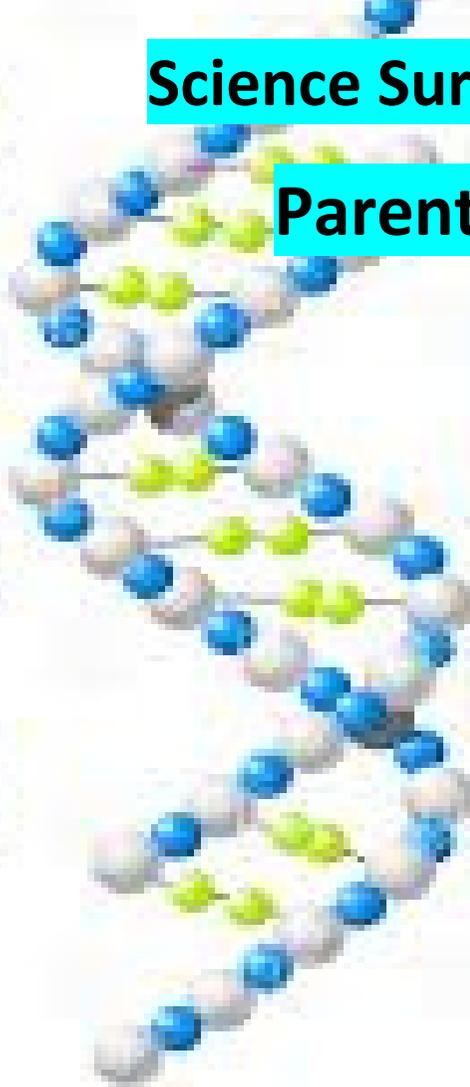
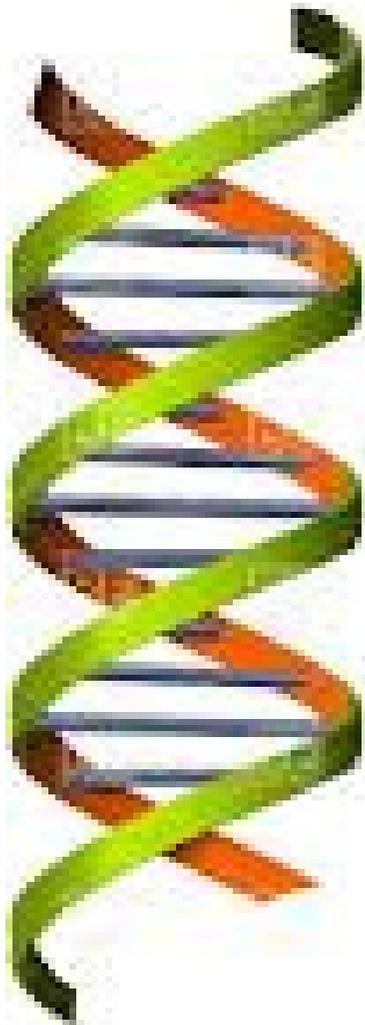


Waikanae School

Science Survey Results 2013

Parent Responses



Executive Summary

54 parents responded to our Science Questionnaire.

89% of parent responses stated that they thought their child likes science. 2% said their child does not like science and the remainder said they didn't know.

Nearly half of the respondents thought that there was not enough Science taught in school and nearly half didn't know. 9% thought there was enough Science taught.

Only 13% of respondents knew what the curriculum currently contains.

A quarter of respondents have no idea how Science has changed since they were taught it and less than 10% thought it hadn't changed much. Only two respondents thought it had changed a lot.

Parents thought the biggest change to Science is the accessibility to information on the internet. It is seen as more practical now, more interactive and integrated and having a wider scope.

About 10% of respondents stated that they don't remember primary Science but many remember the separate lessons of biology, chemistry and physics at college. The one respondent who could clearly remember primary Science (UK based) stated that they were taught it once a term, then three times a week at college by a specialist science teacher.

There was concern from one respondent that the principles of Science/basic fundamentals were not being covered. Another saw Science having more relevance to NZ now, e.g. ecology and health science. Science is also viewed by one respondent as more important now due to a changing world.

98% of parents who responded, value Science as a curriculum area. 92% value it as a potential career option.

