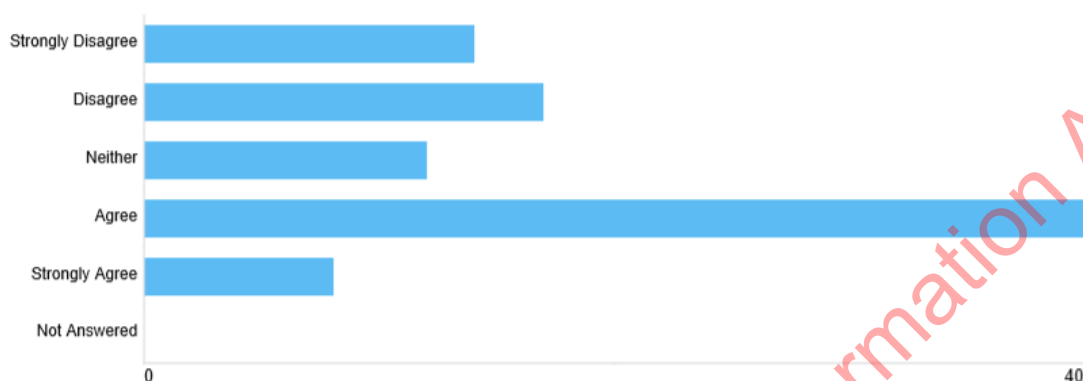


## Review of Achievement Standards (RAS) – Science Trial: Interim report

[This report was created on Tuesday 13 February 2020. The consultation had not yet closed when this report was generated. As such, this report may not accurately reflect the final distribution of responses, and should be treated as interim only.] *The vast majority of responses are from teachers from State/Integrated secondary schools, with a few from Independent schools etc.*

### Q.1 The Science Rationale provides enough background information for readers to understand how the Significant Learning was identified by the Subject Expert Group (SEG) for NZC Level 6 / NCEA Level 1 Science.



Option	Total	Percent
Strongly Disagree	14	15.38%
Disagree	17	18.68%
Neither	12	13.19%
Agree	40	43.96%
Strongly Agree	8	8.79%
Not Answered	0	0%

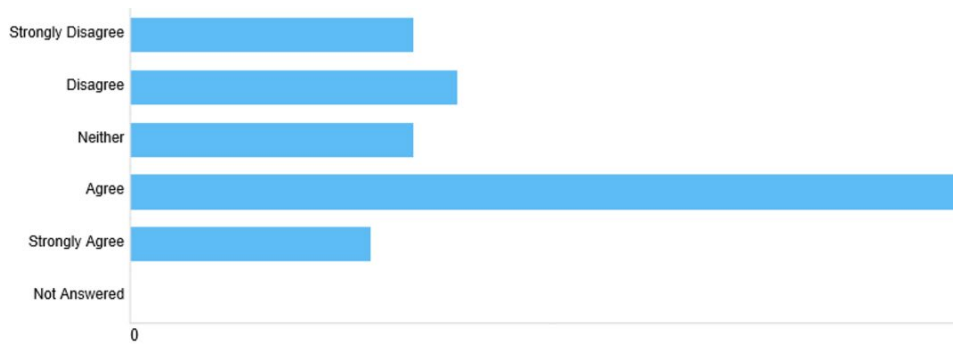
### Q2. The relationship with te ao Māori section makes it clear how Science and mātauranga Pūtaiao are related.



Option	Total	Percent
Strongly Disagree	12	13.19%
Disagree	25	27.47%
Neither	16	17.58%
Agree	26	28.57%
Strongly Agree	12	13.19%
Not Answered	0	0%

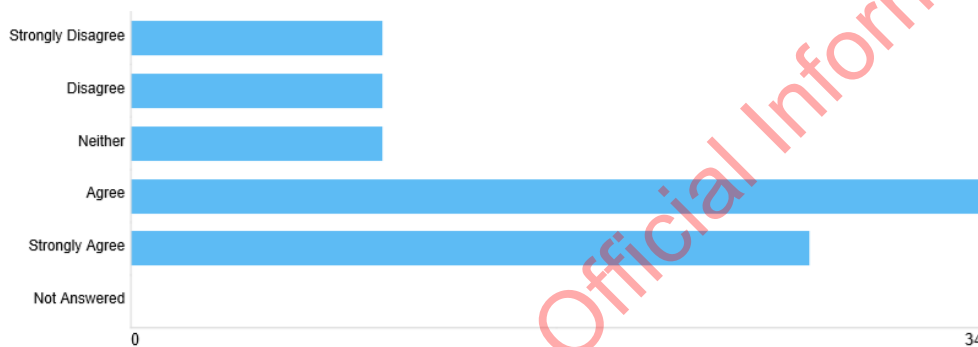
*Sector is somewhat polarised over this item – exemplification and clarification needed TF*

**Q3. The introduction to the Learning Matrix explains its structure and how it can be used.**



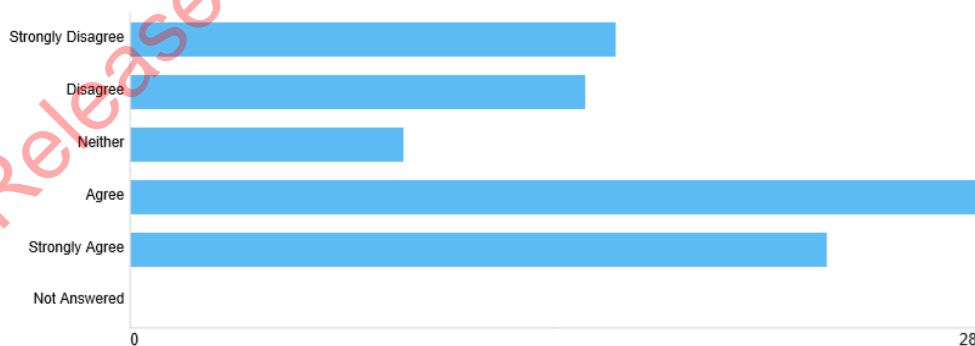
Option	Total	Percent
Strongly Disagree	13	14.29%
Disagree	15	16.48%
Neither	13	14.29%
Agree	39	42.86%
Strongly Agree	11	12.09%
Not Answered	0	0%

