



Young Ocean Explorers

Evaluation Report

28 September 2018

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Finally, we acknowledge Foundation North for funding this evaluation, through the Gulf Innovation Fund Together initiative.

Executive summary

This report explores the reach, engagement and impacts of the Young Ocean Explorers web platform. Young Ocean Explorers (YOE) offers an interactive web platform and learning resources to engage schools and young people aged 5-13 years with the ocean environment.

The evaluation is drawn from the following data sources:

- Analysis of YOE website analytics
- A survey of teachers using the YOE resources
- Focus groups with students from two schools
- Interviews with teachers from five schools.

YOE reach and engagement

Analysis of website data indicates that YOE has a high reach, and that there is active engagement with the site content. There were between 15,000 and 112,000 visitors each month to YOE between February and August 2018. Engagement with the site, in terms of completing content through to conclusion (considered to be a high bar for engagement), varied from approximately 1500 to 13,400 visitors. Accessing YOE peaked in March 2018, likely to be as a result of Sea Week activities across New Zealand.

Teachers who had registered with the YOE website were invited to take part in an online survey, where they were initially asked if they were using YOE in their teaching. Two-thirds of teachers (67%) registered with the platform were using YOE, and a further 31% intended to. Only 2% were not intending to use the platform. The survey data indicates YOE is being used with a wide range of ages, spanning years 1 to 8.

Value of YOE in teaching

Approximately four out of five teachers (79%) indicated YOE was really helpful, and a further 18% said it was generally helpful. More than half of teachers using YOE (57%) had done so on six or more occasions. The relevance of YOE content to existing curriculum was the most frequently cited reason that teachers found the content helpful in the classroom, along with being engaging and relatable for students.

Almost all teachers reported that children enjoy YOE a great deal (83%) or a reasonable amount (16%). Teachers noticed that their students were excited by the content; engaged with the material, the videos in particular; eager to discuss and share their learning, within and outside the classroom; and inspired and engaged by the young presenter.

Students reported that they enjoyed YOE because it was fun, it was relatable to them as individuals and, they were able to learn a great deal from the website. Students said that the young presenter, who was just a bit older than themselves, on YOE was inspiring and it made the videos more relatable.

When asked 'how likely is it that you would recommend YOE to a friend or colleague?' on a scale of 1 to 10, 61% of teachers gave a 9 or 10 rating, and a further 17% gave a 7 or 8 rating. This equates to a very high Net Promoter Score of 49.

Impacts of YOE

Among teachers using YOE, there is a clear indication that YOE is contributing to students' knowledge, particularly for the marine environment in general, the risks to the marine environment, and things they can do to protect the ocean. For students in the Auckland and Northland regions, YOE is making a strong contribution to understanding of the marine environment in the Hauraki Gulf.

There was wide agreement among teachers using YOE that the platform and resources inspire young people in the following ways:

- Reducing the amount of plastic they and their families use (90% indicating either a reasonable amount or a great deal)
- Learning more about the marine environment (95%)
- Keeping our communities clean (86%)
- Making changes in the school about plastics and waster (79%)
- Picking up rubbish every day (80%)

YOE appears to be making a positive contribution to changes around the school. Between 17% and 19% of teachers thought that YOE was inspiring schools to pick up more rubbish around the school, reduce plastic use, and reduce waste; a further 58% to 60% of teachers thought that YOE was supporting changes that were either happening or they were planning to make. This is particularly so in the Auckland/Northland region, for reducing waste and plastic use.

Students reported that the 'Stop Plastic' YOE video made them want to pick up plastic and help solve the plastic issue in the oceans, and to reduce littering. Students were able to report changes made at the school and home to reduce plastic consumption, often as a result of actions led by the students themselves.

Potential improvements

While many teachers said that there were no improvements needed, some suggestion for improvement were:

- Printable follow-up resources to support and extend learning
- Links to further information on topics and projects/initiatives beyond YOE
- The inclusion of experiments and research projects
- More interactive resources
- Visiting schools
- Videos for younger students (suggested by students themselves)

Overall, the combination of data sources sends a strong signal that YOE is highly engaging on issues facing the marine environment, and is proving successful motivating changes in schools, and in the lives of school children, to protect our oceans and the Hauraki Gulf.

Introduction

This report explores the reach, engagement and impacts of the YOE web platform. Young Ocean Explorers (YOE) offers an interactive web platform and learning resources to engage schools and young people aged 5-13 years with the ocean environment. The platform offers:

- Immersive experience
- Self-directed learning
- Multiple touchpoints on the ocean environment

For the purposes of this evaluation, YOE was funded by Foundation North through its Gulf Innovation Fund Together (G.I.F.T.) initiative to develop a series of new experiences and resources featuring the Hauraki Gulf marine environment.

The evaluation is based on the following data gathering:

- Analysis of YOE website analytics
- A survey of teachers using the YOE resources
- Focus groups with students from two schools that had made use of the Gulf-focused resources
- Interviews with teachers from five schools.

The evaluation considers the following overarching aspects of YOE's connection on the marine environment:

- **Reach**, in terms of the number and range of schools activating the resources
- **Engagement**, in terms of how teachers and students respond to and are motivated by the platform and resources
- **Change and impact**, in terms of the actual changes students and schools are making to better protect the marine environment.

This evaluation was undertaken at an early stage following production of Gulf-focused resources. Some of the analysis therefore focuses on the broader range of YOE resources; however, some research was undertaken specific to schools that had made use of the Gulf-focused resources.

The report is prepared by Adrian Field from the Centre for Social Impact (CSI), with qualitative research and analysis undertaken by Emily Garden and Cheryl Glover.

Method

Website analytics

Data was obtained via YOE's web platform on the numbers of people accessing the web-based resources. The focus of the analysis was on the period from February to August 2018, following receipt of Foundation North funding. The time period from 8am to 4pm, to cover school hours, was chosen for analysis.

Teacher survey

Surveys were distributed via the Survey Monkey online platform in June 2018. Survey participants were selected on the basis of enrolling online to make use of the YOE resources. Email addresses were obtained by YOE leadership after extraction from the web platform.

The survey was distributed to 1120 teachers. In total, 276 responses were received, which is a response rate of 25%. This is somewhat higher than online surveys generally, where response rates of only 20% are commonplace.

Surveys were analysed using a mix of frequency and cross-tabulations for closed response questions, and qualitative thematic analysis for open-ended questions. Separate analysis was undertaken by geographic area, to determine any differences between respondents from within the Foundation North region (Auckland/Northland) and other areas of New Zealand. Differences between areas are reported where significance to the level of $p < 0.05$ was indicated.

Across the survey, 50% of respondents were from the Northland/Auckland region, 38% were from other areas, and 12% were unclear or from outside New Zealand.

Student and teacher qualitative engagement

A total of five teachers were interviewed to gain an understanding of their use of YOE. Three of these interviews were conducted by telephone and two were conducted in person at the schools that participated in focus group discussions. The decile ratings of these schools ranged from decile 4 to decile 10, with the majority of the teachers coming from higher decile schools. The locations of these schools included urban, suburban and country areas. The participants used YOE with children from Year 2 to Year 6.

Two student focus groups were conducted with a total of 9 participants. One school had a decile rating of 5 and was situated in a country setting, the other had a decile rating of 10 and was situated in a suburban, ocean setting. The children who participated ranged from Year 4 to Year 6.

Student participants were shown the 'Stop Plastic' video at the beginning of the focus group and were then asked what they thought of the video, what it made them want to do and, what it made them want to stop doing. Following this, participants were asked questions based on their own experiences of YOE.

Website analytics

Data from the YOE website was accessed in August 2018, to explore the level of interaction with the YOE content over the school year From February to the end of August 2018 (following Foundation North funding being made available).

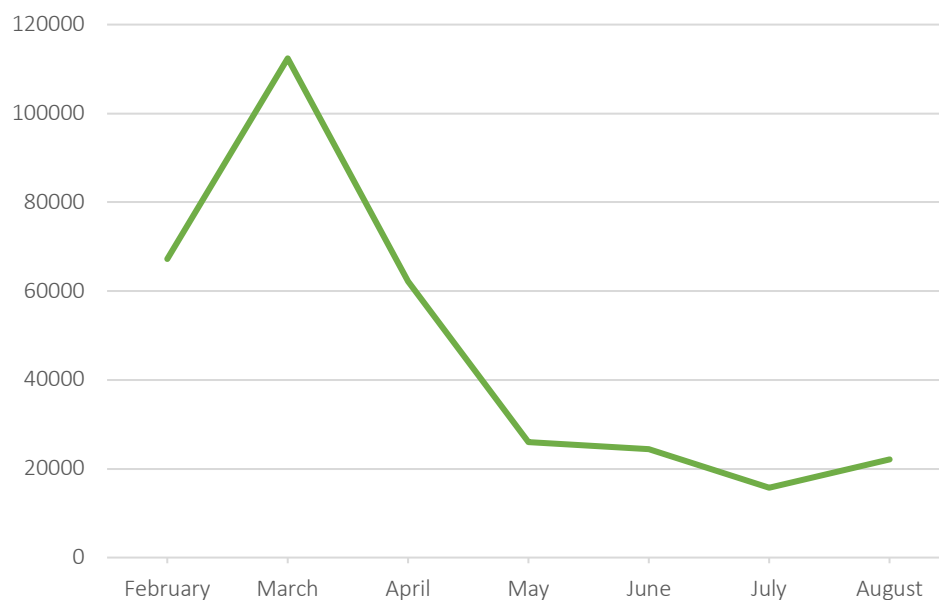
The data extracted was restricted to that which was accessed from New Zealand, during the working week from 8am to 4pm, so as to cover engagement during school hours. The website analytics distinguish between ‘total’ (those accessing the website) and ‘engaged’ (those who not only accessed the site, but also completed a video, quiz or poll through to conclusion – this is considered to be a reasonably high bar for website engagement).

The data available indicates that YOE has a high reach, and that there is active engagement occurring with the content.

Accessing Young Ocean Explorers

As indicated in Figure 1 below, there were between 15,000 and 112,000 visitors each month to YOE between February and August. These can be multiple visits and so are likely to often be one person accessing content on more than one occasion. There is a clear peak in March, likely to coincide with Sea Week (3-10 March).

