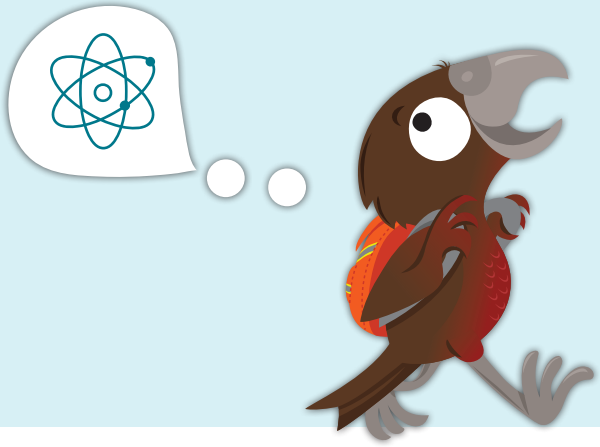
Opportunities for cross-curricular links

- **Visual Art:** Publish poem as a poster with images representing their experiences.

Adaptations for different year levels

- **Level 1:** Introduce features of poetry such as rhyming words.
- **Levels 3-4:** Students can explore more advanced forms of poetic writing, and write with deliberate stanza. Publish poem in interesting visual ways (for example, writing the words in a particular shape or pattern that matches the theme of the poem).

LEARNING AREA: SCIENCE (PHYSICAL WORLD)



greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Aim: To understand how gears on a bicycle work

New Zealand Curriculum Level 3

Lesson Overview

The gears of a bike make pedalling more efficient, and allow the cyclist to travel faster and handle steep grades and other obstacles with ease.

In this lesson, students should be encouraged and supported to make predictions and justifications, test predictions, record findings in an appropriate way, communicate findings using scientific vocabulary, and justify potential reasons.

1. Shift the gears so that the chain is on the smallest cog in the front, and on the largest cog in the back. If you have numbers on your gear changers (on the handlebars), this will be the lowest number.
2. Mark the top of the back tyre with chalk or piece of masking tape.
3. Note the position of the pedals. Have someone hold the bike upright as you turn the pedals forward in one full revolution, so that the pedals return to their original position. Make sure you have a friend or teacher stop the back tyre spinning freely with their hand when the pedal returns to its original position.
4. How many times did the tyre revolve? Write down the number of revolutions.
5. Now try the largest gear in the front combined with the smallest gear in the back. This is the highest number on your gear changers. How many times does the back wheel revolve for one turn of the pedals?
    - Which of these combinations would be better for climbing a hill?
    - Which would be better for a sprint on a flat road? (You can test your guesses later by riding the bike!)
    - Experiment with the intermediate gear ranges.
    - Make a chart of the number of rear wheel revolutions each combination of gears produces for one pedal revolution.
    - Why do you think bikes have evolved to have more and more gears?
    - Put on your helmet and hop on your bike. Experiment with what different combinations of gears feel like and describe the difference.

When you change gears:

- Always make sure you are pedalling
- Make sure you pedal a couple of times in between each gear change. In other words, don't go from your lowest gear to your highest gear in one change.

NB. Children do not need to be able to ride a bike to be able to participate in this lesson. If you would like to arrange for an instructor to teach your students to ride, contact Pedal Ready: www.pedalready.org.nz

Specific Achievement Objective Indicators

Physical World

- Explore, describe and represent patterns and trends for everyday examples of physical phenomena such as movement, forces, electricity and magnetism, light, sound, waves and heat.

Key Competencies

- **Thinking:** students need to make predictions and hypothesis, attempt justifications, and challenge and question findings
- **Using language, symbols and text:** record and communicate findings in a scientifically appropriate way

Science Capabilities for Citizenship

- Gathering and interpreting data
- Use evidence
- Interpret representations

http://scienceonline.tki.org.nz/Science-capabilities-for-citizenship

Possible applications or extensions of this activity

- Explore bike mechanics, how to care for and maintain the function of a bike.
- Create a prototype for gear function, or design an alternative (technology).
- Organise an out of school cycling excursion which require students to use gears.

Contextual Te Reo

- Haere = Journey, trip, travel
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Pūtaiao = science
- Mātai ahupūngao = physics
- Whakamātau = experiment
- Hurahura = to research / Kairangahau = researcher
- Kauwhata = graph

Māori Dictionary

Opportunities for cross-curricular links

- **Statistics** – Data collection methods; communicating findings by selecting appropriate graphs and making ascertations
- **Health and Physical Activity (movement concepts and motor skills)** – Explore what muscles are used to ride a bike and how different selected gears effect the body.

