



WHERE SCIENCE
TECHNOLOGY
ENGINEERING AND
MATHS COME ALIVE.

Water Challenge 2025

Impact report



SUPPORTED BY



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“It was a fun and rewarding experience working with the students and seeing their curiosity grow.”

Desiree Donwen, Ambassador
Fulton Hogan

READY, SET, FLOW!

Ākonga construct and test a mini model of Aotearoa New Zealand's wai network. They explore the journey of wai and how STEM is used to collect, clean, connect and care for one of Earth's most precious taonga.

Modules



Module 1: Protect

Ākonga understand the challenge, the pātai they'll be solving and explore the STEM design process, why water is a taonga and the mauri compass.



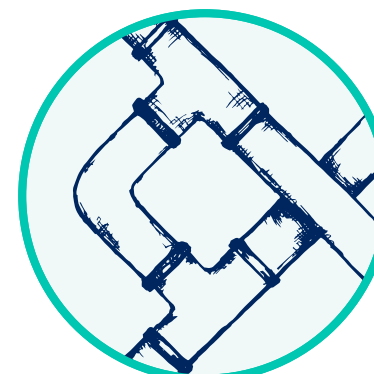
Module 2: Collect

Ākonga learn Te Hurihanga Wai and the water cycle. Then they unpack water's journey through our wai network, and plan a network prototype.



Module 3: Clean

Ākonga learn ngā momo wai (types of water). Then they explore how to treat wai paru (dirty water) and create a water treatment plant.



Module 4: Connect

Ākonga learn how gravity impacts the flow of water. Then they use this knowledge to create and test a pipe prototype.



Module 5: Improve

Ākonga improve their pipe prototypes using challenge knowledge and Manning's equation. Then they connect them to the treatment plant and solve their challenge scenario.



Module 6: Care

Ākonga plan how to care for wai that reaches us. Then they connect two wai networks to hydrate the entire hapori (community), and solve the challenge pātai.

DIVING INTO STEM

Funding continued to be tight for the Wonder Project this year, after losing our primary source through Government, and economic conditions for businesses being difficult. With the Water Challenge in its first year post pilot, we had over 4,000 rangatahi take part, across 151 classes at 109 schools – 7% of target schools.

Continued high demand from schools coupled with limited funds meant we again had a waitlist, with 178 kaiako who we were unable to accept into the challenge. We prioritised schools with a higher level of socio-economic disadvantage and were able to achieve over our 35% goal, with 28% of participants being in this high barrier group. We also had high levels of Māori and Pacific ākonga in the challenge, at 32% and 11% respectively.

216 STEM professionals registered to help with the Water Challenge, and we were able to match 71 of them to support 72 classes – 53% of participating classes. After withdrawals, we had 101 ambassadors we were unable to match due to location differences with participating schools and the relatively low number of available classes compared to ambassador interest. Thanks to our partner organisations who supplied 48% of our matched ambassadors.

Participants
this year

4,379
ākonga

151
classes

109
schools

71
STEM professionals

Demographics

Socio-economic barriers

With limited spaces in the challenge, we wanted to prioritise schools with high socio-economic barriers as much as possible. 28% of participating schools had high barriers – ahead of our 25% goal.



Equity Index group

- High barriers, 28%
- Moderate barriers, 61%
- Fewer barriers, 9%
- N/A, 2%

Ākonga ethnicity

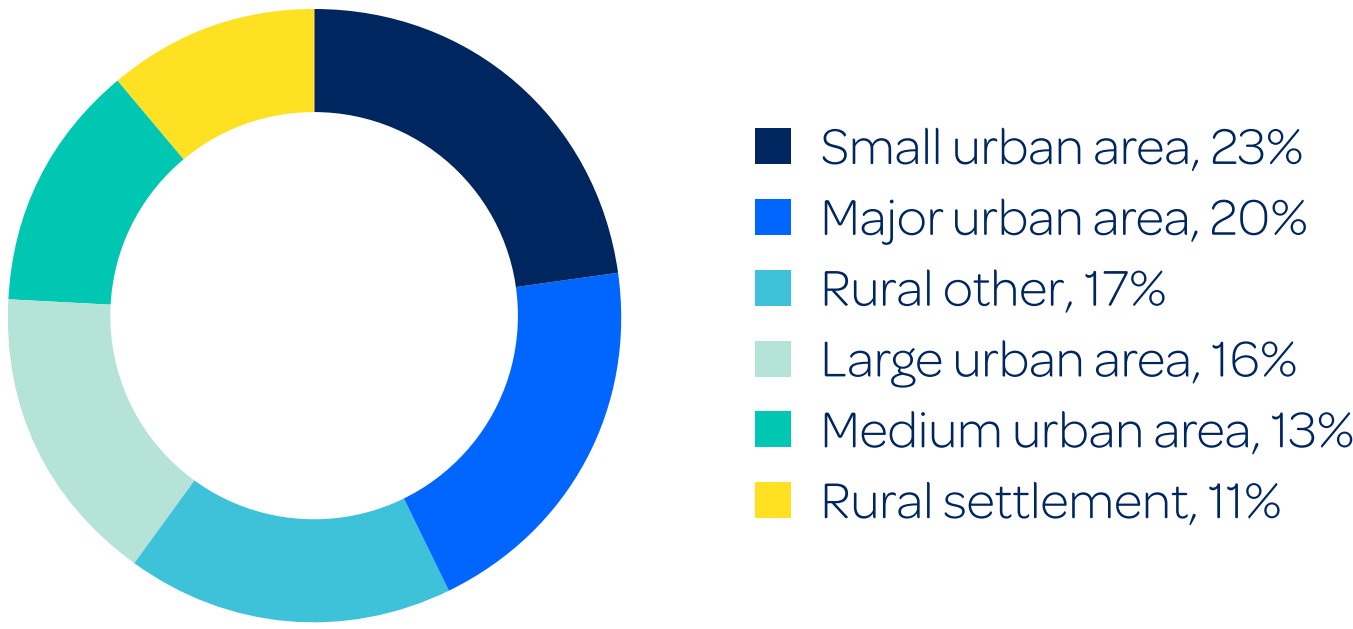
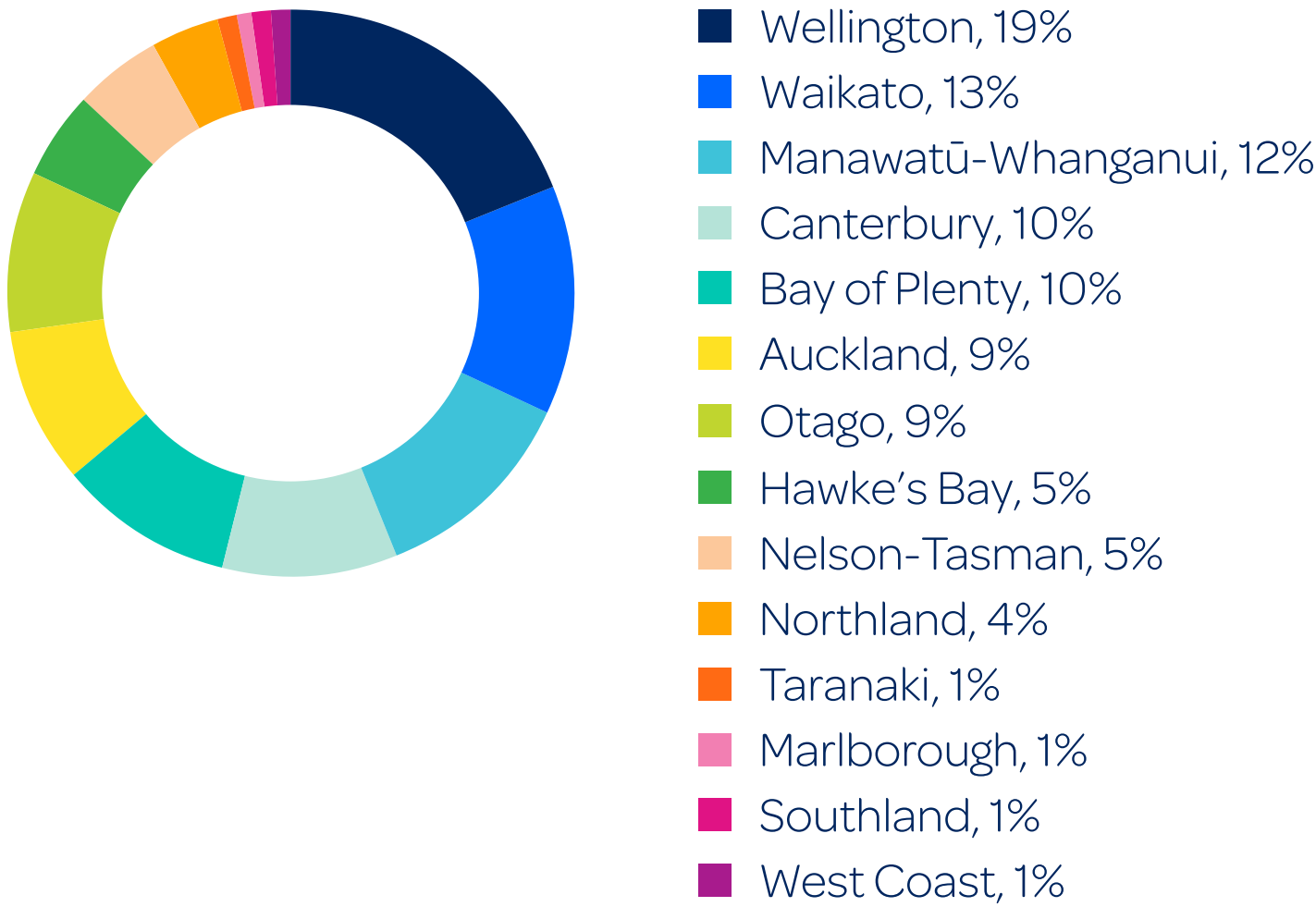
We had 32% ākonga Māori and 11% Pacific Peoples participating in the Water Challenge. We plan to make te reo Māori resources available in 2026 to support Māori medium learners. Even without those available, we still had 9 Māori medium classes take part this year.



