



(Clements, K. et al., 2021: 4)

Home / News

In Defence of Science Article



posted by **Jonathan Ayling** / 208sc November 18, 2021

The Listener Letter (published in 31 July 2021 edition of the New Zealand Listener)



In defence of science

A recent report from a Government NCEA working group on proposed changes to the Maori school curriculumaims "to ensure parity for mätauranga Mäori with the other bodies of know ledge credentialed by NCFA (particularly Western/Påkehå epistemologies)". It includes the following description as partofa newcourse: "It promotes discussion and analysis of the ways in which science has been used to support the dominance of Eurocentric views (among which, its use as a rationale for colonisation of Māori and the suppression of Mäori knowledge); and the notion that science is a Western European invention and itself evidence of European dominance over Mäori and other indigenous

This perpetuates disturbing misunderstandings of science emerging at all levels of education and in science funding. These encourage mistrust of science. Science is universal notespecially Western European. It has origins in ancient Egypt, Mesopotamia, ancient Greece and later India, with significant contributions in mathematics, astronomy and physics from mediaeval Islam before developing in Europe and later the US, with a strong presence across Asia.

Science itself does not colonise. It has been used to aid colonisation, as have literature and art. However, science also provides immense good, as well as greatly enhanced understanding of the world. Science is helping us battle worldwide crises

such as Covid. global warming. carbon pollution, biodiversity loss and environmental degradation. Such science is informed by the united efforts of many nations and cultures. We increasingly depend on science, perhaps for our very survival. The future of our world, and our species, cannot afford mistrust of science.

Indigenous knowledge is critical for the preservation and perpetuation of culture and local practices and plays keyroles in management and policy. However, in the discovery of empirical, universal truths, it falls far short of what we can define as science itself.

To accept it as the equivalent of science is to patronise and fail indigenous populations: better to ensure that everyone narticinates in the world's scientific enterprises. Indigenous knowledge may indeed help advance scientific knowledge in some ways, but it is not science.

Kendall Clements Professor, School of Biological Sciences, University of Auckland Garth Cooper, FRSNZ Professor, School of Biological Sciences, University of Aucldand Michael Corballis, FRSNZ Emeritus Professor, School of Psychology, University of Auddand

Douglas Elliffe Professor, School of Psychology, University of Auckland Robert Nola, FRSNZ Emeritus Professor Department of Philosophy, University of

Auckland Professor, Critical Studies in Education, University of Auckland



John Werry

Emeritus Professor, Department of Psychological Medicine. University of Auckland

GP SHORTAGES

One way the Government could immediately address the GPshortage ("Burnout", July 24) is to work with the Medical Council of New Zealand to fast-track foreign-doctor registration, which isapparently outrageously difficult and takes a ridiculously long time. (Auckland)

I know of three overseastrained doctors who are working in other jobs. When I askedone (a rest-home carer) why he had not gone through the processes required to negister here he said he had to earn a living for his family and could not afford the fees and loss of paid working time.

Surely we could set up a scheme whereby we retrained and assessed these doctors while paying them a salary? We could then bond them to work as GPs (or as hospital doctors) for a set term. Any who failed the assessment would obviously be a cost to the system, but that would be offset by the benefits from those who succeeded.

I am also interested in the example set by the Fred Hollows Foundation. In this country, cataract operations are done by doctors with full medical training, but is it necessary to understand the anatomy of limbs, for example, to operate on a cataract? Maybe we should be training highly specialised technicians to do a lot of the jobs that doctors now do, releasing doctors to diagnose and treat patients whose needs are less clear.

Agood GP is a wonderful resource but the decline in number and availability is now long-standing and unlikely to change even if another medicalschoolwere to be created.

Nurse practitioners are experienced registered nurs with an additional master's degree who are legally able to deliver exactly the same diagnostic, prescribing, referral and management of present ing conditions as a GP. This country has well over 500. some of whom have been in their position for 20 years.

importantly, nurses are the only profession who remain well distributed throughout the country and so with a relatively small investment could become nurse practitioners in the rural areas and small towns in which the shortage is being felt most keenly.

Letters to the editor {listenerletters@aremedia.co.nz}

The Editor, NZ Listener, PO Box 52122, Kingsland, Auckland 1352

- Letters must be under 300 words. Preference is
- given to shorter letters.

 A writer's full residential address is required on all letters, including emails.
- A phone number can be helpful.

 Pen names or letters submitte
- elsewhere are not acceptable.

 We reserve the right to edit or decline letters

LISTENER JULY 31 2021

In defence of science (republished with author's permission).

A recent report from a Government NCEA working group on proposed changes to the Māori school curriculum aims "to esure parity for mātauranga Māori with the other bodies of knowledge credentialed by NCEA (particularly Western/Pakeha epistemologies)". It includes the following description as part of a new course: "It promotes discussion and analysis of the ways in which science has been used to support the dominance of Eurocentric views (among which, its use as a a rationale for colonisation of Maori and the suppression of Maori knowledge); and the notion that science is a Western European invention and itself evidence of European dominance over Maori and other indigenous peoples."

This perpetuates disturbing misunderstandings of science emerging at all levels of education and in science funding. These encourage mistrust of science. Science is universal, not especially Western European. It has origins in ancient Egypt, Mesopotamia, ancient Greece and later India,

with significant contributions in mathematics, astronomy and physics from mediaeval Islam, before developing in Europe and later the US, with a strong presence acoss Asia.

Science itself does not colonise. It has been used to aid colonisation, as have literature and art. However, science also provides immense good, as well as greatly enhanced understanding of the world. Science is helping us battle worldwide crises such as Covid, global warming, carbon pollution, biodiversity loss and environmental degradation. Such science is informed by the united efforts of many nations and cultures. We increasingly depend on science, perhaps for our very survival. The future of our world, and our species, cannot affort mistrust in science.

Indigenous knowledge is critical for the preservation and perpetuation of culture and local practices, and plays key roles in management and policy. However, in the discovery of empirical, universal truths, it falls far short of what we can define as science itself.

To accept it as the equivalent of science is to patronise and fail indigenous populations; better to ensure that everyone participates in the world's scientific enterprises. Indigenous knowledge may indeed help advance scientific knowledge in some ways, but it is not science.

Kendall Clements

Professor, School of Biological Sciences, University of Auckland

Garth Cooper, FRSNZ

Professor, School of Biological Sciences, University of Auckland

Michael Corabllis, FRSNZ

Emeritus Professor, School of Psychology, Universituy of Auckland

Douglas Elliffe

Professor, School of Psychology, University of Auckland

Robert Nola, FRSNZ

Emeritus Professor, School of Philosphy, Universituy of Auckland

Elizabeth Rata

Professor, Critical Studies in Education, University of Auckland

John Werry

Emeritus Professor, Department of Psychological Medicine, University of Auckland