Adaptations for different year levels

Level 2:

- Keep gear content knowledge simple; focus on "high gears" being "hard gears" and "low gears", being "easy gears".
- Focus on how to use and change gears and the basics of why, in relation to care for the bike.
- Potential to go more in depth with braking function; follow cables between brake levers and see how they work.

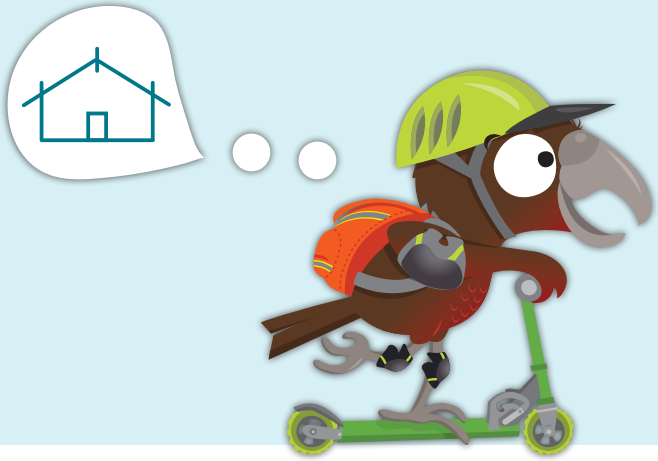
Level 3-4:

- Compare how gears on different types of bikes work (e.g. road versus mountain bikes) – what are the similarities and differences.
- Explore how an internal hub works.
- Explore how to care for gears and why certain actions are important – e.g. how is rust caused and prevented? How would a rusty chain impact the function of the bike?

LEARNING AREA: SOCIAL STUDIES AND HEALTH

Lesson Aim: Students learn how transport behaviours can be understood through a Māori worldview

New Zealand Curriculum Level 4



greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Overview

In this lesson sequence, students learn about the four dimensions of hauora (Te Whare Tapa Wha) and how this relates to active transport, active citizenship and kaitiakitanga. The lesson sequence should be adapted and extended to meet the needs and background knowledge of the class.

Lesson 1: Explore the 4 dimensions of the Te Whare Tapa Wha health model, and how all four dimesnions are dependent on each other for overall hauora.

More information about this model of health can be found here: https://www.r2r.org.nz/maori-health/whare-tapa-wha.html

Lesson 2: Explore what kaitiakitanga means and how transport related behaviours can impact on the mauri of Papatūānuku and Ranginui (for better and for worse). Key teaching points relating to Atua i te Taiao (elements in the environment):

- Air is viewed as a taonga derived from Ranginui (the sky father). Māori legend tells that following the separation of Ranginui and Papatuanuku (the earth mother) their child Tawhirimatea fled with Ranginui to his new home in the sky. From there Tawhirimatea controls the wind and elements.
- Carbon emissions degrade and lessens the mauri or life-force of this taonga. It also affects the mauri of other taonga, for example plants and animals, as all living things need air and all things share the same air.
- It's important to Māori to exercise kaitiakitanga to protect and maintain the mauri of taonga.

Lesson 3: How can we be kaitaki and active citizens to protect the mauri of our community and whenua (land)? Students to research and describe how replacing sedentary and polluting forms of everyday transport, with active and sustainable modes supports this. If possible, arranging for someone from your local iwi, or a whānau member with relevant knowledge to come and share what they know about this would be very appropriate at this point.

Lesson 4: Linking back to the first lesson, how can active and sustainable transport choices support the four dimensions of hauora for ourselves and for our community? Potential for this activity to be organised as a group jig-saw, whole class, or individual activity.

See example on last page.

Contextual Te Reo

Māori Dictionary

- Haere = Journey, trip, travel
- Hauora = health / wellbeing
- Whakapakari tinana = physical fitness
- Kori tinana = physical workout
- Kaitiakitanga = guardianship
- Taha Tinana = Physical Health
- Taha Wairoa = Spiritual Health
- Taha Whānau = Social Health
- Taha Hinengaro = Mental and Emotional Health
- Mauri = Life force
- Papatuanuku = Earth Mother
- Ranginui = Sky father

Specific Achievement Objective Indicators

Social Studies

- Understand how people participate individually and collectively in response to community challenges.
- Understand how people pass on and sustain culture and heritage for different reasons and that this has consequences for people.

Health

- Investigate and/or access a range of community resources that support wellbeing and evaluate the contribution made by each to the wellbeing of community members.
- Specify individual responsibilities and take collective action for the

Key Competencies

- **Relating to Others:** Seeing an issue from another perspective; making choices to benefit a collective.
- **Participating and Contributing:** Actively making a behaviour change to benefit the health of a community.

