



## Overview

*Living the Dream* is an interview with Māori aerospace engineer and NASA employee Mana Vautier. The account explores where Mana's love of space came from and how he got his job at NASA. We also learn about what his job involves, his career highlights, and the process for becoming an astronaut. The interview is enhanced by sidebars, photographs, illustrations, and diagrams on topics such as the International Space Station and the space shuttle *Columbia*.

This is a rich text that you can revisit many times for different purposes.

## Key competencies

Key competencies explored through this story include: thinking, managing self, relating to others, and participating and contributing.

## Themes and ideas

Themes and ideas explored in this text include:

- following your dreams
- the importance of whānau support
- setting and achieving goals
- the desire to understand space and the universe
- the value of dedication and commitment
- the concepts of time, speed, and distance
- the risks of space travel
- the use of the interview technique to find out information.

**Texts related by theme** *Diary of a Wild Boy* SJSL 2016 | **"First Up"** SJ 3.1.11 | **"Night Light"** and **"Tunç Tezel: Star Man"** SJ L2 May 2016 | **"Catching a Space Duck", *Fact or Fiction?*** Connected L3 2015

## Text characteristics from the year 4 reading standard

I always knew I wanted to work in human space flight, but I had no idea how to make it happen. Luckily, I was brought up in a family that taught me to believe I could do anything I put my mind to. In 2006, I was accepted into a university in Alabama in the United States to study aerospace engineering. While studying, I heard about a summer job with NASA in Houston. Houston is where the United States astronauts are trained, so I knew I had to apply. I got the job and eventually became a full-time employee.

It wasn't easy. I remember driving across the United States with my wife and our baby on our way to Alabama. We didn't know where we were going to live or how I was going to pay my university fees. Sometimes

Some compound and complex sentences, which may consist of two or three clauses

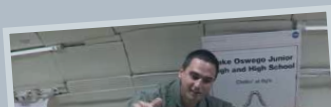


Figurative language, such as metaphors, similes, or personification

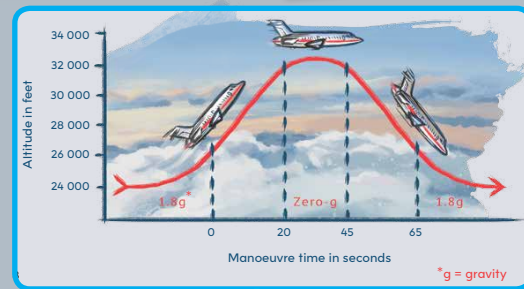
## Text characteristics from the year 6 reading standard

so far?

In 2011, I was taken on a jet plane that trains people for space travel. The plane flies in a series of large arcs, like waves coming towards the shore. Because of the speed and angle of the plane as it flies up, gravity on board is 1.8 times stronger than it is on Earth. Your weight nearly doubles! Then, as the plane goes over the arc, the gravity is cancelled out and you float around as if you're weightless. This is what it feels like in space. It's like driving over a



A significant amount of vocabulary that is unfamiliar to the students (including academic and content-specific words and phrases), which is generally explained in the text by words or illustrations



Illustrations, photographs, text boxes, diagrams, maps, charts, and graphs that clarify or extend the text and may require some interpretation

# Making meaning: Supports and challenges

Possible supporting strategies should be implemented at the appropriate time during the reading or lesson.

## VOCABULARY:

- Possibly unfamiliar words and phrases, including topic-specific vocabulary: “spongy”, “fast-forward”, “National Aeronautics and Space Administration”, “descent”, “star-gazing”, “memorial service”, “space shuttle *Columbia*”, “missions”, “space flight”, “employee”, “university”, “fees”, “science lab”, “systems”, “orbits”, “docking port”, “jet”, “arcs”, “cancelled out”, “weightless”, “launches”, “sound waves”, “ultimate”, “citizen”, “degree”, “application”, “survival”, “scuba dive”, “pursue”, “pathways”
- Place names: “Houston”, “Texas”, “Alabama”, “Cape Canaveral”, “Florida”
- Māori words and names: “Te Arawa”, “Ngāi Tahu”, “Ngāti Kahungunu”, “Ngāti Raukawa”, “taki”, “wero”
- Adverbs: “currently”, “hopefully”, “luckily”, “smoothly”, “brightly”
- Use of figurative language and idioms: “each step forward”, “lose your tummy”, “living his dream”, “like waves coming towards the shore”, “it felt like my eyes were burning”
- The words in bold that are explained in the glossary: “aerospace engineer”, “agency”, “cargo”, “gravity”, “solar panels”, “taki”, “wero”
- The use of prepositions: “towards”, “forward”, “to”, “around”, “outside”, “inside”.