Figure 1: Young Ocean Explorers – Total visitors (NZ school hours, 2018)



Site engagement

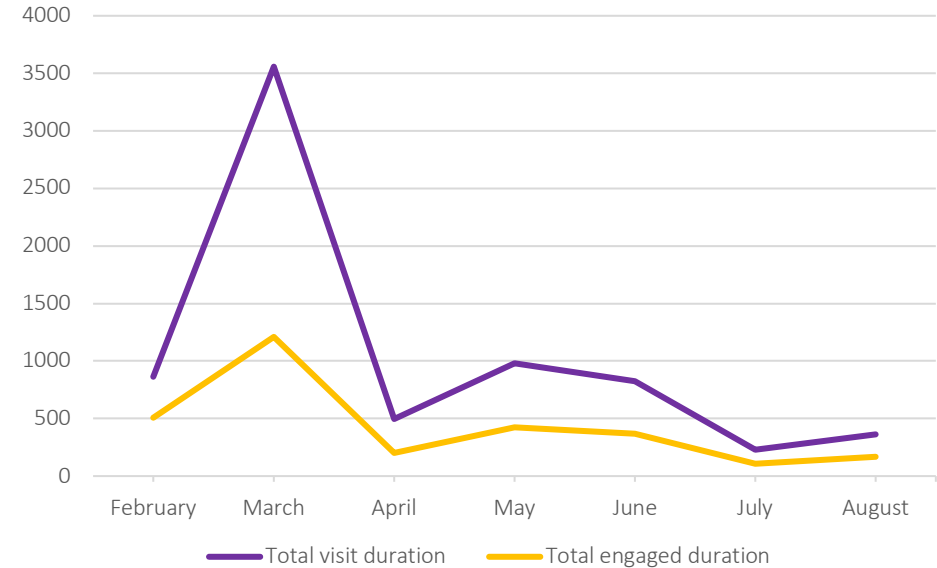
Engagement with the site, in terms of completing content through to conclusion (considered to be a high bar for engagement), varied from approximately 1500 to 13400 visitors (again in March, coinciding with Sea Week). There was also substantial engagement with Māori content, peaking in March with 7100 visitors (Figure 2).

Figure 2: Young Ocean Explorers – Engaged visitors (NZ school hours, 2018)



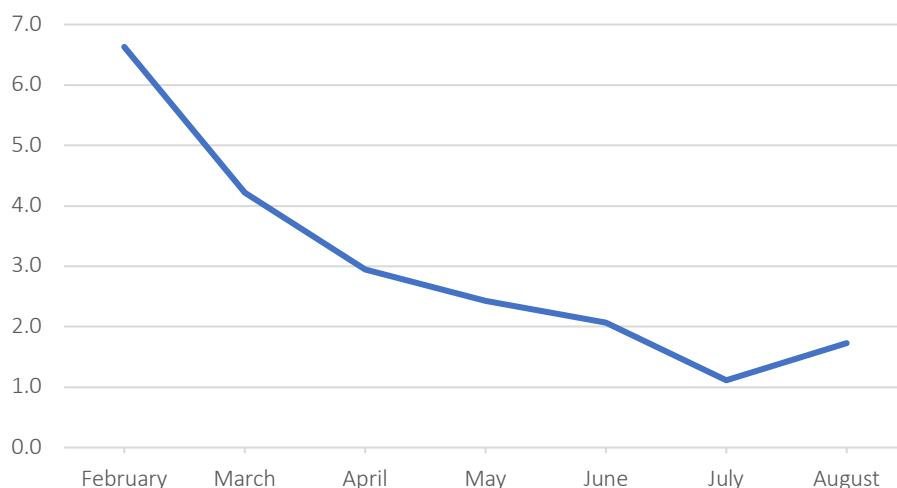
Website data also indicates that in February 2018, over 3500 hours were spent on YOE overall, and over 1200 hours where visitors were engaging with content to completion (as shown in Figure 3 below by the ‘total engaged duration’ line).

Figure 3: Young Ocean Explorers – Total duration and engaged duration



Finally, Figure 4 below details the average duration of each visit, which peaked in the early part of the school year at 6.6 minutes. This will include those who access the site momentarily as well as those engaged for longer periods of time.

Figure 4: Young Ocean Explorers – Average duration (minutes)



As at late September 2018, the most recent website analytics indicated:

- Approximately 1600 teachers signed up to YOE
- More than 157,000 engaged devices (i.e. any device which has played some content)
- 6300 hours completed content
- 12250 hours total visit duration
- 536,800 total content viewed

The website analytics provide a useful insight into the extent to which people are engaging with the YOE site. At the time of writing (September 2018) a further lift in engagement was becoming apparent and is likely to reflect planned teaching sessions on the ocean environment as summer approaches.

It will be useful in future years to compare patterns throughout the year, as there are likely to be seasonal variations, as well as particular events, such as Sea Week, that can cause peaks and troughs in use and engagement.

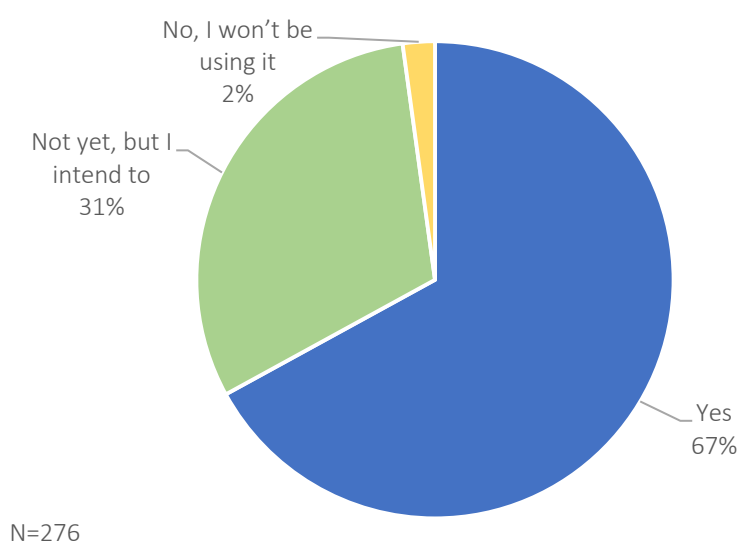
The next sections explore the value that participants, both teachers and students, obtained from YOE.

YOE teacher survey

Making use of Young Ocean Explorers

Teachers who had registered with the YOE website were invited to take part in an online survey, where they were initially asked if they were using YOE in their teaching. Figure 5 shows that two-thirds of teachers (67%) registered with the platform were using YOE, and a further 31% intended to. Only 2% were not intending to use the platform.

Figure 5: Use of YOE in teaching



Respondents were asked to describe in their own words why they had/had not made use of YOE in their teaching, with a total of n=94 responses received. The vast majority of respondents providing comment had used the resources, and all of those that had done so reported that they were of value in their teaching. Those who had used the resources did so because:

- The materials were relevant to their teaching of a particular subject, area of focus, topic or inquiry unit
- Their students enjoyed or were interested in the content

Those who had not made use of the materials had not done so because:

- They had insufficient time
- They had been unaware of YOE
- The content did not fit with their current teaching programme or was not relevant to their inquiry topic
- They did not know they were able to make use of the resources in their teaching
- In one case, problems were experienced with the user interface

Many teachers had made use of the YOE resources because they were relevant to their teaching. Over one third (37%) of respondents noted they had used the resources because they applied to a particular subject, area of focus, topic or inquiry unit. Specific examples provided included Sea Week, World Oceans Day, the Enviroschools programme and units on the living world, ecosystems, conservation, marine life and oceans. For some teachers, it was the availability of resources in Te Reo Māori or the fit with a Te Ao Māori kaupapa that led them to access the programme. Comments included:

I teach EFS at a Primary School and as an Enviroschool was introduced to YOE and immediately found the videos a great teaching resource.
(Auckland/Northland)

YES! Website videos are short, high quality, intrigue, integrate Te Reo, contain science experiments which can be repeated and provide opportunity for conservation action/awareness. Website easy to negotiate, highly relevant to the Science Curriculum Living World Strand and Nature Of Science Strand (pp 9 and 28 curriculum). (Auckland/Northland)

Because it linked to our inquiry focus on the water cycle and people's impact on water/plastic/rubbish. (Rest of NZ)

We tied it in with our school camp trip theme of looking after our ocean.
(Auckland/Northland)

Student interest or enjoyment drove some teachers' use of the YOE resources. Respondents described the materials as fun, engaging, relatable, inspiring and relevant, with the ease of use of the materials also highlighted:

Great, easy to use resource. Appealed to a range of ages. (Rest of NZ)

It was inspiring for children in my class and it was relevant to our topics.
(Auckland/Northland)

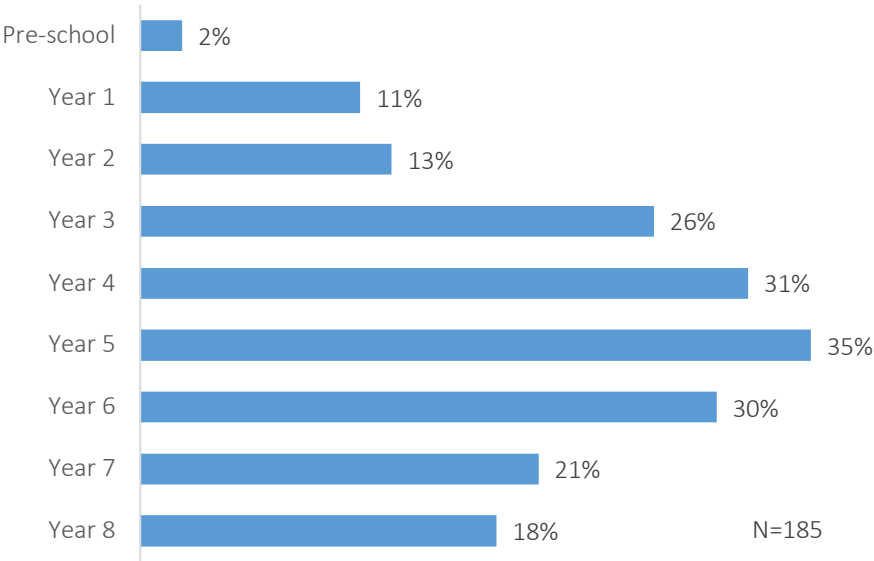
Engaging, pitched at the right level, relevant, easy to access.
(Auckland/Northland)

However, not all respondents had used the resource, with a small number commenting that they had not been aware of YOE, or did not know they were able to make use of it in their teaching. Insufficient time was also highlighted as a barrier to use, while others stated that the content did not fit with their current programme or was not relevant to their inquiry topic. Finally, one respondent indicated that they had tried to make of the resources but had been unable to do so due to problems with the user interface.

