

Briefing Note: Information to support your attendance at SCICON23

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| To: | Hon Jan Tinetti, Minister of Education | | |
| Date: | 5 April 2023 | Priority: | Medium |
| Security Level: | In Confidence | METIS No: | 1306247 |
| Drafter: | Chris Arcus | DDI: | 9(2)(a) |
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| Messaging seen by Communications team: | Yes | Round Robin: | No |

Purpose of Report

This paper provides you with background information on SCICON (the biennial national science teachers' conference), draft speech notes for your upcoming keynote speech at the conference, and questions and answers, as requested by your office.

Summary

- SCICON is the biennial science teachers' conference. This year SCICON is to be held at Rototuna Junior High School, 56 Kimbrae Drive, Hamilton.
- You have agreed to be the keynote speaker between 10am and 11am on Saturday 15 April 2023. Several hundred primary and secondary science teachers are expected to attend the conference, with no media presence.
- Dame Juliet Gerrard, the Prime Minister's Chief Science Advisor, will be speaking immediately after you.
- This Briefing provides background information about relevant areas of interest to science teachers, notably *The New Zealand Curriculum* (NZC) refresh and changes to NCEA, as well as to science education more generally.
- Draft speech notes (Annex 1), Q&As (Annex 2), and event information (Annex 3) are included.

Proactive Release

Agree that Te Tāhuhu o te Mātauranga | The Ministry of Education proactively release this briefing as per your expectation that information be released as soon as possible. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.

Agree / Disagree

Release

Pauline Cleaver
General Manager – Strategy & Integration
Te Poutāhū | Curriculum Centre

05/04/2023

Jan Tinetti

Hon Jan Tinetti
Minister of Education

08/04/2023

Background

1. The New Zealand Association of Science Educators (NZASE) and the Waikato Science Teachers Association are jointly hosting SCICON 23, the biennial science teachers' conference, at Rototuna Junior High School, Hamilton, from 13 to 16 April.
2. You have been invited to be the keynote speaker at the conference on Saturday 15 April.
3. The NZASE coordinates and supports many organisations across the science learning field. Membership is open to institutions and individuals that support the objectives of the association.
4. The objectives of the association include:
 - promote the development of science education throughout New Zealand.
 - facilitate liaison and cooperation between regional science teachers' associations.
 - assist regional science teachers' associations in their efforts to sustain and expand their activities.
 - disseminate information, articles, and other material related to science education through newsletters, journals, and other means.
 - represent the interests and concerns of people involved in science education to the appropriate authorities.
 - organise conferences of its members to further their knowledge of science education and to enhance their skills and interest.
 - develop links with international science education associations.

SCICON23

5. SCICON23 is being held from April 13 to 16, 2023 at Rototuna Junior High School, 56 Kimbrae Drive, Hamilton.
6. The theme for the conference is He kautawa | Tributaries.
7. You have agreed to be the keynote speaker between 10am and 11am on Saturday 15 April 2023. Douglas Walker (the President of NZASE) will introduce you and Professor Dame Juliet Gerrard (the Prime Minister's Chief Science Advisor) will be speaking immediately after you.
8. Several hundred primary and secondary science teachers are expected to attend the conference, with no media presence. Keynote speakers are yourself, Dame Gerrard, and Dr Joel Rindelaub (an academic, athlete, author and actor).
9. Sponsors include the University of Waikato, Education Perfect (resources for teachers), sciPAD (science workbooks), LearnWell (education resources). There is a wide range of other sponsors and exhibitors.
10. As part of the conference, teachers are invited to take part in field trips to key learning opportunities (Sanctuary Mountain Maungatautari, the University of Waikato, Hamilton Zoo and Observatory). Note that the University field trip includes a presentation from Mātauranga expert Professor Kura Paul-Burke on weaving together western science and Mātauranga Māori, as well as 'research bites' in the fields of chemistry, biology, earth and environmental sciences.
11. As requested by your office, we provide you with supporting information for the conference. Attached are draft speech notes (Annex 1), Q&As (Annex 2), and event information (Annex 3).