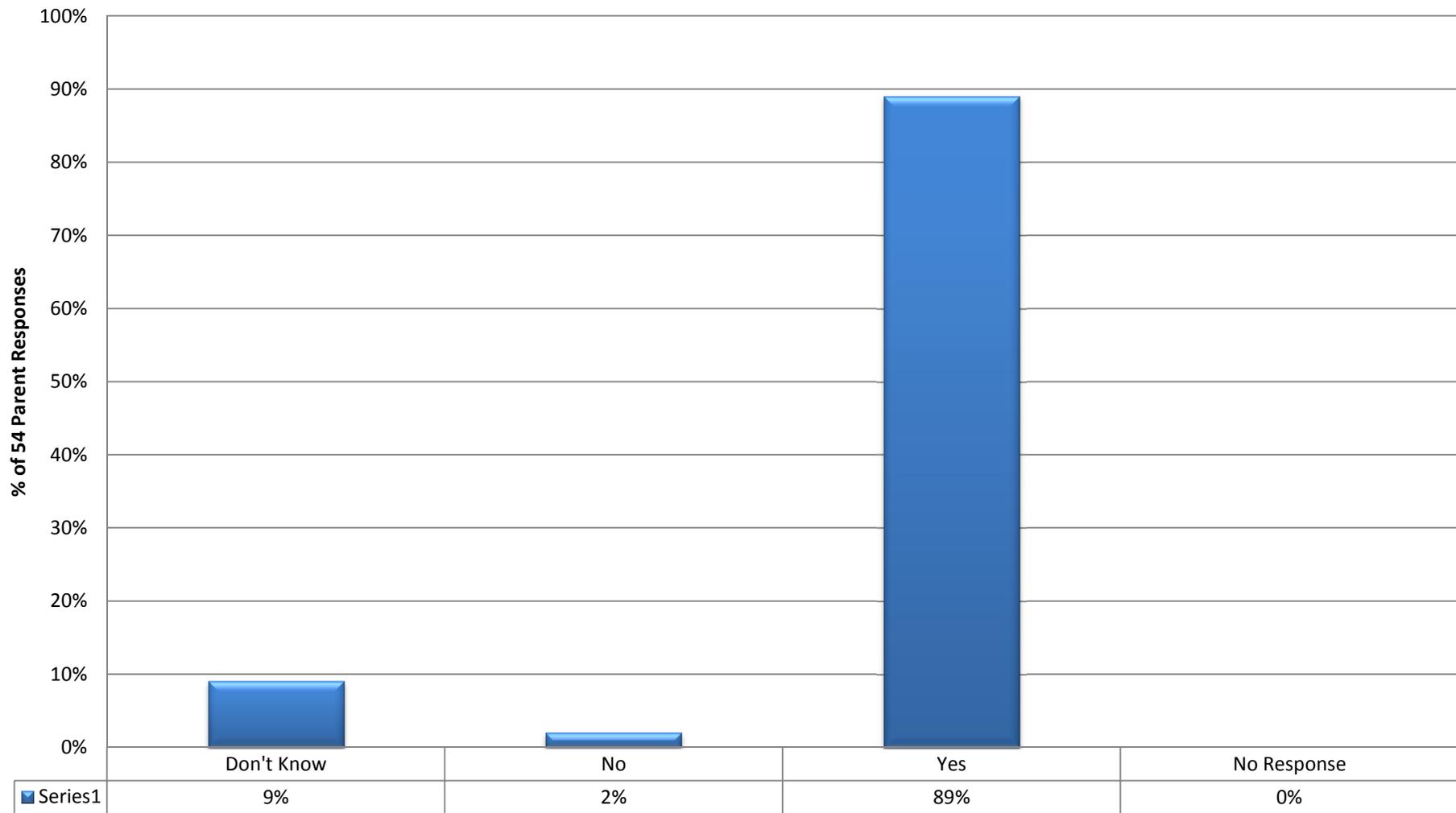
The area of Science valued most was an equal split between Living World, Physical World and Planet Earth and Beyond. Material World was least valued. However, we must bear in mind that only 13% of respondents knew what the curriculum contained.

There was a relatively even split between other areas valued in Science with problem solving and questioning most valued, ICT least valued.