- Māori, 31%
- Pacific Peoples, 11%
- Other, 57%

Region

We had 52% of participating schools in the main centres (Auckland, Wellington and Canterbury), and 48% across the regions.



- Small urban area, 23%
- Major urban area, 20%
- Rural other, 17%
- Large urban area, 16%
- Medium urban area, 13%
- Rural settlement, 11%

IMPACT AT A GLANCE

63%
ākonga said the Water Challenge made them feel more confident in STEM subjects

42%
ākonga were more interested in STEM jobs after the challenge

61%
ākonga said they would do it again

87%
kaiako enjoyed teaching the Water Challenge

82%
kaiako noticed a positive shift in ākonga perceptions of STEM

95%
kaiako increased their confidence in teaching STEM

87%
kaiako said ākonga were engaged with the programme

92%
kaiako said they would do it again

82%
ambassadors enjoyed supporting the Water Challenge

49
(NPS) Challenge Net Promoter Score

“I did not care for
STEM until we
started doing the
Water Challenge.
It helped me
improve a lot.”

~~~~~  
Taya, Ākonga  
– Tokomairiro High School

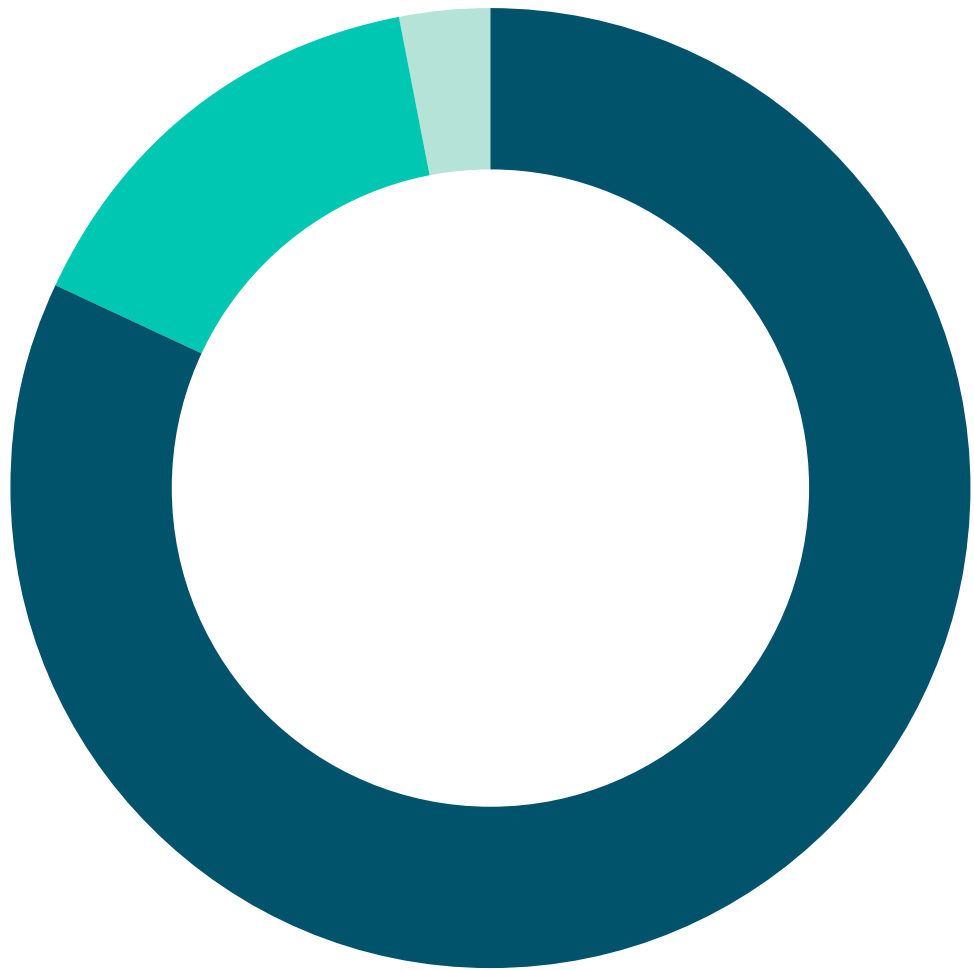
ĀKONGA  
EXPERIENCE



# Perceptions

## STEM perceptions

When kaiako were asked if they noticed a shift in ākonga perceptions towards STEM over the challenge, 82% said they noticed a positive shift.