## SPECIFIC KNOWLEDGE REQUIRED:

- Knowledge of the size of the United States
- Familiarity with the concept of memorial services
- Some familiarity with universities, degrees, and careers
- Some understanding of space agencies and spacecraft
- Some familiarity with how speed and distance are measured
- Some familiarity with the purpose of science labs
- Some understanding of gravity
- Some understanding of space (no air or water, lower gravity, extreme temperatures)
- Some understanding of people having goals and following their dreams.

## Possible supporting strategies

Identify vocabulary and ideas that may be challenging for the students. Encourage them to recall the strategies they can use to solve word problems, such as:

- reading on to see if the meaning becomes clear from the context
- looking for base words, chunks, or word families.

Discuss the technical and scientific language. Use the photos and diagrams to support their understanding. Focus on collocations, such as “sound waves”, “freezing cold”, “boiling hot”, and “solar panels”.

Build your own glossary of the scientific language.

Discuss the te reo Māori words and phrases and their meanings. Pay attention to their correct pronunciation, modelling where necessary. Clarify the difference between “taki” and “wero”.

Explain the use of “feet” to describe altitude on page 8. You may need to elaborate by telling the students that the use of “feet” is the aviation standard for most countries, irrespective of whether they use imperial or metric systems.

Explore the use of figurative language, which may be confusing for English language learners. Students could think, pair, and share their interpretations of what these words mean. Explain that the words do not necessarily have a literal meaning but convey a feeling, visual image, or action.

Simple diagrams can be used to explain the meaning of prepositions. [Pinterest](#) has examples of charts that clearly explain the meaning of various prepositions.

*The English Language Learning Progressions: Introduction*, pages 39–46, has some useful information about learning vocabulary.

## Possible supporting strategies

Draw out students’ knowledge about where NASA is. It may be helpful to show students a world map and ask them to locate the United States. If possible, search for “NASA Johnson Space Centre” on Google Maps and switch to Earth viewing mode. Zoom out incrementally to illustrate where it is in the United States and where the United States is located in the world. Then locate New Zealand. This demonstrates the distances between these locations, highlighting how far Mana has travelled to “live his dream”.

Spend time discussing what universities are and why people attend them. Discuss other careers that students are interested in and talk about what degrees they might need to enter them.

Discuss the challenges that astronauts face in space. You may need to build the students’ specific knowledge of gravity, making sure they understand the difference between the effect of gravity on Earth and its effect in space. The following websites provide further information and ideas:

- <http://sciencelearn.org.nz/Science-Stories/Nigel-Latta-Blows-Stuff-Up/Episode-8-Gravity>
- <http://scienceonline.tki.org.nz/What-do-my-students-need-to-learn/Building-Science-Concepts/Titles-and-concept-overviews>,
- <http://spaceplace.nasa.gov/what-is-gravity/en/>

Facilitate a discussion about what inspires people to become involved in space travel. This could be a good way to introduce and discuss the vocabulary.

Prompt students to recall other memorial services they have attended or watched. Encourage them to think about the purposes of these memorial services and why people attend them.



## TEXT FEATURES AND STRUCTURE:

- Question-and-answer format of an extended interview
- Introduction
- Sidebars providing additional information
- Diagram of plane achieving zero gravity
- Labelled photograph
- Text boxes
- Questions used as headings
- Glossary
- Complex sentences
- Use of numbered steps to outline a process
- Paragraphs to separate the details in Mana's answers
- Use of acronyms: "NASA", "ISS"
- Visual text features: use of colour to denote interview questions
- Ironical humour (in "Becoming a NASA astronaut")
- Instructional text features, including numbered steps, simple present tense verbs, adverbs, and text connectives (for sequencing, adding information, and indicating time): "first of all", "then", "if", "next up", "If you pass", "if you are", "after that", "you also".