Using YOE in the classroom

The survey data indicates YOE is being used with a wide range of ages, spanning years 1 to 8. For the most part, use is concentrated in year 4 (31%), 5 (35%) and 6 (30%), as indicated in Figure 6.

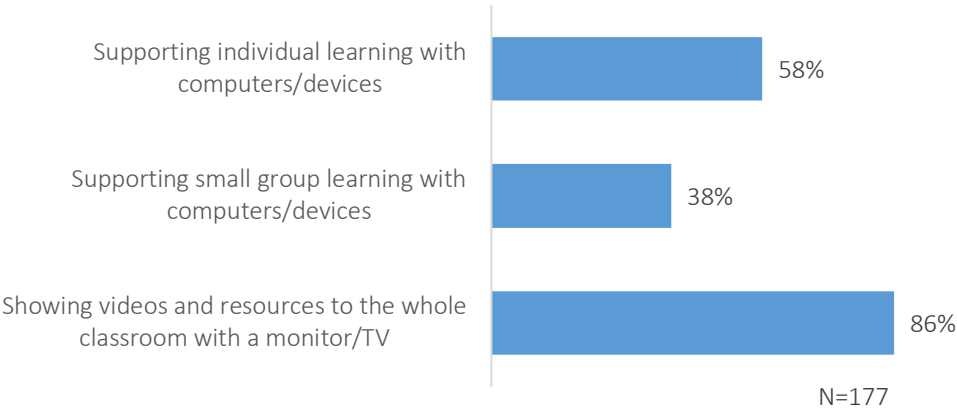
Figure 6: School year levels using Young Ocean Explorers



Note that more than one response was possible

Teachers are using multiple ways of engaging with students in the classroom. Almost all (86%) are showing videos and resources to the whole classroom, but more than half (58%) are also supporting individual learning with computers and devices. Just over a third (38%) are supporting small group learning (Figure 7).

Figure 7: Using Young Ocean Explorers in the classroom

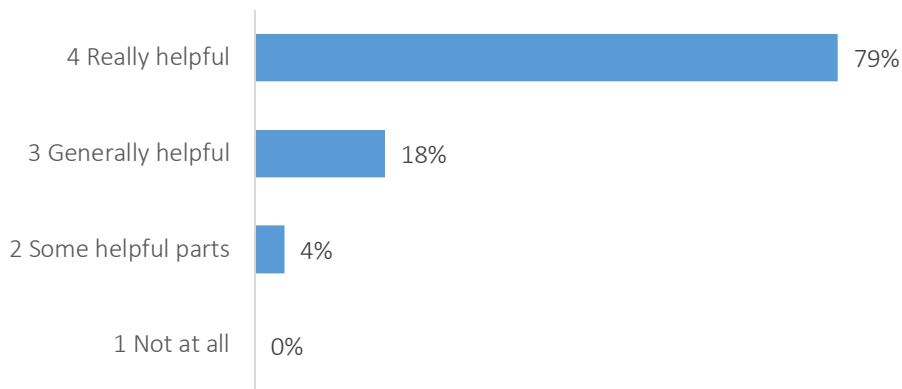


Engagement with YOE resources

Helpfulness of YOE

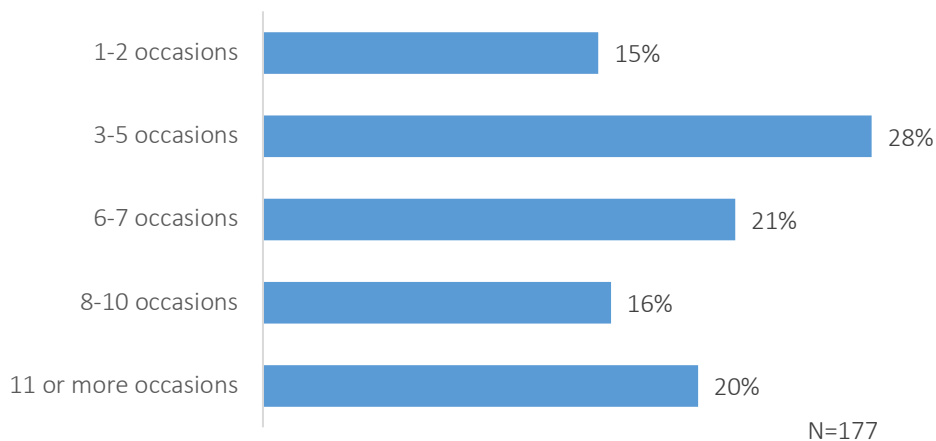
Teachers using YOE were asked how helpful YOE is to them in the classroom. Approximately four out of five teachers (79%) indicated it was really helpful, and a further 18% said it was generally helpful (Figure 8).

Figure 8: Helpfulness of Young Ocean Explorers in the classroom



Furthermore, the resource has been used by teachers on multiple occasions, not simply as a one-off teaching opportunity. More than half of teachers using YOE (57%) had done so on six or more occasions (Figure 9).

Figure 9: Number of times using Young Ocean Explorers in the classroom



Respondents were asked to provide further information on why they had/had not found YOE content to be helpful in the classroom. A total of n=67 free text responses were received to this question, with all respondents indicating that the resources were of value in their teaching. These comments suggests that teachers feel the YOE materials:

- Align well with existing curriculum and study units
- Are engaging and relatable for students, making them very 'kid-friendly'
- Are available in formats that allow for easy integration with other lesson materials

The relevance of YOE content to existing curriculum and study units was the most frequently cited reason that teachers found the content helpful in the classroom.

Given examples included water, marine animals, sustainability, the rocky shore and environmental impacts of plastics:

Our unit this term is about saving our marine environment. YOE videos are perfect for our children to find out interesting ocean-related facts. (Rest of NZ)

Suitable resources that fitted in well with our unit on water, marine animals & sustainability. (Auckland/Northland)

It is engaging and current, highlights issues that we are teaching the students about. (Auckland/Northland)

In addition to relevant subject matter, teachers also highlighted the appropriateness of the format of YOE resources, which were seen as easy to use and integrate within lessons. The visual nature of the materials was valued, as was the brevity of the video clips, which was seen to support children's engagement as well as enhancing usability. The quality of the videos and the value of the facts and focus questions also received special mention, as did the ability of children to access the resources independently and follow their individual interests. Comments included:

Students can access it independently and find videos that interest them. The videos are short, informative and at an appropriate level. Students love that Riley is young and relates to them really well. (Auckland/Northland)

Great content stimulating great conversation. I would love if there was more interactive material with different learning styles accommodated. (Auckland/Northland)

Visual information, relevant living world info about native species. Helps with planning and related activities. (Auckland/Northland)

Easy to navigate, short sound bites which we could move between didn't have to listen to non-relevant parts just to get to what was useful for the particular lesson. (Auckland/Northland)

The 'kid-friendly' nature of the resources was another strong theme within the open comments, with many teachers describing the materials as interesting, engaging, memorable and easy for kids to understand. Many respondents highlighted the role of Riley as a presenter in making the materials unique, engaging and relevant to students. The opportunity for students to see a young person discovering and sharing knowledge was seen to be of real value, with many respondents highlighting how children connect with Riley, who speaks to them in their language:

Relatable, clear information and my learners have made a real connection to the content as well as the presenters. (Rest of NZ)

Kid-friendly, engaging stories. Not too long but full of key facts. (Auckland/Northland)

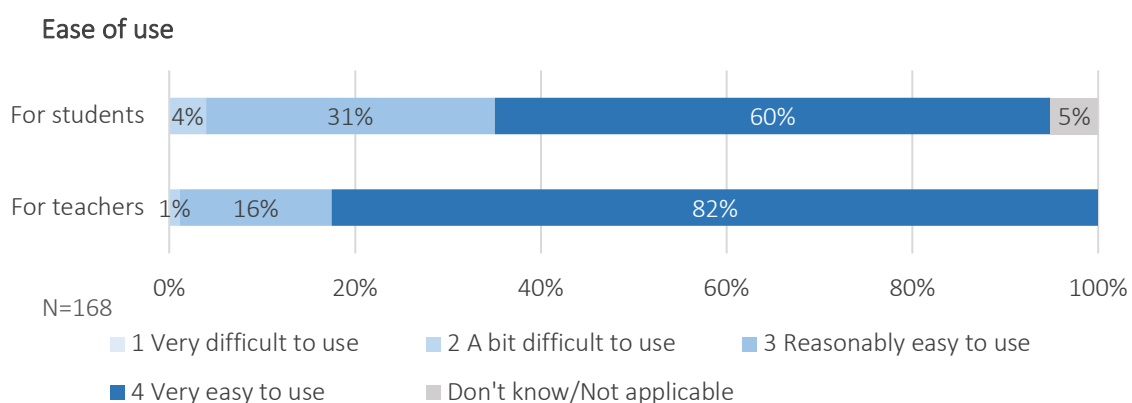
Content is clear and relevant. Students relate well to Riley and the messages she presents. Clips are short and informative so teachers can use them as a group or as a 'one-off' starter for a lesson. (Auckland/Northland)

Helpful facts presented in an engaging and impactful way that speaks to young people of today. (Auckland/Northland)

Ease of use

YOE is clearly easy to use for both students and teachers. Overall 98% of teachers reported that YOE is either very easy to use (82%) or reasonably easy (16%). It was reported by 91% of teachers that students find it either very easy (60%) to use or reasonably easy (31%) (Figure 10).