- Their perceptions changed positively, 82%
- Their perceptions didn't change, 15%
- Their perceptions changed negatively, 3%

## Interest in STEM jobs

72% of kaiako believed their ākonga were more curious about the opportunities that different careers in STEM can provide, after the challenge.

42% of ākonga reported that they were more interested in STEM jobs after completing the challenge. With a further 19% of rangatahi already interested in STEM jobs, post the challenge, 61% of ākonga would consider a STEM career.



- Yes – I was more interested, 42%
- No – I was already interested, 19%
- Yes – I was less interested, 13%
- No – I am still not interested, 25%

**“It was an exciting experience to extend our STEAM learning and get hands on experience with how water gets to us and different places.”**

**Miriam, Ākonga**  
St Francis De Sales School

# Confidence

## STEM subject confidence

When asked if taking part in the challenge made them feel more confident in STEM subjects, 62% reported that it did.



■ I felt more confident in STEM subjects, 62%  
■ My confidence didn't change, 38%

# Knowledge and skills

## Level of challenge

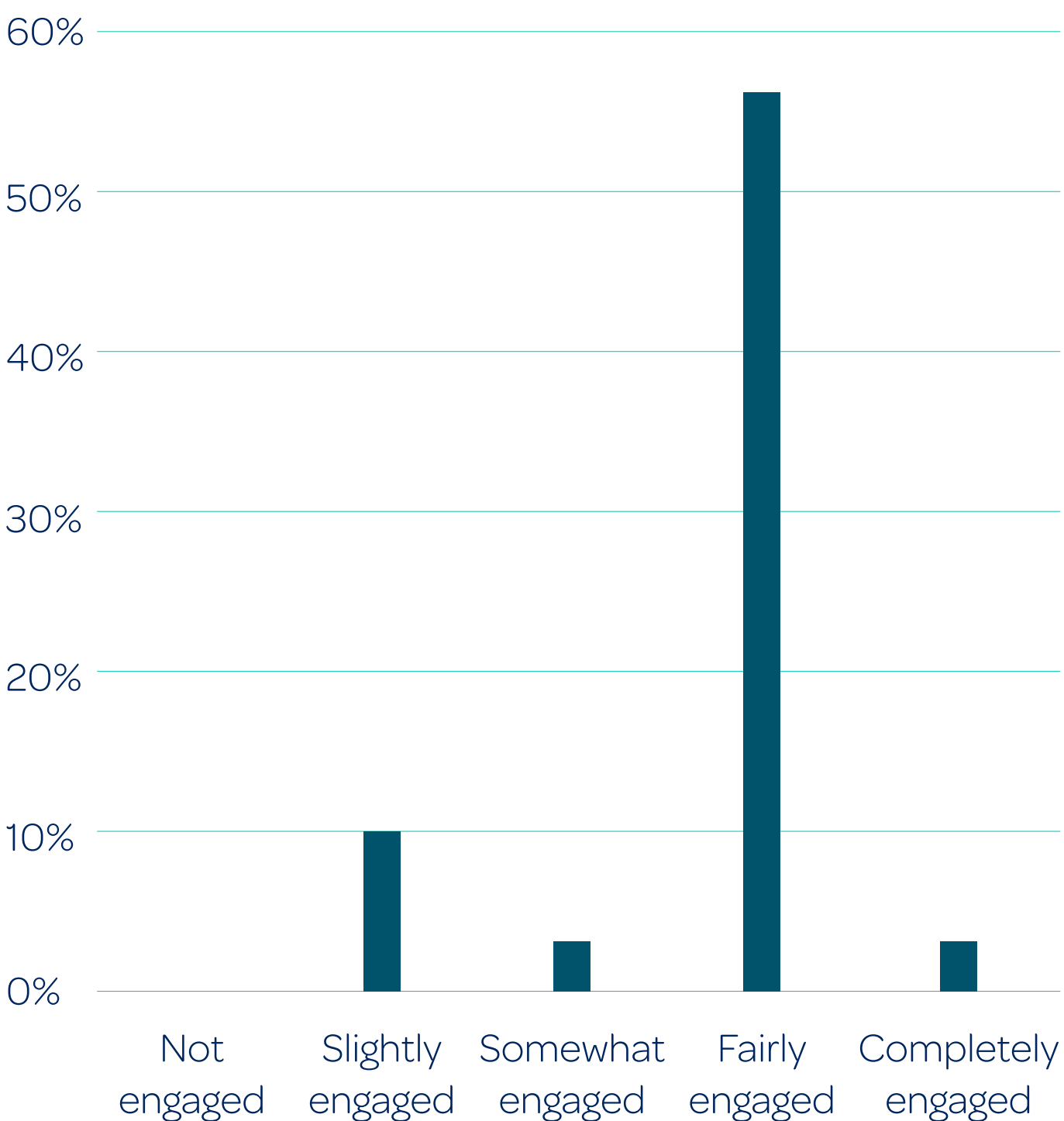