## Possible supporting strategies

Read the opening scenario together. Discuss how it sets the reader up and motivates them to go on reading.

Ask the students to scan the text for features that help them find specific information. Direct their attention to the question headings and use of colour. Ask the students to use the questions and the images to predict the content of each section.

Explore the diagram of the ISS. Discuss each text box if necessary, noting their different purposes. Build up the students' understanding of the ISS – what it is and why it is there – and the different systems that Mana has to manage.

Show students the numbered steps on pages 10–11 and discuss how this approach clarifies information. Use the information to create a flow chart of the steps involved in becoming an astronaut. English language learners may benefit from explicit teaching of text connectives before creating their flow chart.

Facilitate a discussion about how we use phrases in a figurative way. Prompt students to think of other figurative phrases that have become familiar sayings.

Facilitate a discussion around goals and how we achieve them.

## Possible curriculum contexts

### ENGLISH (Listening, Reading, and Viewing)

Level 3 – Structure: Show a developing understanding of text structures.

### SCIENCE (Physical World)

Level 3 – Physical inquiry and physics concepts: 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.

### TECHNOLOGY (Nature of Technology)

Level 3 – Characteristics of technology: Understand how society and environments impact on and are influenced by technology in historical and contemporary contexts and that technological knowledge is validated by successful function.

### HEALTH AND PHYSICAL EDUCATION (Personal Health and Physical Development)

Level 3 – Personal growth and development: Identify factors that affect personal, physical, social, and emotional growth and develop skills to manage changes.

### Possible inquiry questions

- What drives people to want to explore other places, other countries, or outer space?
- How do people achieve their dreams?
- What does it take for people to live together in a confined area for long periods of time?
- What does an aerospace engineer do?

### Possible reading purposes

- To find out what inspired Mana Vautier to work at NASA
- To find out what an aerospace engineer at NASA does
- To explore the steps Mana took to achieve his dream
- To explore the language features, structure, and purpose of an interview
- To identify what is involved in becoming an astronaut.

### Possible writing purposes

- To create interview questions for someone else who is living their dream. Students could then write up the interview using *Living the Dream* as a model
- To describe what an aerospace engineer at NASA does
- To write an imagined dialogue between two astronauts who are living onboard the ISS
- To describe the challenges involved in becoming an astronaut
- To write an advertisement for an astronaut
- To write a step-by-step explanation of a process.



## Instructional focus – Reading

Use this text to develop the students' metacognition. At all stages, encourage the students to vocalise their ideas and thought processes, supporting each other to justify their ideas with reasoning.

### Introducing the text: Paving the way for successful readers

#### Before reading

- Introduce the context of the text. *We are going to read an interview with a New Zealander, Mana Vautier, who is working for the largest space agency in the world, which is in the United States.* Explain that Mana has been interviewed and that his answers tell us how he came to be working there and what his work involves. Invite the students to discuss with a buddy what they want to find out. *What do you want to know about working in space travel? Have a chat with the person next to you.*
- Prompt students' prior knowledge of interviews, including what happens in them and how they might be recorded.
- Discuss the title of the book. Prompt the students to imagine what "living your dream" could mean and encourage them to share their own dreams.
- Use a group discussion to draw out background knowledge about the themes and ideas listed on page 1 of these notes.
- Explain to the students that they will meet technical, subject-specific vocabulary and proper nouns. Prompt their prior knowledge about decoding unfamiliar vocabulary and using comprehension strategies. *What do we do when we meet an unfamiliar word?* Direct students to the glossary at the back of the book.
- Consider previewing the photographs, illustrations, and diagrams to provide context for the students before they begin reading.

#### First reading

- Share a clear purpose for reading. *We are reading to find out about ...*
- Share-read the introduction. Invite students to share their responses with a partner. *Have a chat with the person next to you about Mana as a young boy in Auckland and what he does now in Houston, Texas.* Check for understanding.
- Remind students of the strategies they can use when they meet unfamiliar words.
- Ask the students to identify the interview questions and use these as the purpose for reading each section.
- Have students discuss the interview answers with a buddy. *Did Mana answer the question? Did his answer include the kind of information you thought it would include? Was there some information you expected to find but didn't? Is there something you still want to know?*
- Direct students to the visual text. Provide opportunities for them to work in pairs to discuss what the photographs, diagrams, and graphics show.