Adaptations for different year levels

- **Levels 1-3:** These levels should still focus on the Te Whare Tapa Wha model of health, however will require this to be simplified. These year levels could also focus on how ways of getting to school have changed over time and speculate about why these changes may have occured. Use lots of visual cues to stimulate imagination.
- Lower year levels can also learn or re-vist the Māori creation story through different learning areas (e.g. literacy, drama, visual art).

Opportunities for cross-curricular links

- **Drama:** Using role play, students explore different perspectives and positions of stakeholders who are effected by sustainable and active transport in Aotearoa (e.g. member of local iwi versus Government agency who want to expand roading) – be inventive (but realistic) with scenarios!
- **Science:** How do fossil fuels and carbon emissions impact on the mauri of the whenua? What impact does this pollution have on other areas of Māori importance, e.g. waterways, soil nutrients, supply of kai.
- **Visual Arts:** Using artistic conventions, convey understanding of Te Whare Tapa Wha and how it relates to transport.
- **Poetic Writing:** Students communicate how they feel about un/sustainable and in/active forms of transport through a Māori perspective.

Other ideas for this lesson

- How does the Māori worldview integrate with a scientific worldview?
- Create a pouwhenua (landpost) for the school which communicates relevant learning which can be applied for future behaviour change. Pouwhenua acknowledge the association between the people and the land. Specifically, they reflect the relationship between the ancestors, environment, and the reputation or standing of the tangata whenua.

How can Te Whare Tapa Wha be applied to behaviour choices?

Taha Tinana / Physical Health

Wellbeing of tamariki is ensured through learning about and promoting transport modes which look after their physical safety, and provide them with exercise.

Taha Whānau / Social Health

The input and support of families within the school community is included and encouraged. This ensures that a community is working together for the collective goal of keeping children safe and sharing transport options.

Taha Hinengaro / Mental and Emotional Health

We think deeply about the impacts of our daily actions, and ways to challenge and improve the way we are travelling.

Taha Wairoa / Spiritual Health

We want to ensure that the mauri (life force) of Papatuanuku and Ranginui is healthy. We will therefore reflectively make good choices to enhance the feeling of the community.

LEARNING AREA: NUMERACY (STATISTICS)

Lesson Aim: To research school transport behaviour

New Zealand Curriculum Level 3

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Overview

Students discover how active and sustainable their classmates travel behaviours are via carrying out a statistical enquiry project. This project can be as condensed or extensive as needed to meet your timetable and student needs.

1. Students first identify a problem and turn this into a research question (for example, are students in Room 6 getting to school in an active way?)
2. Then, students make a plan to answer their question. What will they measure and how? Who will they collect the data from? How will they collect their data (e.g. interviews), and how will they record it (e.g. tally chart)? At this point students can also form a hypothesis (prediction) about what they think they will find.
3. After the collection and organisation of their data, students present it on a graph which meets their learning needs (e.g. strip graph, bar graph, pictogram, dot plot, pie graph). At this point, students can also practice identifying patterns in their data.
4. Finally students conclude their project by making interpretation statements about what information their data shows, and doesn't show.

More information about the statistical enquiry cycle can be found on the NZMaths and Census at School websites.

Specific Achievement Objective Indicators (Statistics)

Statistical Investigation

Conduct investigations using the statistical enquiry cycle:

- Gathering, sorting, and displaying multivariate category and whole-number data and simple time-series data to answer questions
- Identifying patterns and trends in context, within and between data sets
- Communicating findings using data displays

Contextual Te Reo

- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run
- Pāngarau = mathematics
- Taturanga = Statistics
- Hurahura = to research / Kairangahau = researcher
- Kauwhata = graph

Te Reo Māori Statistics resources

Māori Dictionary

Key Competencies

- **Thinking:** Students need to think ahead to plan and follow a process. Students will also be interpreting results and phrasing their results in a way which communicates meaning.
- **Using language, symbols and text:** Communicating research finidings with graphs and sentences.
- **Managing Self:** Being self-motivated, and establishing personal goals so the task can independently be completed in a meaningful way.
- **Participating and contributing:** Selecting and researching transport related questions which are relevant to students lives and communicating these in a meaningful and purposeful way.

Opportunities for cross-curricular links

- **Science**: Incorporate the environmental effects of sustainable transport choices into the problem and conclusion phases of the enquiry.
- **Health and Physical Activity**: Incorporate the health benefits of making active trips to school into the problem and conclusion steps.
- **English and Visual Arts**: Communication of research findings.
- **Social Studies:** Explore perspective and decision making by using results to pitch or propose a change of some sort (e.g. implementation of scooter racks to school principal, or pitching to councillors to put in a pedestrian crossing near school gate).