**Q4. Big Idea 1 - Investigating in Science reflects a Big Idea of Science at Level 6 of the New Zealand Curriculum.**



Option	Total	Percent
Strongly Disagree	10	10.99%
Disagree	10	10.99%
Neither	10	10.99%
Agree	34	37.36%
Strongly Agree	27	29.67%
Not Answered	0	0%

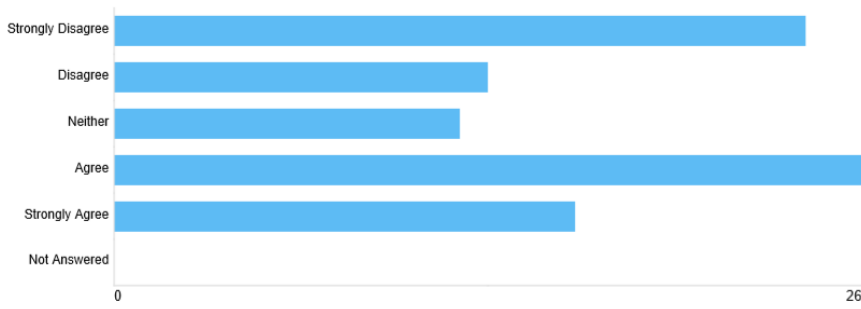
**Q5. Big Idea 2 - Use Science to engage in real world issues reflects a Big Idea of Science at Level 6 of the New Zealand Curriculum.**



Option	Total	Percent
Strongly Disagree	16	17.58%
Disagree	15	16.48%
Neither	9	9.89%
Agree	28	30.77%
Strongly Agree	23	25.27%
Not Answered	0	0%

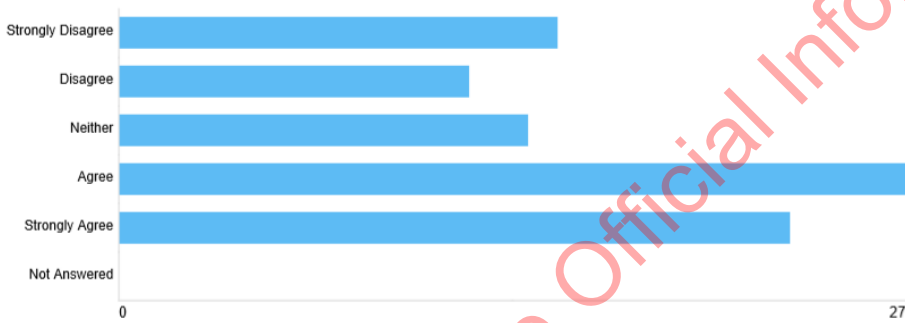
The sector is concerned and unclear with these two less familiar Big Ideas:

**Q6. Big Idea 3 - Science as a Human Endeavour reflects a Big Idea of Science at Level 6 of the New Zealand Curriculum.**



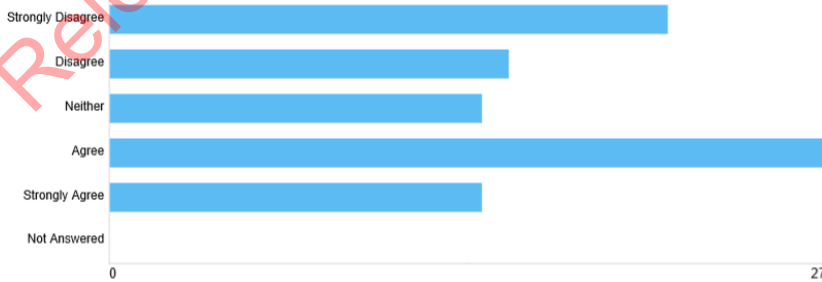
Option	Total	Percent
Strongly Disagree	24	26.37%
Disagree	13	14.29%
Neither	12	13.19%
Agree	26	28.57%
Strongly Agree	16	17.58%
Not Answered	0	0%

**Q7. Big Idea 4 - Communicating in Science reflects a Big Idea of Science at Level 6 of the New Zealand Curriculum.**



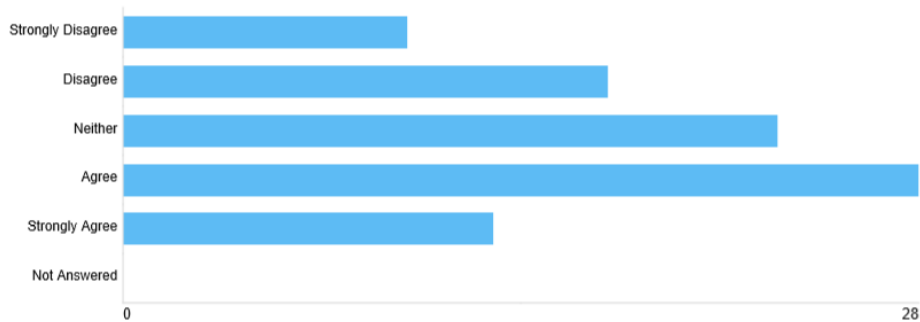
Option	Total	Percent
Strongly Disagree	15	16.48%
Disagree	12	13.19%
Neither	14	15.38%
Agree	27	29.67%
Strongly Agree	23	25.27%
Not Answered	0	0%