Matters of interest to attending teachers

12. Both primary and secondary science teachers will be interested in the refresh of the NZC. The refreshed NZC will provide a stronger focus on inclusive practice that gives effect to Te Tiriti o Waitangi, values and builds on the strengths ākonga bring to literacy and numeracy in learning across the curriculum and supports learners to better access its richness.
13. This year, we are refreshing the Science learning area of the NZC (as well as The Arts and Technology learning areas). While information about the broader curriculum refresh is already available, signalling the direction of changes, work to refresh the Science learning area is at an early stage and the draft curriculum content for it is not yet ready for wider dissemination.
14. Secondary teachers are likely to be in the majority at this conference, and they will be particularly interested in the changes being developed in the NCEA programme. The conference presents an opportunity to reinforce that the changes will be beneficial both to teachers as they implement teaching programmes and to the ākonga they teach.
15. While many in the sector are excited by the curriculum and assessment changes Te Poutāhū | the Curriculum Centre is leading, and the difference they will make for learners over time, some have voiced concerns about the scale and alignment of the changes. Our communications emphasises that we are taking a phased approach, and:
 - a. the changes to NCEA and the Review of Achievement Standards (RAS) are built on the same design principles and are aligned in intent with the refresh of the NZC; and
 - b. in preparation for the review of NCEA, the current NZC essence statements were analysed. This analysis identified the 'big ideas' for each learning area and the need for greater consistency in how these should be expressed across the eight learning areas and NCEA subjects. This has helped to anchor and align both the NZC and NCEA changes.
16. The inclusion of indigenous knowledge (e.g., mātauranga Māori) in the refreshed curriculum represents an important change, and will entail a shift in practice for some teachers. Te Poutāhū will be supporting people to implement changes through guidance, resources and professional learning opportunities. Science provides a strong framework for understanding the world, a framework that is complemented and enhanced in the Aotearoa New Zealand context through mātauranga Māori:
 - a. the refreshed NZC will support kaiako to authentically weave mātauranga Māori into their teaching and learning; and
 - b. in the Review of Achievement Standards, NCEA materials will identify opportunities to offer structural guidance for science and mātauranga Māori to appropriately interact.

Other Relevant Information

The refresh of the Science learning area in the NZC

17. As part of the refresh of the NZC, the Science learning area (alongside The Arts and Technology) is being refreshed this year. The Ministry will be going out to a small number of schools to 'fast test' the first draft, before seeking feedback more widely from the sector and the public later this year. Further information can be found on the Ministry's curriculum refresh website: <https://curriculumrefresh.education.govt.nz/>.

The vision for the role of the science educator and the attributes that future science students will bring to society

18. It is important that ākonga are more scientifically aware than ever before, and that the curriculum provides opportunities for them to be curious about the natural world and supports them to develop skills, knowledge and passion for science. The refreshed Science learning area supports kaiako to see the rich learning possibilities that science provides – the learning that helps ākonga deepen their understanding of the big ideas, use science concepts in more complex contexts that involve the natural world, and become more sophisticated in the critical practices that bring them into the world of science.
19. This includes working collaboratively with others, using a range of science concepts from several disciplines, thinking critically about the claims of others, and using the big ideas as tools to make sense of new contexts.
20. We know ākonga are interested in many critical societal issues, such as living sustainably within the earth's resources, and protecting its ecosystem and diversity. The refreshed Science learning area will provide children and young people with the knowledge and tools to contribute to science knowledge-building and to participate in conversations in which they think critically about information that is presented as science.

NCEA

21. Confirmed NCEA science subjects that draw from the Science Learning Area are:
 - Level 1 (4 subjects to reflect a broad, foundational Level 1): Science; Chemistry and Biology; Physics, Earth and Space Science; Agricultural and Horticultural Science
 - Levels 2 and 3 (5 subjects to reflect the increasing specialisation at Levels 2 and 3): Agricultural and Horticultural Science, Biology, Chemistry, Earth and Space Science, and Physics.
22. Updated Level 1 material (draft-for-pilot 2023) will be published on the NCEA website by the start of Term 2.
23. In 2022, the development timeline for the sciences was adjusted following initial work to develop Level 2 Biology and Level 2 Chemistry. Building in additional time has allowed us to:
 - a. make clear how science specialist subjects at Levels 1, 2 and 3 contribute to coherent Learning Area pathways;
 - b. ensure the progression of science is clear and coherent across subjects in the Learning Area; and
 - c. Explore how mātauranga Māori is included to reflect mana ōrite across Years 11-13 and NCEA Levels 1, 2 and 3.
24. Following the Ministry's restructure of the NCEA Change Programme and the national state of emergency earlier this year, a revised development timeline for Level 2 is yet to be finalised. At a Programme level the aim is for Level 2 development to be completed this year. Teachers can expect to see further 'in-progress' draft Level 2 material published on the NCEA website for public engagement in the near future.

25. We are continuing to closely align the Curriculum and the NCEA Change Programmes and support the sector to understand the key points of connection. This includes the underpinnings of each and our change and implementation approaches, as we work to ensure coherent communications, guidance, and resources across the full pathway to support leaders to lead change, as well as alignment of review cycles.

