

# Queenslanders' Perceptions and Attitudes to Science Research Report

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Kantar Public Consultants: Richard Bishop & Susan Knight

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**1.**  
**Executive Summary**

# Executive Summary (1)

## Research background, objectives and methodology

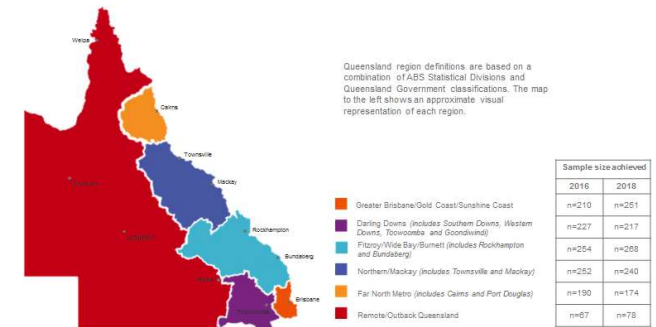
Science impacts our lives every day and is vital to the state’s economic prosperity, and our current and future wellbeing. Queensland scientists are international leaders at the forefront of many breakthroughs and discoveries that have a significant impact on the Queensland community. Given this, public awareness and recognition of science is essential to engender increased support for science at local, state and national levels.

In February/March 2016, Kantar Public (then TNS) conducted an online survey amongst n=1200 Queenslanders to establish a benchmark of the perceptions and attitudes towards science. In February 2018, Kantar Public repeated this research, conducting a 10 minute survey with n=1228 Queensland residents (aged 18 years and over). Broad age and gender quotas were applied and a good spread of responses across the whole of the state was achieved (as highlighted below).

Data was post-weighted to 2011 ABS Census data to ensure that the sample is representative of the population statistics in Queensland. Weighting was conducted by age, gender and location within Queensland.

The results of the research will help inform the Advance Queensland Science Engagement and Communication Strategy (being implemented by the Office of the Queensland Chief Scientist). The vision is to create a Queensland population that engages in and recognises, supports and advocates for science. This has the potential to help influence the subject choices of students and ultimately career and job choices and contribute to the broader economy.

6 Broad Queensland Regions



<sup>1</sup>Effects of integrative approaches among STEM subjects on students’ learning’, Becker, K. and Park, K., Journal of STEM Education Volume 12 – Issue 5 & 6, July-September, 2011

## Executive Summary (2)

### Awareness, knowledge and interest in Science

Overall, 20% of Queenslanders provided a correct definition of STEM (unprompted), with a further 9% partially correct in their definition. As in 2016, most Queenslanders typically associate science in mainstream (school-related) terms with chemistry, biology, physics and experiments the most common associations.

After being informed of the broad range of topics that science encompasses, almost seven in ten (68%) Queenslanders consider themselves interested in science. This represents a slight softening in interest compared to 2016 levels (74%). However, positively there has been an increase in interest among a key target; Queenslanders aged 18-24 (78% up from 65% in 2016).

With interest in science among males declining to a greater degree than among females, the gap between the two genders has narrowed with 69% of males interested compared to 67% of females. What has remained consistent, however, is the markedly different areas of interest between males and females; females are focussed on health and medicine, biology and environmental studies, while males are more interested in technology, computer science and engineering.

### Perceptions and Attitudes toward Science and Science Careers

Scientific development continues to be perceived as having a positive impact on society by four in five Queenslanders (80%), which has increased compared to 2016 results.

Encouragingly, compared to 2016 results there has been a decrease in agreement with negative perceptions about science including “a career science is limited to high performing students (37% down from 45%), “school science projects are not engaging” (30% down from 36%), “scientific developments will reduce the number of jobs” (23% down from 28%) and “people in science-related jobs spend most of their day in a lab” (15% down from 21%).

As in 2016, most Queensland parents (78%) stated they would encourage their children to consider science as a subject to study at school, but fewer would actively encourage science as a career choice (59%).

## Executive Summary (3)

### Media and Science News / Information

Although the majority of Queenslanders are interested in science, one in two (51%) Queenslanders consider there is currently not enough information available.

### Science Activities and Events

As in 2016, those in more regional locations are more likely to have participated in science-based activities outside their own local area – suggesting the issue of accessibility remains. Museums, guided nature tours, and zoo/aquarium visits remain the most commonly attended science-based activities in Queensland. One in two Queenslanders (51%) express an interest in participating in science-based events in the future.

Awareness of National Science Week (42%) and the World Science Festival (11%) was consistent with results from 2016. In terms of attendance, almost one in ten (8%) had attended the 2016 World Science Festival, whilst slightly more than one in ten (13%) stated they had participated in National Science Week.

Whilst unprompted awareness of Citizen Science was very low at 3%, when prompted with a description awareness increases to almost one in five (18%). Of those aware, around one in four (27%) have participated either in their local area or somewhere else in Queensland.

### Awareness of Queensland Science Projects and Scientists

Spontaneously, one in four (25%) Queenslanders were able to name notable Queensland scientists and/or discoveries (an increase from 20% in 2016).

**2.**  
**Visual Representation of 6 Broad Queensland  
Regions and Remoteness Classifications**

## 6 Broad Queensland Regions



Queensland region definitions are based on a combination of ABS Statistical Divisions and Queensland Government classifications. The map to the left shows an approximate visual representation of each region.

- Greater Brisbane/Gold Coast/Sunshine Coast
- Darling Downs (*includes Southern Downs, Western Downs, Toowoomba and Goondiwindi*)
- Fitzroy/Wide Bay/Burnett (*includes Rockhampton and Bundaberg*)
- Northern/Mackay (*includes Townsville and Mackay*)
- Far North Metro (*includes Cairns and Port Douglas*)
- Remote/Outback Queensland

Sample size achieved	
2016	2018
n=210	n=251
n=227	n=217
n=254	n=268
n=252	n=240
n=190	n=174
n=67	n=78



# Remoteness Classifications



Remoteness classifications referenced throughout the report are based on the ABS 2011 Australian Statistical Geography Standard Queensland Remoteness Area boundaries.

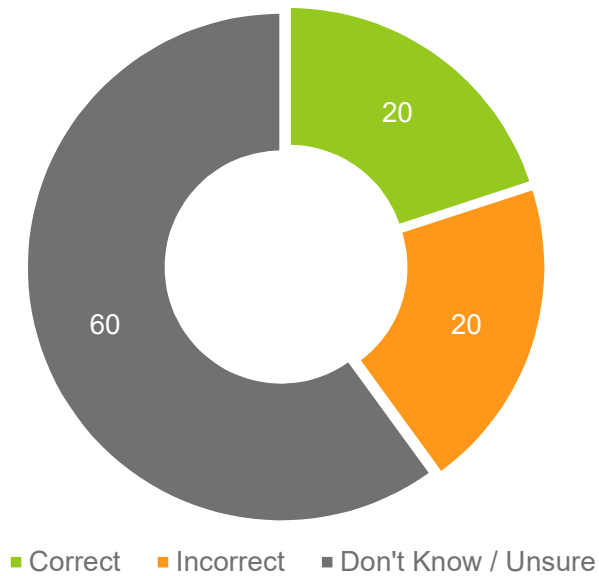
- Very remote
- Remote
- Outer regional
- Inner regional
- Major cities

Sample size achieved	
2016	2018
n=117	n=118
n=551	n=539
n=352	n=367
n=180	n=204

### **3. Awareness, Knowledge and Interest in Science**

Overall, one in five (20%) Queenslanders understood what STEM stands for (unprompted).

#### Awareness of STEM Abbreviation



#### Key demographic differences:

Those, aged under 45 years, were more likely to provide the correct definition (23% correct); while those over 45 years significantly less likely (16% correct).

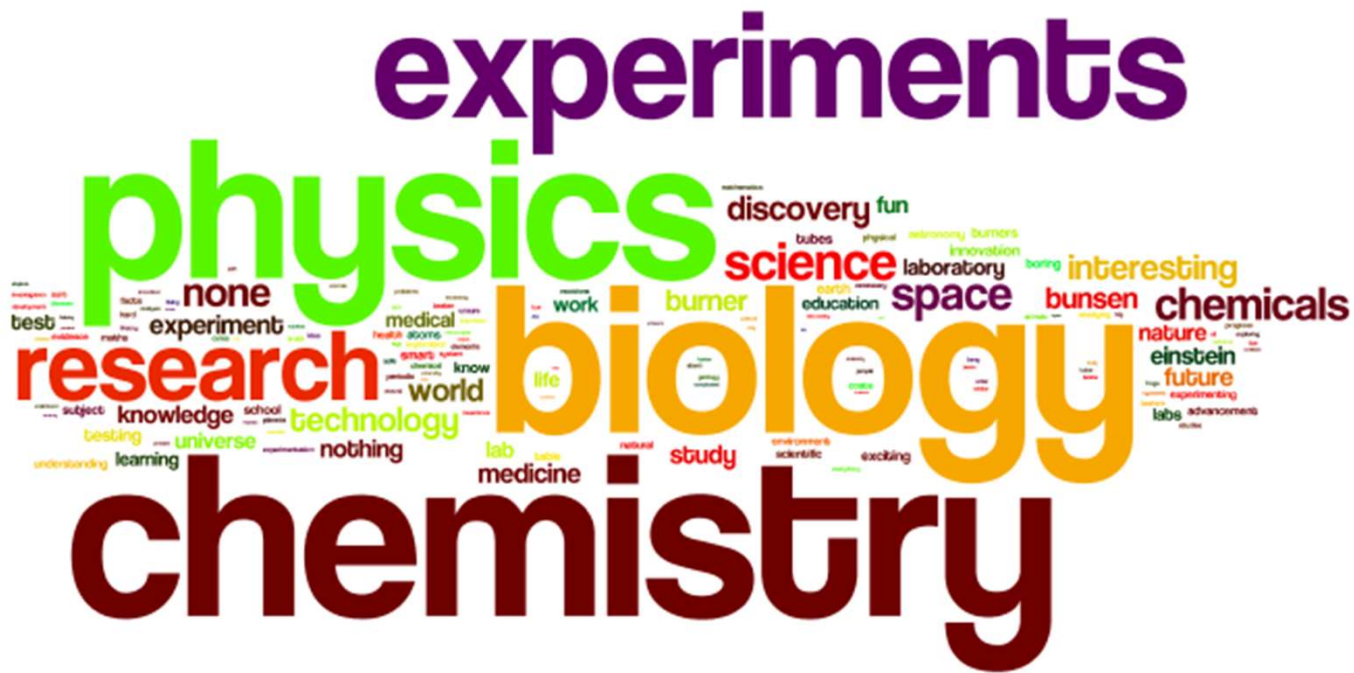
Those who have completed a degree from a university are significantly more likely to have provided a correct definition of STEM when compared to the total (31% vs. 20%). Conversely, those with a lower level of education (high school only) are less likely to have provided a correct definition compared to the total (16% vs. 20%).