**Q8. The Knowledge Big Ideas from the contextual strands (in the column on the left of the Learning Matrix) reflects the important "content" of Science at Level 6 of the New Zealand Curriculum. This response was expected – around 40% of respondents do not feel the knowledge big ideas capture the content they are familiar with and which is traditionally the basis for their year 11 programmes.**



Option	Total	Percent
Strongly Disagree	21	23.08%
Disagree	15	16.48%
Neither	14	15.38%
Agree	27	29.67%
Strongly Agree	14	15.38%
Not Answered	0	0%

**Q9. The language used in each Big Idea is appropriate for Level 6 of the New Zealand Curriculum.**



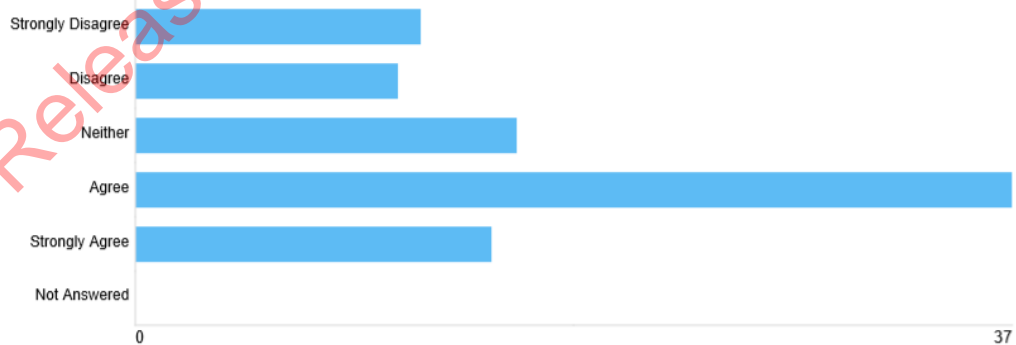
Option	Total	Percent
Strongly Disagree	10	10.99%
Disagree	17	18.68%
Neither	23	25.27%
Agree	28	30.77%
Strongly Agree	13	14.29%
Not Answered	0	0%

**Q10. The Learning Matrix clearly shows connection and alignment with Science at Level 6 of the New Zealand Curriculum (in particular the Learning Area Statement p28-29).**



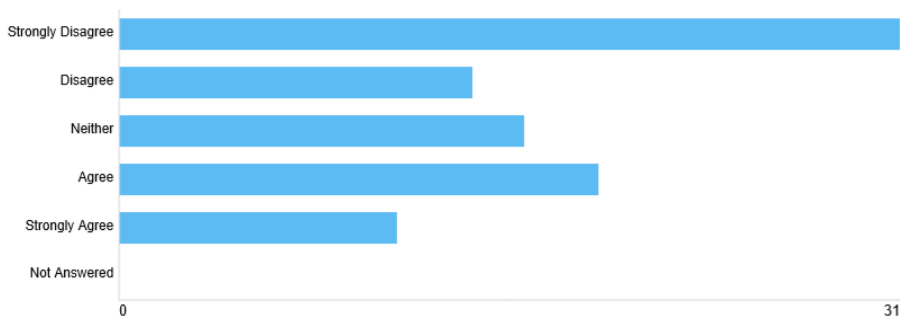
Option	Total	Percent
Strongly Disagree	11	12.09%
Disagree	20	21.98%
Neither	23	25.27%
Agree	25	27.47%
Strongly Agree	12	13.19%
Not Answered	0	0%

**Q12. There is alignment between the Draft NZC Level 6 Science Learning Matrix with the Draft NCEA Level 1 Science Assessment Matrix.**



Option	Total	Percent
Strongly Disagree	12	13.19%
Disagree	11	12.09%
Neither	16	17.58%
Agree	37	40.66%
Strongly Agree	15	16.48%
Not Answered	0	0%

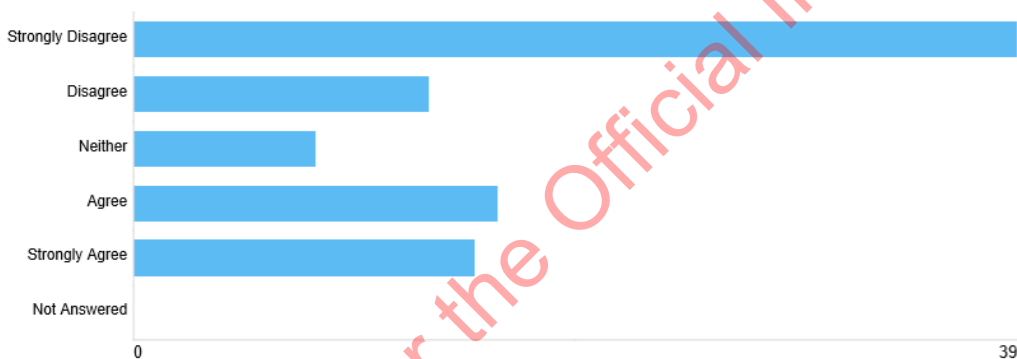
**Q13. The internal and external modes allocated to each standard are appropriate for the key outcomes in that standard.**