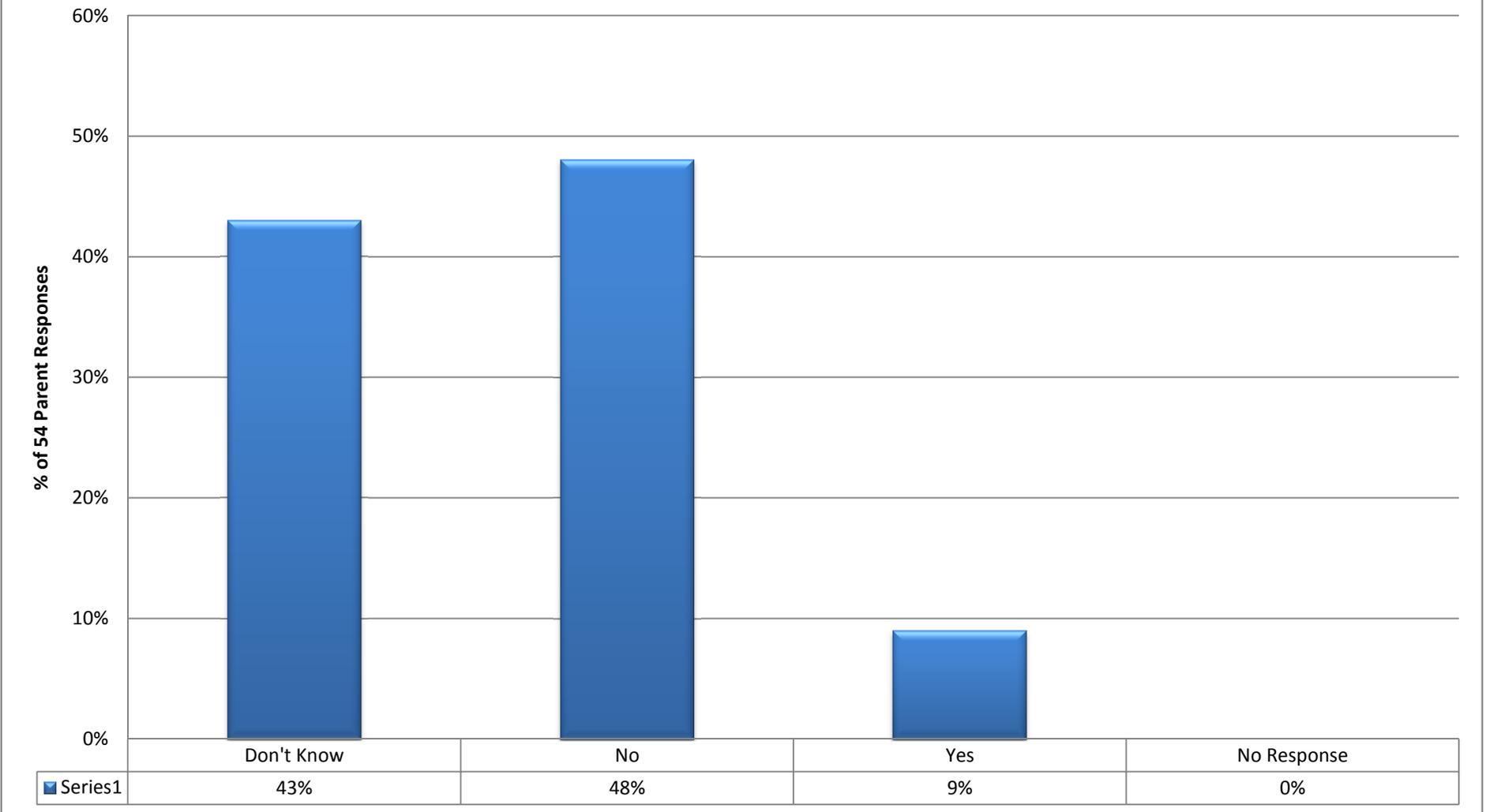
Organisations/resources that could support the teaching of science in school were given as follows: Carter Observatory, Wellington Zoo, Te Papa, Kapiti Island, Nga Manu, Crown Institutes, Resene Paints, Dr Kenworthy (local scientist), Future Problem Solves website, water treatment testing laboratories, GNS in Upper Hutt, Health Workforce NZ, manufacturing and IT companies, Ministry for Primary Industries, Interislander, Royal Society of NZ, Freemasons, Science Learning Hub, local universities, Crest awards.

Other comments include: catching the children's interest early, making them excited about science, allowing them to question and experiment, ensuring students understand principles behind experiments, more cross curricular/integrated study, the conflict between RI and key science concepts, children find science interesting and science is essential. Around 10% thought that science should be a core curriculum subject like Maths and English.

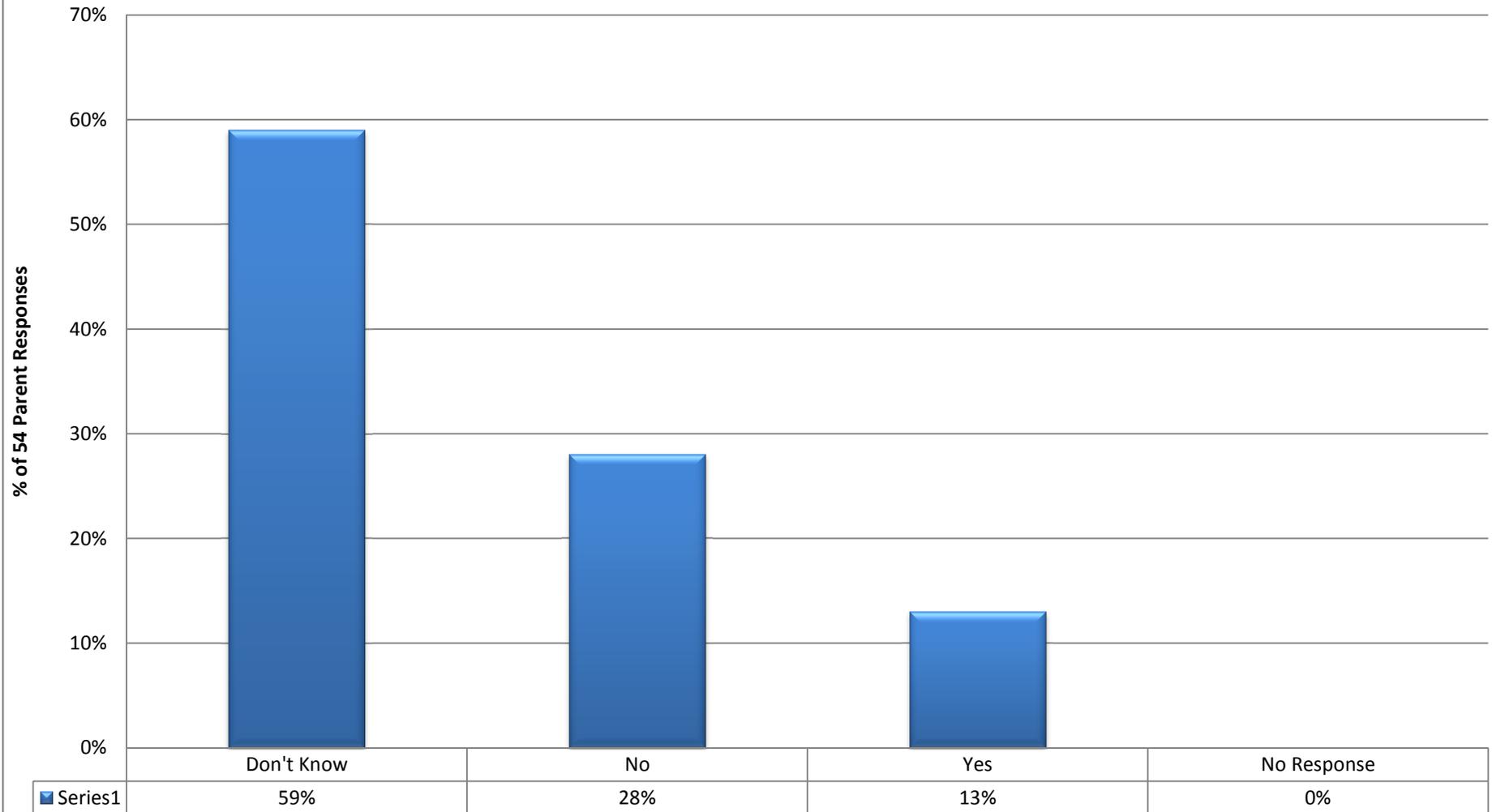
**Question 1 Parents.
Does your child like Science?**