Q1. Firstly, in the context of the following sentence, what do you think the abbreviation STEM stands for? There is currently a focus on STEM in Queensland schools.  
BASE: All respondents 2018 n=1228.

Science is generally associated with mainstream terms such as, chemistry, physics, biology, experiments, and research.

Unprompted Awareness / Understanding of Science

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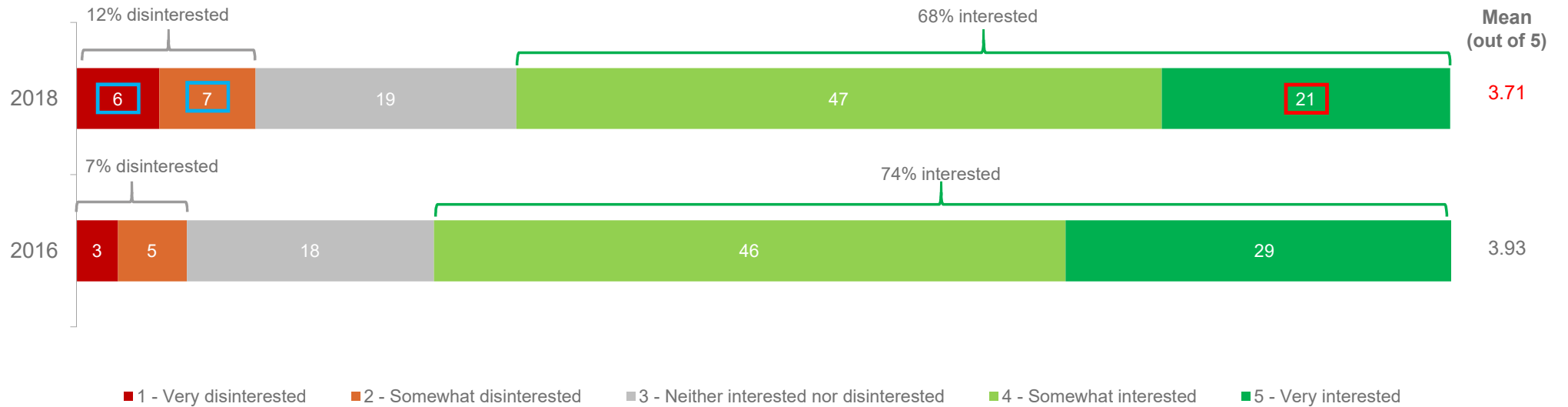
A1. When you think about science, what words or phrases first come to mind?

BASE: All respondents 2018 n=1228

Note: The top 100 words mentioned by respondents are shown in the above word cloud. Words mentioned more often are shown in larger text.

Almost seven in ten Queenslanders (68%) claim they are interested in science. This is slightly down compared to 2016 results (74%).

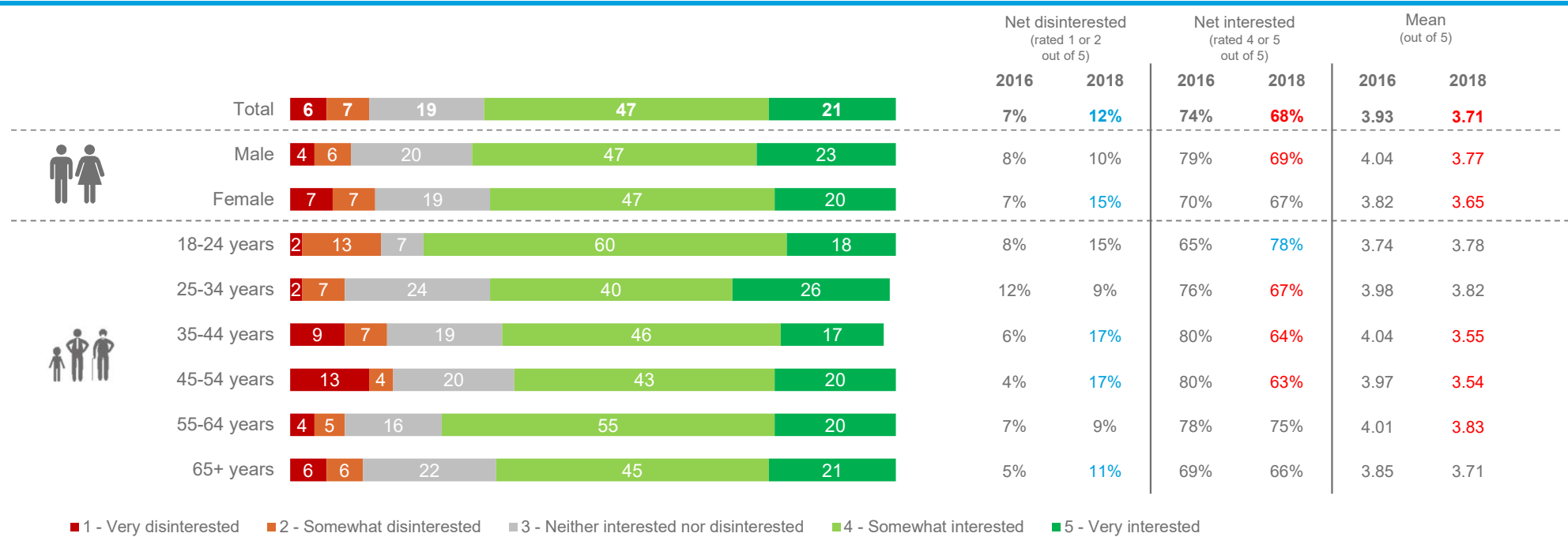
Interest in Science (%)



A2. Thinking about science, as defined above, how interested would you say you are in science?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

Positively, interest in science has increased among 18-24 year olds from 65% stating they are 'somewhat' or 'very interested' in 2016, to 78% in 2018. Interest among females has softened to a lesser degree than among males, resulting in interest levels being more closely aligned between the two groups.

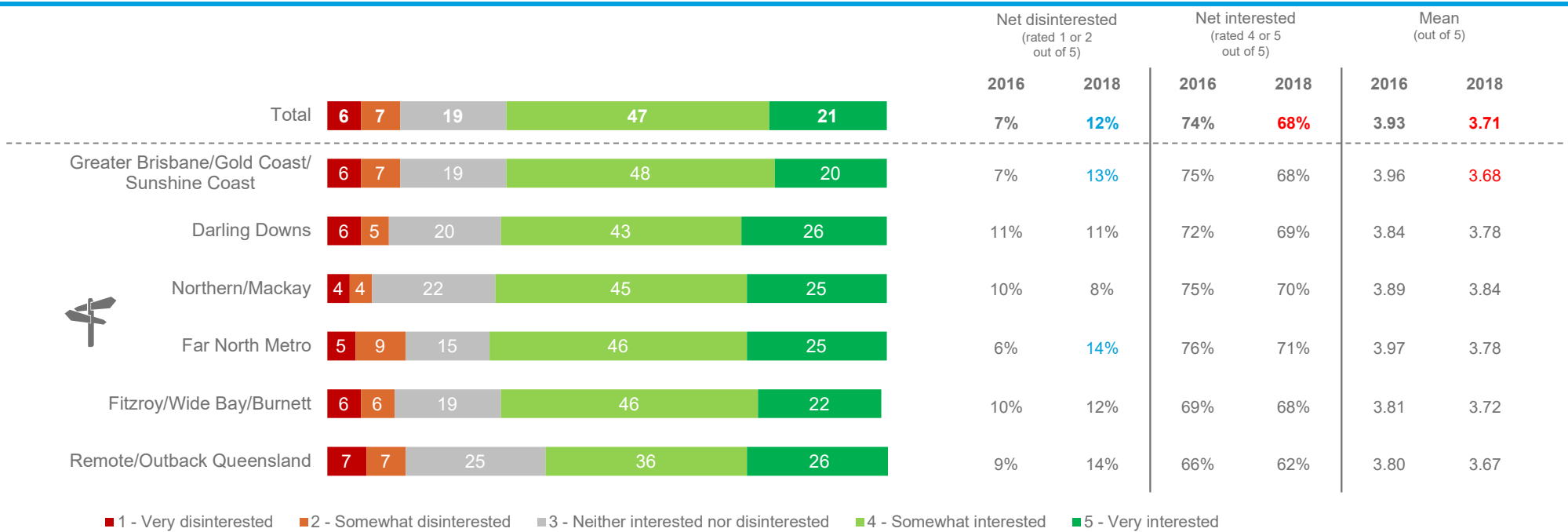
Interest in Science (%) – by age and gender



A2. Thinking about science, as defined above, how interested would you say you are in science?  
 BASE: All respondents 2018 n=1228; 2016 n=1200; Male 2018 n=556; 2016 n=565; Female 2018 n=672; 2016 n=635; 18-24 years 2018 n=96; 2016 n=139; 24-34 years 2018 n=252; 2016 n=231; 35-44 years 2018 n=220; 2016 n=200; 45-54 years 2018 n=152; 2016 n=190; 55-64 years 2018 n=239; 2016 n=217; 65+ years 2018 n=269; 2016 n=223.

# Interest levels in science are consistent across the state.

## Interest in Science (%) – by 6 broad Queensland regions



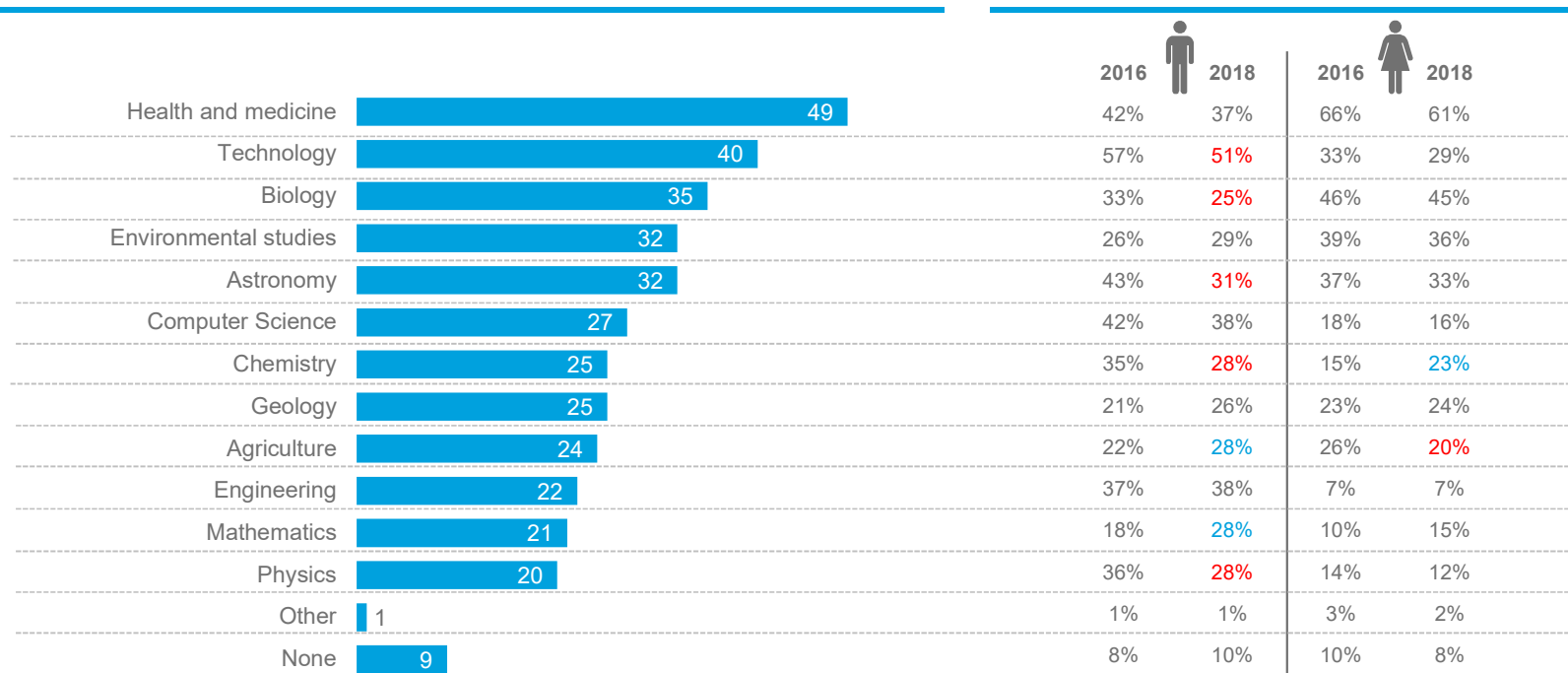
A2. Thinking about science, as defined above, how interested would you say you are in science?