79% of kaiako said ākonga were challenged by the learning material at about the right level. We had quite a large group of kaiako, along with similar feedback from ambassadors, that it was a bit too challenging. This is something we'll investigate further for refinement before the 2026 programme.



■ About the right level of challenge, 79%  
■ A bit too challenging, 21%  
■ It was too easy, 0%

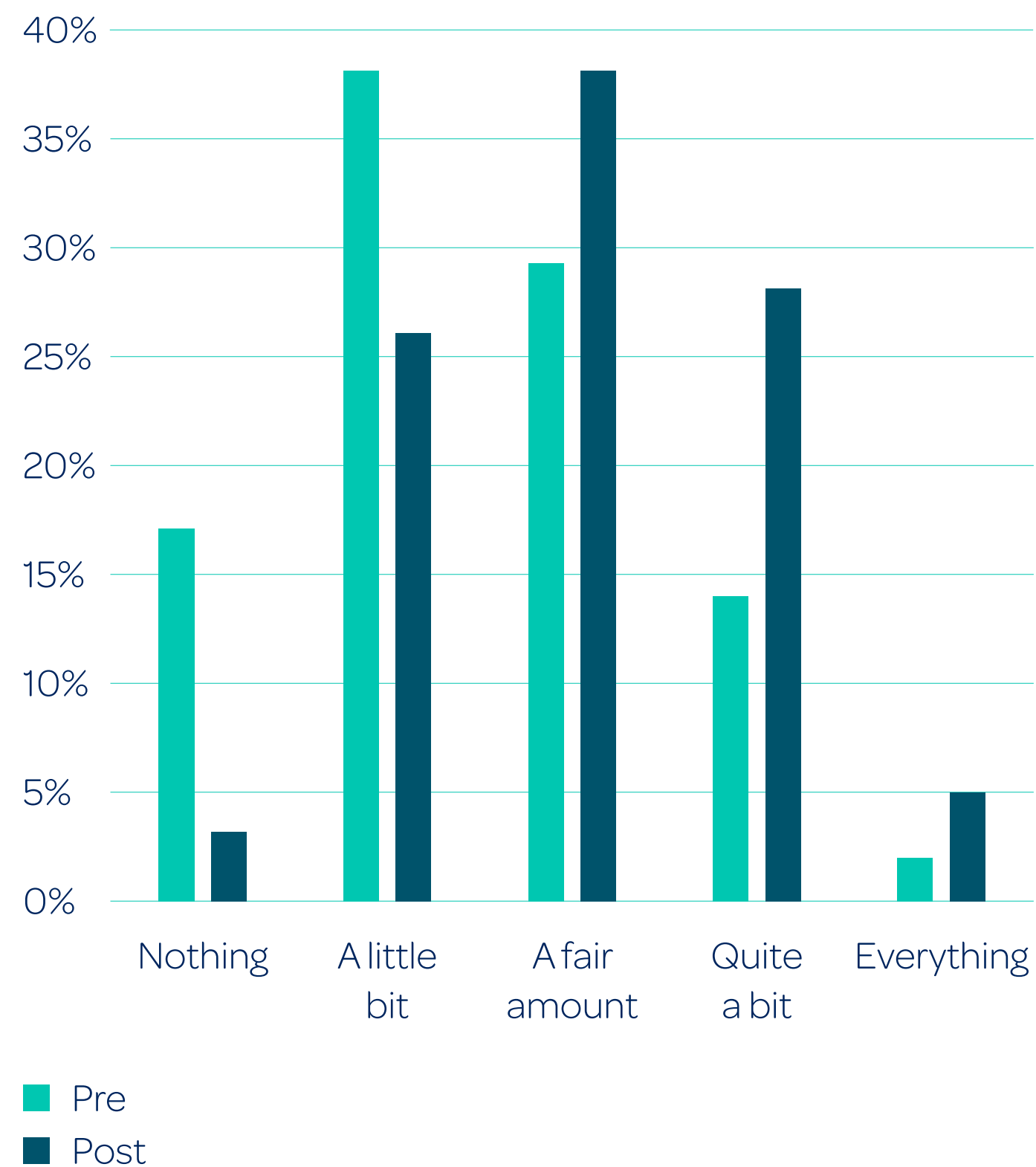
## Engagement with learning

87% of kaiako reported their ākonga were fairly or completely engaged with the learning journey. This is another area we'd like to improve for future roll outs to meet our goals.



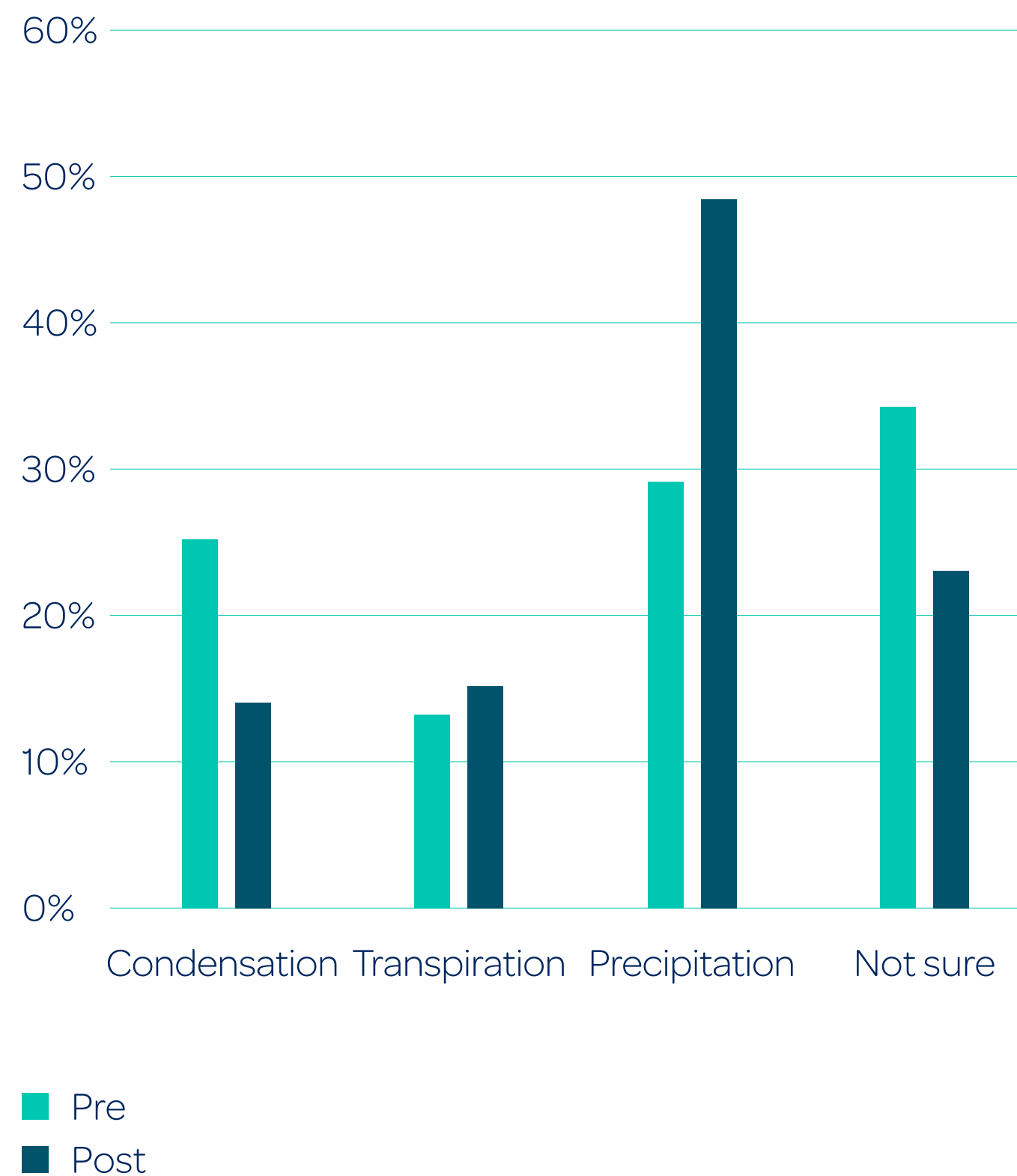
## Water networks

We saw a positive shift in what ākonga knew about one of the key learning outcomes, how water reaches us through a network, including a 50% increase in ākonga saying they knew quite a bit about the topic.



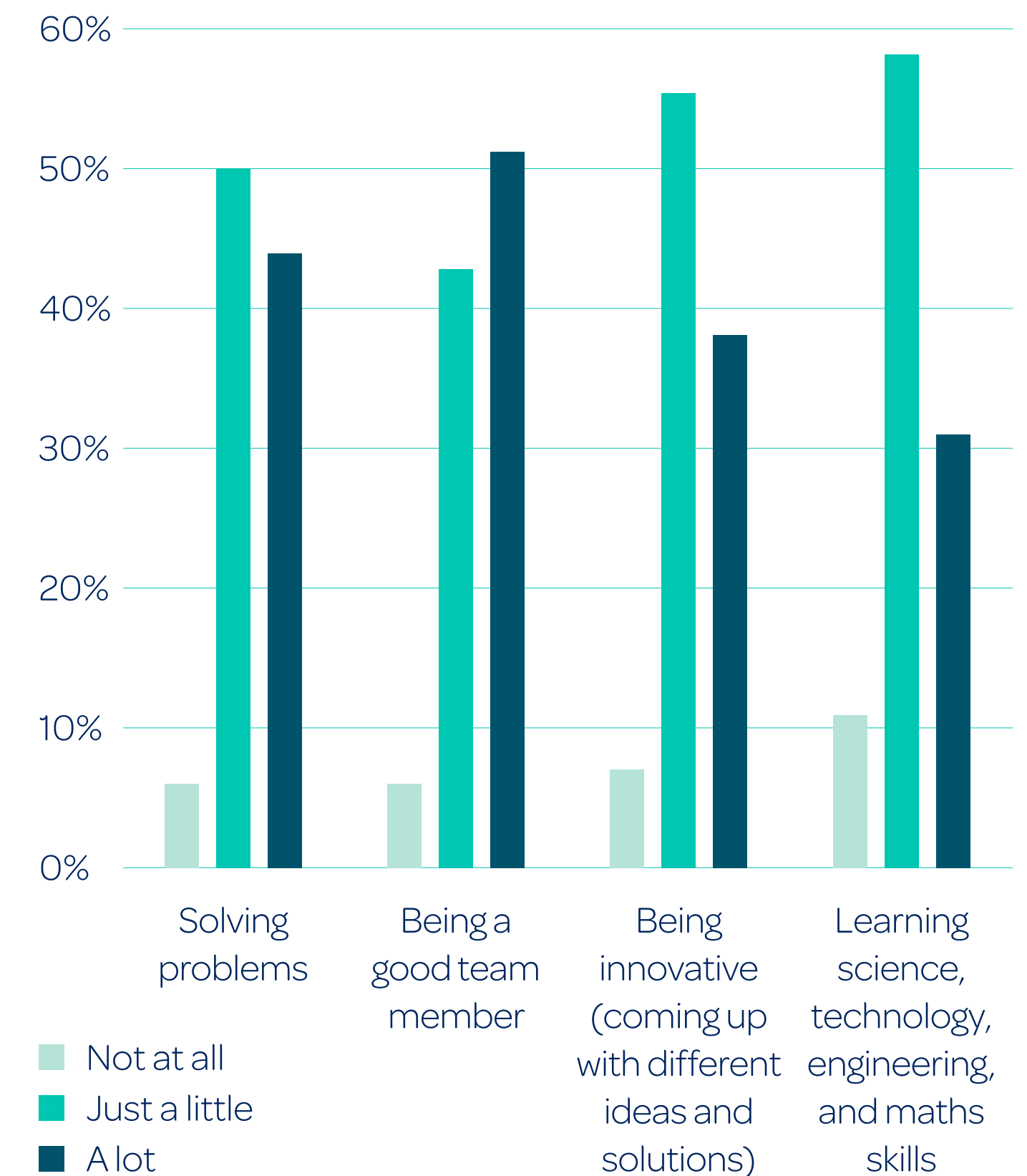
## Precipitation

Before the challenge, 29% of ākonga could correctly identify precipitation as the term to describe water falling to Earth. After the challenge this rose to 48% of ākonga, a 66% increase.



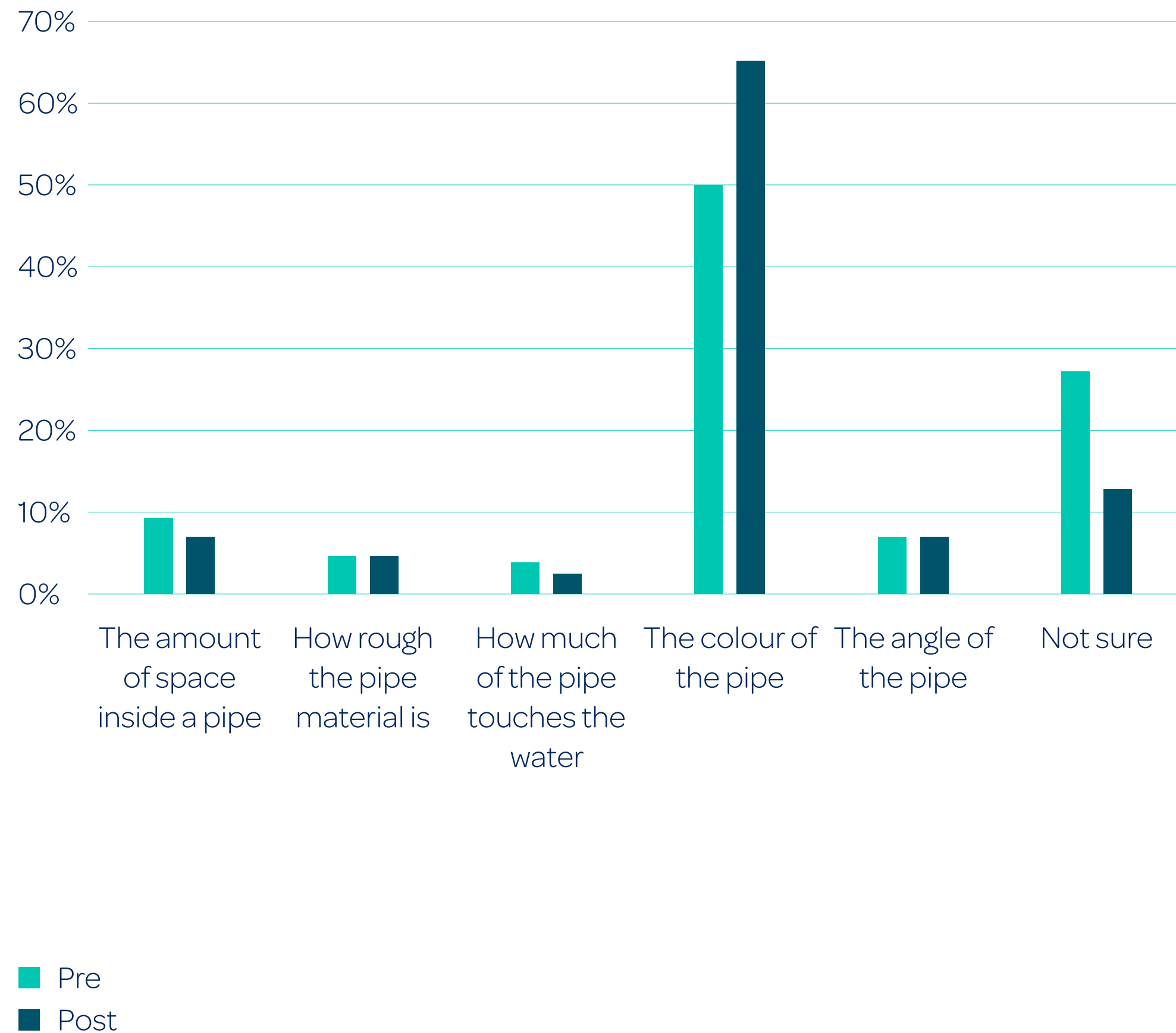