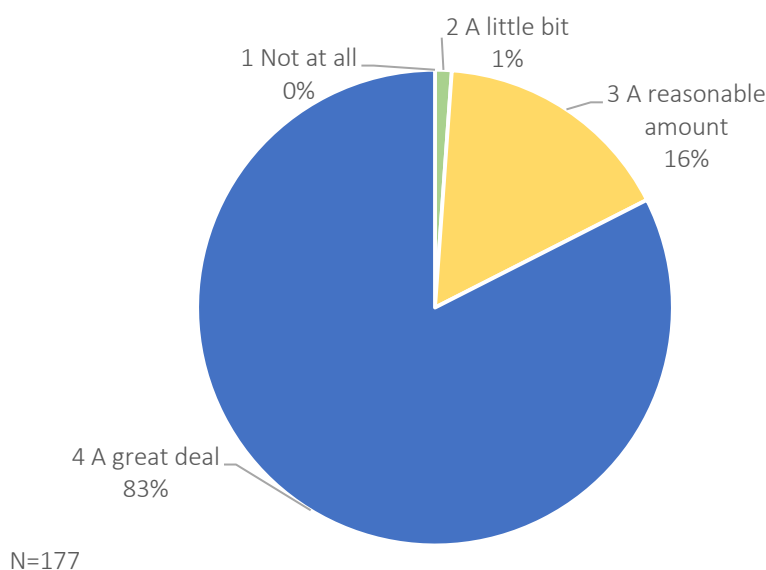
Figure 10: Ease of YOE use



Perceptions of student reactions

Teachers are reporting that students really enjoy using YOE. Almost all teachers reported that children enjoy YOE a great deal (83%) or a reasonable amount (16%) (Figure 11).

Figure 11: Student enjoyment of Young Ocean Explorers



Respondents were asked to detail the main reactions they noticed from students on the YOE website. A total of n=190 responses were received to this question, and comments about student's reactions were overwhelmingly positive. Key themes throughout these responses were that teachers noticed that their students were:

- Excited and fascinated by the content
- Deeply engaged with the material, the videos in particular
- Eager to discuss and share their learning, within and outside the classroom
- Inspired and engaged by Riley as a presenter
- Able to use the website and its content with ease and used it to follow their own lines of inquiry

A large number of respondents described their students as excited, amazed or fascinated by the content, with many noting that they would request revisiting the materials or access them independently. Comments included:

Wonder and amazement at having the underwater world revealed to them. (Auckland/Northland)

Excitement, interest to extend learning, eagerness to share. (Rest of NZ)

Genuine excitement, especially watching the video clips. (Auckland/Northland)

Wow! Is a first response from many. (Auckland/Northland)

Many respondents highlighted their student's deep and sustained engagement with the YOE content. Some attributed this to the style of presentation, which was described as fun and well paced with short, engaging videos. The appeal of the delivery format of video, followed by quiz questions received many mentions, as with the *did you know facts*:

They are drawn into the resource - highly engaged. They wish to know more - they ask questions and can answer questions. (Rest of NZ)

It's engaging especially the videos, & it's connecting to their world. (Auckland/Northland)

It's a lot of fun - they notice when new content is up - excited to share new facts (the weirder the better). (Rest of NZ)

The role of the website in stimulating discussion within and outside the classroom was also emphasised, with respondents noting that their students were eager to share their new learning with teachers and peers:

They are talking about issues more. It creates a buzz. (Auckland/Northland)

Enthusiasm for sharing what they've discovered. (Auckland/Northland)

The inclusion of a young presenter that students could relate to was viewed as having a significant impact on learning and engagement. Some teachers highlighted their student's enjoyment in seeing a peer have new experiences and in sharing her learning journey. Others noted that Riley's passion for the ocean inspired children and that seeing her achievements motivated them to make change or encouraged the belief that they too could take action on issues of importance to them. Comments included:

My students connected with the children hosts. They were really motivated to explore alongside the hosts and they were fascinated with the experiences of the hosts. (Rest of NZ)

They seem to engage with Riley, her infectious personality and the 'kid' friendly sharing of information. The videos stimulate sharing of their own experiences as well as create a curiosity for the ocean environment. They want to know more. (Auckland/Northland)

They are engaged and it makes them consider the impact that they could have. (Auckland/Northland)

They all really enjoyed watching the videos and your TED talk, the idea of Kids Inspiring Kids is what really stuck with them! When we received your book they were very excited and have spent free time reading it. (Rest of NZ)

In addition, some teachers felt that the distinctly New Zealand flavour and context of the materials played a key role in engaging students. The featuring of places the children recognised or had been to, along with a focus on topics that were current, visible and of local importance (such as plastic pollution) were seen to contribute to the sense that the students experienced the content as relevant to their lives:

They are really engaged, love that the content is local. (Auckland/Northland)

They were amazed by the diversity in our backyard. (Auckland/Northland)

Some responses to this question referred to student's experiences of using the website, which was described as interactive and user-friendly. A number of respondents noted that

the structure of the site empowered students to access content independently and follow their own lines of inquiry. Others observed that students wished to use the resource in their own time or had shared the site with family at home. Comments included:

They enjoy the interactiveness of the site and also the range of topics so that they can focus on what they are interested in. They enjoy the video clips.
(Auckland/Northland)

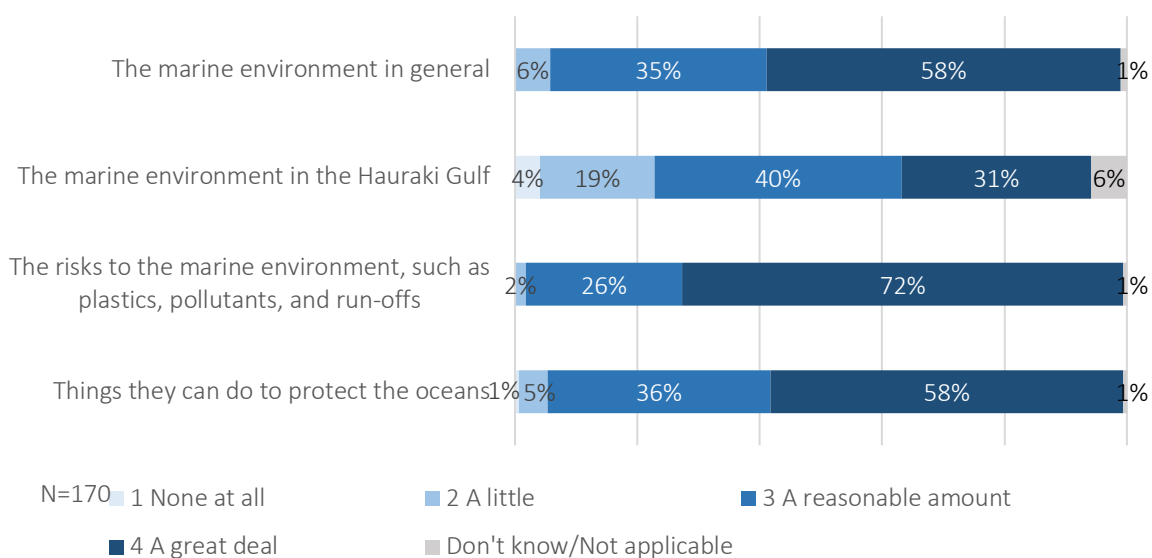
Excited that they are able to navigate and access learning themselves, building on and testing their knowledge, very excited and engaged. (Rest of NZ)

Impact of YOE resources

Among teachers using YOE, there is a clear indication that YOE is contributing to students' knowledge, particularly for the marine environment in general, the risks to the marine environment, and things they can do to protect the ocean (Figure 12).

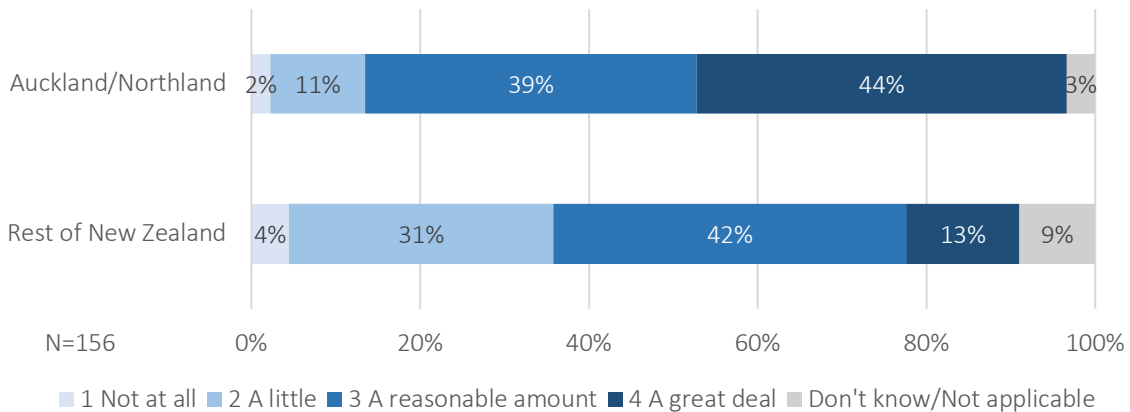
Contribution to knowledge

Figure 12: Contribution of Young Ocean Explorers to students knowledge



For students in the Auckland and Northland regions, YOE is making a strong contribution to understanding of the marine environment in the Hauraki Gulf. Teachers from these regions thought YOE was contributing a great deal (44%) or a reasonable amount (39%), substantially higher than students from other regions (Figure 13).