BASE: All respondents 2018 n=1228; 2016 n=1200; Greater Brisbane/Gold Coast/Sunshine Coast 2018 n=251; 2016 n=210; Darling Downs 2018 n=217; 2016 n=227; Northern/Mackay 2018 n=240; 2016 n=252; Far North Metro 2018 n=174; 2016 n=190; Fitzroy/Wide Bay/Burnett 2018 n=268; 2016 n=254; Remote/Outback Queensland 2018 n=78; 2016 n=67.

As in 2016, overall, health and medicine and technology remain the most commonly nominated science areas of interest. Interest in agriculture and mathematics has significantly improved for males in 2018; while interest in chemistry has improved significantly for females.

Areas of Science Interest (Total %)

Areas of Science Interest (%) – by gender






A4. Which of the following broad areas of science are you interested in?  
 BASE: Those who are not "very disinterested" in science 2018 n=1164; 2016 n=1152; Male 2018 n=533; 2016 n=549; Female 2018 n=631; 2016 n=603.



On the whole, there are minimal differences in areas of science interest based on regional location.

Areas of Science Interest (%) – regional differences

	Greater Brisbane/Gold Coast/Sunshine Coast		Darling Downs		Northern/Mackay		Far North Metro		Fitzroy/Wide Bay/Burnett		Remote/Outback Queensland	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
 Areas of significantly higher interest level than total  			<b>Chemistry</b> (28% vs. 20%)  <b>Mathematics</b> (21% vs. 14%)		<b>Geology</b> (28% vs. 22%)		<b>Geology</b> (30% vs. 22%)  <b>Chemistry</b> (29% vs. 20%)  <b>Mathematics</b> (27% vs. 14%)		<b>Chemistry</b> (27% vs. 20%)  <b>Mathematics</b> (20% vs. 14%)	<b>Astronomy</b> (41% vs. 32%)		
Areas of significantly lower interest level than total  			<b>Engineering</b> (16% vs. 22%)		<b>Computer science</b> (21% vs. 30%)	<b>Computer science</b> (17% vs. 27%)		<b>Computer science</b> (18% vs. 27%)  <b>Chemistry</b> (18% vs. 25%)	<b>Biology</b> (26% vs. 39%)			<b>Technology</b> (26% vs. 40%)  <b>Computer science</b> (14% vs. 27%)

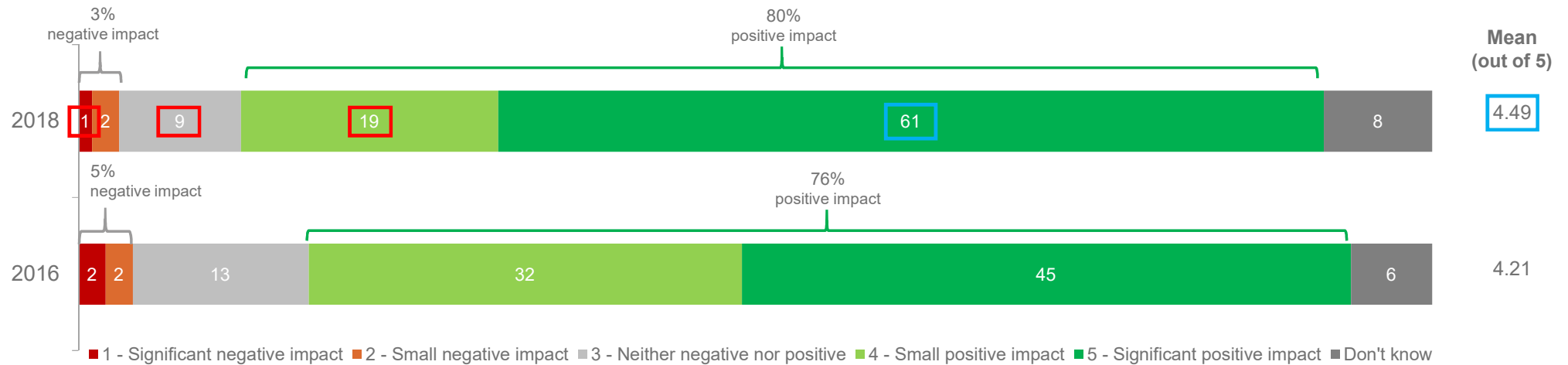
A4. Which of the following broad areas of science are you interested in?

BASE: Those who are not "very disinterested" in science 2018 n=1164; 2016 n=1152; Greater Brisbane/Gold Coast/Sunshine Coast 2018 n=235; 2016 n=206; Darling Downs 2018 n=208; 2016 n=213; Northern/Mackay 2018 n=232; 2016 n=239; Far North Metro 2018 n=166; 2016 n=184; Fitzroy/Wide Bay/Burnett 2018 n=252; 2016 n=244; Remote/Outback Queensland 2018 n=71; 2016 n=66.

## **4. Perceptions and Attitudes towards Science**

At a total level, the perceived impact of scientific development in society has strengthened slightly (80% vs. 76% in 2016). Not surprisingly, those who have studied, or have a career in a science, are significantly more likely to perceive scientific development as having a positive impact (94%).

Perceived overall impact of scientific development on society (%)



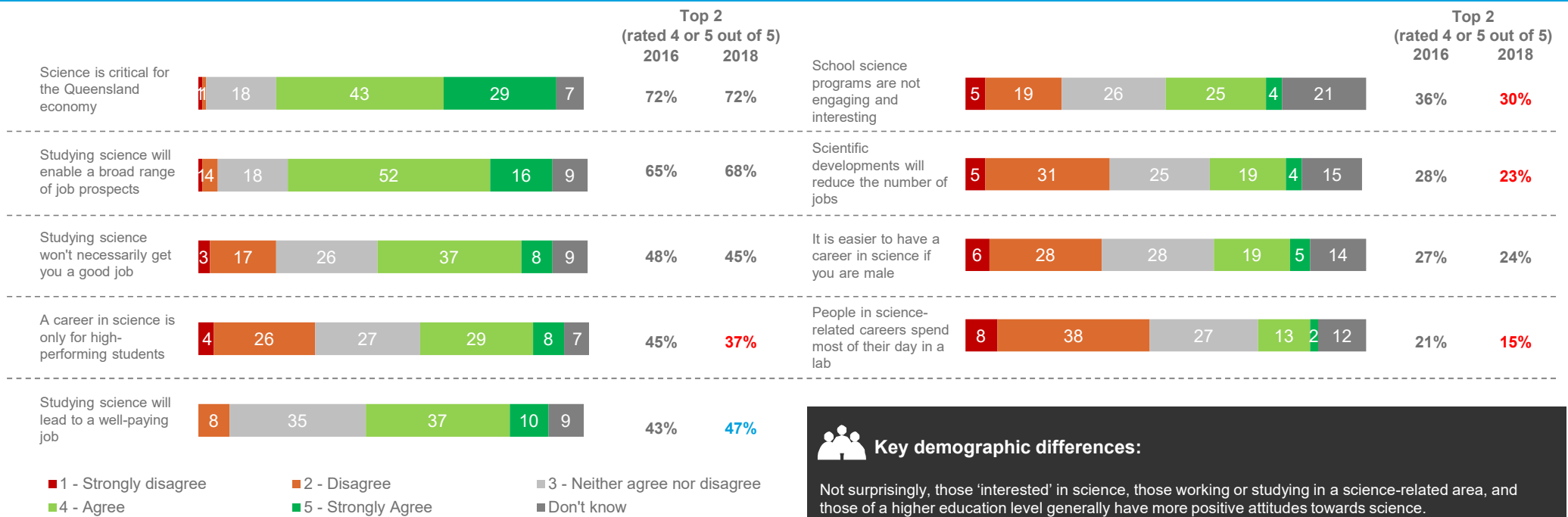
B1a. And overall, please indicate the impact you believe scientific development is having on society in general.  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

**Key demographic differences:**

Those who have completed a degree from a university are significantly more likely perceive scientific development is having positive impact on society compared to the total (89% vs. 80%). Those with a lower level of education (high school only) are less likely to see the positive impact compared to the total (68% vs. 80%).

Positively, there has been a significant decline in agreement for the following statements: ‘a career in science is limited to high-performing students’; ‘school sciences programs are not engaging and interesting’; ‘scientific developments will reduce the number of jobs’; and ‘people in science related careers spend most of their day in a lab’.

General attitudes towards science (%)



**Key demographic differences:**  
 Not surprisingly, those 'interested' in science, those working or studying in a science-related area, and those of a higher education level generally have more positive attitudes towards science.

B2. To what extent do you agree or disagree with the following statements about science?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

Those who have completed a diploma or certificate are significantly more likely to agree that studying science will enable a broad range of job prospects.