Option	Total	Percent
Strongly Disagree	31	34.07%
Disagree	14	15.38%
Neither	16	17.58%
Agree	19	20.88%
Strongly Agree	11	12.09%
Not Answered	0	0%

*The level of agreement here suggests we need to revisit how we frame the external assessments within our 50:50 internal:external mandate.*

**Q14. The Assessment Matrix as a whole assesses the most important learning outcomes for Level 1 Science.**

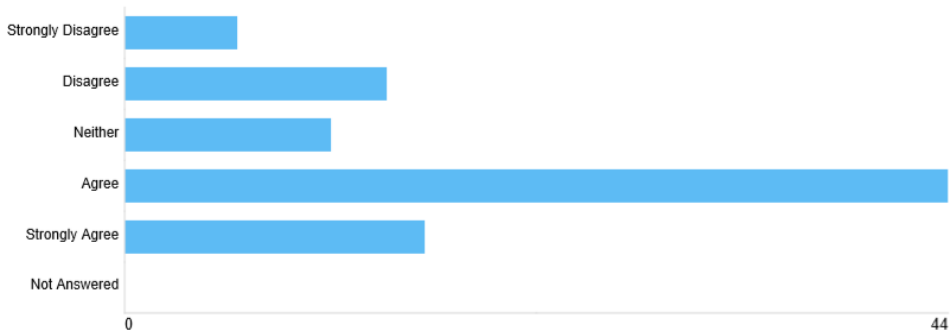


Option	Total	Percent
Strongly Disagree	39	42.86%
Disagree	13	14.29%
Neither	8	8.79%
Agree	16	17.58%
Strongly Agree	15	16.48%
Not Answered	0	0%

*The concerns indicated here need to be addressed. Clarification and exemplification through activities and student exemplars are a key strategy.*

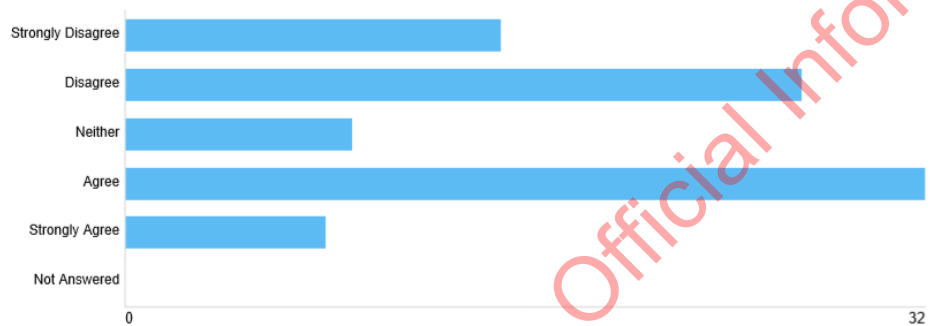
**Q15 AS 1.1 – Use a range of scientific investigative approaches**

The Title provides a general summary of the requirements for this standard.



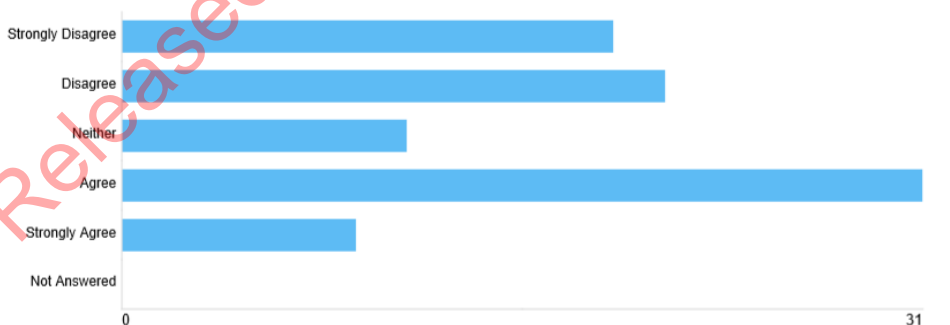
Option	Total	Percent
Strongly Disagree	6	6.59%
Disagree	14	15.38%
Neither	11	12.09%
Agree	44	48.35%
Strongly Agree	16	17.58%
Not Answered	0	0%

**Q16. The Achievement Criteria sufficiently specify the requirements for the award of each grade.**



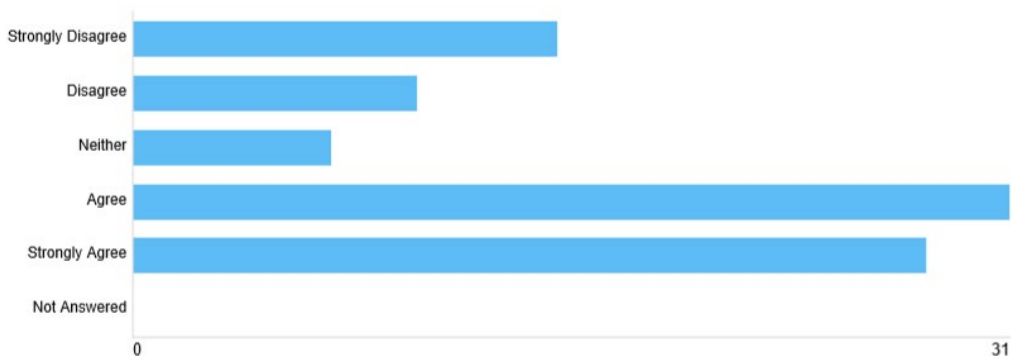
Option	Total	Percent
Strongly Disagree	15	16.48%
Disagree	27	29.67%
Neither	9	9.89%
Agree	32	35.16%
Strongly Agree	8	8.79%
Not Answered	0	0%