Figure 13: Contribution to students' knowledge of the Hauraki Gulf marine environment (by region)



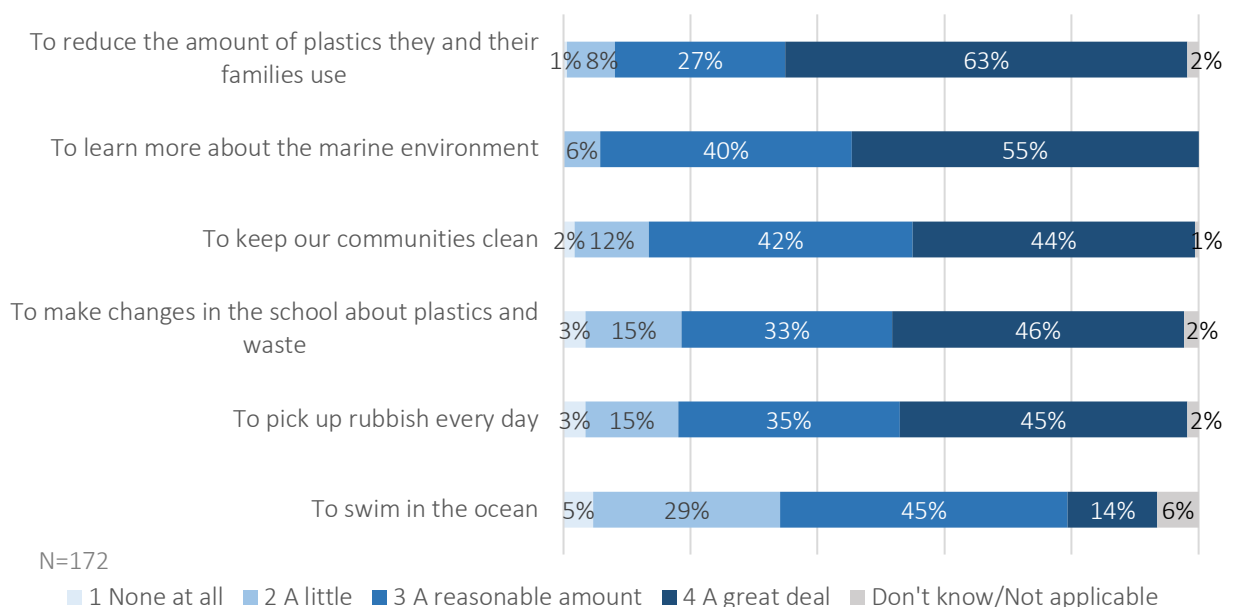
Inspiring students

There was wide agreement among teachers using YOE that the platform and resources inspire young people in the following ways (Figure 14):

- Reducing the amount of plastic they and their families use (90% indicating either a reasonable amount or a great deal)
- Learning more about the marine environment (95%)
- Keeping our communities clean (86%)
- Making changes in the school about plastics and waster (79%)
- Picking up rubbish every day (80%)

There was less agreement with impact on inspiring students to swim in the ocean (59%).

Figure 14: Contribution of Young Ocean Explorers to inspiring students



Supporting and inspiring changes in school

In terms of direct impact on changes in the school, Figure 15 below indicates that YOE is making a positive contribution to changes around the school. Between 17% and 19% of teachers thought that YOE was inspiring schools to pick up more rubbish around the school, reduce plastic use, and reduce waste; a further 58% to 60% of teachers thought that YOE was supporting changes that were either happening or they were planning to make.

Figures 12 and 13 suggest that YOE is making a particular contribution in the Auckland region to reducing waste and plastic use in schools; significantly higher proportions of teachers indicated YOE was inspiring change to happen, compared to other parts of New Zealand. This may be due to the active efforts of YOE to engage directly with schools in the region.

Figure 15: Contribution of Young Ocean Explorers to supporting changes around the school

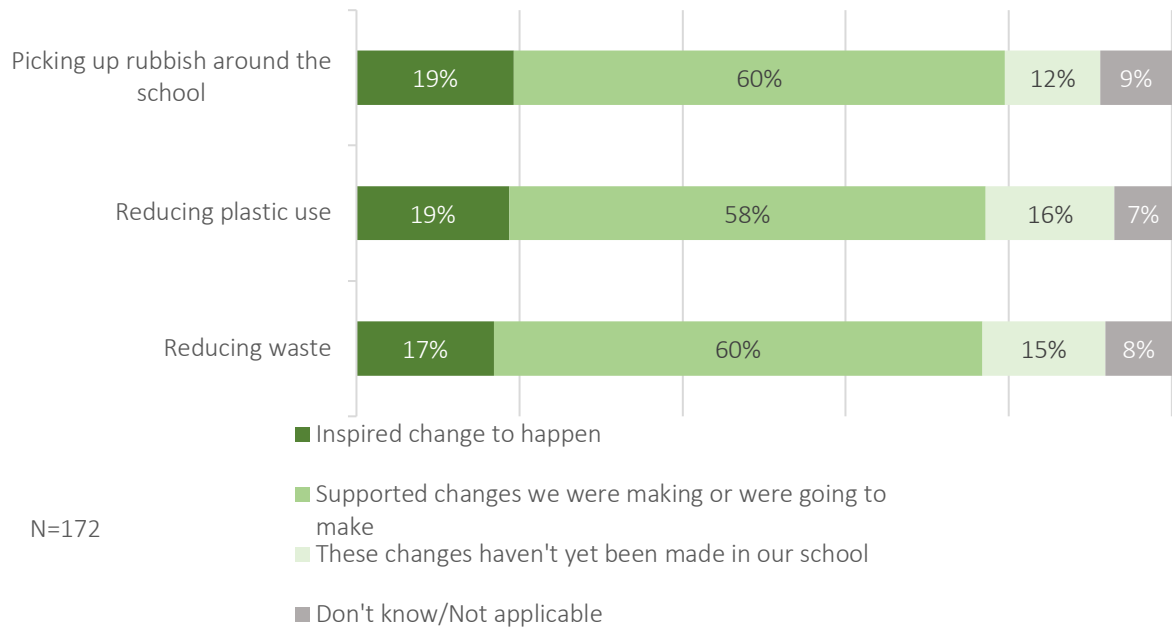


Figure 16: Contribution of Young Ocean Explorers to supporting waste reduction in schools (by region)

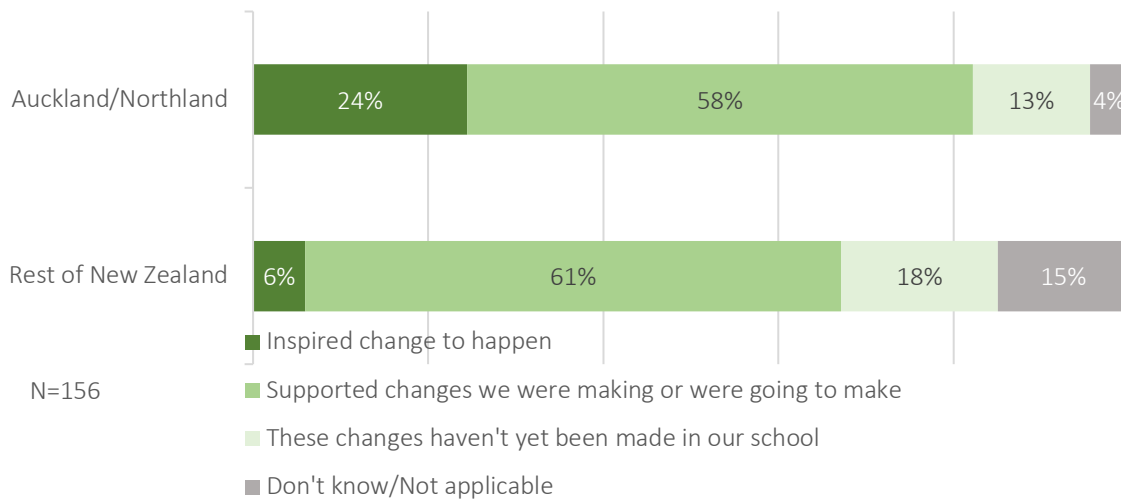
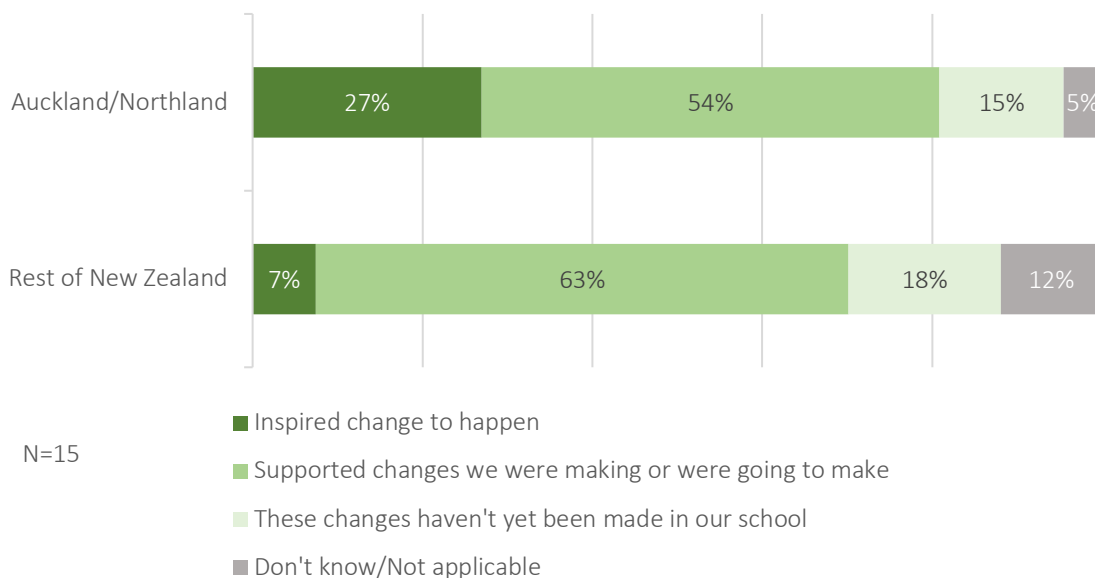


Figure 17: Contribution of Young Ocean Explorers to supporting reduction in plastic use in schools (by region)



Respondents were asked to detail any other changes they believed YOE had helped bring about. A total of n=53 free text responses were received to this question, with approximately three-quarters describing additional changes. The remaining 26% of respondents believed that no other changes had occurred. The key changes highlighted by teachers as a result of engagement with the YOE resources were:

- Greater knowledge of and interest in the marine environment
- Increased understanding of human behaviors on the environment
- Motivation to lead and engage in projects that contribute to positive change
- Reduced use of plastics

Increased general interest in and understanding of New Zealand's marine environment, including an awareness of the ocean's fragility, was a fundamental change noted by teachers. Some highlighted ways in which YOE had generated conversation among young people about the marine environment and its protection:

Students talking about cleaning beaches, bays and sharing their learning at home. (Auckland/Northland)

Motivated to read more and share learning with others. (Rest of NZ)

Others noted that their students had been inspired to discover the marine environment for themselves, requesting masks and snorkels for presents or wishing to peruse careers as a marine biologist or underwater cameraperson:

Some children were inspired to look at becoming a marine biologist when they leave school, so they can learn more! (Rest of NZ)

Helping students who were timid about entering the ocean. (Auckland/Northland)

Knowledge regarding the impacts of human behavior on the marine environment was also reported to have increased following engagement with YOE. Teachers described their students as having more "self-awareness" and an enhanced understanding of how their behaviors impact our oceans and the environment generally.