## STEM skills practiced

During the challenge, we expect ākonga will learn about and practice four key STEM skills. The majority of ākonga were exposed to these and could identify that they'd been able to practice them. Teamwork was the highest, with 51% of ākonga saying they practiced this skill a lot. 93% of kaiako also said there were lots of opportunities for ākonga to discover and develop STEM skills.



## Flow of water

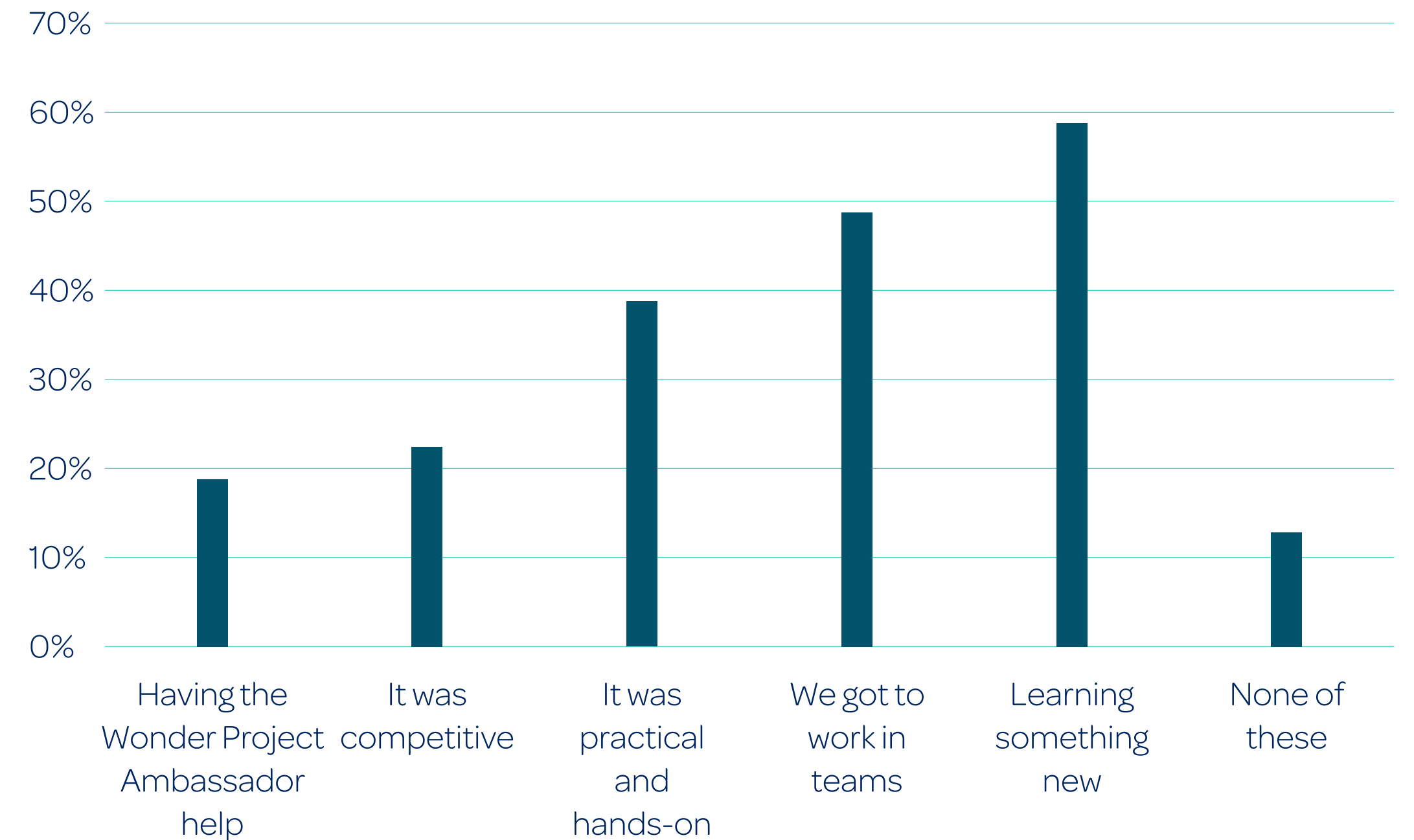
Before the challenge, 50% of ākonga could correctly identify the colour of the pipe as something that did not affect the flow of water in a pipe. After the challenge this rose to 65% of ākonga, a 30% increase.



## Enjoyment

### What they liked

From their Wonder Project experience, ākonga mostly valued learning something new and working in teams, when asked what they enjoyed about the challenge.



### Experience completing the challenge

**59%** had a great experience doing the Water Challenge  
**ākonga**

### Take part again

**61%** said they would like to take part in another challenge  
**ākonga**

“I’ve seen students grow in resilience, learning to view failure as a necessary step toward success. Their problem-solving and teamwork skills have flourished.”