General attitudes towards science (% rated 4 “agree” or 5 “strongly agree” out of 5) – by highest education level achieved



Attitudinal statements about science	Total		High school only		Diploma or certificate from a college or TAFE		Degree from a university (incl. honours)		Post-graduate degree/ diploma	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Science is critical for the Queensland economy	72%	72%	67%	62%	71%	74%	81%	88%	75%	71%
Studying science will enable a broad range of job prospects	65%	68%	57%	61%	63%	71%	79%	77%	75%	67%
Studying science won't necessarily get you a good job	48%	45%	49%	39%	48%	46%	40%	49%	47%	52%
A career in science is only for high-performing students	45%	37%	45%	40%	42%	36%	49%	40%	44%	29%
Studying science will lead to a well-paying job	43%	47%	45%	49%	38%	43%	48%	55%	38%	33%
School science programs are not engaging and interesting	36%	30%	33%	26%	31%	28%	45%	38%	46%	34%
Scientific developments will reduce the number of jobs	28%	23%	28%	18%	26%	20%	34%	36%	29%	32%
It is easier to have a career in science if you are male	27%	24%	21%	21%	20%	22%	41%	38%	48%	20%
People in science-related careers spend most of their day in a lab	21%	15%	23%	13%	15%	15%	21%	21%	23%	17%

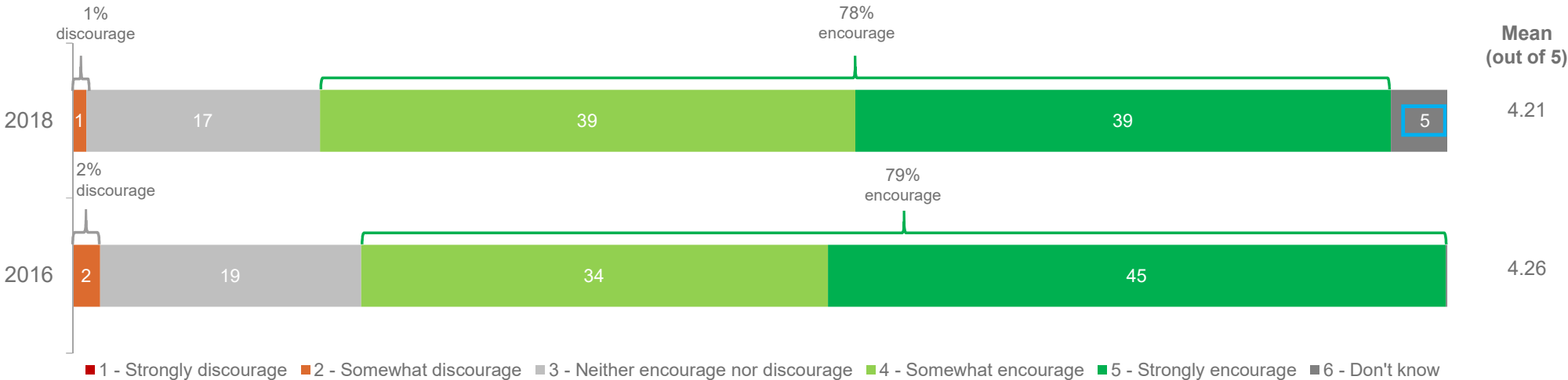
B2. To what extent do you agree or disagree with the following statements about science?

BASE: All respondents 2018 n=1228; 2016 n=1200; High school only 2018 n=476; 2016 n=506; Diploma or certificate from a college or TAFE 2018 n=472; 2016 n=420; Degree from a university (incl. honours) 2018 n=171; 2016 n=155; Post-graduate degree/diploma 2018 n=95; 2016 n=111.

**5.  
Parents' Behaviours and Attitudes towards  
their children studying Science**

Consistent with 2016, almost four in five (78%) parents/carers have/would encourage their child/children to study science subjects in high school.

Encouragement of studying science subjects in high school (%)



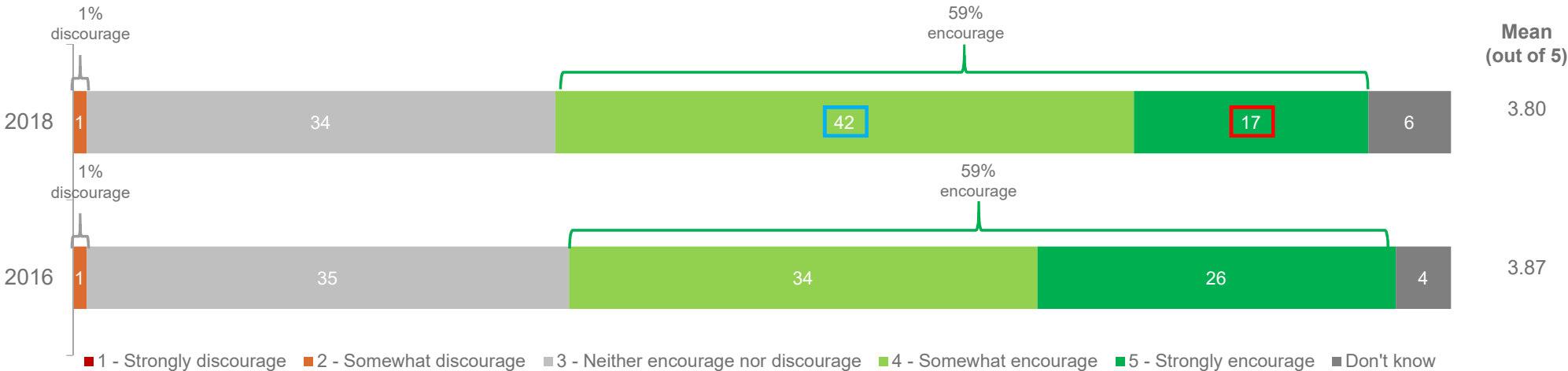
**Key demographic differences:**

Those interested in science are more likely to encourage their children to study science subjects in high school (88%) when compared to the total (78%). Those with a high school education level are less likely to encourage the same (67% vs. 78%).

C1. To what extent have you / would you encourage your child/children to study science subjects in high school?  
 BASE: Parents /primary carers 2018 n=540; 2016 n=475.

Almost three in five (59%) parents/carers have/would encourage their child/children to consider a science-based career.

Encouragement of science-based career (%)



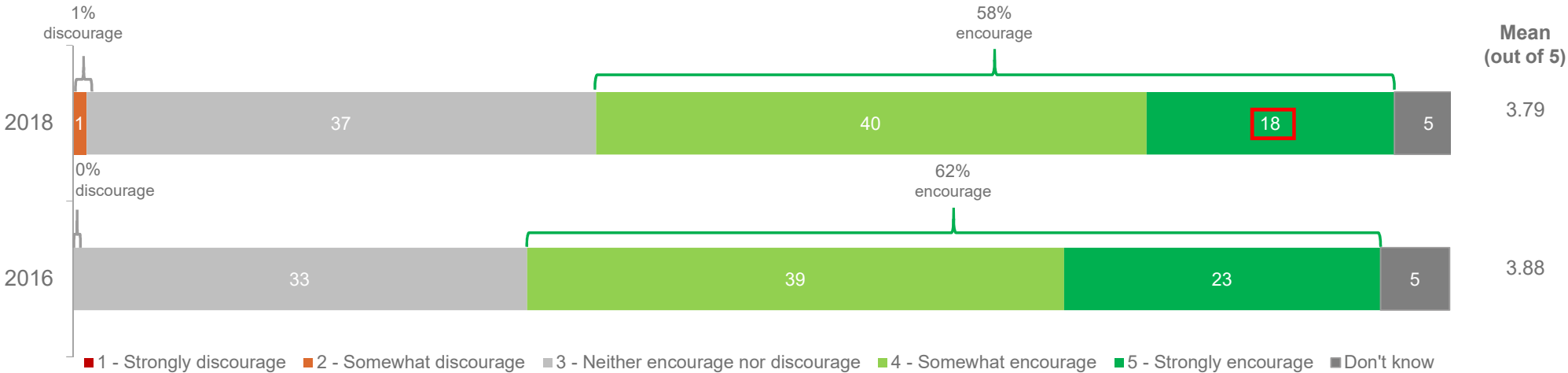
**Key demographic differences:**  
 Those aged 65 or older (75%), people in ROQ (65%), those who completed a degree (75%), those who studied in a science related field (75%), and those who are interested in science (69%) are significantly more likely to encourage a science-based career when compared to the total.

C3. To what extent have you / would you encourage your child/children to consider a science-based career?  
 BASE: Parents /primary carers 2018 n=540; 2016n=475.



The proportion of Queensland parents to 'strongly encourage' science-based activities outside of school has softened slightly since 2016 (from 23% to 18%). Despite this, almost three in five (58%) Queensland parents/carers have/would encourage their child/children to be involved in science-based activities outside of school.

Encouragement of science-based activities outside of school (%)



**Key demographic differences:**

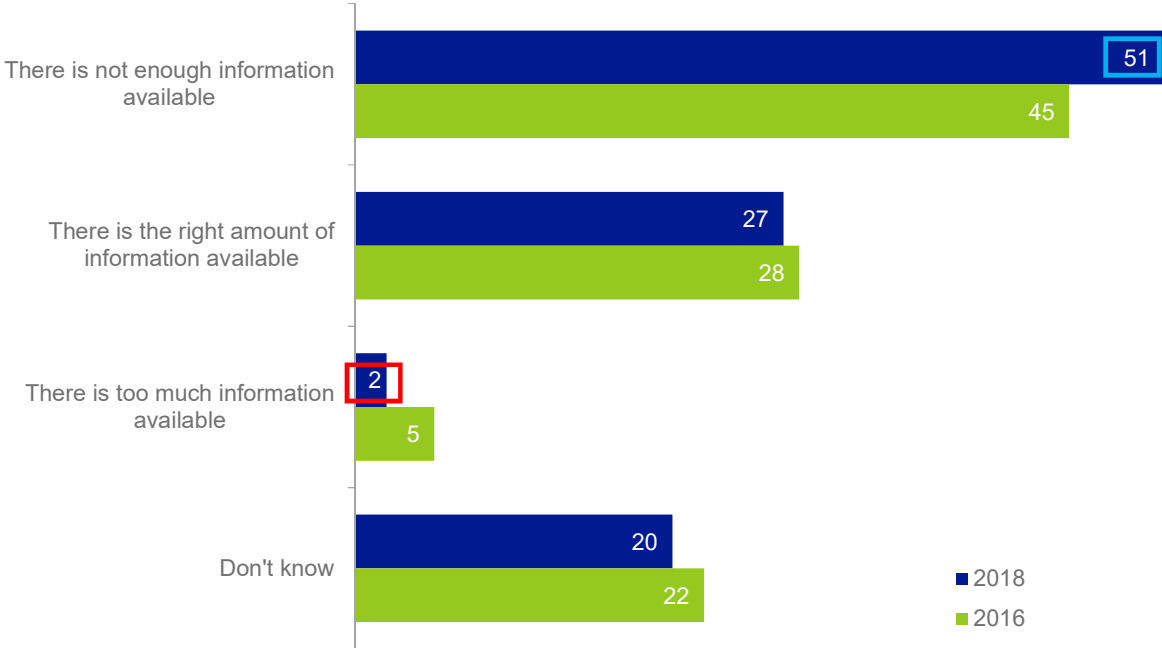
Those 'interested' in science (66%), those working or studying in a science-related area (79%), those of a higher education level (74%), and those in ROQ (64%) are significantly more likely to encourage children to be involved in science-based activities outside of school when compared to the total (58%).