Question 2 Parents.
Do you think enough Science is taught in school?



Question 3 Parents.
Do you know what the Science Curriculum contains?



Question 4 Parents. How has Science changed since you were taught it?

We used to have a definite science lesson when I was at school with different topics- biology, chemistry etc.

Unsure

To be honest I don't remember doing science as a topic at primary / intermediate school. It wasn't until high school that "science" as a recognisable subject was taught.

The difference is that it does not seem to be taught. There are extracurricular fun things but they are merely games and the principals of science are not being covered. Of course what has changed is the spread and ease of gaining knowledge through the internet, but what is needed is basic teaching of science fundamentals because they are based upon universal truths. The processes involved encourage the child to ask questions and to find answers to questions and therefore learn to think for themselves.

seems more fun now days

See answer to question 3.

Science was very rote learning in junior school, although it was clearly taught in streams identified as 'history', 'geography', 'chemistry' etc. There was little to show how the sciences interact. However I do feel that giving us an early taste of different sciences was a good idea.

Science was always a big part of my school curriculum, both practical and theory. By the time I left Primary School (at the age of 11 in England), I had the basic understandings of biology and chemistry. I'm not sure that many children of that age nowadays would be even able to tell you what biology or chemistry is!

Science keeps evolving with new discoveries and is taught in a more practical way

Refer Q 3!

Not sure how it is taught these days but we started science in secondary school and I enjoyed it.

Not sure because I don't know what is taught now.

Not much.

Not a lot I don't think except for the use of computers to use as a tool. Subjects still are fascinating to children like space.

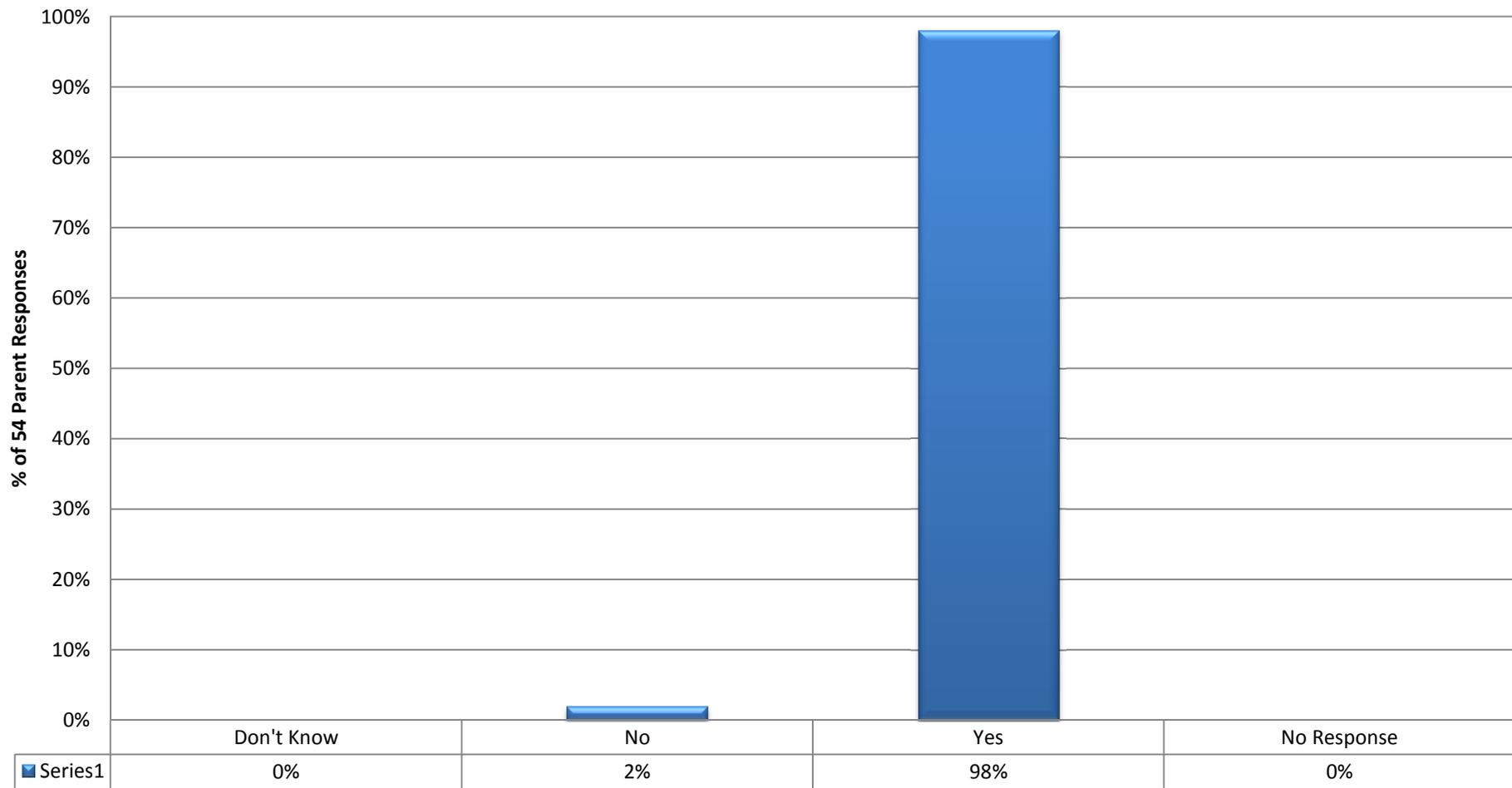
No Idea since have no idea how it is taught at the school.