~~~~~  
Debbie Wilson, Kaiako
Naenae Intermediate

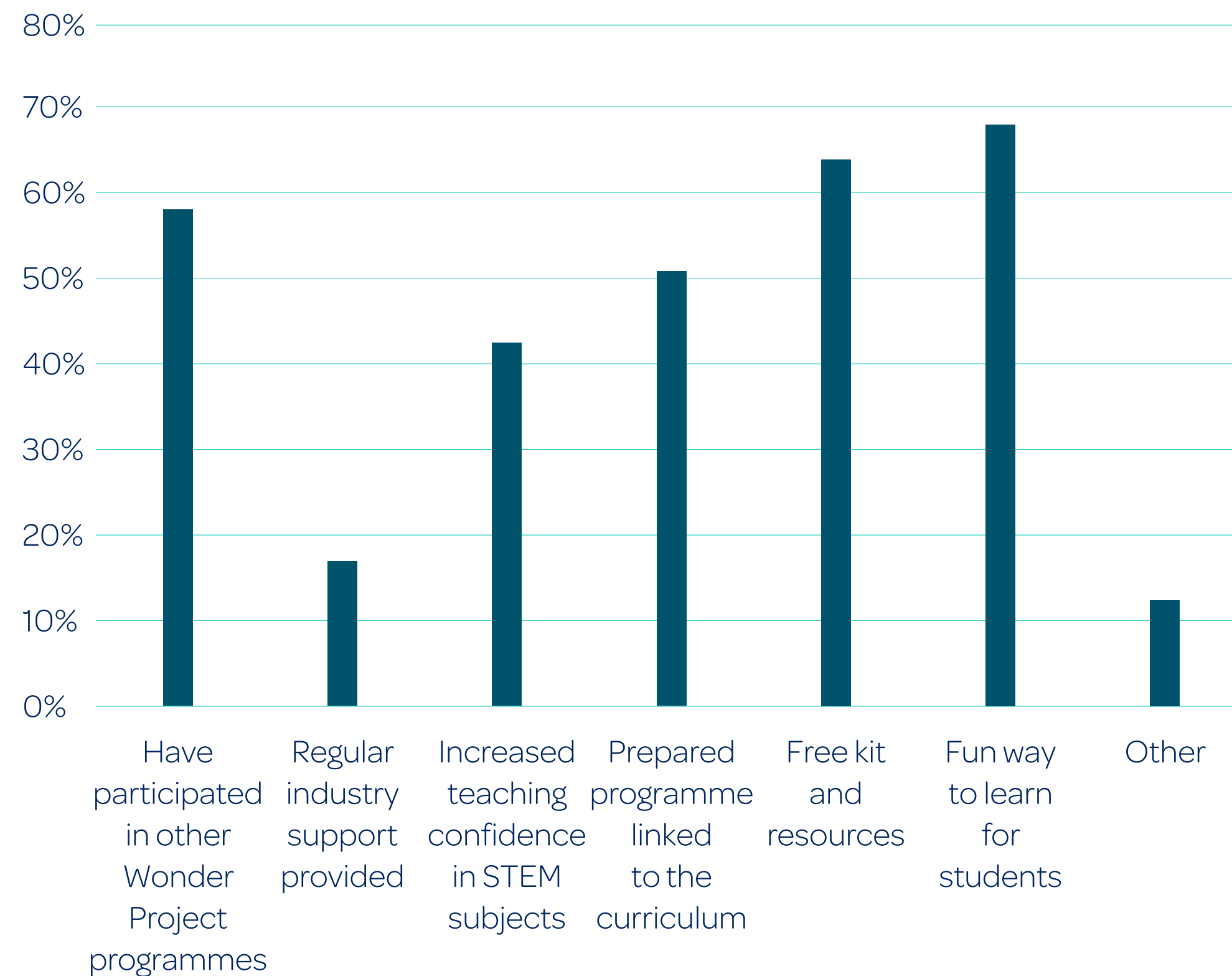
**KAIAKO
EXPERIENCE**



Registering

Motivation to sign up

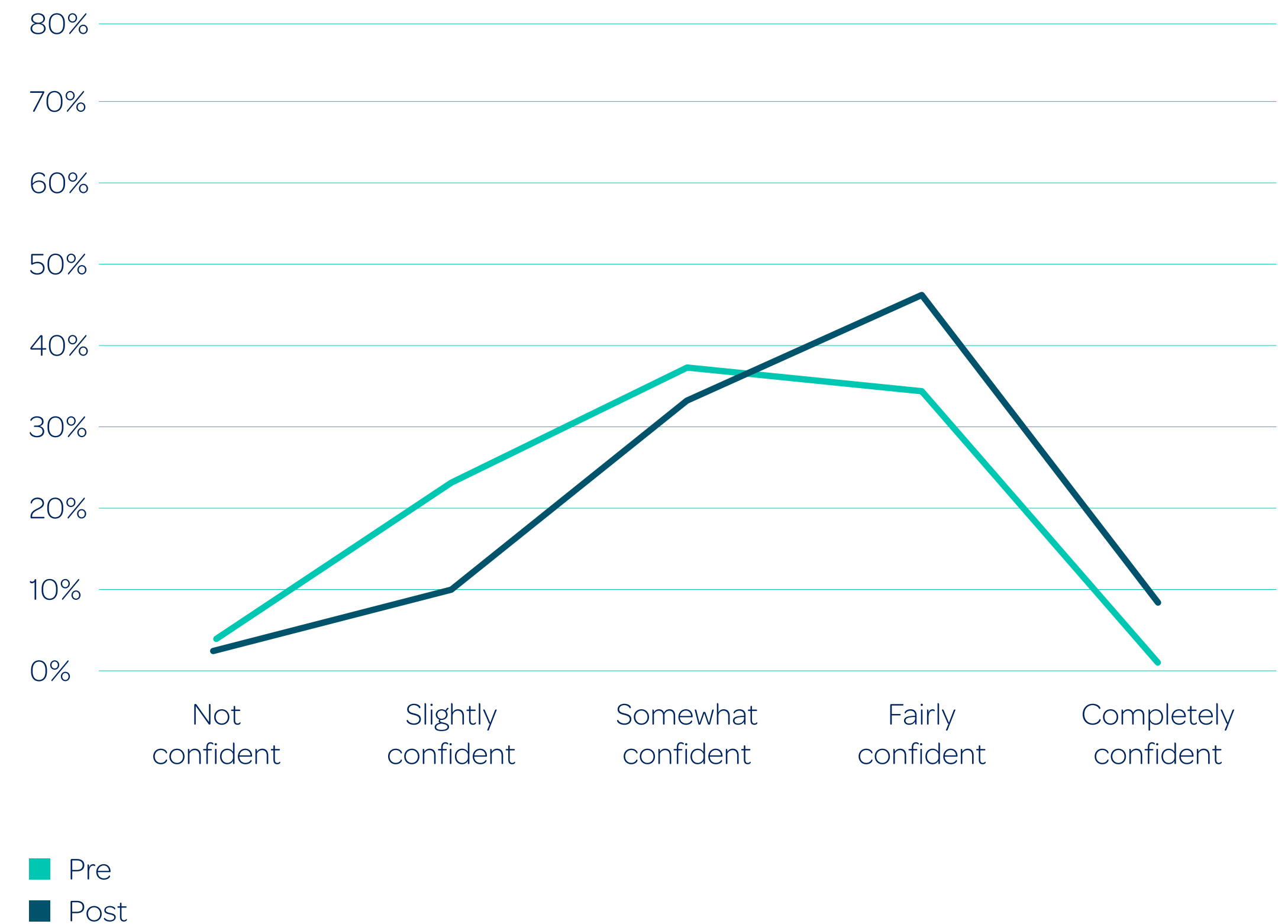
Kaiako primarily registered for the Water Challenge because it looked like a fun way for their ākonga to learn. The free kit and resources, as well as it being a prepared programme linked to the curriculum, and increasing their confidence teaching STEM were also predominant reasons they signed up.