**Q17. The Explanatory Notes clarify and explain the standard.**



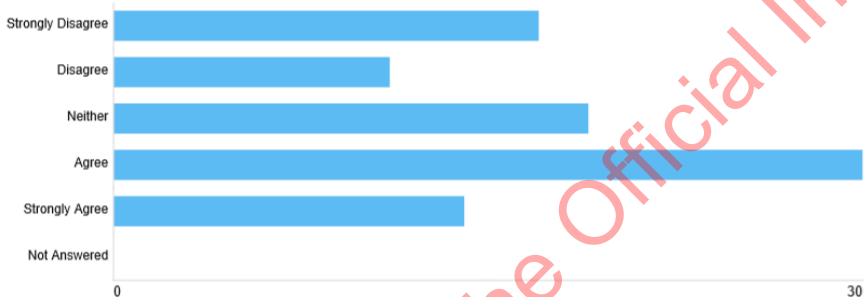
Option	Total	Percent
Strongly Disagree	19	20.88%
Disagree	21	23.08%
Neither	11	12.09%
Agree	31	34.07%
Strongly Agree	9	9.89%
Not Answered	0	0%

**Q18. The Mode of Assessment (internal/external) suggested for this achievement standard is appropriate.**



Option	Total	Percent
Strongly Disagree	15	16.48%
Disagree	10	10.99%
Neither	7	7.69%
Agree	31	34.07%
Strongly Agree	28	30.77%
Not Answered	0	0%

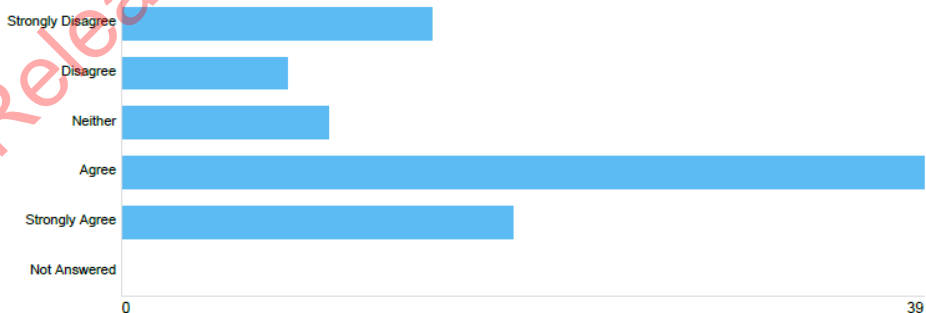
**Q19. The possible contexts and activities for teaching and assessment are appropriate for exemplifying this standard.**



Option	Total	Percent
Strongly Disagree	17	18.68%
Disagree	11	12.09%
Neither	19	20.88%
Agree	30	32.97%
Strongly Agree	14	15.38%
Not Answered	0	0%

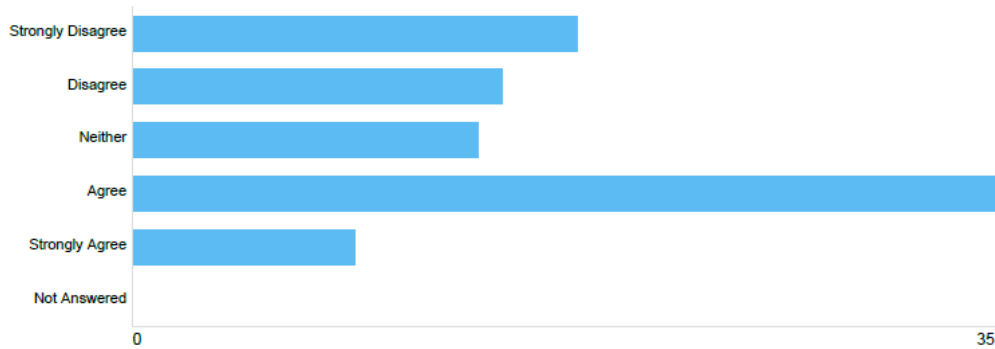
**Q21. AS 1.2 – Explore a real-world issue and devise a local, science-informed action.**

The Title provides a general summary of the requirements for this standard.



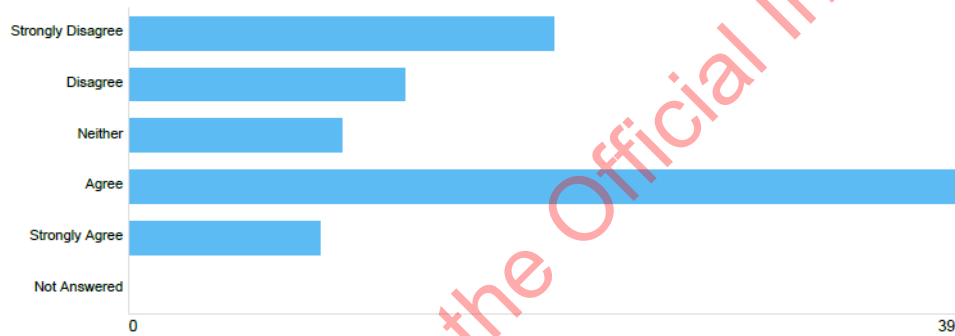
Option	Total	Percent
Strongly Disagree	15	16.48%
Disagree	8	8.79%
Neither	10	10.99%
Agree	39	42.86%
Strongly Agree	19	20.88%
Not Answered	0	0%