No idea

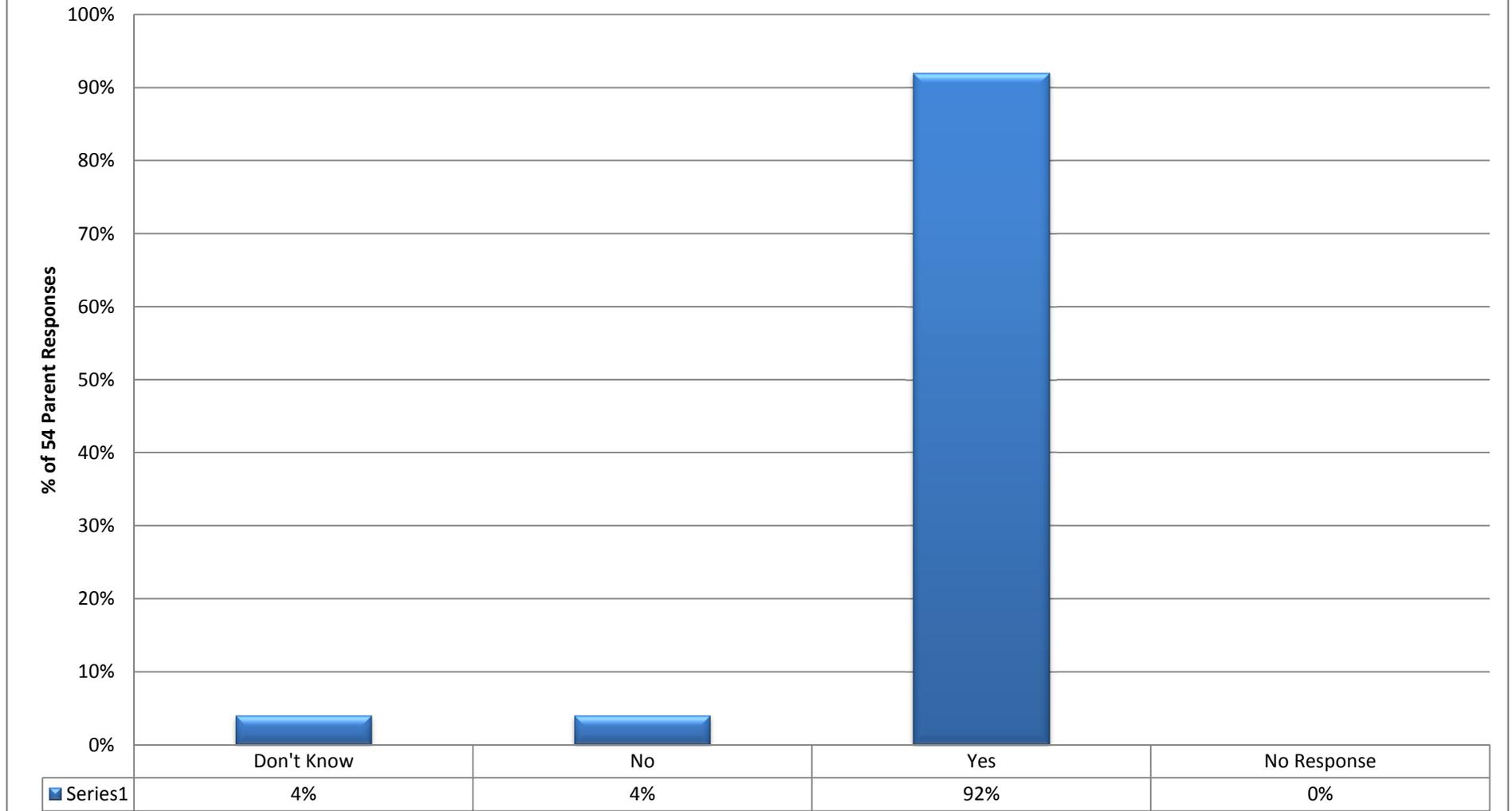
Much wider scope. Hugely improved resources and access to information.
more technology
More relevance to NZ. More understanding than rote learning. More discovery. More ecology and health science and biological focus.
More interactive
More integrated and interactive. The resources and techniques available now are much less boring!
More hands on, using science in everyday contexts.
It has changed as new discoveries are made.
It can be more practical and is seen as a subject girls can excel, not just boys.
I'm not sure as I know very little of how it is taught these days
If the question is related to how it is taught we would consider it is more accessible and integrated across the curriculum. Genuine science is more about asking intelligent questions than providing answers. Thus independent and creative thinking needs to be valued rather than the notion of providing a concrete reductive view of the world.
I would say it has changed a lot but saying that I am not sure what James has learnt at school I know a few things but would like to know more please..
I think things have come a long way since I was at school I think that maybe teacher training has changed as things have advanced I also think that the internet has opened children up to a whole wealth of information that helps them if they are really interested in a subject.
I think now it is learning through experimentation rather than sitting writing.
I think it is quite similar in the broader picture.
I think it has become more important, there is an absolute need to keep discovering new ways of doing, monitoring and changing things to cope with the way the world is changing. The invention of the internet has helped science be more accessible and probably more appealing due to the ease in which information can be obtained
I don't remember much! Sorry I can't answer this.
I don't really remember doing science at school when I was her age. Probably just combined with maths.
I don't really know the answer to this but I guess teaching aids and resources available are different and more advanced in terms of technology. Definitely the use of computers at school today would be a fantastic resource which weren't available when I was at school.