Confidence

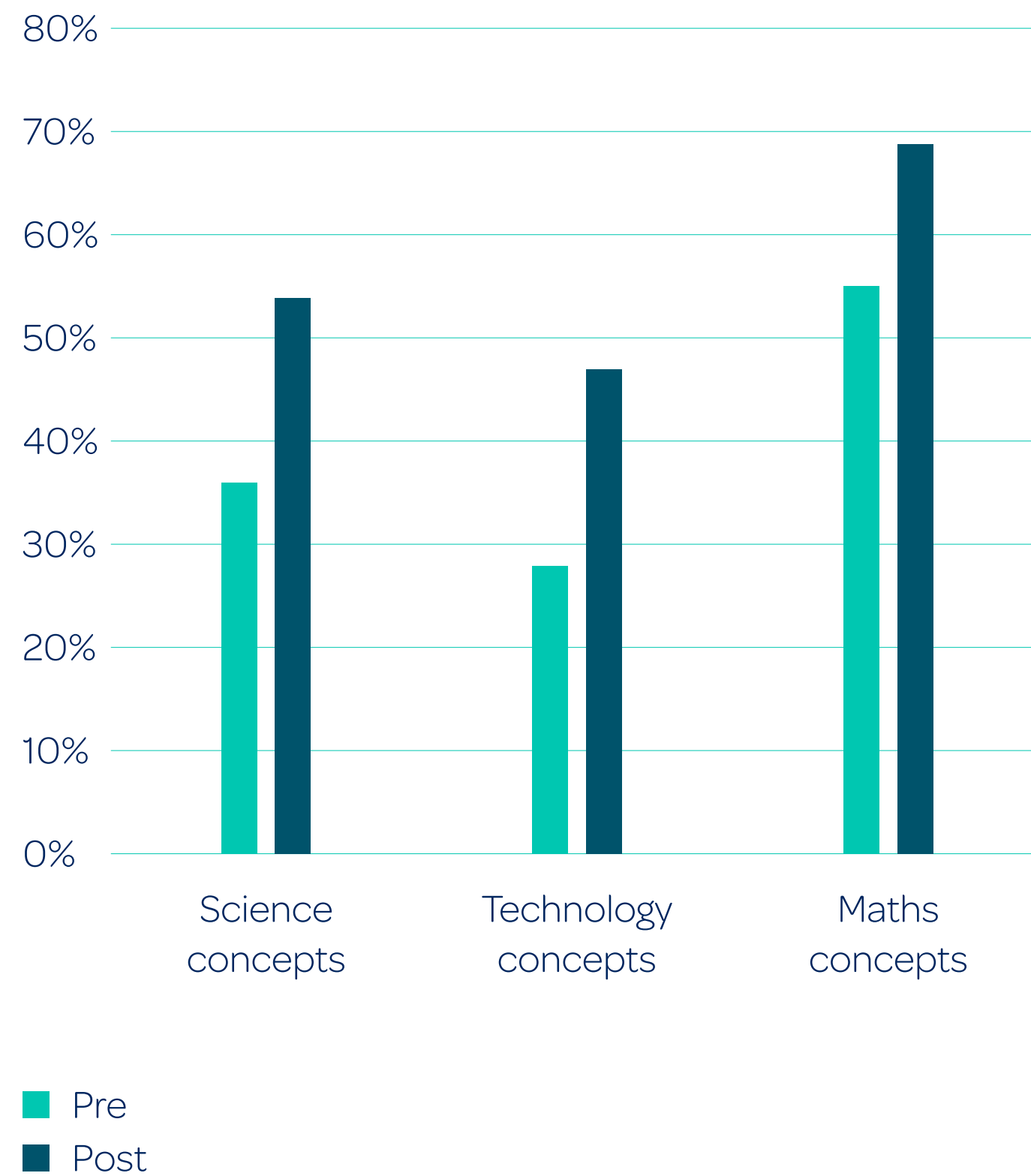
Teaching STEM subjects

When asked if they felt participating in the challenge has increased their confidence in teaching STEM, 95% of kaiako agreed. We had a 54% increase in kaiako feeling fairly or completely confident teaching STEM subjects.



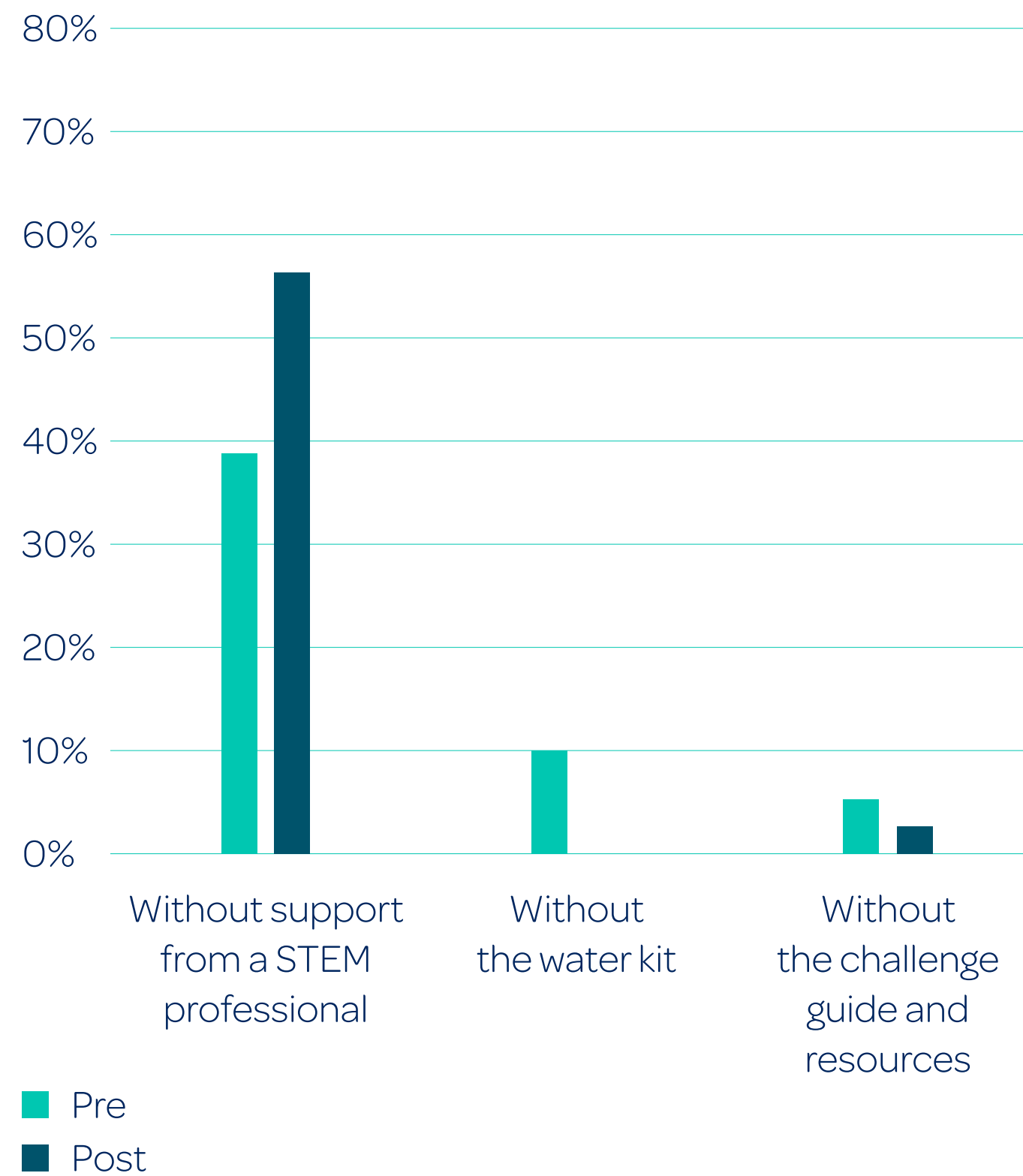
Demonstrating STEM concepts

There was a 43% increase in kaiako feeling fairly or completely confident demonstrating STEM concepts overall. The shift was largest for technology subjects.