Annexes

- Annex 1: Draft speech notes
Annex 2: Q&As
Annex 3: Event Information Sheet

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Annex 3: Event Information Sheet

Event details

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| Name of host organisation | NZASE & WSTA |
| Type of event the Minister is being invited to (e.g., conference, launch, cocktail function) and title of event | SCICON23 - Biennial science educators conference |
| Day, date and timeframe of Minister's attendance | Saturday 15/4/23 10-11am |
| Venue (exact room, building and full physical address). | Rototuna High Schools 56 Kimbrae Drive Rototuna Hamilton |
| Purpose of event (objectives, planned outcomes) | Bringing science educators together for networking and professional learning. |
| If the Minister is being asked to make a presentation to someone (e.g., an award), please provide details of what the presentation is, what the Minister is required to do, who the presentation is to | n/a |
| If a conference, please provide a programme for the full conference (or an indicative outline, with a full programme provided at a later stage), particularly indicating what is scheduled to take place <u>before</u> and <u>after</u> the Minister's speech | Minister Tinetti will be the first keynote speaker for the conference in conjunction with Juliet Gerrard. Before her speech will be the opening address and powhiri. Following the minister's speech will be morning tea. |
| If a launch/function, please provide a run-sheet including timings for the event | n/a |
| Who will be introducing/thanking the Minister? | Douglas Walker, NZASE president |
| Catering info | Morning tea will be provided |
| Dress code | Casual |

Facilities

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| How will the venue be set up? (e.g., lecture style with podium; or informal, people standing) | Seated theatre, with podium and microphone provided. |
| Please indicate the facilities available to assist the Minister deliver the speech., e.g., Datashow, Overhead Projector, etc | School environment with all of the normal AV facilities. |

Multi-cultural dimension

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| Please indicate whether it would be appropriate for the Minister to include a Maori, Pacific or other ethnic greeting at the start of her speech | Yes please |
| Please advise if the Minister is to be involved in a more formal/specific Maori, Pacific or other ethnic dimension to your event (e.g., powhiri); the nature and timing of this; will she be required to respond, in English or Maori; and if Maori, can your organisation provide a speaker/singer on the Ministers' behalf? | To be confirmed, still in discussion with local iwi. |
| Please indicate who the Minister should acknowledge (either as part of her greeting at the start of her speech, or as part of a more formal dimension) | Ngāti Wairere (others to be advised) |

Attendees

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| Please provide a guest list if possible, or indicate the makeup of the audience | Science educators from primary, secondary, tertiary sectors throughout New Zealand. |
| Are other Ministers and/or MPs being invited to attend? If so, who? | No |
| Please indicate any other important guests the Minister should be aware of | To be confirmed as registrations continue |

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| How many people in total are being invited or are expected to attend? | approx. 250-300 |
| Is an admission fee being charged? | Part of conference registration. |

Speeches

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| Length of speech requested (Note the standard length of speech is 5-7 mins.) | 30 minutes allocated (subject to confirmation) |
| Is there to be a Question-and-Answer session following the speech? If so, how long will this session be? | As part of the 30 mins if required. |
| Who else has been invited to speak? In particular, are other Ministers or MPs being invited to speak? | Dr Juliet Gerrard |
| Content of Minister's speech – please indicate what issues you consider will be of interest to the audience | What is the minister's vision for the future of education in New Zealand with particular reference to science curriculum reform and NCEA assessment changes. |
| Will the Minister's attendance (i.e., speech or q&a session) be recorded/broadcast in any way? If so, this must be cleared with the Minister's Office in advance | We will be live streaming the conference for attendees unable to attend due to covid. This can be negotiated. |

Media

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| Are media being invited; and if so, who? | No media are not invited. |
| Will there be a media release issued by the organiser or host of the event? If so, please supply a copy to the Minister's Office one week prior to the Event, with information on when it will be released to the media and to who | Are we able to have a photo of Minister Tinetti to be added to our 'Keynote speaker' page on our website please? |
| Will there be invitations sent out, or advertisements for the event? If so, please supply a copy to the Minister's Office at least one week prior to the event. | Yes, as part of the conference registration |

Contact details

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| For organisational issues around the Minister's attendance | Name: Lisa Clay Mobile: 9(2)(a) [REDACTED] [REDACTED] |
| For the speechwriter to make contact, if required, to discuss content and elicit further information | Name: Fiona Wolff Mobile: 9(2)(a) [REDACTED] [REDACTED] |
| Who will meet the Minister at the venue (mobile number, and land-line number for the venue if possible) | Name: Fiona Wolff and Lisa Clay (maybe Doug Walker) Mobile: 9(2)(a) [REDACTED] [REDACTED] |
| Often photographs are taken during the Minister's visit. If the organisation takes any photos, we would be grateful to receive copies. Often a staff member accompanying the Minister will take photos. In order for us to use/publish any photos taken or obtained from you, we need to obtain consent from the people in the photos, in particular if young children or students are in the photos. Please supply the Minister's office with an appropriate person to contact, following the visit, to arrange consent | Name: Lisa Mobile: 9(2)(a) [REDACTED] [REDACTED] |
| Do you have any questions you need answered in relation to the Minister's attendance? | Are there any costs associated please? If the Minister is unable to attend for any reason, is she able to provide a backup guest speaker from the Ministry of Education? |