I don't know.
I don't know how it is taught now to be able to make a comparison. I really enjoyed Science at school, and focussed on Biology for 6th and 7th form. I hope my kids enjoy science at school as much as I did.
I can't remember doing science at primary school. The earliest introduction to science was in form 1 and then we started doing real experiments.
I attended school in the UK, so probably very different from here. In Primary School, we were taught at least one new science topic a Term and then as this progressed into Middle School (Years 5-8), we had science lessons at least three times a week, in a school lab, with a Science Teacher, not just our Form Teacher.
I am not sure
I actually don't remember being taught science in primary school
Hard to answer because the earliest I can remember is being taught science at secondary school and so would not be comparing apples with apples.
Don't know what is currently taught so cannot answer with any validity.
do not think it has changed much
Been such a long time , but the methods were similar
Advances in technology. The digital world enables access to more information than researching through hard copy. E.g. library books.

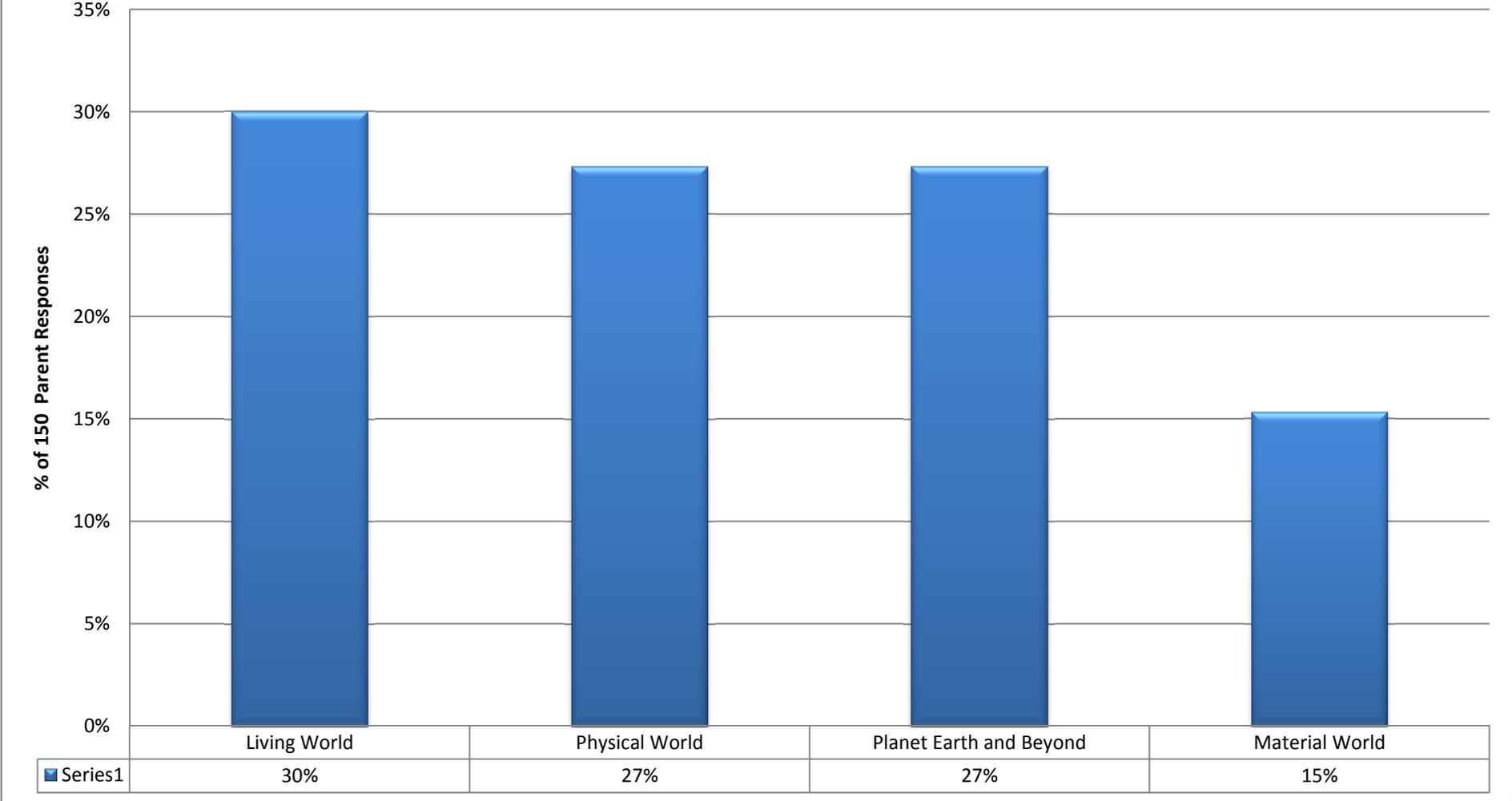
Question 5a Parents.
Do you value Science as a curriculum area?