**Q22. Achievement Criteria sufficiently specify the requirements for the award of each grade.**



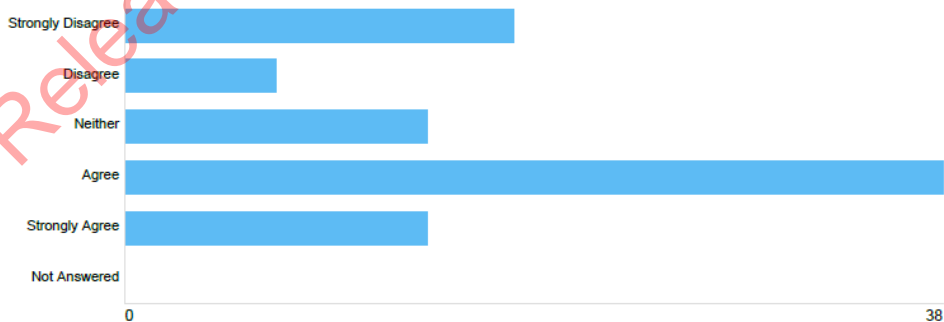
Option	Total	Percent
Strongly Disagree	18	19.78%
Disagree	15	16.48%
Neither	14	15.38%
Agree	35	38.46%
Strongly Agree	9	9.89%
Not Answered	0	0%

**Q23. The Explanatory Notes clarify and explain the standard.**



Option	Total	Percent
Strongly Disagree	20	21.98%
Disagree	13	14.29%
Neither	10	10.99%
Agree	39	42.86%
Strongly Agree	9	9.89%
Not Answered	0	0%

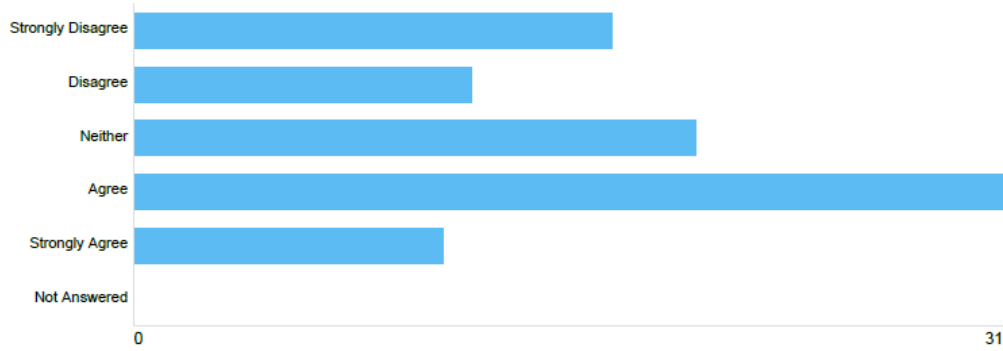
**Q24. The Mode of Assessment (internal/external) suggested for this achievement standard is appropriate.**



Option	Total	Percent
Strongly Disagree	18	19.78%
Disagree	7	7.69%
Neither	14	15.38%
Agree	38	41.76%
Strongly Agree	14	15.38%
Not Answered	0	0%

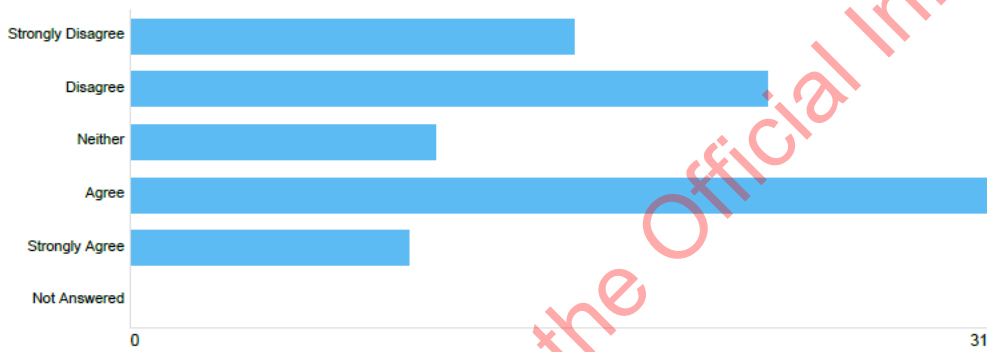


**Q25. The possible contexts and activities for teaching and assessment are appropriate for exemplifying this standard.**



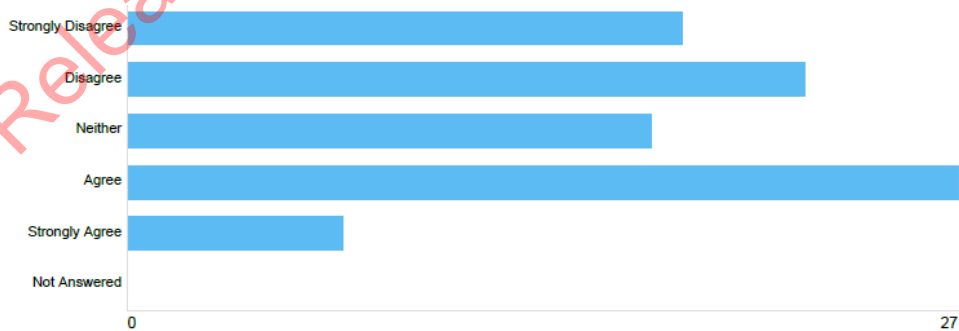
Option	Total	Percent
Strongly Disagree	17	18.68%
Disagree	12	13.19%
Neither	20	21.98%
Agree	31	34.07%
Strongly Agree	11	12.09%
Not Answered	0	0%

**Q27. AS 1.3 - Describe attributes of Science that contribute to the development of scientific ideas and processes. The Title provides a general summary of the requirements for this standard.**