Respondents also noted that their students were motivated to undertake actions and projects to contribute to positive environmental change. Specific examples included reduced personal plastic use, such as more students bringing 'nude food' to school, while one respondent noticed their students informing new children about the environmental impacts of plastic bags. Another described how their class was inspired to write a letter to the Prime Minister requesting the banning of plastic bags. Comments included:

I think students have made more of a connection between the piece of plastic in their hand and how that might have an impact on not only our local environment but also on a global scale - this is a hard concept for them to grasp. (Auckland/Northland)

Our school leaders have undertaken their own projects on reducing the use of plastics in the environment. (Auckland/Northland)

Painting fish on wastewater drains to remind us not to litter or pour paint down school wastewater drains. (Rest of NZ)

Approximately one-quarter of respondents to this question (26%) stated that no additional changes had been brought about by YOE.

Most valuable aspects

Respondents were asked to describe what they found to be the most valuable aspect of YOE for them as a teacher, with a total of n=192 responses received. Key themes to emerge from these comments were that teachers particularly value the fact that the YOE materials:

- Have a New Zealand focus
- Are easy to use
- Are “kid friendly”
- Support independent learning
- Are delivered by a peer
- Teach children about the environment and conservation

The local nature of the YOE New Zealand content was its most valuable aspect for many respondents. The focus on environments and animals “in our own backyard”, along with threats to these natural values, was seen as making the content relevant and engaging for students. Some noted the ability of the resources to link places and issues of local importance to those in the wider world. Comments included:

Local content, local eco-heroes, strong messages to our tamariki.
(Auckland/Northland)

It's a Kiwi resource which fits our Kiwi science curriculum. It's delivered in short bites. (Auckland/Northland)

Being distinctly 'New Zealand' the content feels relevant and 'ours', belonging to us and to this place. I think it translates to a feeling of stewardship how can we respect and look after our taonga. (Auckland/Northland)

The ease with which the YOE website, and associated content, may be accessed and integrated into lessons was also highly valued by teachers. Many commented that the materials linked well to the areas of inquiry on which they were focusing, while others noted the good range of resources available. Some respondents highlighted the versatility of the materials, the short videos in particular, which were seen to be adaptable for different lesson styles and topics. As was the case in responses to other questions, the short format of video clips received many mentions, with the quizzes also popular.

The resources were widely identified as being “kid friendly” and “pitched at the right level” for students. Teachers frequently described the materials as engaging, inspiring, current, interesting and relevant. The visual nature of the YOE content was also seen to be of particular value. Some teachers felt that the appeal of the resources to a wide range of learners and abilities was their greatest value. Others highlighted their ability to engage specific groups of learners, with boys and students who find accessing the written world difficult given as examples. Comments included:

Access to information in a kid-friendly way. (Auckland/Northland)

Child-friendly. Great key messages. Interesting, informative and leads to great discussions. (Auckland/Northland)

Resources pitched for the level of the class. Digital resources that are child user-friendly. (Rest of NZ)

Many respondents again highlighted the value of having the resources fronted by a presenter close to their student's age, sharing information in their language. Many described Riley as engaging and relatable, and the passion of both presenters for their subject was also noted. Others valued the “family focus” of the content. Comments included:

Children talking to children. Like peer tutoring or Tuakana-Teina approach. Very informative and highlighting local places and sea life. (Rest of NZ)

I mainly used the videos as am now retired and did not get a chance to fully implement use of the webpage. The fact that Steve and Riley front the videos are REAL in a very caring Kiwi way. They visit schools, which is a powerful connection to make and have had a big impact on many children. (Auckland/Northland)

For some teachers, the most valuable aspect of YOE content was that it supported independent learning. Some highlighted the interactivity of the resources, while others valued the fact that children could use the materials to research and follow their interests. Some respondents commented that they appreciated the fact that YOE was a ‘safe site’ and they were, therefore, comfortable to allow independent exploration without worrying that students might come across inappropriate material. Comments included:

Independent learning. Children can select things that interest them. (Rest of NZ)

Differentiates so each learner can set own pace and personal understanding, visually engaging, the videos and quizzes. (Rest of NZ)

The fact that YOE taught children about the environment and conservation was highlighted by a further number of respondents, with some noting that they valued access to resources that addressed these topics in an engaging and accessible way. Comments included:

It has sparked a lot of interest amongst my students in the oceans and what we can do to preserve them for future generations. (Auckland/Northland)

I have a passion for conservation and it enables me to share this in an authentic way that is relevant to the children. (Rest of NZ)

Engaging the students with a topic that is important to them and the wider world! The language used was easy to understand. (Rest of NZ)

Potential improvements

Respondents were asked in an open text question whether there was anything they believed could be done to improve YOE as a teaching resource. A total of n=130 responses were received, including a wide range of thoughtful suggestions. While many respondents stated that there were no improvements needed, others made the following suggestions:

- Printable follow-up resources to support and extend learning
- Links to further information on topics and projects/initiatives beyond YOE
- The inclusion of experiments and research projects
- More interactive resources
- Greater publicity to enhance knowledge and use of YOE
- Improvements to the navigation of the YOE website
- Resolving playback issues with some videos

Almost half (44%) of respondents indicated there were no improvements they would like made to the resources or that they would like more of the same. “No. It’s really great as it is!” or “Keep adding content - keep doing what you're doing!” were typical responses.

However, many teachers requested the addition of printable “follow-up” resources to support and extend student’s learning, and this was the most frequently suggested improvement. Many suggested the inclusion of worksheets, attached to individual videos. Others stated that downloadable readings, posters or resources enabling students to record and track their learning would be welcome additions. Comments included:

I have been creating comprehension worksheets as a follow up to every video as a task for my older kids, which helps them to be active learners. I advise adding this to your programme as very worthwhile. (Rest of NZ)

Maybe activities we can do in class that link to the videos? Worksheet type activities that can be adapted or used as a follow-up to teaching about the content? (Auckland/Northland)

Add more dad jokes and add an ocean explorer species traveler's book to show the species discussed, make some notes, activity to implement. (Rest of NZ)

The desire for more interactive resources was another common theme, with some respondents requesting further quizzes or the addition of games or challenges tied in with YOE content. Others felt that the inclusion of class discussion questions, either standalone on particular topics or generated at the end of each clip would be of real value.

More Te Reo Māori resources were requested by some respondents, while another suggested the inclusion of students from the Pacific islands as presenters of some content. Tying content to activities such as research projects or resources beyond the Young Ocean Explores website was a further suggestion. Some teachers requested the inclusion of links to more detailed information on topics, or to other learning sites. Comments included:

More content, perhaps follow-ups in a lab to investigate an issue. (Rest of NZ)

Lesson plans and follow up activities. How about some research projects linked to the site? (Auckland/Northland)

Some respondents suggested that more could be done to publicise YOE and increase teacher uptake of the resources. Advertising on the New Zealand Teachers website, linking content to aspects of the Enviroschools or Sea Week programmes were some specific suggestions. One respondent recommended the creation of a “teacher package” that would make it easier for teachers to share resources with colleagues and the broader school community.

Specific topics or issues were highlighted by some teachers as areas for particular or enhanced focus. Examples provided included Korora (Little Blue Penguins), food webs and specific regions of New Zealand. A number of respondents wished to see a greater focus on the impacts of human behaviour on the marine environment:

Perhaps lots of focus on the big issues of climate change, i.e., sea level rising, ocean acidification, overfishing, e.g., kina barrens, the importance of marine reserves, etc. (Rest of NZ)

Next step materials such as resources to build or explore the food webs in the Whangateau Harbour, question series for impacts of humans in each area explored on YOE (short and long term cascades etc.). (Auckland/Northland)

Many respondents suggested changes to the YOE website or content they felt would enhance usability. Some teachers requested improvements to the site navigation, many of whom stated they would like to be able to search the site and resources by keyword or topic. The addition of a favourites page upon login to allow quick and easy access for a lesson was another suggestion, as was the means to assign assignments to individual students and monitor their results. Comments included:

Have a site menu or page that shows all the connections between resources. (Auckland/Northland)

It can be hard to find the unit plans as a list - a different arrangement could be helpful. (Auckland/Northland)

Yes, kids need to be able to save their progress. They didn't like having to restart to complete the course they chose. (Auckland/Northland)

A number of teachers highlighted issues they had experienced with the videos, with difficulty opening clips or viewing them on a range of devices the key concerns raised. Comments included:

Please make the interface more accessible. The class codes had troubles, and the videos were not playable via different devices. Different pages would time out/not load for unknown reasons at random times. (Auckland/Northland)

We often found that the videos had A LOT of information but were very quick! So being able to slow it down or have subtitles so we can pause and still read the information. (Rest of NZ)

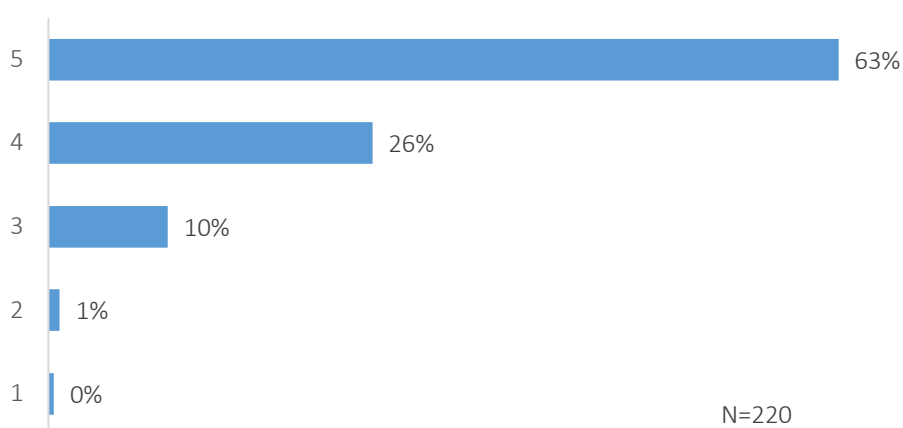
Overall reflections by teachers

When asked ‘how likely is it that you would recommend YOE to a friend or colleague?’ on a scale of 1 to 10, teachers responded very positively. Over 60% gave a 9 or 10 rating, and a further 17% gave a 7 or 8 rating.

