

INFORMATION SHEET (TEACHER)

Project title: Scientific Literacy: How years 7-10 science teachers define and develop scientific literacy in New Zealand

Researcher: Catherine Hunter

Supervisors: Dr Sally Birdsall and Dr Gillian Ward

Researcher introduction

Catherine Hunter is a student working towards a Master of Education with the Faculty of Education and Social Work at the University of Auckland. Her supervisors, Dr Sally Birdsall and Dr Gillian Ward are both Senior Lecturers with the School of Curriculum and Pedagogy at the University of Auckland.

Project description and invitation

The purpose of my study is to investigate how years 7-10 science teachers define scientific literacy. I am also exploring teachers' perceptions of the positive and negative factors that influence the development of scientific literacy. At present there is no research about Aotearoa-New Zealand teachers' perceptions of scientific literacy and its development in students. Findings from my study will help develop knowledge about factors that contribute to the development of scientific literacy, which may influence how science is taught in schools. The findings could inform future teacher education programmes.

I would like to invite you to take part in my study. Your participation is voluntary and your Principal has given an assurance that your decision to take part or not, will have no effect on your employment status or relationship with your school. Should you have questions about the Māori cultural appropriateness of the study, my colleague Hayley Tipene has offered to answer any questions you have by emailing her at htipene@mhjc.school.nz.

Project procedures

If you decide to take part in my study, you will complete an online questionnaire in Google Forms that will take about 15 minutes of your time. I may also invite you to take part in an individual interview. Before the interview, I would like you to complete two lesson templates that I will supply that outline how you would teach science based on two differing science topics. I will email you the template. These templates should take about 15 minutes to complete. At the interview we will discuss your questionnaire responses and these templates. You can choose the venue and time of the interview that is convenient for you.

The individual interview will take about 60 minutes and be audio-recorded. During the interview, you can refuse to answer any question, request that the audio-recorder be turned off at any time and leave whenever you like. The audio-recording will be transcribed by a university-approved transcriber who has signed a confidentiality agreement. The completed transcript will be returned to you for editing and you will have two weeks to return it to me. After that time the transcript will be regarded as an accurate copy.

In the event of any COVID-19 restrictions, we can have our interview via Zoom. I will use the recording function and only store an audio-file of our interview.

Data storage/retention/destruction/future use

Throughout my study, only my supervisors and I will have access to your data. The transcriber will have access to the audio-recording and your transcript but will delete all data once transcription is completed. During data collection, I will store your data securely in locked cabinets and on my password protected computer. Following data analysis, your data will be securely stored for six years in a locked cupboard or on a password protected computer and server at the University of Auckland. After that time, the hard copy data will be placed in a secured confidential recycling bin and the electronic data deleted from the computer and servers.

If you would like a copy of the findings of my study, please indicate on the consent form.

Right to withdraw data

You can withdraw your questionnaire data at any time and without giving reason up to two weeks after its completion by emailing me. If you take part in an interview, you can withdraw your data at any time without giving reason up to four weeks following the interview by emailing me.

Confidentiality

Your identity will be protected through the use of a pseudonym that you will nominate. I will also disguise any identifying details about the school in which you work.

If you decide to take part in my study, please use this link to access the questionnaire:

[Survey Link](#)

Your completion of the questionnaire will be regarded as you giving consent to take part in my study. If you would like to take part in my interview, please



EDUCATION AND SOCIAL WORK

indicate on the front cover of the questionnaire. I will be in touch with you once you have completed the questionnaire to organise a mutually convenient time.

If you have any questions, queries or concerns, please contact me, my supervisors or the Head of School:

Catherine Hunter
Student Researcher
021 305 203
chun503@aucklanduni.ac.nz

Dr Gillian Ward
Faculty of Education
09 373 7999 ext. 48840
g.ward@auckland.ac.nz

Dr Sally Birdsall
Faculty of Education
09 373 7999 ext. 48458
s.birdsall@auckland.ac.nz

Dr Katie Fitzpatrick
Head of School, School of Curriculum and Pedagogy
09 373 7599 extn 48652
k.fitzpatrick@auckland.ac.nz

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, Office of Research Strategy and Integrity, The University of Auckland, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711. Email: humanethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on November 16, 2021 for three years. Reference Number 23487