#### If the students struggle with this text

Remind students of strategies that are particularly useful on a first reading, such as reading on, rereading, using context clues, and making connections with their prior knowledge. Use some of the following approaches, depending on students' needs:

- Explain that the introduction describes a moment from the past to set the scene. Check they realise that Mana is the stargazing boy in the introduction.
- Check that students understand Mana's Māori descent.
- Lead discussion and encourage critical thinking about the rhetorical question "But how did a star-gazing boy from Auckland end up working for NASA?"
- Deal with specific vocabulary challenges before reading.
- Model reader responses to the interview questions. *I'm looking forward to finding out more about ... That is exactly what I want to know!*
- Model recognising the impact of the responses. *This sounds as if he is talking directly to me.*
- Use thinking aloud to prompt critical thinking. *It sounds brave to set off across the US when you don't know where you're going to live ... I wonder if his wife shared his dream.*
- Invite questions to clarify the information in the diagrams.
- Support students to identify key points from the text boxes on pages 6–7.
- Model responses to the visual features. *It's useful to have the interview questions all printed in a yellow banner – I can find each one easily.*

## Subsequent readings

Use subsequent readings to focus on particular themes and ideas described in the text. Support the students through modelling, thinking aloud, prompting, and explaining to link and synthesise ideas across the text in order to interpret those ideas and the text's themes. See suggestions for possible reading purposes on page 3.

- Encourage the students to think critically about the underlying theme of setting goals and working hard to achieve them. For example, explore the idea of “following a dream” and see how this aligns with the actual work involved. Encourage students to make connections to their own experiences of working hard to achieve a dream.
- Develop a simple graphic organiser with the headings “Challenges” and “Supports” and have the students work in pairs to identify what was a challenge for Mana and what supported him in his quest to become an astronaut. For example, his family were a support, but not knowing where he and his family were going to live or how he was going to pay his tuition fees were challenges. Students could compare this with difficulties they or someone in their whānau may have had in pursuing a goal. For English language learners, this same text could be used to develop a [split information gap](#) task. This would allow them to reuse the language.
- Support the students to identify the interview structure.
  - Discuss the use of the first person in the replies. Support students to identify the personal pronouns, including the use of “you”, “you’re”, “I”, and “I’ve” when Mana talks directly to the reader. Lead them to identify the language features of an interview and the effects these have on the reader, such as the use of colloquial language to achieve a more conversational and intimate tone. For students having difficulty using pronouns, part of the text could be made into an [interactive cloze](#) activity, with the focus on filling in all the pronouns.
  - Note the use of the rhetorical question on page 5. Have the students explore and discuss its purpose. *Do you think that Mana expected the interviewer to answer it? Can the reader directly answer it? Why did he ask it?* Direct the students to the answer that Mana provides in the rest of the paragraph.
  - A [Say It](#) activity could be useful to support students to think more deeply about the text and to practise asking and answering questions.
- Facilitate a discussion about the use of diagrams and infographics to convey particular information, especially scientific ideas. Model by thinking aloud how to make meaning from the diagram and infographic.
- You may need to focus on the top text box on page 7. Although the vocabulary may not be particularly challenging, the concepts around gravity and the explanation about why the ISS doesn't fall to Earth will require some unpacking. Share-read the information and ask the students to summarise it in pairs. It may also be helpful for them to create a diagram of what they think is happening and then discuss it with a partner.
- Working in pairs, have the students look at the diagram on page 8 and discuss what extra information is in the diagram (height of the plane at start, how high the plane climbs before going down again, time taken for whole manoeuvre). Similarly, look at the labelled photograph on pages 6–7. Discuss what each text box is about and decide on an appropriate heading for each.
- Support the students to track ideas and information across the text. Remind them about the structure of a paragraph. Select certain paragraphs and ask them to work in pairs to identify the key idea. You may need to model this first by thinking aloud. *I'm looking at the second paragraph on page 4. I know that often the key idea of a paragraph is in the first sentence. The first sentence says “It wasn't easy.” That tells me straight away that the rest of the paragraph is going to be about the difficulties that Mana faced as he worked towards achieving his dream job. I'm going to read the rest of the paragraph to find out what those difficulties were.*
  - Ask the students to find another paragraph and work with a partner to identify the key idea from the first sentence. Prompt them to read the rest of the paragraph to find details that back it up.
- Prompt the students to make inferences about the difficulties of living in space.
  - *What do we know about the conditions inside the ISS?*
  - *How much room would there be for the astronauts?*
  - *What would it be like not being able to sit down or stand up?*
  - *How would they eat? How would they sleep?*
  - Alternatively, you could ask the students to work in pairs to come up with a list of questions about what it would be like to live on the ISS. From this discussion, you could draw out what the difficulties might be.
- Ask the students to look for evidence about the part that Mana's background and family play in his success (reference to iwi affiliations on page 2, reference to his wife and their baby on page 4, reference to being brought up in a family that taught him he could achieve anything he put his mind to on page 4, use of te reo on page 12, comparing it with what Māori warriors have to do on page 12, and the use of a whakataukī on page 12). Students use this evidence to infer that Mana's whānau and iwi affiliations are important to him.