C6. To what extent have you / would you encourage your child/children to be involved in science-based activities outside of school?  
 BASE: Parents /primary carers 2018 n=540; 2016n=475.

## **6. Media and Science News / Information**

One in two Queenslanders (51%) believe that there is currently not enough information or news about science via the media or online.

Amount of science news and information available in the media and online (%)



**Key demographic differences:**

Those 'interested' in science (61%), those working (63%) or studying in a science-related area (64%), those of a higher education level (65%), and those 18-24 (63%) are significantly more likely to think that there is not enough news or information about science in the media and online when compared to the total (51%).

Parents (38%) and indigenous Queenslanders (42%) are significantly more likely to believe there is the right amount of information available.

D2. Which of the following best describes the amount of information or news about science that you currently see or hear through the media or online?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

## **7. Science Activities and Events**

# Queenslanders have noticed a wide range of activities and events in their local area in the past 1 -2 years.

## Science events and activities in local area in the past 2 years – Verbatim quotes

*“Astronomy drama using telescopes, lots of landcare/primary producer talks/workshops, robotics/technology kids' sessions at the local Library, visiting science/technology talks/workshops.”*

*“Developments in agriculture- breeding new varieties of plants to produce specific benefits i.e fatty acid profile in peanuts. school-based events.”*

*“Farms working to stop their activities affecting others. Small crop growers working to improve crops. Solar farms being installed. Coal miners working to better clean coal power. Work to reduce pollution.”*

*“Small courses at local libraries, information sessions, school events.”*

*“Robots inventions, technology science museum for kids. Computer and app conventions for kids learning. Kids garden and nature exploration groups.”*

*“Studies on great barrier reef activities, studies on animals that were thought to be extinct. studies on medicinal plants.”*

*“Talks by Renowned overseas experts on scientific subjects e.g. : Professor Brian Cox.”*

*“Only what's reported in the media and that's mainly medical breakthroughs.”*

*“Local Students compete for chances to attend a Workshop in Canberra. This is an annual competition.”*

*“The local museum changes its theme regularly. We normally attend the Townsville Ecofiesta at which there are a few science displays. One of my kids does Optiminds which has science/engineering as one of its options and sit in on a couple of these performances. We attended James Cook University open day this year and last year at which there are science related displays from related faculties. We visited the Australian Institute of Marine Science Open Day at Cape Cleveland, Townsville around 2 years ago.*

*“Unfortunately there aren't many. We live semi-rurally. Sometimes the library has dinosaur things on but otherwise isn't much.”*

*“My son done a stem program through school last year”*

*“USC Science Research Awards, Science Week activities, frog counts, mangrove protection programs.”*

*“Science expo in our regional area. Science careers event. Environmental protection of the local waterways. Open university science (robotics) available to the community.”*

*“The local Department of Environment runs a 6 weeks programme for school aged kids based around the environment and issues that affect our local area.”*

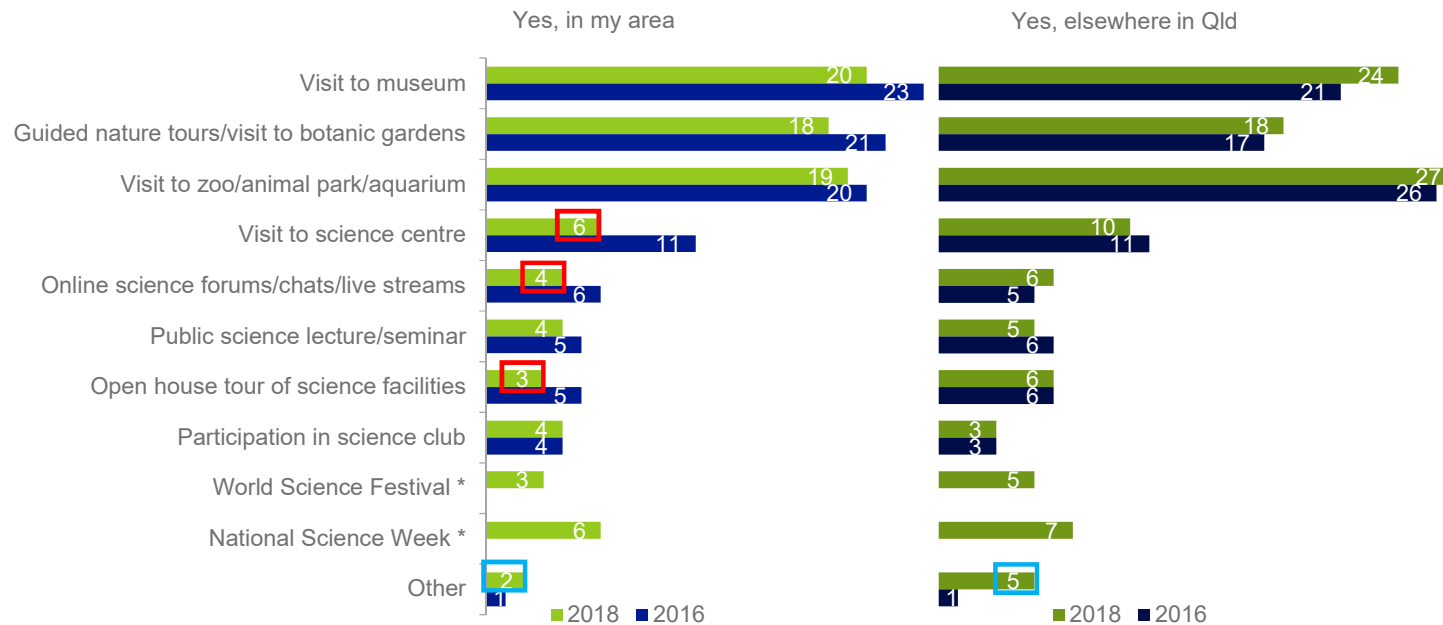
*“Info on global warming Biology related save the reef Uni open days advertising science.”*

E1new. What science events and activities, if any, have you noticed in your local area in the past 1-2 years?  
BASE: All respondents 2018 n=1228.

Nb: Select verbatim responses provided.

Visiting the museum, zoo/animal park/aquarium, and guided nature tours/visiting the botanic gardens remain the most commonly attended science-based activities for Queenslanders.

Participation in science-based activities in past 12 months (%)



**Key demographic differences:**  
 Younger participants and people who are 'interested' in science were more likely to have participated or had someone in their immediate family participant in science-based activities in the last 12 months.

World Science Fair locations attended

1%	Chinchilla
4%	Townsville
6%	Toowoomba
9%	Gladstone
86%	Brisbane

E2. Have you or has anyone in your immediate family participated in or attended any of the following science-based activities or events in the last 12 months, either in your area or somewhere else in Queensland?  
 E2a. You mentioned that you've attended the World Science Festival, to clarify, please select with location(s) you or someone in your immediate family attended this festival.  
 BASE: All respondents 2018 n=1228; 2016 n=1200; Those who attended World Science Festival 2018 n=60. NOTE: \* New code added in 2018.

As in 2016, those in more regional locations are more likely to have participated in science-based activities outside their own local area – suggesting the issue of accessibility remains.

Participation in science-based activities in past 12 months (%) – by remoteness



Science Activities undertaken in past 12 months <sup>7</sup>	Yes, in my area										Yes, elsewhere									
	Total		Major Cities		Inner Regional		Outer Regional		Remote/ Very remote		Total		Major Cities		Inner Regional		Outer Regional		Remote/ Very remote	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Visit to museum	23%	20%	28%	23%	17%	13%	17%	18%	12%	15%	21%	24%	19%	26%	27%	25%	21%	18%	31%	26%
Guided nature tours/nature play/visit to botanic gardens	21%	18%	24%	17%	13%	17%	23%	22%	9%	17%	17%	18%	16%	18%	20%	17%	17%	16%	29%	21%
Visit to zoo/animal park/aquarium	20%	19%	19%	18%	17%	21%	24%	24%	17%	11%	26%	27%	24%	29%	32%	22%	24%	23%	39%	37%
Visit to science centre	11%	6%	16%	7%	7%	5%	4%	5%	4%	2%	11%	10%	10%	10%	16%	12%	9%	7%	16%	13%
Online science forums/chats/live streams	6%	4%	7%	3%	5%	4%	7%	5%	5%	12%	5%	6%	5%	6%	7%	4%	4%	5%	12%	10%
Public science lecture/seminar	5%	4%	6%	4%	3%	5%	5%	5%	5%	4%	6%	5%	7%	5%	7%	6%	4%	3%	7%	13%
Open house tours of science facilities	5%	3%	7%	3%	1%	4%	4%	4%	2%	1%	6%	6%	6%	7%	8%	6%	4%	3%	9%	5%
Participation in science club	4%	4%	5%	5%	4%	4%	4%	4%	3%	3%	3%	3%	3%	4%	3%	1%	3%	3%	6%	6%
Other	1%	2%	<1%	1%	1%	4%	3%	4%	2%	4%	1%	5%	1%	6%	<1%	3%	2%	3%	2%	9%

E2. Have you or has anyone in your immediate family participated in or attended any of the following science-based activities or events in the last 12 months, either in your area or somewhere \

BASE: All respondents 2018 n=1228; 2016 n=1200; Major cities 2018 n=234; 2016 n=180; Inner regional 2018 n=570; 2016 n=352; Outer regional 2018 n=726; 2016 n=551; Remote/Very remote 2018 n=174; 2016 n=117.

There has been a significant increase in participation in guided nature tours/nature play/visit to botanic gardens among those in remote/outback Queensland.