Adaptations for different year levels

- **Level 1-2:** Whole class guided research project using collage or drawn pictograms. Emphasise purpose of data and research.
- **Level 2-3:** Experiment with different graphs for presenting data on, and essential features of a graph (e.g. scale, labels, title, key etc).
- **Level 3-4:** Organise data so that different groups can be compared. E.g. compare classes, year groups, boys vs. girls, people who live close vs. far from school.
- **Level 4:** More student-driven than lower levels. Students need to be making statistical ascertations at this level and linking these back to their original problem and research question. Students can also work on posing next research steps to build on their research findings.

Other ideas for this lesson

- Different groups could research different questions.
- Communicate findings for a specific purpose (see social studies link).
- Use Google-sheets to record and present data.
- Different degrees of student vs. teacher driven project, depending on norms and needs in the class.
- Use a time-series graph to track class trends in class transport behaviour over Movin'March month.
- Present data on creative and thematic infographics without misrepresenting the data. Here is a New Zealand example (Te Ao Mārama).

Questions could also investigate:

- Reasons for using particular mode of transport
- Barriers for using other modes of transport
- Ideas about how to get more kids in their school to use active and sustainable modes

LEARNING AREA: LITERACY (Persuasive Writing)

Lesson Aim: Use persuasive writing and language techniques to convince someone of the benefits of replacing a car journey with an active journey to school.

New Zealand Curriculum Level 3-4

greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Lesson Overview

Students write a persuasive piece for a specific audience or person, arguing for why they think active trips to school is a better option than non-active modes.

Students should do some kind of research beforehand to collate their ideas. This could include: brainstorming in groups, think-pair-share, different viewpoints, doing internet searches, interviewing different people (at home and in the school). There is also potential for them to bring in facts or prior learning to do with health, physical activity, economics or sustainability.

In their writing, students practice using evidence to support their argument, and using persuasive sentence starters (such as "In my opinion...", "It is clear that...", "I agree that...", "The time has come to...", "Without doubt...").

Specific Achievement Objective Indicators

Purposes and audiences

- Constructs text that show a growing awareness of purpose and audience through careful choice of content, language and text form.
- Conveys and sustains personal voice where appropriate.

Ideas

- Forms and expresses ideas and information with increased clarity, drawing on a range of sources.
- Ideas suggest awareness of a range of dimensions or viewpoints.

Language Features

- Uses oral, written and visual language features to create meaning and effect, and engage interest.
- Uses a range of vocabulary to communicate meaning.

Contextual Te Reo

- Haere = Journey, trip, travel
- Wake or Hīkoi = to walk (verb)
- Pahikara = bicycle
- Ete Pahikara = to bike (verb)
- Oma = run
- Whenua = Land
- Taiao = Natural world, environment
- Moni = money
- Whakapakari Tinana = Physical exercise
- Tapuwae waro = carbon footprint
- Hauora – health, wellness

Māori Dictionary

Key Competencies

- **Thinking:** Being creative with how the argument is framed for a specific purpose and audience.
- **Relating to Others:** Understanding different points of views and how these determine decisions and behaviours.
- **Participating and Contributing:** Using a context which is relevant to the lives of students, their whānau and the school community; supports development of active citizenship.

Opportunities for cross-curricular links

- **Social Studies**: Exploring view points, values and perspectives.
- **Science**: Using environmental evidence to back up argument.
- **Numeracy (statistics):** Carrying out an investigation within the class to give context to the argument. Investigation could focus on current modes of transport, or on the view points of peers (as an example).
- **Health and PE**: Using health and physical activity related evidence to support argument .

Adaptations for different year levels

- **Level 1:** Talking, writing and drawing about how individual students get to school, what they experience on their journey (drawing on the senses), and what they really like about they way they get to school.
- **Level 1:** Students can also start to think about the audience of their writing. They could write a letter to Mum and/or Dad telling them how they would like to get to school and why, from the ordinary (scooter) to the extraordinary (by space shuttle, horse or yacht!).
- **Level 2:** Similar to level 1, but incorporating in more complex sentences and descriptive vocabulary.
- **Level 4:** Students plan for and incorporate specific persuasive writing elements (such as examples, facts, comparisons, personal experiences, counter arguments and quotes) into their writing.

Possible applications or extensions of this activity

- Have a whole class debate (or in small groups) with each half allocated a viewpoint and given time to frame their argument.
- Research different viewpoints.
- Research different factors which can effect perspectives (e.g. economic, health, convenience, environmental, safety, beliefs).
- Create an oral proposal to present to the class or to the school principal (individually or in groups).