Research guidelines

for WasteMINZ' Sector Groups

Introduction

Finding credible research papers on a particular topic can be daunting when you don't have access to an academic database. These guidelines have been prepared by the Organic Materials Sector Group steering committee, with input from the Behaviour Change Sector Group, to help organisations and individuals find credible research.

How to work out what is credible research

The Harold B. Lee Library provides a step by step guide to evaluating material to determine credibility. Called the TAARP method, it suggests evaluating research according to:

Timeliness

Unless researching historical topics it is generally more relevant to search for the most recent information so keep an eye on the year the research was published.

Authority

This means the author or organisation has authority to speak on the topic. You can determine this by seeing what their experience and qualifications are. Peer-reviewed research is also a good check – you can use **Ulrichsweb** to determine if a journal is peer-reviewed (you will need to create a free account to access this service). Within an article there should also be sufficient footnotes, bibliographies, credits, or quotations, which you can also check to see if they link to credible sources.

Audience

There is a difference between a magazine written for the public and a journal written for professors and experts in the field. If you are presenting a scientific argument, make sure it is backed up with credible research from authoritative sources, and is heavily referenced so the reader can see where the information originates from.

Relevance

Searches don't always turn up the most relevant research for your topic but an easy way to check for relevance is by reviewing the abstract or summary of the article before downloading the entire article.

Perspective

While you will want information to support your argument, it is important to also find sources to help you understand the other side as well. Extremely biased sources will often misrepresent information. In addition, reading opposing arguments may help refine your own thinking on a topic.

Other online libraries detail similar methods called the CRAAP test: Currency, Relevance, Authority, Accuracy and Purpose of the article. See University of the People and the European Association for International Education for examples.

Sources of credible New Zealand research

Tertiary institution databases (in alphabetical order, using the name of the institution first)

Auckland University - Waipapa Taumata Rau

- · Research hub
- Research space

Canterbury University – Te Whare Wānanga o Waitaha

· Research repository

Lincoln University - Te Whare Wanaka o Aoraki

· Research archive

Massey University - Te Kunenga Ki Pūrehuroa

· Research online

Otago University - Te Whare Wānanga o Ōtago

- Research archives
- Searchable database of research themes



Victoria University of Wellington – Te Herenga Waka

- Open access
- Policy Quarterly journal searchable database

Waikato Institute of Technology (Wintec) – Te Kuratini o Waikato

· Research archive

Waikato University – Te Whare Wānanga o Waikato

- Āmiomio Aotearoa current research (includes circular economy, Material Flows Analysis and Right to Repair research)
- Research commons
- Research publications database

Crown Research Institutes (with areas of research relevant to the Waste, Resource Recovery and CLM sectors)

The Institute of Environmental Science Research (ESR) specialises in water quality, biowaste, groundwater, public health, food and pharmaceuticals, geonomics, and forensic science.

ESR published research

Manaaki Whenua / Landcare Research specialises in biosecurity, biodiversity, land and environment

- Soil databases
- Enuironmental data of Aotearoa
- Manaaki Whenua publications

Plant & Food specialises in primary production and has some research on food waste and compost

Planet & Food publications

Scion specialises in innovation and growth from New Zealand's forestry, wood product and woodderived materials and other biomaterial sectors and biodegradable packaging innovations.

Scion digital library

Central government

Department of Statistics

· Data on imports, soil health indicators etc

Ministry for the Environment

- MfE data service (includes data on litter, greenhouse gas emissions)
- New Zealanders' attitudes to environmental issues
- Publicly available data on waste (including waste to landfill, estimates of composition of waste, research into attitudes on waste and recycling - including WasteMINZ' research emissions from waste data, and emissions from f-gases)

Ministry for Business, Innovation and Employment (MBIE)

Searchable document library

Parliament

 Parliament's website has a search function where you can search for information on Bills and Laws, select committees, Hansard debates, Papers Presented and much more.

Independent research institutes

BRANZ (the Building Research Association of New Zealand) does research on building including on reducing C&D waste

Publications

The Callaghan Research Institute specialises in R&D for businesses and has supported some food waste projects, biochar, e-waste etc projects.

Search function

The Parliamentary Commissioner for the Environment is an independent Officer of Parliament who has broad powers to investigate environmental concerns and is independent of the government of the day. Past research includes work on biodegradable and compostable packaging.

Office of the Prime Minister's Chief Science Advisor

The PMCSA is government-appointed but independent of the Government.

Reports including on plastics and food waste



NZ Research Tool

Litmaps is a NZ developed tool that is helpful for navigating the vast academic literature pool. It enables the user to visualise the literature that is relevant to their topic, as well as helping to find relevant and credible articles. You are required to create an account to use it but access to the basic tool is free.

Open access (OA) databases (international)

Bielefeld Academic Search Engine (BASE) is a German based university database which has 60% OA content.

CORE is a UK based multidisciplinary aggregator of OA, international research which allows users to search more than 219 million OA articles – either by linking to the full-text article on the original publisher's site, or directly on CORE.

Digital Library of the Commons is the University of Indiana's (USA) multidisciplinary journal repository.

Directory of Open Access Journals (DOAJ) is a multidisciplinary, community-curated directory that provides access to high-quality peer-reviewed journals.

Dryad is a repository of curated, OA scientific research data which is run by a not-for-profit membership organisation, with a community of institutional and publisher members for whom their services have been designed.

Education Resources Information Center (ERIC)

is related to the field of education. Links lead to other sites, where you may have to purchase the information, but you can search for full-text articles only. You can also search only peer-reviewed sources.

ETHOS (the E-Theses Online Service) has over 500,000 doctoral theses in a variety of disciplines which have all been awarded by higher education institutions in the United Kingdom.

JURN is a multidisciplinary search engine, that provides links to various scholarly websites, articles, and journals that are OA.

Paperity has a focus on helping users avoid paywalls while connecting them to authoritative research.

ScienceOpen is a USA based research and publishing network that offers OA to more than 74 million articles in all areas of science. You do need to register to view the full text of articles but registration is free.

Semantic Scholar defines itself as a "search and discovery tool" and uses artificial intelligence to efficiently sort through millions of science-related papers based on your search terms.

Social Science Research Network is an interdisciplinary platform where users can search for scholarly articles related to 67 social science topics.

Zenodo is a tool "built and developed by researchers, to ensure that everyone can join in open science." Zenodo accepts all research from every discipline in any file format.

Other international sources

Doug McKenzie-Mohr's Community Based Social Marketing (CBSM) has a **searchable database** of articles on a variety of topics, including waste, that use a CBSM approach.

The Recycling Partnership, a private-public partnership organisation, has a **Centre for Sustainable Behaviour & Impact** with reports on a variety of subject to do with recycling and resource recovery.