The Net Promoter Score is a research tool to explore the extent to which people are prepared to recommend a service or product to others. It is derived by deducting those rating 0 to 6 on the above question from those rating 9 or 10. YOE received a score of 49, which is considered very high, and indicates a high level of engagement with, and support for YOE, and a high probability of teachers promoting YOE to others.

Teachers also gave very high ratings for the extent to which YOE inspires young people to protect our marine environment. Among all respondents, 63% gave YOE a five star rating, and a further 26% gave 4 stars, with an average score of 4.5 (Figure 18).

Figure 18: Star rating by teachers for inspiring young people to protect our marine environment (average score 4.5 out of 5)



As a closing question, respondents were asked if they had any final comments to make about YOE. A total of n=83 responses were received to this question. Overwhelmingly, these concluding comments praised the programme and thanked its producers. Key themes were that teachers:

- Found YOE to be an extremely valuable teaching resource
- Valued the local context and focus
- Praised the ability of the presenters to engage and inspire their students
- Noted the ability of the materials to engage boys
- Made some suggestions for improvement, including more use of Te Reo Māori and encouraging critical thinking
- Felt that YOE could be better promoted to increase uptake by teachers

The vast majority of respondents who provided concluding comments on YOE used this as an opportunity to thank the producers for a valuable teaching resource.

Overwhelmingly positive responses such as "Thank you for the amazing resource" were provided by approximately three quarters (75%) of teachers who answered this question. Respondents frequently described the materials as engaging, useful, informative and relevant and once again, some respondents noted the appeal of the resources to boys. Comments included

Awesome site, a great resource to engage students in their learning about the environment. Thank you. (Auckland/Northland)

An outstanding site with kiwi accents. Very easy to access and navigate. My students want to meet you all, as they have been motivated to learn more about the environment and how they can help. Their families are also becoming involved. Highly recommend this site and the resources available! (Rest of NZ)

Excellent resource. Beautiful images. Love that it's NZ info and relevant to our students. (Rest of NZ)

Just WOW - what an amazing, easy to use resource. This is especially engaging for boys who are interested in fishing and the sea, thank you so much. (Rest of NZ)

Thank you for providing this valuable resource. It has been a wonderful resource to inspire and engage my reluctant writers - especially boys! (Rest of NZ)

Some respondents had particular praise for the presenters, Steve and Riley, and their ability to engage and inspire students:

Keep up the great work! Having Riley on-board helps children to connect with the messages. (Rest of NZ)

Keep up the good work. As a teacher, it is great to have Riley in front of the camera so much. Young people respond to other young people, and Riley is a great role model for my students. They can relate to her, and many of them want to follow in her footsteps. The students like Steve too and the teachers can relate to what he does. Awesome work guys!!! (Rest of NZ)

Some teachers suggested improvements to the YOE resources. One respondent wished to see more use of Te Reo Māori, while another believed that the materials were not New Zealand based. Other comments included:

I wonder how YOE could inspire students to think critically about the environmental impact plastics have on our ocean... EMR have a competition for example. (Rest of NZ)

It is a great programme and the resources are excellent, the outcomes for children are still very teacher driven. If the teacher is passionate about what he or she believes then that has the greatest impact. Your resources and video clips are terrific and are very informative. (Auckland/Northland)

The other suggested area for improvement was a need for better promotion of YOE resources. Some respondents requested school visits by the presenters as something that

would be of value to staff and students, with one teacher suggesting annual or bi-annual visits. Comments included:

I wish it was more widely used in schools, possibly needs one teacher or facilitator to take a staff meeting to encourage this. (Auckland/Northland)

Would love a visit to our whole school. Our leaders saw you at the leadership day and came back really inspired. (Auckland/Northland)

YOE teacher interviews

To supplement and add further depth to the survey, five interviews were held with teachers using YOE. This section details their feedback. The interview findings align well with those of the teacher survey.

Using Young Ocean Explorers

When participants were asked how they first found out about YOE, a recurrent theme in their answers was that they found out about the website through other people, through word of mouth. This coincides with the answers given as to why participants began using YOE.

Participants reported that they had they had been led to first using Young Ocean explorers as a way to support enquiry projects at school and because of personal connections to YOE. YOE was seen to link well with enquiry projects at their schools.

Our topic for enquiry was 'Plastic; yay or nay?'. We looked at why plastic was a good thing and why it was bad.

I lead the enquiry science team and am always alert online to opportunities. Part of my job is teaching children about conservation.

There was also an element of personal connection, including visits to the school by the YOE team.

Participants shared how often they had used Young Ocean explorers themselves so far. Responses included those who had used it for a set period, such as during Sea Week, and those that had used it, or planned to use it throughout the year.

We used it continuously in the first term, around the time of Sea Week.

I use it throughout the year. I pop in to different bits and pieces. There are lots of links to science, and environmental science.

You could use it throughout the year. We only found out about it mid last term. You could use it weekly or fortnightly. [There are] so many different angles you can take. Certainly wouldn't get bored of it.

Supporting teaching

When asked how YOE supported their teaching, some participants responded in terms of using it as a provocation to get kids motivated, or as a spring board for [children's] own participation.

One described using the resource for a range of literacy purposes, including reading and writing, visual literacy, oral languages, listening skills, and discussion groups.

Participants reported that when using YOE children are highly engaged. Children were seen by the participants to respond well to Riley, in particular. Participants also commented on the delivery styles of the presenters being an important factor in capturing children's attention. Positivity, enthusiasm, and clarity of delivery and information were all factors that were mentioned.

Participants also reported that the website itself captured children's attention because it showed topics that were interesting to them in a fun way. The visual style and interactivity of the website, and the short videos, were also reported as appealing to children.

It's a young person doing something. Because we've seen Riley speak, it seems like they [the children] know her.

[The videos are] delivered by people who are animated.

The website is interactive and bright. There are lots of bells and whistles. Children now are used to being entertained, so this appeals to them.

There was a mixed reaction in participants as to the benefits of the quizzes and polls as a teaching aid. Some reported that the children found them really interesting, but others said they found them less useful.

The quizzes are okay. I don't think they were as beneficial for our topic. If you are studying sea life, then most definitely.

Love, I would like to use them more. It's not just about watching. [The quizzes] get them to remember what they've just seen and reinforces the message.

Value of YOE

Participants had very positive things to say about the value of YOE as a resource. It was reported as being useful, relevant and high quality.

It's way up there, one of the most useful types of resources for kids.

It's really high quality, the fact that it was free was fantastic.

There were many aspects of YOE that were highlighted by participants as making it a good resource. The main aspects included its ease of use, relevancy to children and current issues, and the idea that it was fun.

It's relevant and easy to use. It's easy to click on different videos and learn.

It's new, up to date, present, appeals to kids. I wouldn't hesitate to use it again. From me using it, other teachers have used it.

It's interactive, fun, simple but informative, easy to understand for all ages, inspirational. It's just different, it's vibey, It's young, it's fresh and exciting.

When asked what worked well when participants had seen children use YOE, ease of use was a concept that came up repeatedly.

I don't think there was anything that didn't work well. [My] 7-8 year olds were perfectly capable. If there were more videos they would have kept watching and participating more.

Just clicking and watching, that's how kids work nowadays with [other websites]

Other things that worked well are the ability to make your own classroom and select the videos to be accessed, the quizzes, and the interesting topics that inspired further discussion.

Strengthening YOE further

When asked what could be done to improve or strengthen YOE, a common theme in participant's answers was to make it even more interactive. This included ideas such as giving children a voice on the website, making it easy to meet Steve and Riley and, creating a way for children to have hands on experience in ocean conservation, or increasing their understanding about the ocean. Alongside making it more interactive, participants also requested more resources.

Give a chance for kids to give feedback and give suggestions. To help kids feel involved and feel like they are being heard.

Continue to give ideas about how they can participate and help the ocean. We liked the mussel experiment and went and got mussels to do the experiment ourselves. Get the hands on practical experiences into classrooms. The website could have information on how to meet Steve and Riley. Perhaps create a badge system, or something like that. Like DOC [Department of Conservation] Kiwi Guardians. You could develop a range of badges that children could send away for if they complete certain tasks.

Participants commented that they didn't have many critiques or areas for improvements and one in particular stated:

I don't want to detract from what they are doing well. [They] don't need to do everything but what they are doing, they are doing really well.

When asked what would make it easier to use YOE in their teaching, participants answers centred around technology; access to it in general terms and technological knowledge.

One participating teacher (notably from the lower decile school) stated that access to devices could be an issue with more senior children in her school having access to computers, whilst the juniors had access to a limited supply of iPads. The other participants indicated that the children in their classes had access to devices, with many having their own device.

In terms of technological knowledge, one teacher commented that there were no barriers to the children as:

Young children could easily navigate the site using an iPad. It was very user friendly.

Another participant requested more information on how to use the website quickly for those unfamiliar with YOE and wondered if there was a way to use it offline.

Maybe if you had no knowledge and wanted to use it, more information on how to use it quickly would be good. And easily printable if you had a reliever. And, make it user friendly if the technology went down- offline capability.

Supporting change around the school

Participants reported a number of ways in which YOE has helped make changes around the school, and in the community including both child led changes and school/teacher led changes. It was also highlighted that the changes inspired by YOE could extend into the wider community. Two recurrent themes throughout were awareness of the problem and, that looking after the environment and the oceans is everyone's responsibility.

Children have been inspired to pick up all litter, and in particular plastic. Many classes focused on the 'Pick up one piece' concept.

Our Year Fours, if they see a piece of plastic they pick it up, even if they have been the one to drop it or not. It's about being responsible for our environment

People are so much more aware. [YOE has helped make us more aware] this is happening in New Zealand. So many other videos are from overseas.

We pick plastic up. Kids are talking about it amongst themselves.

Some of the changes that YOE has supported have been led by the school or teacher.

We painted sea creatures round our drains to remind ourselves that rubbish goes to the ocean.

We painted drain designs and slogans...they have been a talking point. We got Watercare to come and give a talk. They used the drain covers, where children's paintings where. [So] it worked well in access to other conservation activities.

We are seeing conservation, not as a single week block, but wanting to thread it throughout the year. It helped that it was in term one [we started using it]. We are much more aware of what we are doing with our recycling.