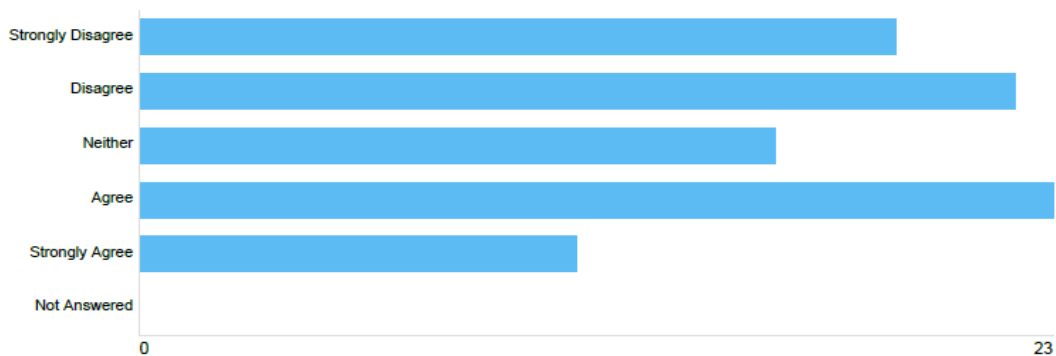
Option	Total	Percent
Strongly Disagree	16	17.58%
Disagree	23	25.27%
Neither	11	12.09%
Agree	31	34.07%
Strongly Agree	10	10.99%
Not Answered	0	0%

**Q28. The Achievement Criteria sufficiently specify the requirements for the award of each grade.**



Option	Total	Percent
Strongly Disagree	18	19.78%
Disagree	22	24.18%
Neither	17	18.68%
Agree	27	29.67%
Strongly Agree	7	7.69%
Not Answered	0	0%

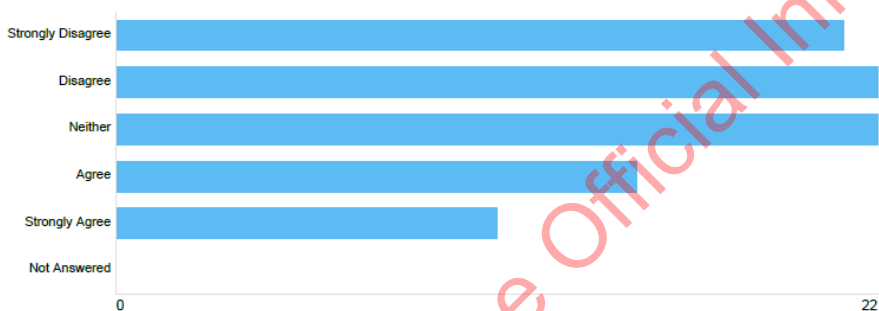
**Q29. The Explanatory Notes clarify and explain the standard.**



Option	Total	Percent
Strongly Disagree	19	20.88%
Disagree	22	24.18%
Neither	16	17.58%
Agree	23	25.27%
Strongly Agree	11	12.09%
Not Answered	0	0%

**Q30. The Mode of Assessment (internal/external) suggested for this standard is appropriate.**

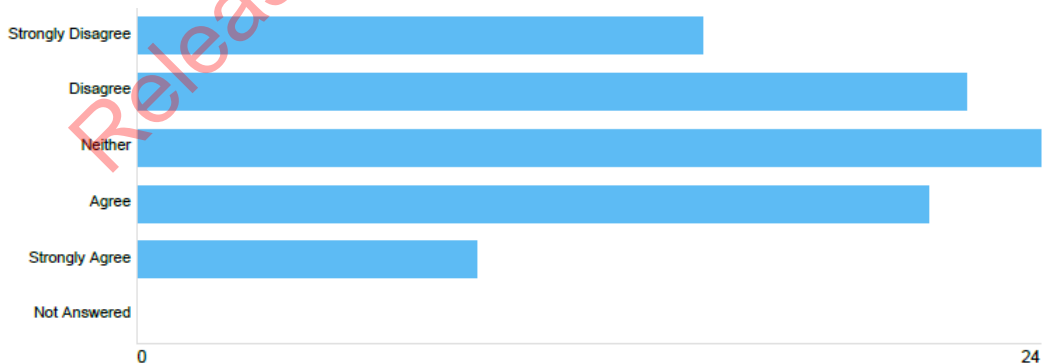
*The Mode of Assessment (internal/external) associated with this achievement standard is appropriate for the standard*



Option	Total	Percent
Strongly Disagree	21	23.08%
Disagree	22	24.18%
Neither	22	24.18%
Agree	15	16.48%
Strongly Agree	11	12.09%
Not Answered	0	0%

*Consider NZQA feedback for how this AS is assessed externally.*

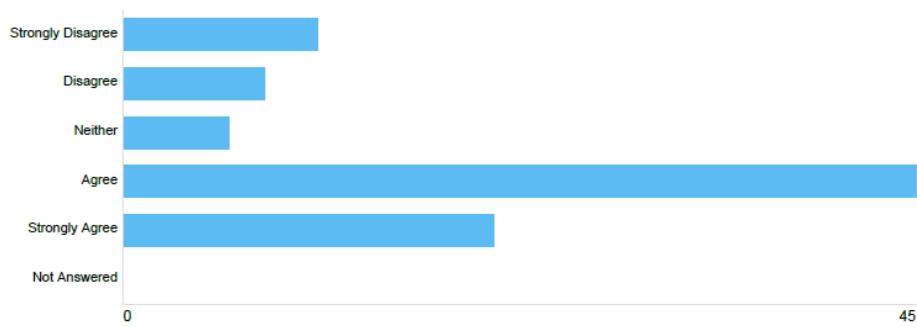
**Q31. Please provide some suggestions that might be useful for the SEG and NZQA in further developing external assessment activities for this standard.**



