

Future Focus

DAIRYING AND FUTURE TECHNOLOGICAL INNOVATIONS

ESSENTIAL QUESTION

What impact could further technological innovations have on New Zealand's dairy industry?

WHAT ARE WE LEARNING?

- Innovation is an on going process in the dairy industry. Innovation arises from addressing needs or realising opportunities
- Innovation has an impact on people, processes and economies

TRY THIS WITH

- Years 5-8
- Students who have an interest in innovation and technology
- Students who like inventing or thinking about future technologies

FIND

- Relate
- Choose
- Review
- Match
- Discuss
- Listen

Explore the 'Go Milking' activity. Allow students enough time to try all three milking types and for each answer the following:

- What are the choices?
- What are the pros and cons of each choice?
- How important are each of the pros and cons?
- Which is the best method based on what you have found out? Why?
- Use a class Google Doc to record answers for each of the different milking types.

APPLY

- Apply
- Translate
- Plan
- Manipulate
- Use
- Arrange

Discuss how technological innovation in milking cows has reduced the amount of time and number of people required for milking.

- Ask students what impacts this has had on people, the dairy industry and economies.
- Make a Wunderlist of every area in the dairy industry that the students can predict might be the subject of innovation in the future - e.g. irrigation, milk tankers, motor bikes.
- Compare the original answers with the list of each area - is there a cross over at all?

PRODUCE

- Change
- Compare
- Justify
- Maximise
- Determine
- Test

Use the class list (in pairs) to brainstorm their predictions about future innovations they think might take place in the dairy industry.

- Identify whether each innovation will arise because of a need or an opportunity. They need to say what impact this innovation will have.
- Choose one possible future innovation to describe and draw in detail. Descriptions should include why it is an improvement, how it works and how it differs from the original process or technology.
- Present to the class so discussion can be generated about the impact of these possible innovations on the dairy industry, people and economies. Do the students think this impact is positive or negative? Can it be both?



SUCCESS CRITERIA

Students can check they have completed the task successfully by:

- Identifying if innovation has arisen because of a need or an opportunity
- Contributing informed opinions about the impact of innovation
- Checking that the design of a future innovation includes enough detail to explain how it works and why it is an improvement

PRINCIPLES	VALUES	KEY COMPETENCIES	LEARNING AREAS	WORD BANK	RESOURCES REQUIRED
Future focus Coherence	Innovation, inquiry and curiosity Excellence	Thinking Managing self	Social Sciences Technology CREST	Innovation Technological Irrigation Impact	Go Milking Game