These changes supported by YOE also extended into the wider communities of the children involved. These included raising awareness of the issues with plastic in the community, community tidy ups and, in one school, two different families have taken responsibility to spread awareness and support their communities in being more environmentally friendly.

Further feedback

Participants used this question to continue to praise YOE. The main themes being that it was beneficial to have a New Zealand specific resource, the inspirational nature of YOE and its appeal to children.

Please can someone keep funding it. It's NZ based, high quality and appropriate. This home flavour resource is just awesome.

The passion that comes across from the people fronting the videos, that passion is catching.

The kids loved the fact that Steve and Riley answered their emails when they sent reports and letters of their own clean ups. It was really encouraging.

Even for children with little English, they are able to answer some of the questions. It appeals to all cultures and languages. It's all encompassing.

Kids can't get enough. They are always keen to have a go. Even if they have seen it before they always seem to find something new and share facts with each other.

Children's feedback on YOE

Two student focus groups were conducted with a total of 9 participants from two separate schools. The children who participated ranged from Year 4 to Year 6.

Before the focus group, student participants were shown the 'Stop Plastic' video at the beginning of the focus group and were then asked what they thought of the video, what it made them want to do and, what it made them want to stop doing. Following this, participants were asked questions based on their own experiences of YOE.

Initial response to Young Ocean Explorers

In addition to the teacher feedback on YOE, direct feedback was sought from two groups of students, from years four to six. The two participating schools were in the Auckland region, and students were asked to give feedback directly on a G.I.F.T.-funded video featuring the Hauraki Gulf.

The responses when asked what they thought of this video included surprise:

It's scary, the facts, just crazy.

Way more rubbish than I thought went into the ocean, it's kind of ridiculous.

Others found the video inspiring:

I thought it was really good for people who hadn't learned it before.

It makes people think about it [the plastic issue] more.

It's really convincing and it convinces you to pick up a piece of plastic every day.

Enjoyment of Young Ocean Explorers

Participants liked many different aspects of YOE. Participants indicated they enjoyed YOE because it was fun, it was relatable to them as individuals and, they were able to learn a great deal from the website.

The presenters were clearly enthusiastically received:

I liked Riley. It's not just adults. We can relate to it.

[I liked] how they were so passionate about what they do. It was inspiring.

They have a way of making it seem really fun.

The content was very engaging for the students:

[It shows] videos that are very convincing and very fun to watch.

I watch the Māori videos. It was the same as some of the other ones [videos]. It's good that it's translated into another language.

There's always a quiz on the side that you can do if you want to. It also tells you some facts once you get it right.

You can watch 10 seconds and know like heaps.

Participants reported having someone like Riley, who was just a bit older than themselves, present on YOE was inspiring and it made the videos more relatable.

It was cool because we can see what we can do in the future and if we wanted to do something like that we could.

[Riley] inspired us to do it and to make a difference. She is only a bit older than us so we can do it as well.

Riley is relatable for kids and Steve is relatable for adults.

Participants in the focus groups, like those in the teacher interviews, found it difficult to come up with anything that they didn't like about YOE. Most participants answered with a strong "No", however, one participant expressed dislike over some of the longer videos and preferred the shorter ones. Another commented that the only thing she didn't like was that she wasn't more personally involved.

[I didn't like] that I couldn't do the stuff. [The presenters] got to do it and I just had to watch.

Learning from Young Ocean Explorers

When participants were asked what they had learned about our oceans through YOE, their answers concerned the environmental impact that we have on our oceans and the animals in them. They talked about the current state of the oceans, the processes that lead to harm, and the future of our oceans. Opinions included that we don't respect our oceans and that we should look after them, resulting in much cleaner oceans.

[I learned] that we don't respect the ocean.

That the problem is much worse than I thought it was.

I feel pretty bad because we kill the environment.

Participants learned that plastic rubbish made its way to our oceans and was detrimental to the animal life in it, in particular turtles, who confused plastic bags for the jellyfish that they eat.

[I learned] that we shouldn't go dumping plastic and you should pick it up because it will go down the drains and lead to the ocean. Turtles could suffer and other animals too.

If you drop a plastic bag it looks like jellyfish to turtles and they eat it.

Animals could be disappearing from the oceans and I really like seeing animals. I don't want to see plastic in the oceans, just animals.

Motivating change

The responses from all participants indicated the video made them want to pick up rubbish and to help solve the plastic issue in the oceans. Some responses focused on existing plastics:

Pick up one piece of plastic each day, or even more.

Yeah, and get others to do it. To promote it. If others understood what was going on, just by watching the video, they might help and do it.

Others focused on reducing plastic in the environment:

Refuse more plastic. We need to reuse more [rather than] making more all the time.

Use more plastic again instead of making more. [There is] so much plastic not being used.

Participants reported that the video made them want to stop littering/not litter and to stop using as much plastic.

Just don't drop plastic in the first place

Using as much plastic, use reusable stuff instead.

When asked if they had done anything different at school after using the YOE website, participants reported ways in which they were more aware of plastics at school and things they had done to help the environment. Participants in one focus group talked about how, as a class, they count how many plastics they have in their lunch boxes.

Sometimes in class, when its lunchtime, we count how many plastics we have in our lunchbox. The other day we had 90. One person had 17.

When reporting what they had done to help the environment, examples given included cleaning up a local river walkway, helping at the local recycling centre, and making reusable bags.

We made some fabric bags so we wouldn't use plastic bags. We did some drawings of sea animals with plastic near them and making them look sick because it makes them sick...We sell them to people in the school [and] tried to inspire people with the bags.

We cleaned the Kaipara river walkway

[We] helped at the recycling centre. We're going to try and make it a termly thing.

The two focus groups were at different stages in their YOE journey. One school was just beginning to think about what they could do. The other school had introduced litterless lunches and were trying to take away regular bins and replace them with separate bins for different types of waste. Participants demonstrated their critical thinking abilities about the use of plastic when they discussed and questioned the fact that the bins were made out of plastic themselves.

[The school is] trying to take away the bins but it's not happening. They're beginning to give us separate bins – compost, worm farm, chicken food. We already had paper recycling for ages.

But [the bins] are made out of plastic.

Yeah, but that's alright. It's recycled plastic.

Yeah, we're using it again.

Participants in both focus groups reported that they watch the YOE videos at home with their parents and many discuss the messages that the videos convey.

My parents watched the videos. [We] talked about how we can make sure there's no plastic in the ocean and how we can solve that.

I watched with my mum. She said 'We need to pick up more plastic, don't we?'

[I] didn't watch the videos but I talked with my parents. Dad and I do beach clean ups whenever we find one.

Participants talked of how they had reduced their use of plastics by eliminating gladwrap, using tubs, greaseproof paper and honey wax paper and, using reusable bags. Participants also spoke of increased recycling efforts at home and sorting soft plastics.

Instead of using snack bags of chips we buy a big bag and separate them into containers.

We don't use gladwrap so much anymore, we put it in tubs.

My parents never use plastic bags anymore. They just take reusable bags.

It came to light in the discussion that the participants, i.e. the children, were often the driving force behind the changes made at home, in particular with the use of reusable bags and in one case a parent even justified to her child her reason for not bringing reusable bags to the supermarket.

Sometimes I have to remind my mum about taking reusable bags

We use reusable bags but one time my mum picked me up from school to go to the supermarket and said "Sorry I couldn't get the bags because I needed to pick you up".

The question concerning changes they have made at home led on to a discussion in one of the focus groups concerning the unnecessary use of plastics in the world, an indication how the participants had begun to think about plastic in different areas of their lives.

There are some things we don't need to have plastic for.

When you buy things online...there's too much packaging. Sometimes there are big boxes and bags filled with air for just little things.

Overall reflections

Children were asked if you could come up with one word to describe YOE, what would it be? Participants described YOE as inspirational, dedicated, interesting, interactive, adventurous, convincing, helpful and fun.

When participants were asked if there was anything else they wanted to tell us, they came up with a multitude of responses. Participants talked about how they liked the quizzes and that it wasn't just videos, they stated that it was fun to use, that it was suitable for any age, and that they were able to learn a lot from it.

I like how you can choose your own videos and that it's not just videos.

It's fun to watch; it gets you. I want to watch it even more.

It's a good website to look on. There's not many like it in New Zealand or the world.

Anyone can watch it, at any age. You can watch it with your family, or little brother or sister. It's suitable for any age.

I like how it's one adult and one child, and you meet all these experts so learn a lot more.

Steve has lots of experience so he might be helpful, I guess.

Possible improvements

When asked if there was anything that would make YOE better, responses centred around the videos and increased involvement for children. Participants wanted more videos, specific content for the videos (including dolphins and deep sea creatures) and suggested that having separate videos for younger and older children might be beneficial.

It needs more videos.

Make more for little kids, have older kid and younger kid video.

Participants suggested that Steve and Riley visit more schools and that all schools need to get into YOE. Another suggestion was to take school children out on the ocean, both for the reason to make videos more relatable and because the participants themselves wanted to play a more active role.

Take the kids out into the oceans to actually show them. [Steve and Riley] see it a lot and we see their reactions. How do other kids react to things they see in oceans? Some of the presenters reactions are maybe not as real as they see it often. We want to see real reactions.

Conclusions

The feedback from teachers and students who have used Young Ocean Explorers is overwhelmingly positive, and indicates that the website and resources integrate well with curricula, are engaging and often inspiring, and have motivated both learning and action in school and home settings. The data collection approaches used in this evaluation all support these findings.

Teachers and students alike are reporting that YOE is supporting and inspiring changes in the school environment to reduce plastic and waste, and students are taking their learning to the home and family settings to make similar changes.

The YOE resources are accessible and engaging, and the young presenter offers a clear point of difference for YOE, and supports children to and teachers to reflect on how to better protect our oceans and the Hauraki Gulf.

For many, YOE requires little or no change for it to maintain its value, and overall, any changes to its approach and content were proposed as incremental rather than substantive. Some suggested improvements, such as visits to more schools in the region, are clearly dependent on YOE capacity. Other suggestions will serve to strengthen YOE's presence and impact through a broader range of resources and links to other information, greater publicity, experiments and research projects, and some navigation and technical improvements.

YOE is well-positioned to broaden its reach and strengthen its engagement with children, families and education settings. YOE is highly engaging on issues facing the marine environment, and is proving successful motivating changes in schools, and in the lives of school children, to protect our oceans and the Hauraki Gulf.