Wonder Project support

When asked how confident kaiako would feel running the challenge on their own and without various aspects of support provided by the Wonder Project, we notice that kaiako still value the kit and challenge guide post the challenge. They do feel more able to run the challenge without support from a STEM professional, which aligns to their increase in confidence teaching STEM subjects and demonstrating concepts.



“The resources in the water kit were fantastic and not anything I would have been able to source myself.”

Andrea Noakes, Kaiako
St Columba's Catholic School

Challenge content

Structure and pace

77%
of kaiako

said the challenge was well structured and paced to support ākonga learning and agency

Accessibility

97%
of kaiako

said the challenge was appropriate for ākonga from different cultures and backgrounds

Inclusiveness

82%
of kaiako

said the challenge was appropriate for neurodiverse learners

Online Learning Hub

87%
of kaiako

said the online Learning Hub was helpful, easy to use and navigate

Teaching content

84%
of kaiako

were fairly or completely satisfied with the teaching content

Ākonga module content

84%
of kaiako

were fairly or completely satisfied with the ākonga module content

Enjoyment

Net
Promoter
Score



NPS of
54

with

64%
of kaiako

being
promoters
for the
Wonder Project



Experience
teaching the
challenge



87%
of kaiako

said they
enjoyed teaching
the Water Challenge



Take part
again



92%
of kaiako

said they'd
take part in another
Wonder Project
challenge based on
their experience



“It’s a refreshing change
of pace to go and hang
out with a bunch of
10-year-olds for an
hour in your day.”

~~~~~  
Jock McNaught, Ambassador  
Beca

**AMBASSADOR  
EXPERIENCE**



## Challenge content

### Teaching content

**57%**  
ambassadors

were fairly or  
completely  
satisfied with the  
teaching content

### Ākonga module content

**72%**  
ambassadors

were fairly or  
completely satisfied  
with the ākonga  
module content

## Enjoyment

### Net Promotor Score

**NPS of  
43**

with

**54%**  
ambassadors

being promoters  
for the Wonder  
Project

### Experience supporting the challenge

**82%**  
ambassadors

said they enjoyed  
supporting the  
Water Challenge

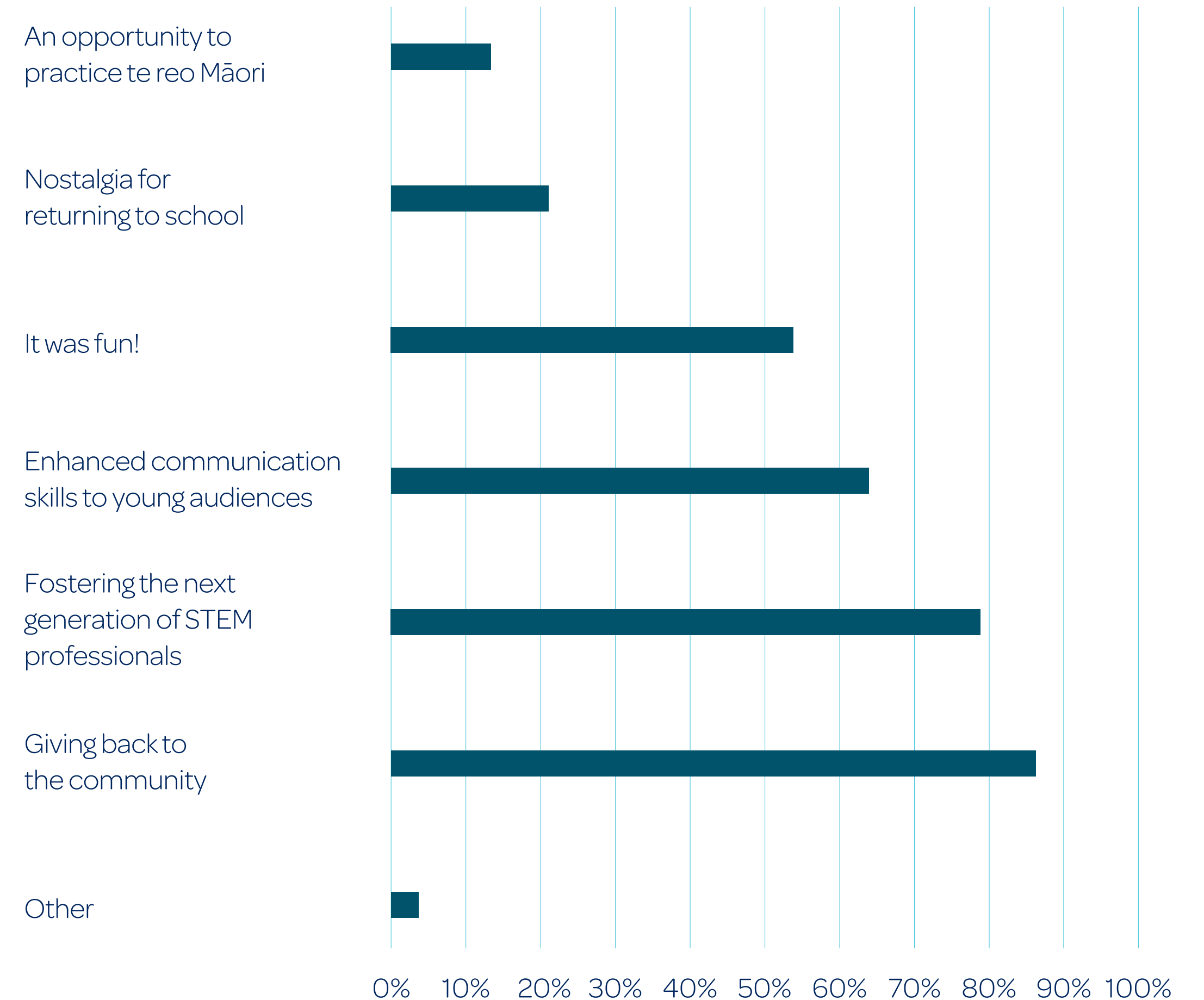
### Take part again

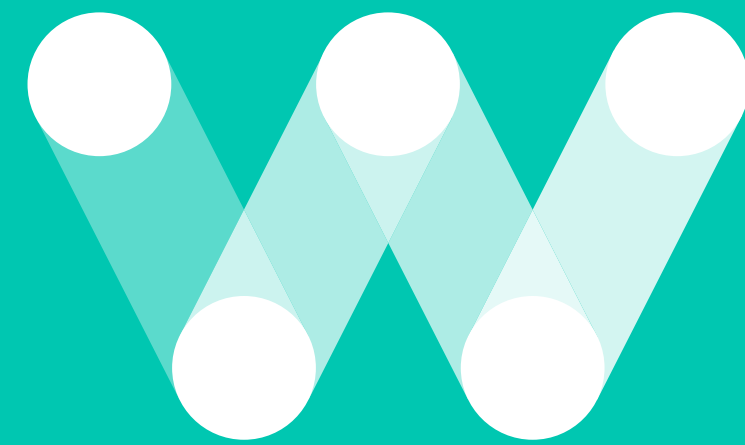
**89%**  
ambassadors

said they'd like to  
be involved again

## Benefits

Ambassadors rated giving back to their community and fostering the next generation of STEM professionals as the top things they gained from being part of the Wonder Project.





**Wonder**  
Project

**WHERE SCIENCE  
TECHNOLOGY  
ENGINEERING AND  
MATHS COME ALIVE.**