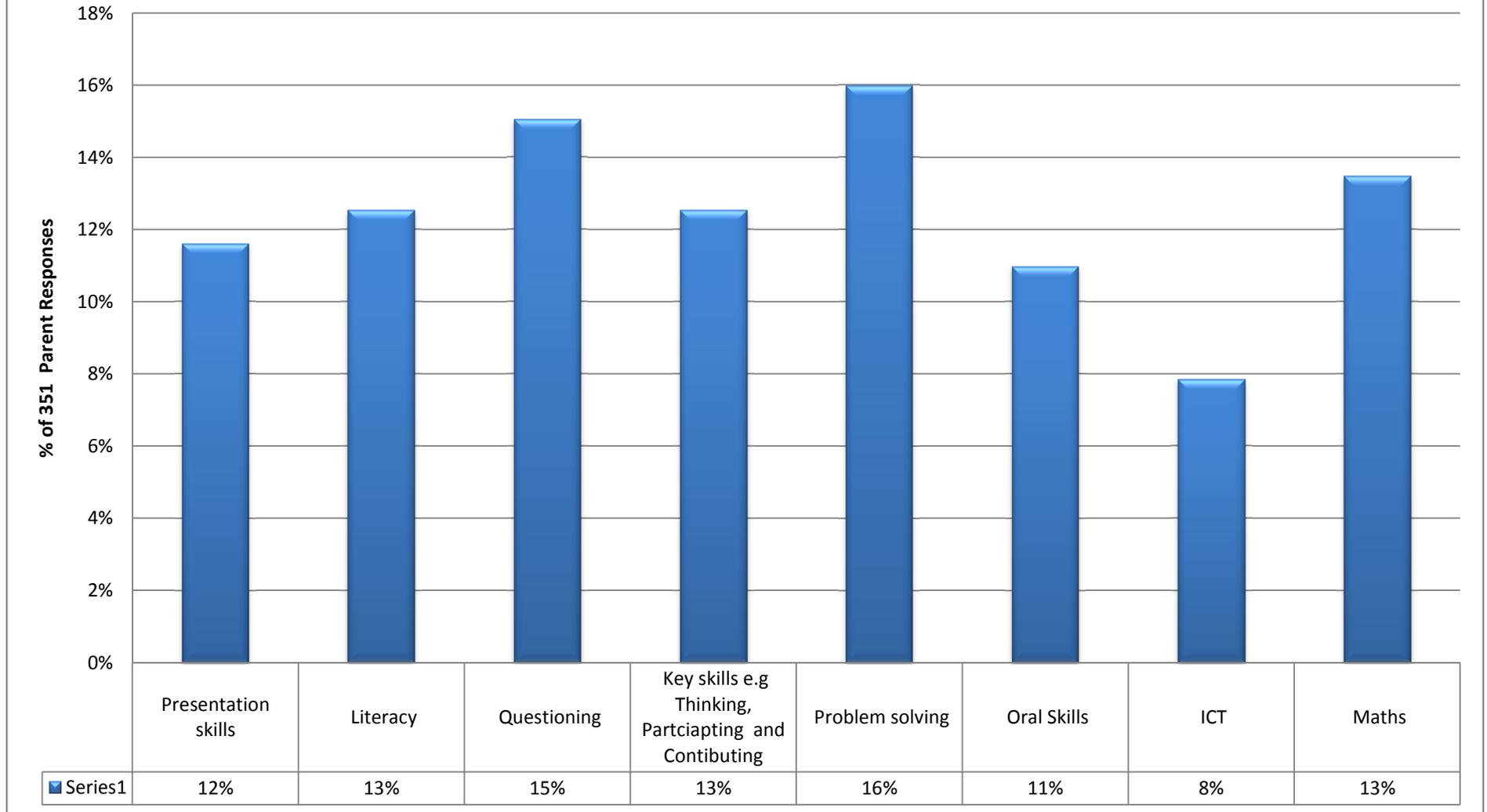
Question 5b Parents.
Do you value Science as a potential career option?



Question 6 Parents.
What areas of the Curriculum do you value most?



**Question 7 Parents.
What other areas do you value in Science?**



Question 8 Parents. Do you know of an organisation that could support the teaching of Science in school?

Carter Observatory

Carter Observatory, Wellington Zoo, Te Papa, Kapiti island Tours Nga Manu

Crown Institutes, IT companies in general, Resene Paints

Dr K did have a great science afterschool club. Also check out Future Problem Solvers website.

Dr Sarah Kenworthy NIWA, ESR, Massey University, Probably others too but cannot think of their names at present - the water treatment place in Waikanae, maybe the testing laboratories in the Hutt or Palmerston North.

GNS in Upper Hutt do fantastic tours of their facilities. We went into the ice room and looked at all the ice cores from Antarctica. They can use them to tell what the weather was like hundreds of years ago. The man who showed us around - Julian Thomson 04 5704768 said he goes into schools and gives talks.

Health Workforce NZ is interested in identifying areas where the workforce may be lacking in the future, and then addressing this through working in the colleges. It may be an area where you could get some input through them presenting career areas to the kids i.e. if you are interested in xxx career, then you would need to learn yyy sciences.

I don't know any personally, but some big manufacturing companies might allow some School trips to find out who things are made/work if approached?

I suppose it all depends on what area of science you are looking at and how in depth you want the learning to be.

I work at the Ministry for Primary Industries, which is a very science focussed Ministry. I could make enquiries if that would be useful.

I would think that there is lots of scope for organisations to come into schools and demonstrate the practical applications of science in the physical world. E.g. a lesson on the rules of flight would seem to be an obvious one for the Air Force to assist teaching at schools lying adjacent to an Air Force Base. Likewise I would think that teachers could look into the community for exciting applications of science.

Interislander are my Employer, I know they are community minded when it comes to things like education.

Love the fact that Waikanae School offers the science club with Dr K she offers a great hands on experience for the children. would be great if some of her experiments could be used in the classroom

No we as a centre have used Dr Kenworthy from Kapanui

Not that I know of but I thought the after school science programme was really fun. If it runs again I will book my boys into it.

Royal society of NZ. Freemasons. Science Learning Hub. Local CRI's and Universities.

the Crest awards (working towards bronze, silver and gold) Science fairs not sure which organisation runs them I know organisations such as NZIFST sponsor students in the above activities

We know of and have participated with Dr K but the issue we have is that there is no instruction or teaching of the deeper principals involved. There is no point in creating a tick box response to this. Schools need science teachers like they need maths and English teachers.

Question 9 Parents. Do you have any other comments about Science in school?

It enjoyable so children want to learn about the amazing world around them, how things work, how to prom pen solve etc. when children get a passion and understanding early on it will mean it will continue on with them later in life and because they have learnt the basics early on in a fun non-judgemental way they can continue and will want to continue to build on these at college and beyond and will know how to.

Catch the kids' interest early and you have them for life, make them excited about science and the scientific method, and allow them to question and experiment.

Ensure students understand principles behind experiments. When speaking to Josh about the science he had done he doesn't know what he was trying to achieve

I do think that the basics need to be taught at Primary, so all students have an understanding of it when they go to College. Science can be incorporated in to so many other subjects and it can make learning fun. Both my boys at Waikanae school have said to me before that they wish they would be learning more science, geography and history.

I have no idea what is meant by the curriculum area "Material World" so was not able to say whether I value it or not

I have some concerns about the potential for the inappropriate influence of religious instruction over key science concepts. My youngest soaks RI in - she should be doing the same with science

I like it when things are integrated, children don't necessarily knowing there are learning science but the topic incorporates all learning areas and allows the child to be responsible for the information they gain.

I think it is important to have science in school. Children find it very interesting to learn about and it is a very exciting curriculum to have in school. I think science expands the children's minds greatly. I personally have fond memories of science experiments and projects.

I think kids will enjoy science and find it interesting.

I think science at school is essential.

I think there should be a core science curriculum like for maths and English.

I would like to see it integrated with the maths curriculum. At this stage I am more concerned that as much time as possible (in the classroom) is spent on the Maths Curriculum.

In my opinion Science is the third most important subject at school after Maths and English.

Keep it up.
Many teachers have a Very poor understanding of basic science as there were poorly taught and the past time they took it was the 5th form. As a professional science educator I am appalled at the poor science knowledge of primary school teachers. My 11 year old son has had his teachers berate him for what they thought was an incorrect answer when infant they were wrong.
more please
My daughter enjoyed learning about Natural Disaster and we still have lengthy discussion about it.
My eldest daughter is showing an interest in science so I am looking at getting chemicals from a wholesaler and doing some home experiments with her.
My kids love the interactive aspect of science; my daughter is a little less enthused than my sons. Maybe girls need a slightly different approach?
Practical applications of science are the ones that 'stuck' for me and elicited from me the greatest commitment to learn the subject when I was at school.
Question 6 doesn't make sense to someone who doesn't know the science curriculum, what is the difference between the physical and material worlds?
Should have more of it.
Start the students learning as soon as possible, it's such an important area
There should be more of it, children have naturally enquiring minds in this area and they should be stimulated
Whatever is taught it needs to be relevant and engaging. I think the aim of science t4eaching at a primary level should be to spark interest and enthusiasm and integrated into whatever is being taught in a holistic way rather than a separate subject. Happy to contribute more, if more ideas or feedback required,