Option	Total	Percent
Strongly Disagree	15	16.48%
Disagree	22	24.18%
Neither	24	26.37%
Agree	21	23.08%
Strongly Agree	9	9.89%
Not Answered	0	0%

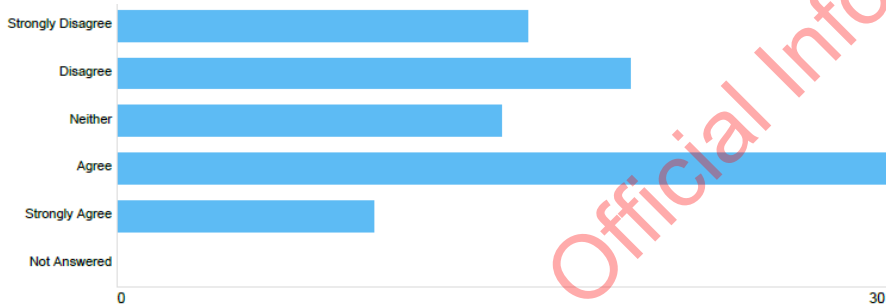
**Q32. AS 1.4 - Interpret scientific claims in publicly communicated information.**

The Title provides a general summary of the requirements for this standard.



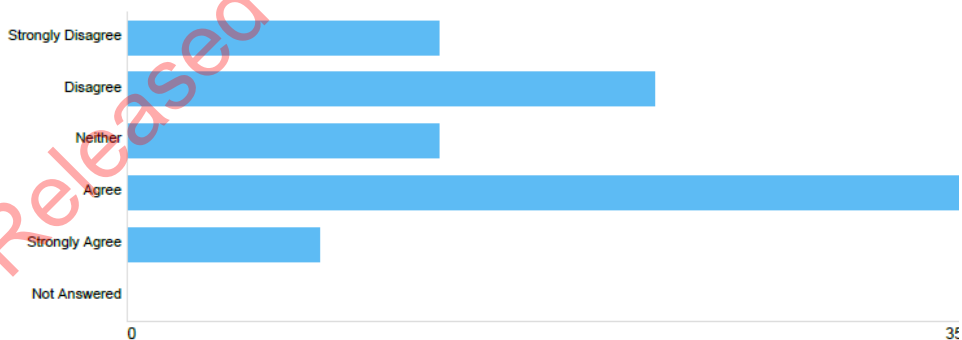
Option	Total	Percent
Strongly Disagree	11	12.09%
Disagree	8	8.79%
Neither	6	6.59%
Agree	45	49.45%
Strongly Agree	21	23.08%
Not Answered	0	0%

**Q33. The Achievement Criteria sufficiently specify the requirements for the award of each grade. Clarify?**



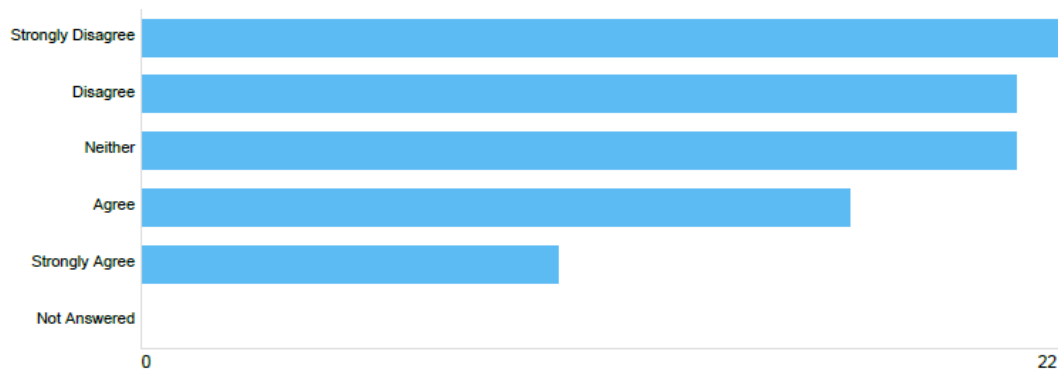
Option	Total	Percent
Strongly Disagree	16	17.58%
Disagree	20	21.98%
Neither	15	16.48%
Agree	30	32.97%
Strongly Agree	10	10.99%
Not Answered	0	0%

**Q34. The Explanatory Notes clarify and explain the standard. Clarify ENs.**



Option	Total	Percent
Strongly Disagree	13	14.29%
Disagree	22	24.18%
Neither	13	14.29%
Agree	35	38.46%
Strongly Agree	8	8.79%
Not Answered	0	0%

**Q35. The Mode of Assessment (internal/external) suggested for this achievement standard is appropriate for the standard.**



Option	Total	Percent
Strongly Disagree	22	24.18%
Disagree	21	23.08%
Neither	21	23.08%
Agree	17	18.68%
Strongly Agree	10	10.99%
Not Answered	0	0%

*Consider NZQA feedback for how this AS is assessed externally.*

**Q37. These products provide the opportunity for all learners to see their language, culture and identity in their learning and assessment in Level 1 Science.**



Option	Total	Percent
Strongly Disagree	16	17.58%
Disagree	19	20.88%
Neither	18	19.78%
Agree	27	29.67%
Strongly Agree	11	12.09%
Not Answered	0	0%