

THINK INTERNATIONAL SCHOOL UNIT OF INQUIRY PLAN

YEAR GROUP: 5

DATE: 16/10/20-20/11/20

DURATION: 6 weeks

COLLABORATIVE TEACHING TEAM: Christine Simpson and Alesha Oner

TRANSDISCIPLINARY THEME:

Sharing the planet

CENTRAL IDEA:

Energy use impacts society and the environment.

LINES OF INQUIRY:

1. Sources of energy
2. Electricity generations and consumption
3. The impact of our choices on the planet

KEY CONCEPTS:

Form Connection
 Perspective Function
Change

LEARNER PROFILE:

Inquirers Knowledgeable
Thinkers
 Open-Minded Reflective
Balanced Risk-Takers

APPROACHES TO LEARNING:

Thinking Skills Social Skills
 Self-Management Skills
Research Skills

Causation	Responsibility	Caring Communicators	Principled	Communication Skills
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<p><u>SUMMATIVE ASSESSMENT:</u></p> <p><i>How will students demonstrate their understanding of what has been learned? How will we measure their understanding of the Central Idea?</i></p> <p>Students will be given their own inquiry wheel which they will complete using experiences that we have had throughout the unit. They will then be asked to reflect and assess themselves on the lines of inquiry using the learning pit (not there yet, almost there, got it).</p> <p>Chinese Adv. Make a poster or a Google slide to write a report about how to save energy.</p> <p>Every student will make an oral presentation for their poster /Google slide to the class.</p>	<p><u>ACTION:</u></p> <p><i>What student-led action and application do we hope to see as a result of their learning?</i></p> <p>Students wrote letters to fossil fuel companies explaining the negative impact of fossil fuels and the benefits of renewable energy.</p> <p>An awareness of their own energy use and changes based on this. E.g. Using less electronic devices, turning off lights, using more eco-friendly packaging.</p>
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TEACHING AND LEARNING

LEARNING EXPERIENCES:

TUNING IN

FINDING OUT

SORTING OUT

GOING FURTHER

MAKING CONCLUSIONS

TAKING ACTION

LINE OF INQUIRY 1: Sources of energy

Language links: Reading- the boy who harnessed the wind. Writing- diary entry

LINE OF INQUIRY 2: Electricity generations and consumption

Maths links: four operations- worded problems.

Language links: [Information reports](#)

LINE OF INQUIRY 3: The impact of our choices on the planet

Language links: email writing and etiquette, proofreading.

Maths links: fractions (standalone)

- **Tuning in:** Students watched a short clip from the 2040 documentary (about electric energy grids). From this, they reflected on their own energy use (how much they rely on energy within their daily lives). They then asked about energy sources (renewable and non-renewable).
- Read the book 'The boy who harnessed the wind' with the class. Wrote diary entries as William and looked further into wind power and how it works. Students did research on wind power through a [choice grid](#).
- Students researched energy sources [useful website can](#)

- Students did worded problems relating to oil companies and their income in Maths [lessons](#).
- Students looked at worded problems linked to energy focusing on [perimeter and area](#).
- Students took part in a social experiment in which they challenged themselves to see how long they could survive without any electricity and reflected on the experience.
- As a result of this, students researched carbon footprints and ways to reduce their own carbon footprint. They completed an [online quiz](#) to determine their own impact.

- **Taking Action:** Students came to the conclusion that fossil fuel companies contribute to a lot of co2 emissions. They researched the pros and cons of fossil fuels and wrote [emails to fossil fuels](#) companies to persuade them to invest in renewable energy sources.
- Art project: students brought in their recycling from home and used these to create pieces of art relating to [environmental issues](#).

Chinese Adv

Discussion - how to save energy

Make a poster or a Google slide to write a report about how to save energy.

[be found here](#)) to write an information report on an energy source of their choice. Explored features of information reports through [WAGOLLS](#).

Chinese Adv

Tuning in:

Mindmap - What resources can produce electricity?

Brainstorm - what do people usually use to produce electricity and why?

Chinese CAL

- Learn various Chinese words about energy
- Chinese words about nature

CAL

Use the sentence pattern to say

- “(Shui) cong nali lai?”

(Where is water come from)

- “(Shui) keyi.....”

(Water can)

LEARNING EXPERIENCES: *as a result of student agency (students interests, questions and action)*

- 5A wanted to know how Einstein was related to energy. They then researched this area and shared this as a presentation with the rest of the class.
- 5B watched 'A life on our planet' and did a comprehension activity based on their interest in this.
- Both classes enjoyed the no electricity challenge and this led into their reflections on carbon footprints and how companies contribute a huge amount to co2 emissions on earth.
- 5B were interested in the future of the world and environment when they watched 2040. They used artwork to depict what the earth could look like if we switched to renewable sources vs. continued using fossil fuels.

ASSESSMENT STRATEGIES:

Observations Open-Ended
Task

Process-Focused Assessment

Performance Assessment

Selected Response

ASSESSMENT TOOLS:

Rubric Checklist - self
assessment based on lines of
inquiry. Exemplar

Anecdotal Records

Continuum

RESOURCES:

- Summative assessment:
[inquiry wheel](#)

REFLECTION:

What Went Well?

- The students engaged really well with the task of researching fossil fuels and emailing the companies to persuade them to invest in renewable energy sources. This linked really well with research skills, critical thinking skills, referencing and citing sources, email etiquette and proofreading.
- Students enjoyed the independence of the art project. They showed independence and ownership through the sketches they made, their choice of materials and the final outcome of the projects. Many students reflected on the importance of planning when designing a project.

Chinese Adv.

Students engaged well in brainstorming about natural resources and they learned how to categorise clean energy and energy that is bad for the environment. They enjoyed making their posters about how to save energy in their daily life.

NOTES:

