



Sweeney
RESEARCH

Cool Australia Resources Evaluation

RESEARCH REPORT

Sweeney Contact:

David Barner

Cool Australia Contact:

Susie Meagher

Ref. No.

24075

Date:

May 2014– V1



Table of contents

| | |
|--------------------------------------|-----------|
| Background | 3 |
| Introduction | 4 |
| Objectives | 5 |
| Research Methodology | 6 |
| Management Summary | 7 |
| The Detailed Findings | 10 |
| Section 1: About the Programme Users | 11 |
| Section 2: Overall Perceptions | 15 |
| Section 3: Teacher & School Outcomes | 21 |
| Section 4: Programme Evaluation | 28 |

Sweeney Research is accredited under the International Standard, ISO 20252.
All aspects of this study have been completed in accordance with the requirements of that scheme.



Background

Introduction

The Cool Australia goal is all about educating young Australians for a sustainable future. The mission of Cool Australia is to provide online educational material and support to the teaching community. It strives to bring sustainability and our environment into Australian classrooms, providing teachers with engaging, fun and informative learning activities and units of work on a whole range of topics.

Cool Australia provides original units of work and learning activities that can be downloaded from the Cool Australia website and taken straight into the classroom.

The learning activities are year level specific, from foundation to year 10 and linked to Australian curriculum standards.

For the older students, there are inquiry-based learning activities that seek to broaden and deepen students understanding of how our world works. For the younger students this topic is explored through literacy, numeracy, social awareness, creativity and imagination.

In order to help gain Government and private sector support, Cool Australia needs to provide evidence based information to demonstrate that the programme is delivering learning outcomes.

Such an evaluation, would also contribute to gaining support from non-Government philanthropic organisations.

To this end, Cool Australia commissioned Sweeney Research to undertake a programme of research amongst teachers who are involved in delivering the Cool Australia education resources to their pupils.

This report provides the outcomes of this research which involved an online survey amongst over 500 teaching professionals.



Objectives

The overall aim of the research was to focus on the 'outcomes' of the Cool Australia programme – including the outcomes for both teachers and children



For **teachers**, the 'big picture' outcome is...

“This makes sense; saves me time; fits naturally into what I teach.”

This involved investigation of teacher's perceptions of..

- The extent to which the programme contributed to a better understanding of sustainability;
- The extent to which it helped teachers plan and deliver the teaching of sustainability;
- The extent to which the programme contributed to a 'Whole School' approach to sustainability;
- The extent to which teachers enjoy using the resources and find them interesting and useful;
- The extent to which the resources save time and money; and
- The extent to which they help drive leadership to encourage positive change amongst colleagues, the school community and the broader community.

The research also examined (teachers' perceptions of) the outcomes for **children**, for whom the big picture outcome is...

“This is fun, engaging and important. It is relevant to my world and future.”

Specifically, to what extent has the programme helped their students...

- Become connected with and interested in sustainability;
 - Developed knowledge and understanding around the issues;
 - Developed skills in identifying environmental challenges and become empowered to help deliver solutions; and
 - Adopt appropriate behaviours and practices that can 'make a difference'.
- The research also examined teachers' perceptions of key **programme elements** including the website, the worksheets and the digital toolbox.

Research Methodology

In conjunction with Cool Australia, Sweeney Research prepared an initial questionnaire.

In order to test and further refine the questionnaire, Cool Australia undertook a series of interviews with participating teachers.

After finalisation, an online version of the questionnaire was programmed and a link to the survey was emailed to some 13,220 prospective respondents. To maximise cooperation, the invitation was sent from Cool Australia rather than Sweeney Research.

Over a two week period reminder emails were sent out and, after two weeks in field, we received a total of 522 completed responses. This represents a response rate of 3.9% which is acceptable for an unsolicited survey such as this.

A profile of the sample is shown opposite.

In this report, significant differences between subgroups are shown at the 95% Confidence Interval. A significantly higher subgroup finding is indicated in green and a significantly lower subgroup finding is indicated in red

| Sample Structure | | | |
|------------------|------------------------------|-----|-----|
| | | # | % |
| School type | Primary | 275 | 53 |
| | Secondary | 101 | 19 |
| | Early learning | 53 | 10 |
| | Other | 93 | 18 |
| School status | Government | 331 | 63 |
| | Private | 111 | 21 |
| | Catholic | 80 | 15 |
| School size | Under 100 | 304 | 58 |
| | 100-199 | 74 | 14 |
| | 200+ | 122 | 23 |
| | Not established | 22 | 4 |
| Role | Teacher | 288 | 55 |
| | Leading Teacher | 52 | 10 |
| | Sustainability Coordinator | 45 | 9 |
| | Curriculum Coordinator | 29 | 6 |
| | Assistant teacher/aid/relief | 24 | 5 |
| | Department head | 20 | 4 |
| | Principal/Deputy Principle | 15 | 3 |
| | Director | 7 | 1 |
| | Other | 42 | 8 |
| Total | | 522 | 100 |

Note: The maximum margins of error at the total sample at the 95% Confidence Interval is +/-4.6%. This means that if 50% of our sample give a particular answer, we can be 95% sure that between 45.4% and 54.6% of the total population would give that response.



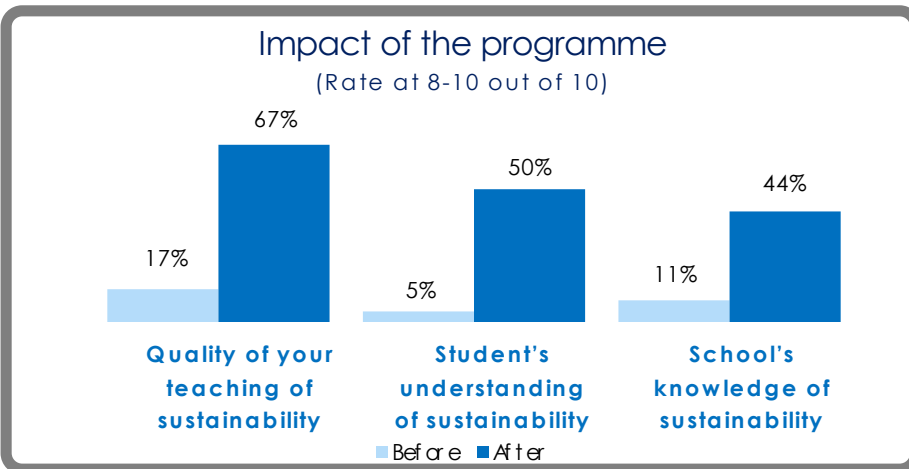
Management summary

An overview of the key results

A highly positive outcome for teachers, students and the school community

There is little doubt that teachers view the Cool Australia resources in a highly positive light. In a series of key questions teachers were asked to rate the quality of their own teaching of sustainability, students' knowledge of sustainability issues, and overall sustainability awareness across the school **before** and **after** using the cool Australia programme.

As shown below, the proportion rating these dimensions at the high level of 8-10 out of ten changes dramatically from before to after. **There is a fourfold increase in the proportion rating quality of teaching and school knowledge at this level and, for students' knowledge the increase is tenfold.**



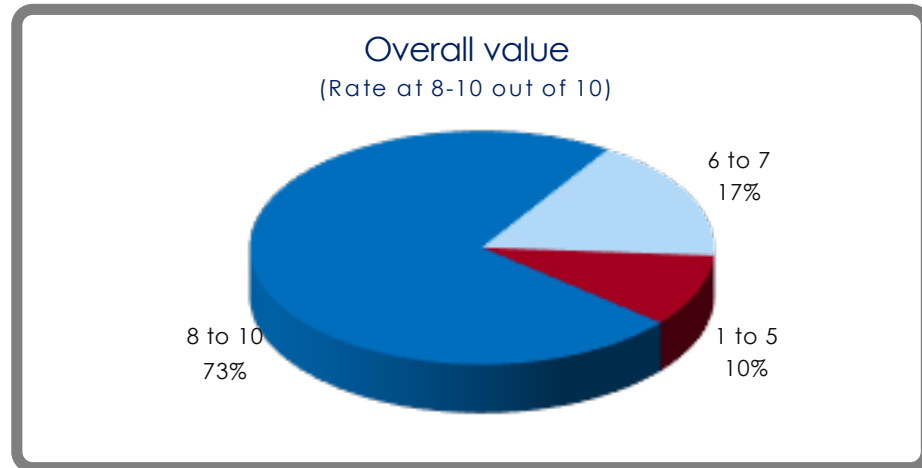
Teachers from government, private and catholic schools, those at primary, secondary and early learning schools and those in large, medium and smaller schools all demonstrate similar levels of enthusiasm.

The programme is extremely valued

Teachers were asked to evaluate the programme overall..

'Taking everything into account, including the outcomes for yourself, your school and your students, how would you rate the value of the Cool Australia programme?'

Ratings are highly positive, with almost half rating at the 8-10 level and 90% rating at an above average six or more. Over a quarter (27%) rated right at the top end of the scale (10 out of 10) and the mean score came in at a high 8.0 out of ten.



An overview of the key findings(Cont..)

The programme is seen as being helpful in multiple areas

Teachers rated the extent to which the programme has helped them and their students across fourteen dimensions.

For all the aspects the majority (around two thirds or more) see the programme as helping 'a great deal' or 'a lot'. The areas in which the programme has been particularly powerful include increasing teachers' interest in the subject, enhancing their ability to teach, enhancing their ability to plan and integrate sustainability into their classes, reducing planning time and enhancing teacher knowledge of the topic. The programme is also highly regarded for increasing student interest, engagement and understanding of the topic.

In what ways has the programme helped students and teachers?
(Rate as helped a great deal/helped a lot)

Teachers



Students





The Findings in Detail

Section 1: About the Programme Users

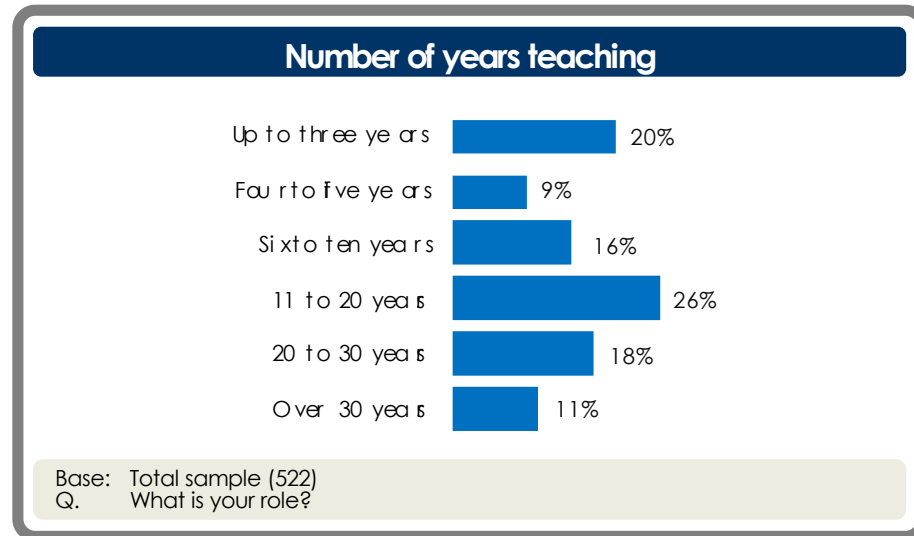
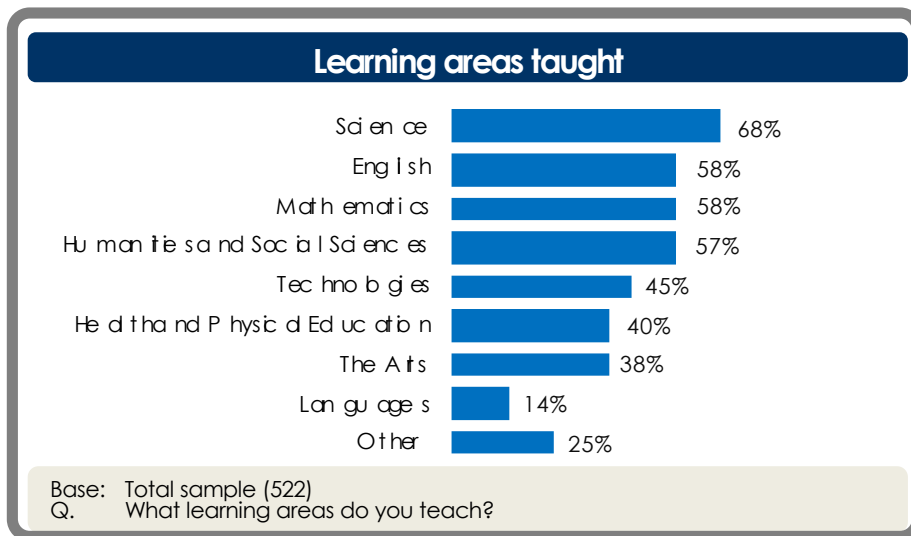
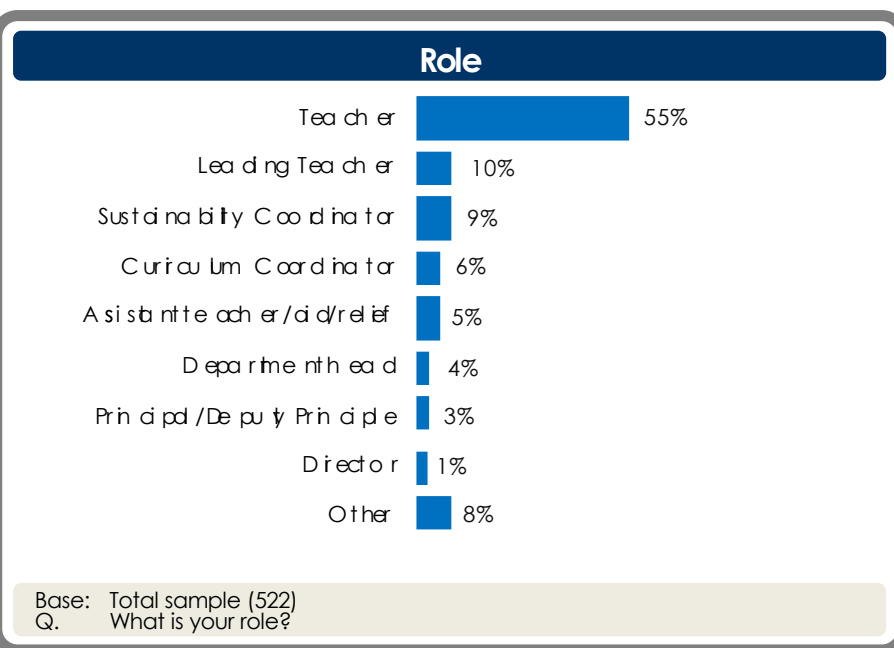
Who is using the Cool Australia resources?

Some 55% of those responding to the survey described themselves as teachers with the balance being spread across a range of position categories.

Just under one in ten specifically referred to sustainability in relation to their job description.

On average, respondents had around fifteen years of teaching experience, with some 55% having in excess of ten years in this role.

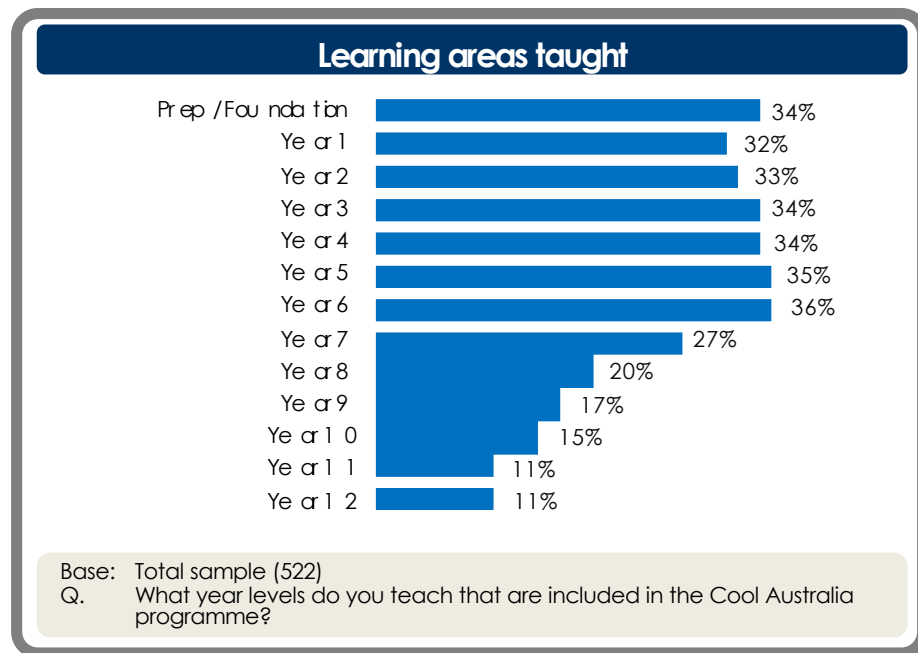
Respondents most commonly teach Science, English and Maths with Humanities figuring prominently.



Which year levels are taught using the resources?

The resources are used right across the student age spectrum although use tends to tail off beyond Year 6.

Not surprisingly, given the focus of the programme, relatively few year 11 and 12 students are taught using the resources.



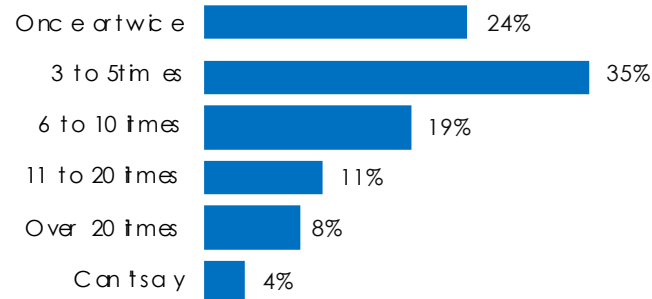
How often have the resources been used in the last year?

The largest proportion (35%) have used the resources between three and five times in the last year, with a similar proportion having used on six or more occasions.

On average, teachers have used the resources around seven times.

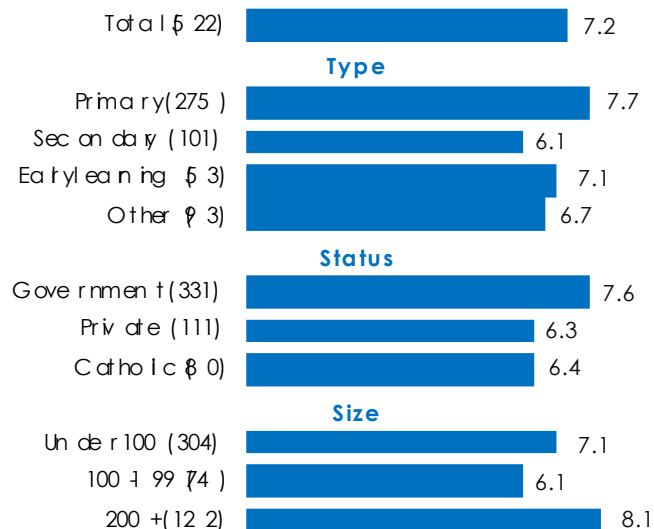
Usage frequency tends to be a little higher than average in primary schools, in Government schools and amongst the larger establishments.

Number of times used in the past year



Base: Total sample (522)
Q. On how many occasions would you have used Cool Australia's online resources in the last year?

Average frequency by school characteristics (average times used)



Characteristics of the frequent and less frequent users

The frequent users of the Cool Australia resources tend to be in the six to ten years experience cohort and are more likely than average to teach children at the Year 3 to 6 level.

They are a little more likely to teach science subjects and less likely to teach the arts.

| Comparison of light, medium heavy users | | | | |
|---|---------------------|-------------------------------------|------------------------------------|--------------------------------|
| | Total (522) % | Used once or twice (125) % | Used 3 to 5 times (181) % | Used 6+ times (196) % |
| Number of years teaching | | | | |
| Up to five years | 29 | 38 | 31 | 23 |
| Six to 20 years | 42 | 34 | 40 | 47↑ |
| Over 20 years | 29 | 28 | 29 | 30 |
| Years taught | | | | |
| Prep/foundation | 34 | 31 | 35 | 34 |
| Year 1 | 32 | 30 | 31 | 33 |
| Year 2 | 33 | 30 | 33 | 35 |
| Year 3 | 35 | 30 | 31 | 41↑ |
| Year 4 | 35 | 28 | 33 | 41↑ |
| Year 5 | 36 | 31 | 30 | 44↑ |
| Year 6 | 37 | 30 | 31 | 46↑ |
| Year 7 | 27 | 25 | 23 | 32 |
| Year 8 | 20 | 19 | 15 | 24 |
| Year 9 | 17 | 17 | 14 | 19 |
| Year 10 | 15 | 14 | 12 | 18 |
| Year 11 | 11 | 9 | 9 | 14 |
| Year 12 | 10 | 10 | 8 | 13 |
| Learning areas taught | | | | |
| Science | 69 | 60 | 70 | 74↑ |
| English | 59 | 53 | 66 | 56 |
| Humanities and Social Sciences | 59 | 54 | 64 | 57 |
| Mathematics | 59 | 54 | 67 | 54 |
| Technologies | 45 | 34 | 51 | 46 |
| Health and Physical Education | 41 | 34 | 48 | 39 |
| The Arts | 39 | 40 | 43 | 34↓ |
| Languages | 14 | 14 | 14 | 14 |
| Other | 24 | 23 | 20 | 28 |



Section 2: Overall Perceptions

Perceived Benefits to Teachers – In Their Own Words

'As a teaching and learning coordinator with sustainability as my priority, the Cool Australia programme gives me piece of mind that I can forward quality resources to staff to help them implement the cross curriculum priority of sustainability.'

'Some varied activities that are focused very accurately on aspects of climate and sustainability. The activities are designed well to be very relevant and engaging and unlike YouTube clips are Australian in context.'

'All activities are relevant to student needs and interests. They are perfectly aligned with curriculum requirements, engaging and easy to implement in an integrated curriculum'

'I can see that there are a wide range of high quality resources to support me in ensuring I am meeting the requirements of the Australian Curriculum in ways which will actively engage and motivate my students.'

'I try to promote resources to the School and Cool Australia provides a range of interesting material that teachers across the school may choose to use.'

'A diversity of rich resources that address specific needs of learners. These are able to be easily accessed and adapted for classroom use.'

'An easily accessible resource to support what is being taught in class.'

'It is relevant to the Australian Curriculum I have seen lessons that outline exactly what AusVELs the students will achieve by demonstrating certain abilities/tasks.'

'Instant ideas and programs available for assisting when teachers are absent and allowing environmental education to be specifically chosen to teach universally.'

'Great context to deliver the activities. Very age appropriated activities.'

'The wonderful facts and ideas that help to support our teaching. Our teachings are heavily based on the environment and sustainability on a daily basis.'

'Current, easily accessible, children as role models, all information in one place, reliable information, worded at the right level. Links in beautifully with our sustainability focus and the impact of waste on the environment as well as aspects of our kitchen garden focus.'

'It's an easy to use and extremely relevant website to highlight modern concerns that are based on science and our environment. As an outdoor garden/living classroom/environmental teacher this site is a perfect ICT tool to use in my classrooms.'

Perceived Benefits to Students – In Their Own Words

'I think that the students have been able to access a wider range of resources than previously possible because sometimes sustainability resources can either be a bit hard to find or unreliable so teachers have shied away from them, but because of the excellent resources provided students are getting a much more diverse understanding of sustainability.'

'The program provides them with hands on activities, interactive activities and presents information that is highly relevant and engaging to students.'

'Students are learning about environmental responsibility and taking control of their future. This is empowering, particularly as many of my students are from significantly disadvantaged backgrounds and have had little opportunity to learn about such things in the past.'

'The Cool Australia programme delivers engaging and interactive activities and resources which will ensure that learning occurs through an inquiry approach'

'It shows students that the environment is an issue tackled by many people. We can get on board too and help save the world!'

'It helps students to be accountable and know that ultimately the earth and it's health are in our hands.'

'The programme allows me firstly to model to my students an example of a regular subscription/reading/professional training resource that is constantly updated, fresh and relevant. It appeals to all of their learning styles and is engaging'

'The involvement and children really love the hands on approach.'

'Empowered them to know that they can make a difference.'

'Interesting and informative programs that they enjoy learning about.'

'Opened their eyes to big wide world around them and highlighted the importance of needing to care for the environment. It also shows that everything they do can make a difference.'

'Great ideas that we can use with the children to help start conversations on the importance of sustainability at kindy and at home. Clear instructions and goals that tie in with curriculum and tick all the right boxes.'

'It has allowed students to participate in higher quality lessons, and therefore enhances their learning. They are more engaged in the learning.'

'It has given them an understanding and a basic knowledge of our environment and the importance of looking after it.'

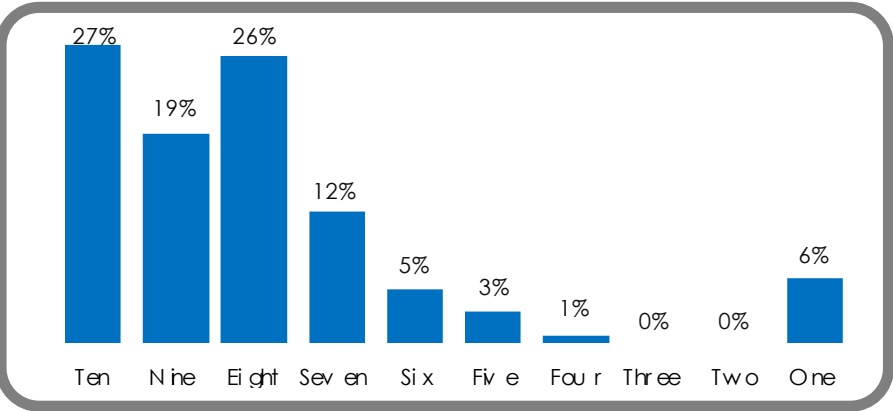
Overall Value of the Programme

Respondents were asked to evaluate the programme overall by responding to the following question...

'Taking everything into account, including the outcomes for yourself, your school and your students, how would you rate the value of the Cool Australia programme?'

As illustrated opposite, ratings are highly positive, with almost three quarters rating at the 8-10 level and 90% rating at an above average six or more. **The average score is a highly creditable 8.0 out of ten.**

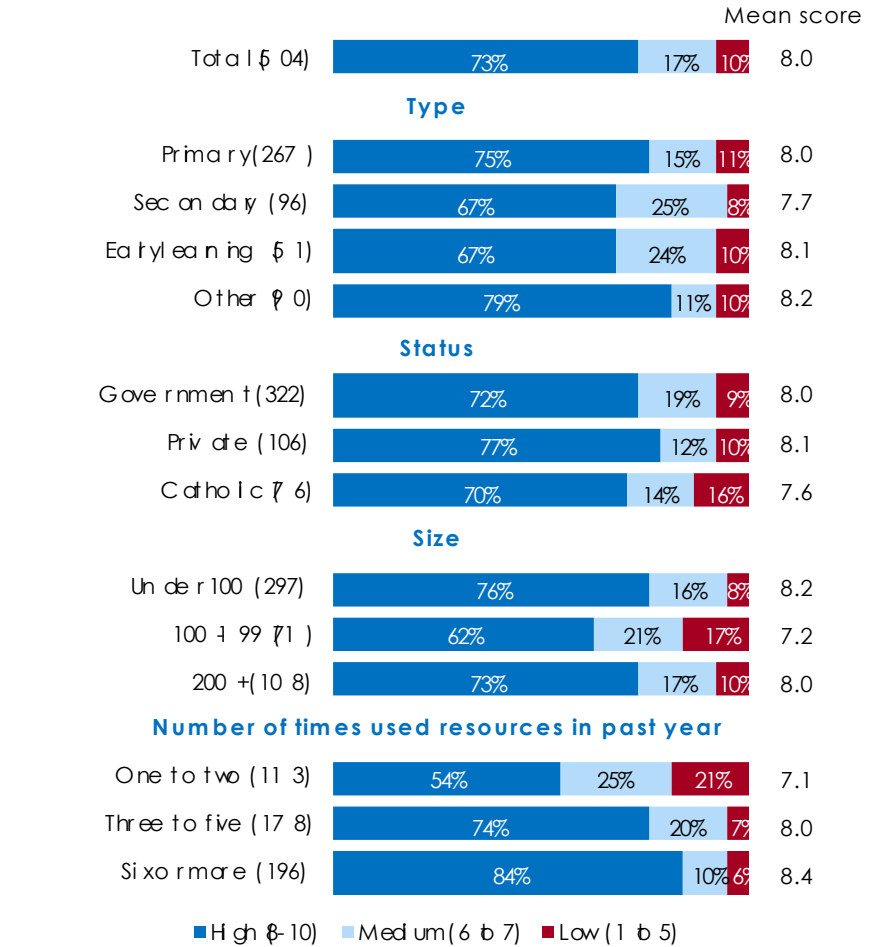
The full distribution, below, shows a high proportion rating right at the top end of the scale...



Ratings are high across all school types and sizes – with those in the smaller schools being particularly positive.

Ratings of value increase with usage. A high 84% of those who have used the resources six or more times rate at the 8-10 level.

Rating of value by school type and usage frequency (rating on a ten point scale)



Base: Total sample - Excluding 'Don't Know'
Q. And, taking everything into account, including the outcomes for yourself, your school and your students, how would you rate the value of the Cool Australia programme?



Section 3: Teacher and School Outcomes

Overall impact on quality of teaching

Respondents rated quality of their teaching of sustainability both before and after using the Cool Australia resources.

There is a very substantial lift in perceived quality, with the proportion rating at 8-10 being almost **four times as high** after using the programme relative to before.

The mean score increases from 5.6 to 7.8.

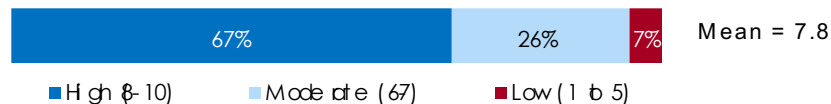
Post resource ratings are highly consistent across the school type and sizes.

Impact on teacher quality - summary

Quality of your teaching of sustainability before using the Cool Australia programme



Quality of your teaching of sustainability after using the Cool Australia programme



Base: Total sample (522)
Q. How would you rate the quality of your teaching of sustainability before/after using the Cool Australia programme?

Mean ratings by school characteristics

| | Base | Before | After | Change |
|----------------|------|--------|-------|--------|
| Total | 522 | 5.6 | 7.8 | 2.2 |
| Type | | | | |
| Primary | 275 | 5.6 | 7.9 | 2.3 |
| Secondary | 101 | 5.8 | 7.7 | 1.9 |
| Early learning | 53 | 5.2 | 7.6 | 2.4 |
| Other | 93 | 5.6 | 7.9 | 2.4 |
| Status | | | | |
| Government | 331 | 5.5 | 7.9 | 2.3 |
| Private | 111 | 5.8 | 7.9 | 2.1 |
| Catholic | 80 | 5.7 | 7.8 | 2.0 |
| Size | | | | |
| Under 100 | 304 | 5.5 | 7.9 | 2.4 |
| 100 - 199 | 74 | 5.4 | 7.6 | 2.2 |
| 200+ | 122 | 6.0 | 8.0 | 2.1 |

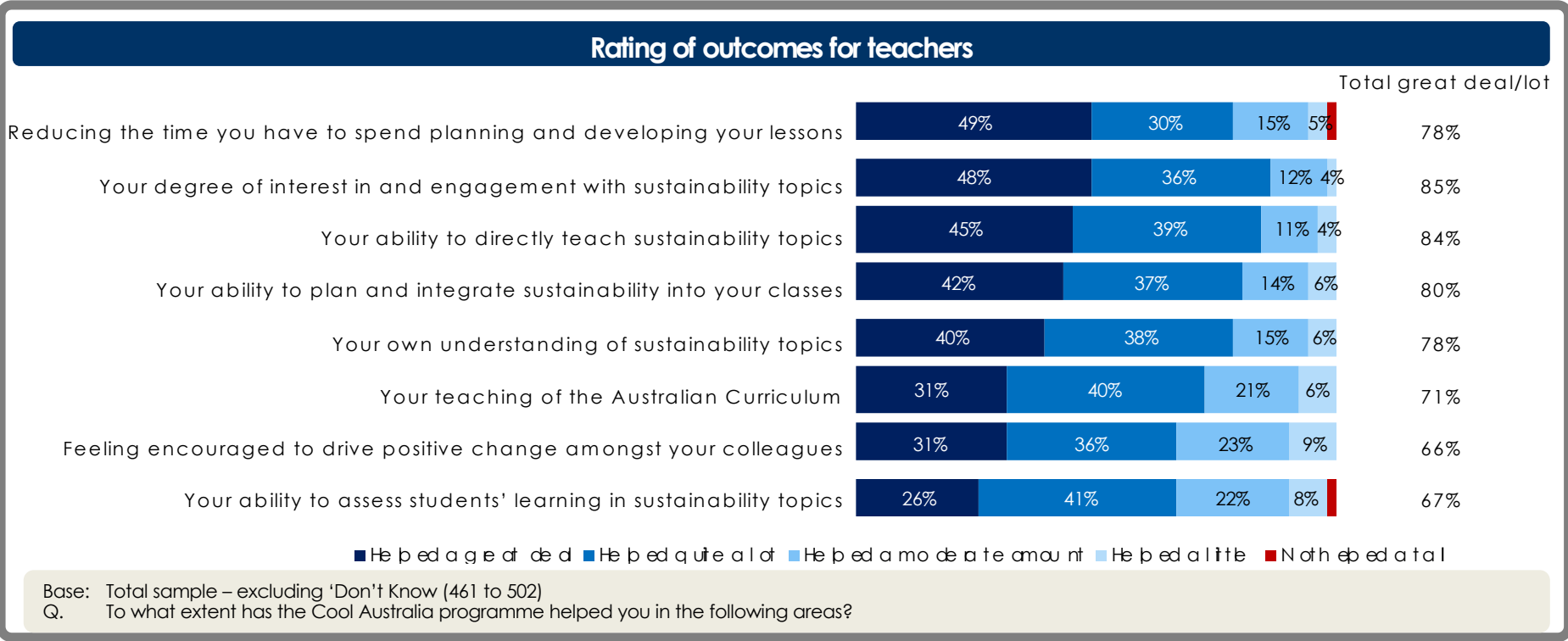
Specific teacher outcomes

Teachers rated the extent to which the programme has helped them across eight dimensions.

The majority (two thirds or more) rate the programme as helping a great deal or a lot for each of the dimensions.

The programme has proven to be particularly valuable in reducing the time required for planning and developing lessons, increasing the degree of interest in and engagement with sustainability topics and increasing ability to directly teach sustainability topics.

It is some what less likely to have helped (but by no means being negatively viewed) in the areas of teaching of the Australian Curriculum, encouraging teacher to drive positive change amongst their colleagues and aiding their ability to assess students' learning in sustainability topics.



Overall impact on student's knowledge

Respondent also evaluated the impact of the programme on student's knowledge.

Once again there is a sizeable difference between the pre-programme and post-programme ratings. Just 5% rate students knowledge at 8-10 prior to using the Cool Australia resources, rising to 50% post usage.

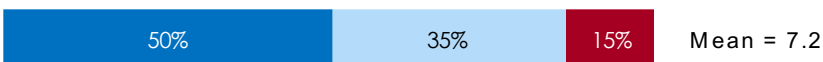
Whilst post usage ratings are consistent across the school categories, there is evidence of a greater than average degree of improvement in early learning schools.

Impact on student's knowledge - summary

Rating of student's knowledge before using the Cool Australia programme



Rating of student's knowledge after using the Cool Australia programme



■ High (8-10) ■ Moderate (6-7) ■ Low (1-5)

Base: Total sample (522)
Q. How would you rate your students' knowledge of sustainability issues before/after using the Cool Australia programme?

Mean ratings by school characteristics

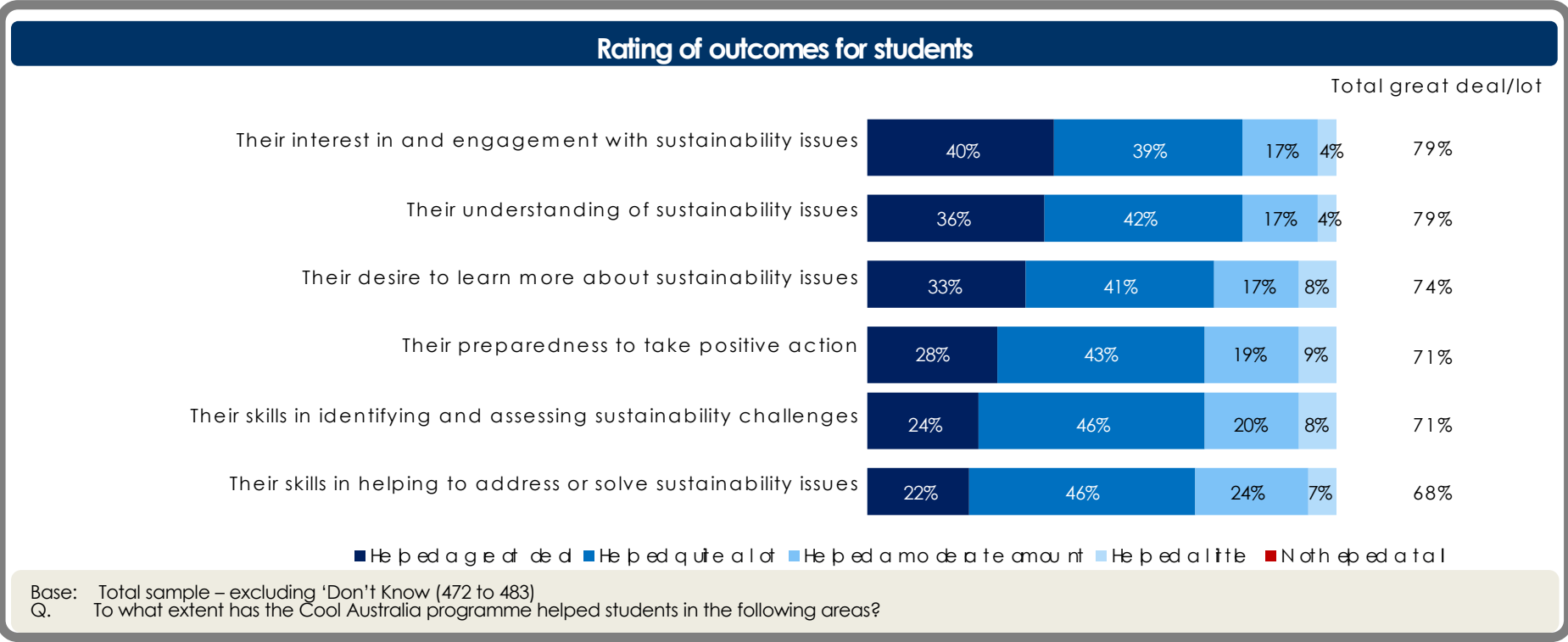
| | Base | Before | After | Change |
|----------------|------|--------|-------|--------|
| Total | 522 | 4.5 | 7.2 | 2.7 |
| Type | | | | |
| Primary | 275 | 4.6 | 7.3 | 2.7 |
| Secondary | 101 | 4.5 | 7.1 | 2.5 |
| Early learning | 53 | 3.8 | 6.9 | 3.1 ↑ |
| Other | 93 | 4.5 | 7.2 | 2.7 |
| Status | | | | |
| Government | 331 | 4.4 | 7.1 | 2.8 |
| Private | 111 | 4.8 | 7.4 | 2.6 |
| Catholic | 80 | 4.6 | 7.2 | 2.6 |
| Size | | | | |
| Under 100 | 304 | 4.4 | 7.2 | 2.8 |
| 100 - 199 | 74 | 4.3 | 7.1 | 2.8 |
| 200+ | 122 | 4.6 | 7.3 | 2.7 |

Specific student outcomes

Respondents evaluated the outcomes for students on six key dimensions.

As for teacher outcomes a clear majority of two thirds or selected the 'Helped a great deal' or 'Helped quite a lot' response.

The programme is seen to be particularly successful in terms of increasing students' interest in and engagement with sustainability issues and enhancing their understanding of sustainability issues.



Overall impact on the school

The impact on the school overall was also assessed by a pre-usage and post-usage rating.

Prior to use of the programme, only 11% rated their school as having high awareness of sustainability issues. Post usage this figure increases to 44%.

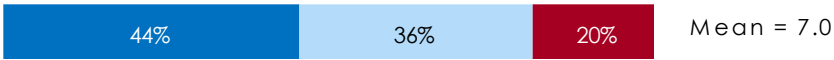
The degree of improvement is particularly significant in the early learning establishments.

Sustainability awareness - summary

School sustainability awareness before using the Cool Australia programme



School sustainability awareness after using the Cool Australia programme



■ High (8-10) ■ Moderate (6-7) ■ Low (1-5)

Base: Total sample (522)
Q. How would you rate your school in terms of sustainability awareness before/since using the Cool Australia programme?

Mean ratings by school characteristics

| | Base | Before | After | Change |
|----------------|------|--------|-------|--------|
| Total | 522 | 5.2 | 7.0 | 1.9 |
| Type | | | | |
| Primary | 275 | 5.4 | 7.2 | 1.8 |
| Secondary | 101 | 4.7 | 6.4 | 1.6 |
| Early learning | 53 | 4.9 | 7.5 | 2.6 ↑ |
| Other | 93 | 5.2 | 7.0 | 1.8 |
| Status | | | | |
| Government | 331 | 5.1 | 7.0 | 1.9 |
| Private | 111 | 5.4 | 7.4 | 2.0 |
| Catholic | 80 | 5.1 | 6.7 | 1.6 |
| Size | | | | |
| Under 100 | 304 | 5.2 | 7.1 | 1.8 |
| 100 - 199 | 74 | 4.6 | 6.5 | 1.9 |
| 200+ | 122 | 5.3 | 7.3 | 2.0 |

Specific school outcomes

The outcomes for schools overall were assessed via four statements rated on an 'agree strongly' to 'disagree strongly' scale.

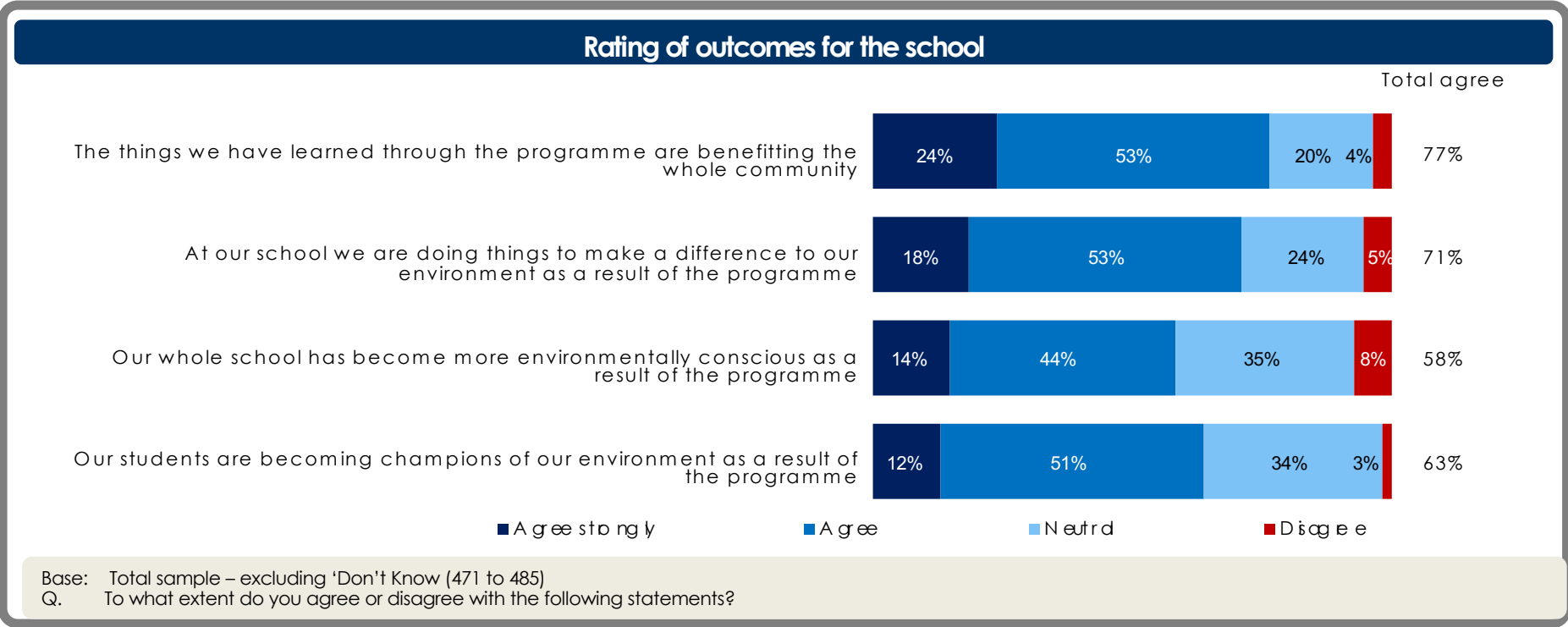
As illustrated the highest proportion (77%) agree that..

“The things we have learned through the programme are benefitting the whole community.”

The clear majority (71%) also agree with..

“At our school we are doing things to make a difference to our environment as a result of the programme.”

There is also strong belief that schools have become more environmentally conscious as a result of the programme and that students are becoming champions of our environment as a result





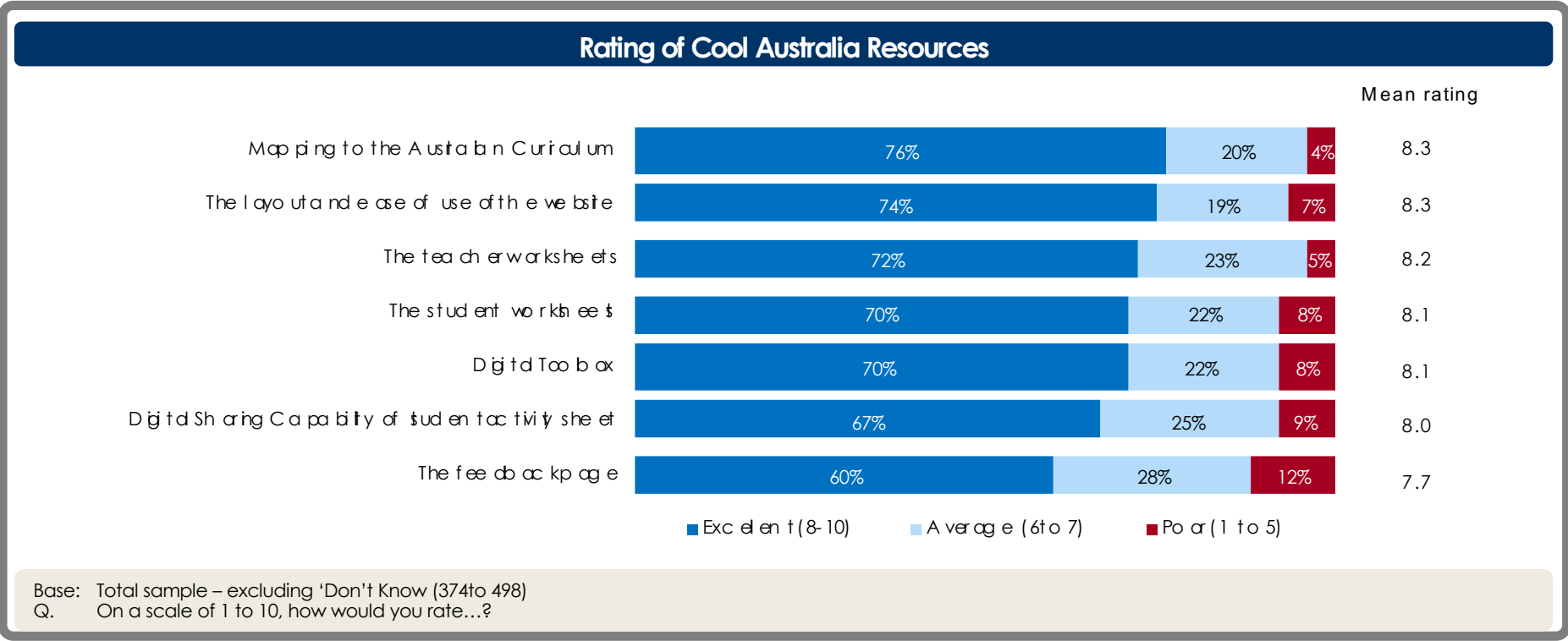
Section 4: Programme Evaluation

Rating of resources

Seven aspects of the programme resources were rated on a ten point 'excellent' to 'poor' scale.

All elements are viewed in a positive light although there is some evidence that the feedback page may require some attention.

Particularly high ratings are evident for 'Mapping to the Australian Curriculum', 'The layout and ease of use of the website' and 'The teacher worksheets'.





www.sweeneyresearch.com.au

All Sweeney Research studies are conducted in accordance with the International Standard ISO 20252

MELBOURNE

L1, 90 York Street
South Melbourne VIC 3205T

T 61 3 9699 8466
F 61 3 8199 0172

SYDNEY

L1, 30-32 Market Street
Sydney NSW 2000

T 61 2 9262 3266
F 61 2 9262 5774