## Monitoring the impact of teaching

As the students read and discuss the text, take particular note of the following:

- Can the students identify and discuss the main themes of the story?
- Can they independently use strategies for:
  - working out unknown vocabulary?
  - knowing what to do when meaning breaks down?
  - making connections to their personal experiences?
  - using the visual text to support meaning?
- With support, can the students:
  - link ideas and information across the text?
  - use these ideas to draw conclusions about Mana’s skills and motivations?
- Do the students transfer skills and knowledge from your modelling to their reading?
- Do the students use evidence from the text to support their responses?

## Providing feedback and supporting metacognition

**Provide explicit feedback and support the students to develop their metacognition. Both strategies support students’ growing independence and confidence as proficient readers. An example of each is provided below.**

### Providing feedback

*I noticed that you and your buddy spent a long time looking at the graphic and discussing what it showed. I can see that this helped you to find lots of information about the ISS because you summarised the information really clearly.*

### Supporting metacognition

*Tell me how you used the text boxes to help you to understand what it is like on the ISS. You said you were surprised to find out how big the ISS is – did you make links with the number of astronauts who stay there? Can you show us where you found that information? What have you learnt about reading infographics?*

## Suggestions for writing instruction

Students may choose to:

- record further questions that they would like to ask Mana Vautier or choose a different person who is “living their dream” and record the questions they would like to ask them. *What do you want to know? How will you phrase your questions to get the best responses? What order will they be in? Will you need any follow-up questions?*
- draw a comic strip and write speech bubbles for two astronauts who are living on the ISS or write a diary or blog about daily life on the ISS (This can be done using a free online comic creation tool, such as [Pixton](#), [Toondoo](#), or [Storyboard](#). Creating a professional-looking comic is motivating, and not having to rely on drawing skills means the students can focus on the story they are trying to tell.)
- interview someone who has a special passion and write up the answers using *Living the Dream* as a model. (Check that English language learners can form appropriate question stems. Using Google Docs, students could type their interview script and then act it out and record it. These could be put in an online space that whānau and other taura could access.)
- write a letter to NASA telling them why they would be a good choice as an astronaut. *Make sure your letter includes some complex sentences that provide extra information for the reader.*
- create an advertisement for an astronaut, including the qualities and skills required for the job
- choose an occupation they know about and write a step-by-step guide to working in that occupation.

Scaffold the students to build on their writing strengths, giving stronger support where needed and reducing it as the students become confident using and developing the strategies themselves. Help them to see the connections between their reading strategies and writing strategies (for example, implying as a writer, inferring as a reader). Also, it might be helpful to revisit the particular features of the text that the author has used in this story. Allow plenty of time (with agreed targets) for the students to think about, plan, rework, and polish their writing.



**Writing standard: by the end of year 6**



**The Literacy Learning Progressions**



**Assessment Resource Banks**

ISBN 978 0 478 16864 8 (online)