Participation in science-based activities in past 12 months (%) – by 6 broad Queensland regions



Science Activities undertaken in past 12 months	Yes, in my area														Yes, elsewhere														
	Total		Greater Brisbane/Gold Coast/Sunshine Coast		Darling Downs		Northern/Mackay		Far North Metro		Fitzroy/Wide Bay/ Burnett		Remote/Outback QLD		Total		Greater Brisbane/Gold Coast/Sunshine Coast		Darling Downs		Northern/Mackay		Far North Metro		Fitzroy/Wide Bay/ Burnett		Remote/Outback QLD		
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016
Visit to museum	23%	20%	26%	21%	20%	21%	26%	27%	12%	15%	10%	6%	9%	17%	21%	24%	21%	25%	30%	29%	18%	20%	26%	17%	20%	24%	28%	24%	
Guided nature tours/nature play/visit to botanic gardens	21%	18%	20%	15%	11%	17%	21%	24%	35%	35%	25%	22%	3%	16%	17%	18%	17%	18%	22%	20%	17%	20%	14%	11%	16%	16%	25%	19%	
Visit to zoo/animal park/aquarium	20%	19%	18%	18%	15%	16%	28%	24%	29%	35%	25%	21%	17%	12%	26%	27%	26%	27%	34%	34%	22%	25%	24%	22%	29%	26%	38%	34%	
Visit to science centre	11%	6%	15%	7%	3%	6%	7%	8%	4%	4%	3%	2%	3%	1%	11%	10%	10%	10%	16%	14%	7%	8%	12%	10%	12%	10%	20%	10%	
Online science forums/chats/live streams	6%	4%	6%	3%	5%	5%	6%	5%	9%	7%	4%	4%	7%	14%	5%	6%	5%	6%	7%	8%	5%	5%	4%	6%	5%	4%	8%	8%	
Public science lecture/seminar	5%	4%	6%	4%	5%	1%	6%	4%	7%	9%	3%	4%	5%	3%	6%	5%	7%	6%	6%	5%	6%	3%	2%	4%	5%	3%	5%	13%	
Open house tours of science facilities	5%	3%	5%	3%	1%	3%	6%	5%	2%	5%	3%	2%	3%	1%	6%	6%	7%	6%	5%	11%	6%	4%	6%	4%	4%	4%	5%	4%	
Participation in science club	4%	4%	5%	4%	2%	3%	5%	6%	1%	6%	3%	3%	5%	2%	3%	3%	3%	3%	4%	3%	4%	5%	4%	5%	2%	2%	3%	7%	
Other	1%	2%	<1%	1%	3%	2%	2%	5%	3%	5%	3%	3%	0%	4%	1%	5%	1%	5%	1%	7%	2%	2%	2%	6%	1%	4%	3%	9%	

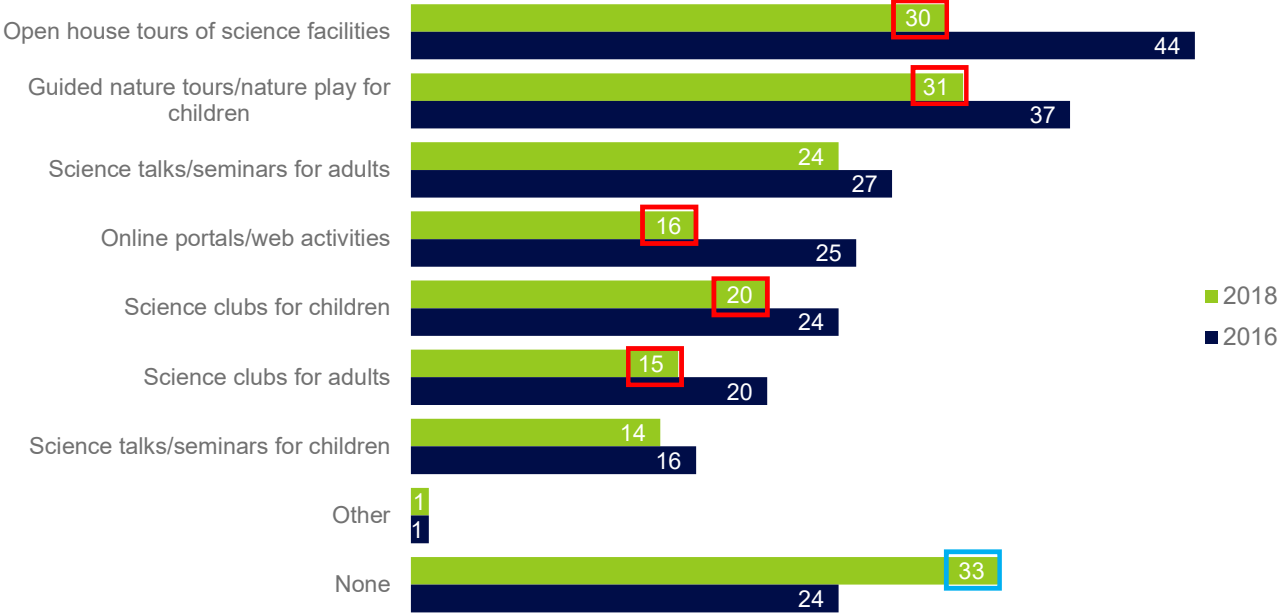
E2. Have you or has anyone in your immediate family participated in or attended any of the following science-based activities or events in the last 12 months, either in your area or somewhere else in Queensland?

BASE: All respondents 2018 n=1228; 2016 n=1200; Greater Brisbane/Gold Coast/Sunshine Coast 2018 n=251; 2016 n=210; Darling Downs 2018 n=217; 2016 n=227; Northern/Mackay 2018 n=240; 2016 n=252; Far North Metro 2018 n=174; 2016 n=190; Fitzroy/Wide Bay/Burnett 2018 n=268; 2016 n=254; Remote/Outback Queensland 2018 n=78; 2016 n=67.



Interest in science talks/seminars for adults and children has remained consistent with 2016, while it has decreased across other activities.

Interest in science-based activities or events (%)



E3. If they were available, which of the following science-based activities or events would you or anyone in your immediate family be interested in participating in or attending?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

## Interest in select science-based activities or events has decreased across regions.

Interest in science-based activities or events (%) – by SEQ/ROQ regions / remoteness



Interest in science-based activities	Total		SEQ		ROQ		Major Cities		Inner Regional		Outer Regional		Remote/ Very remote	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Open house tours of science facilities	44%	30%	44%	28%	44%	35%	46%	30%	40%	27%	45%	36%	40%	36%
Guided nature tours/nature play for children	37%	31%	37%	29%	36%	35%	38%	27%	32%	35%	39%	35%	38%	33%
Science talks/seminars for adults	27%	24%	26%	25%	27%	21%	25%	27%	29%	17%	29%	21%	29%	21%
Online portals/web based activities	25%	16%	26%	17%	21%	16%	27%	19%	21%	9%	20%	15%	24%	15%
Science clubs for children	24%	20%	24%	18%	25%	24%	25%	17%	18%	25%	27%	24%	26%	21%
Science clubs for adults	20%	15%	19%	14%	22%	17%	18%	14%	18%	14%	27%	18%	23%	20%
Science talks/seminars for children	16%	14%	16%	14%	16%	16%	16%	13%	14%	16%	20%	16%	12%	13%
Other	1%	1%	2%	1%	1%	1%	1%	1%	2%	2%	1%	1%	2%	1%
None	24%	33%	24%	33%	24%	31%	22%	33%	28%	34%	23%	32%	24%	31%

E3. If they were available, which of the following science-based activities or events would you or anyone in your immediate family be interested in participating in or attending?

BASE: All respondents 2018 n=1228; 2016 n=1200; SEQ 2018 n=251; 2016 n=212; ROQ 2018 n=977; 2016 n=988; Major cities 2018 n=234; 2016 n=180; Inner regional 2018 n=570; 2016 n=352; Outer regional 2018 n=726; 2016 n=551; Remote/Very remote 2018 n=174; 2016 n=117.

## Interest in select science-based activities or events has decreased across regions.

### Interest in science-based activities or events (%) – by 6 broad Queensland regions



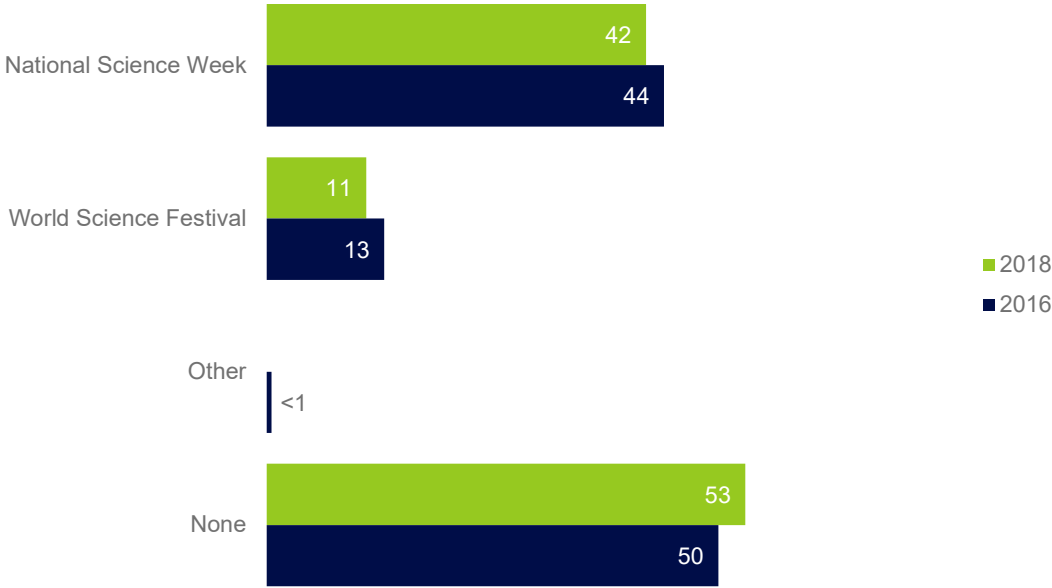
Interest in science-based activities	Total		Greater Brisbane/ Gold Coast/ Sunshine Coast		Darling Downs		Northern/ Mackay		Far North Metro		Fitzroy/ Wide Bay/ Burnett		Remote/ Outback Queensland	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Open house tours of science facilities	44%	30%	44%	28%	46%	36%	44%	38%	46%	38%	44%	30%	38%	37%
Guided nature tours/nature play for children	37%	31%	37%	29%	33%	38%	39%	34%	38%	35%	32%	33%	36%	36%
Science talks/seminars for adults	27%	24%	26%	25%	30%	24%	27%	21%	30%	26%	25%	15%	21%	23%
Online portals/web based activities	25%	16%	26%	17%	24%	18%	20%	17%	24%	18%	21%	14%	18%	11%
Science clubs for children	24%	20%	24%	18%	26%	27%	27%	30%	25%	21%	21%	20%	28%	20%
Science clubs for adults	20%	15%	19%	14%	19%	15%	26%	17%	25%	21%	20%	15%	22%	25%
Science talks/seminars for children	16%	14%	16%	14%	20%	21%	20%	22%	14%	15%	13%	11%	10%	9%
Other	1%	1%	2%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	2%	1%
None	24%	33%	24%	33%	23%	30%	21%	28%	22%	28%	27%	36%	27%	32%

E3. If they were available, which of the following science-based activities or events would you or anyone in your immediate family be interested in participating in or attending?

BASE: All respondents 2018 n=1228; 2016 n=1200; Greater Brisbane/Gold Coast/Sunshine Coast 2018 n=251; 2016 n=210; Darling Downs 2018 n=217; 2016 n=227; Northern/Mackay 2018 n=240; 2016 n=252; Far North Metro 2018 n=174; 2016 n=190; Fitzroy/Wide Bay/Burnett 2018 n=268; 2016 n=254; Remote/Outback Queensland 2018 n=78; 2016 n=67.

Two in five (42%) are aware of National Science Week, while one in ten (11%) are aware of the World Science Festival.

Awareness of Queensland science-based events (%)

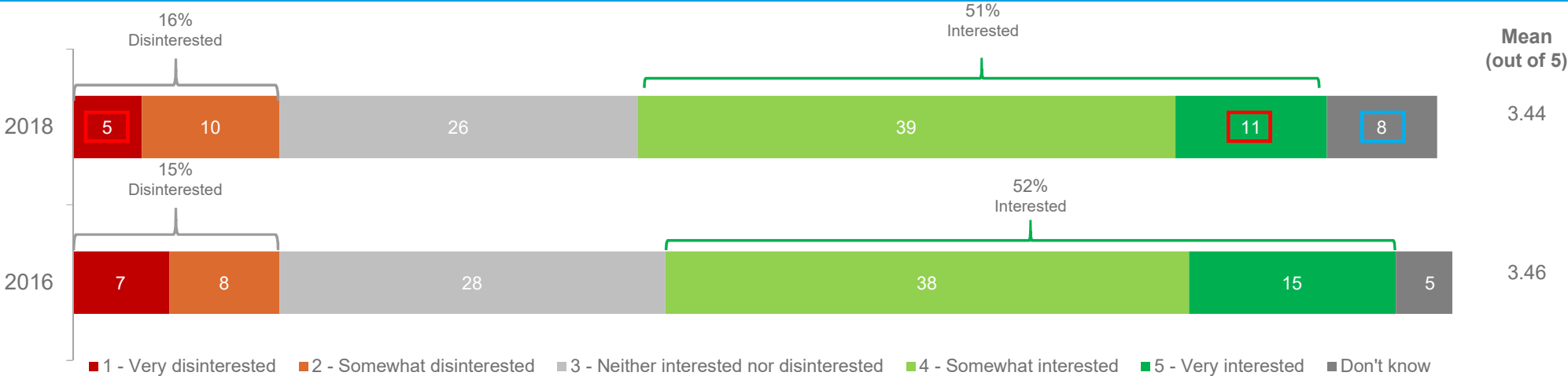


**Key demographic differences:**  
 Parents are significantly more likely to have heard of science-based events held in Queensland (50% aware of National Science week; 16% aware of World Science Festival).

E5. Before today, which of the following science-based events have you heard of in Queensland?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

As in 2016, more than one in two Queenslanders (51%) demonstrate an interest in participating in science-based events in the future.

Interest in attending science-based events in the future (%)



**Key demographic differences:**

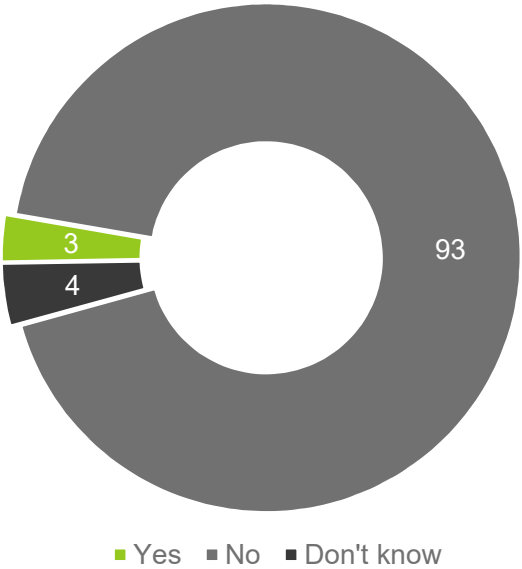
Younger age groups are more likely to demonstrate an interest in attending a science based event in the future (62%, aged 18.24 years; 64% aged 25-34 years).  
 Not surprisingly, those working or studying in a science related field, are significantly more interested in attending science-based events (73% of those studying science; 74% those working in a scienc-based career).

E6. How interested are you in attending events like these in the future?  
 BASE: All respondents 2018 n=1228; 2016 n=1200.

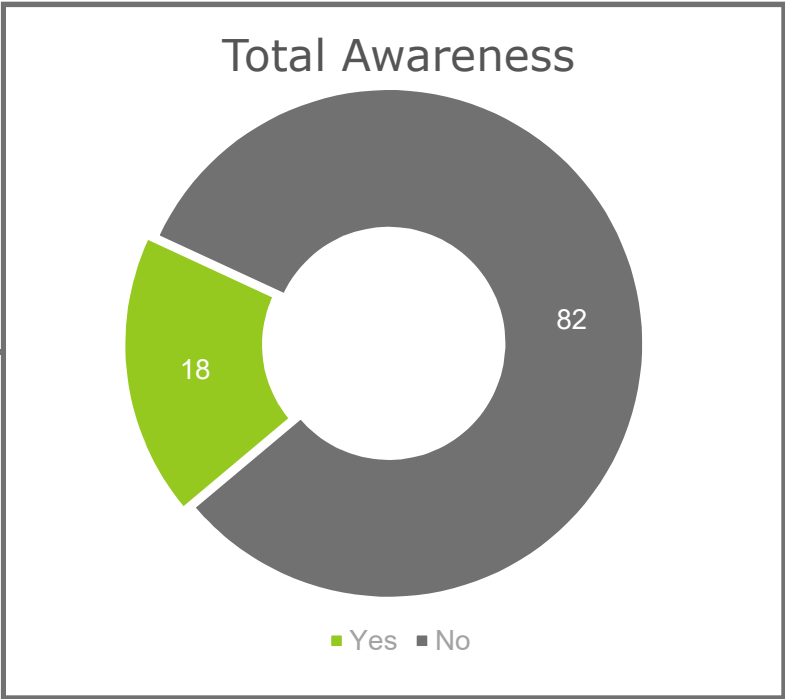
Unprompted awareness of Citizen Science is low (3%), however when given a definition of the term, total awareness improves to almost one in five (18%).

Citizen Science (%)

Unprompted awareness



Total Awareness



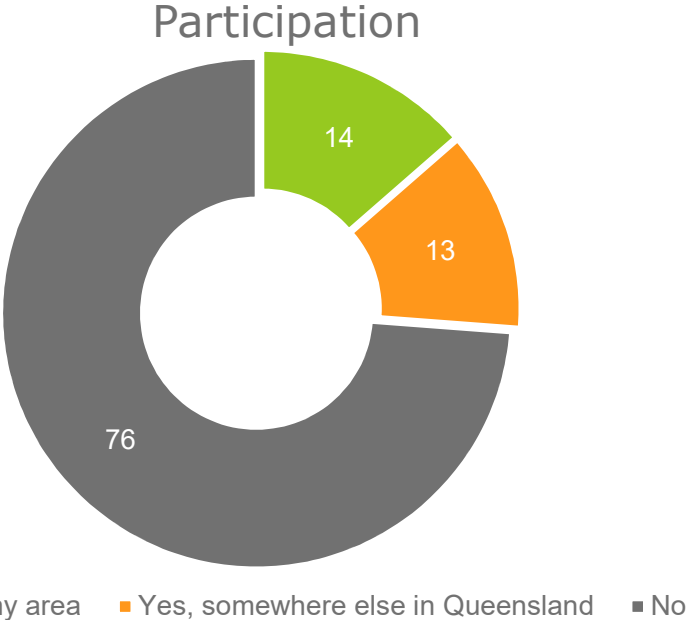
 Key demographic differences:

Looking at total awareness, those who have completed a post graduate degree from a university (36% vs. 18%), and those who completed post-schooling studies in a science related courses (35% vs. 18%) are significantly more likely to have be aware of Citizen science when compared to the total.

E7. Before today, have you heard of Citizen science?  
E8. Have you heard of Citizen science based on this description?  
BASE: All respondents 2018 n=1228; Those who have not heard of Citizen science 2018 n=1174.

Around one in four (27%) Queenslanders aware of citizen science have participated in citizen science either in their local area (14%) or elsewhere in Queensland (13%).

Participation in Citizen Science (%)



What did you do? – Verbatim quotes

- “Counted koala population in Karrawatha environmental park lands in Logan.”
- “Released mosquitos with the Wolbachia bacteria in my back yard. Kept mosquito trap for researchers to regularly collect mosquitos for testing.”
- “We went to Mon Repos where we observe and take notes on the hatchings of the turtles on the beach, we keep records of the turtles, including weight, length, numbers.”
- “Assisted with capture of biting midges and methods of control.”
- “Frog ID - Record frog sounds via an app which are then identified by scientists for species distribution purposes.”
- “I have submitted photos and details of animals in my area to the Atlas of Living Australia.”
- “Kept records of bird sightings within a prescribed area.”
- “Online protein folding, seti@home, planet hunters etc.”
- “Saved butterfly trees on the spit/la balsa park sunshine coast”

E9. And have you participated in any Citizen science activities?  
 E10. And what did you do?  
 BASE: Those who had heard of Citizen science or the Citizen science program n=236; Those who had participated in Citizen science 2018 n=50.

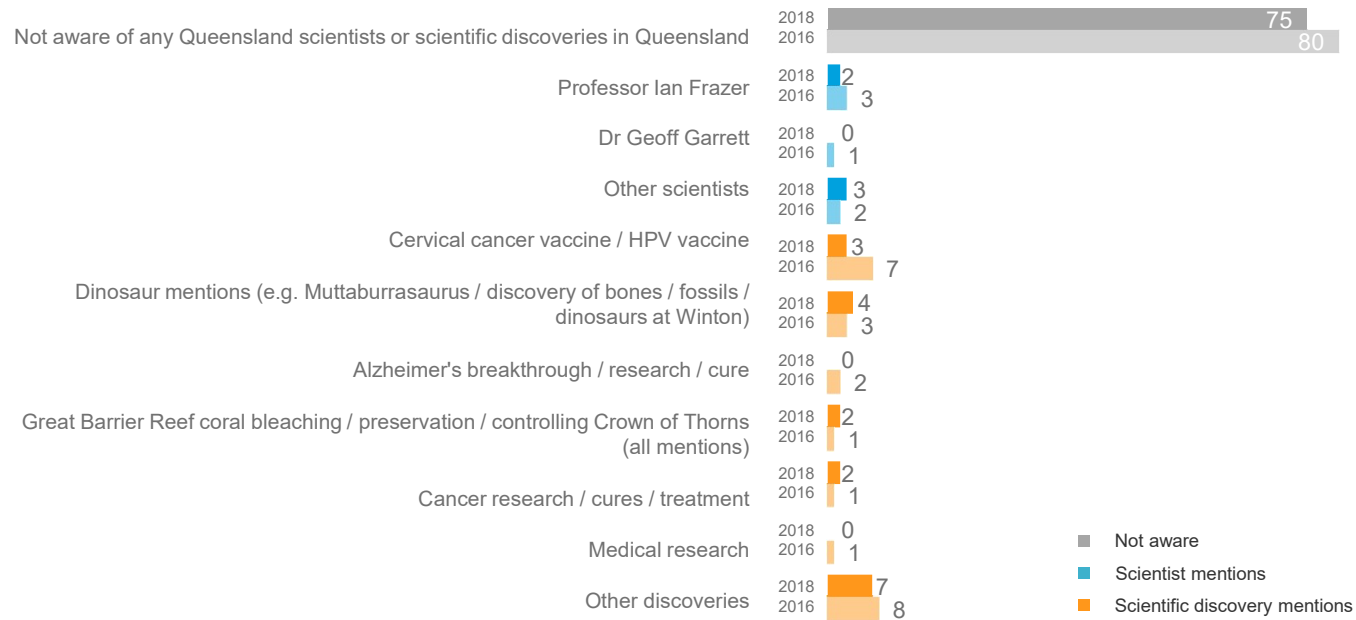
Nb: Select verbatim responses provided.

**8.**  
**Awareness of Queensland Science  
Projects and Scientists**



Unprompted, one in four (25%) could name a Queensland scientist and/or scientific discovery.

Unprompted awareness of Queensland scientists and scientific discoveries (% of total respondents)

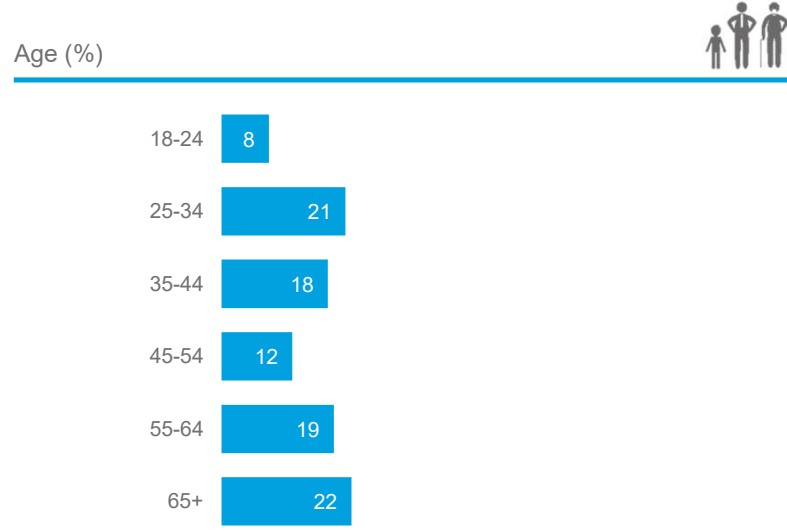
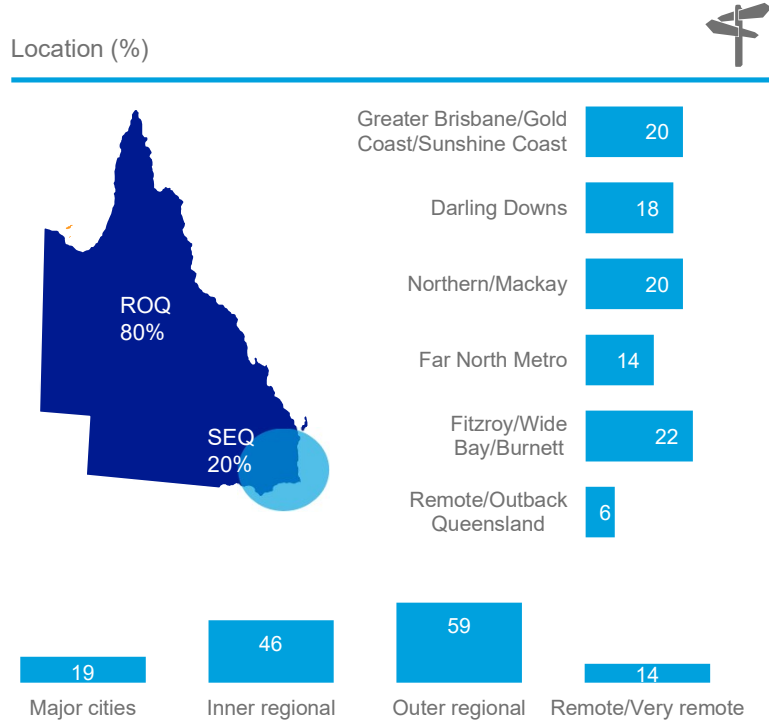


F1. In the spaces provided below, please name any Queensland scientists or scientific discoveries in Queensland that you are aware of.  
 BASE: All respondents 2018 n=1228; 2016 n=1200.  
 Note: Verbatim responses were coded into common themes. Responses <1% have been combined into "Other scientists" or "Other discoveries".

## **9. Demographics**

# Demographic Data: Location, Age, Gender

## Unweighted Data

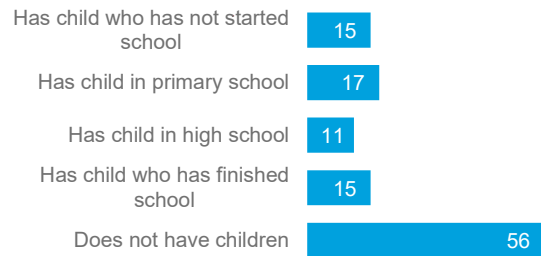


S2. Please enter your 4-digit postcode in the box below.  
 S3. How old are you?  
 S4. Are you male or female?  
 BASE: All respondents 2018 n=1228.  
 Refer to Appendix 1 for visual representation of 6 broad Queensland regions and remoteness classifications.

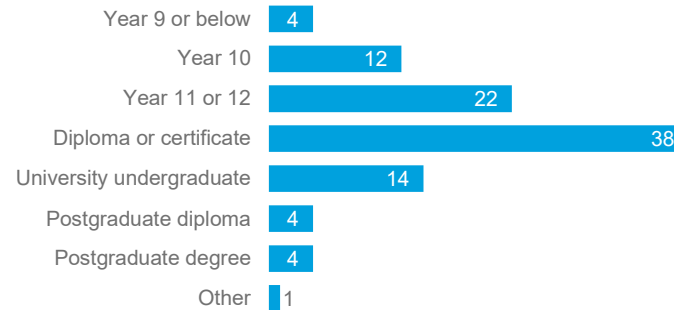
# Demographic Data: Parental status, Education, ATSI

## Unweighted Data

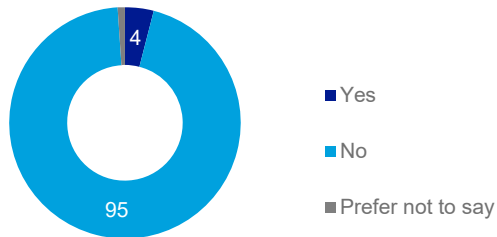
Parental status (%)



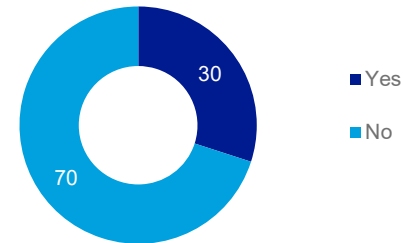
Education level (%)



Aboriginal or Torres Strait Islander (%)



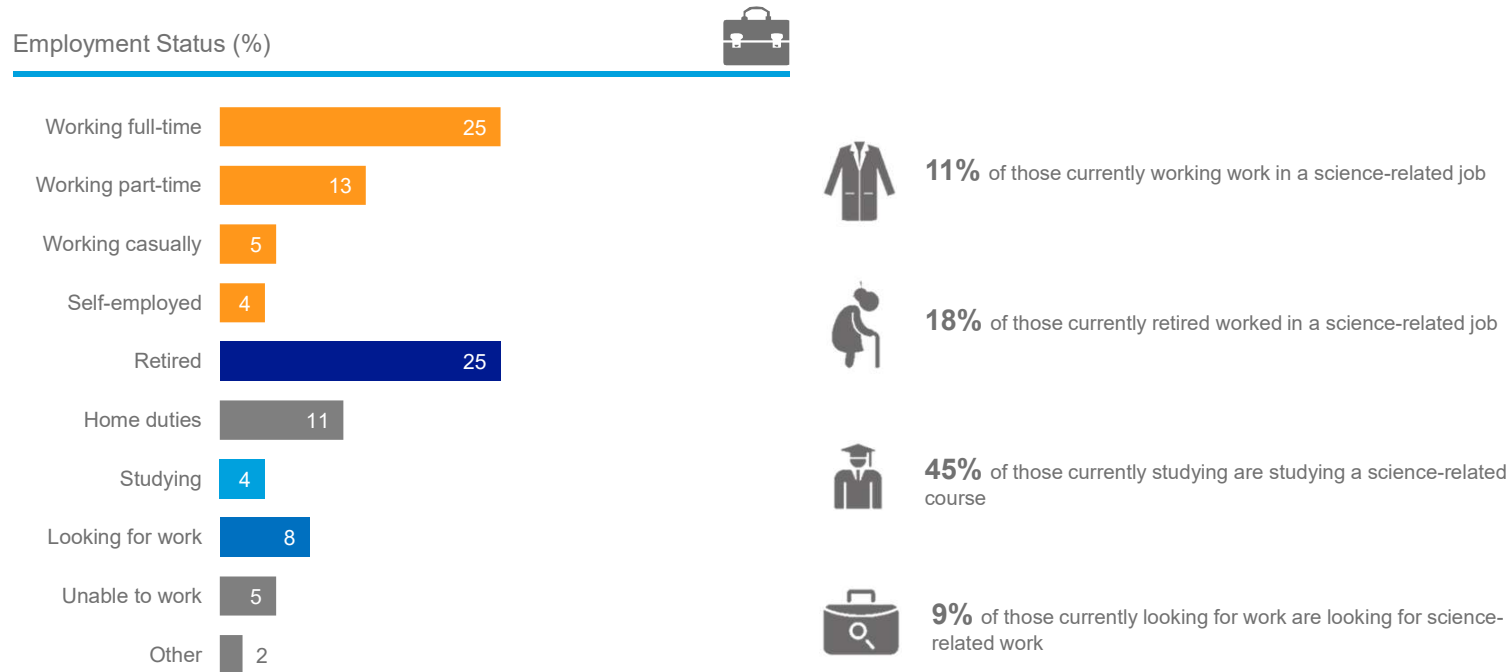
Participation in post-school science course  
(% of those who have studied post-school)



S5. Please select which of the following apply to you.  
 G2. What is the highest level of education you personally have completed?  
 G3. Were any of your post-schooling studies in a science-related course?  
 G9. Do you identify as Aboriginal and/or Torres Strait Islander?  
 BASE: All respondents 2018 n=1228.

# Demographic Data: Employment Status

## Unweighted Data



G4. Which of these best describes your current employment status?

G5. Are you currently working in a science-related job?

G6. Before retirement, did you work in a science-related job?

G7. Are you currently studying a science-related course?

G8. Are you currently looking for science-related work?

BASE: All respondents 2018 n=1228.

**Richard Bishop**  
Senior Consultant  
P: 07 3011 4215  
E: Richard.Bishop@kantarpublic.com

**Susan Knight**  
Consultant  
P: 07 3011 4215  
E: Susan.Knight@kantarpublic.com