

---

## Metro Group

### CPIT, MIT, Otago Polytechnic, Unitec, WelTec, Wintec

---

#### The distinctive contribution of Metro research

Research undertaken within the tertiary education environment – including that undertaken by the metropolitan Institutes of Technology and Polytechnics (Metros) and universities – represents a continuum that covers:

- developmental, problem-based or applied research – activities aimed at answering questions or problems where the fundamentals are understood, and an application is developed because of its foreseen utility;
- creative work and design – undertaken on a systematic basis to enhance knowledge, culture and society and to use this knowledge to devise new applications;
- evidence-based professional practice – addressing knowledge and practice issues within a profession that lead to innovations in practice; and.
- discovery (blue sky) research – novel and ground-breaking inquiry designed to explore subjects which have not previously been identified or addressed and where the potential outcomes, implications and impact are not yet identified.

Metro research is high quality research that has a bias towards solving problems that are relevant and applicable to the industries, enterprises and professions we work with. Our problem-based approach is unique in that we engage directly with the enterprises, industries and professions by:

- responding directly to industry needs (as voiced by enterprises large and small) rather than being driven by an internal programme of research, and supporting seamless approaches that transfer knowledge and integrate the workplace with the expertise of staff and students of an institution
- building critical mass and depth of expertise nationally, regionally and internationally.
- Working in a cost effective manner by building community-enterprise culture, productivity and sustainability.

The transfer of new knowledge and technology to our communities of interest is a hallmark of Metro research and measures of impact can be readily used to determine quality.

#### **Potential Impact Measures**

One significant measure of the quality of research is the usefulness of that research in terms of its impact/ability to make a difference and how far it is disseminated. Impact measures will

vary for different forms of research activity. The following table attempts to provide some measures of impact for the different forms of research activity recognised.

<b>Research Type</b>	<b>Possible Measures of impact</b>
Basic Fundamental Research Strategic research	<ul style="list-style-type: none"> <li>• Number of programmes theories are taught in/number of students enrolled in those programmes</li> <li>• Number of citations by other researchers of original work</li> <li>• Number of follow on research projects spinning out of the initial research</li> <li>• Number of books/articles published/sold</li> </ul>
Applied Research	<ul style="list-style-type: none"> <li>• Number of businesses spun out of an incubator</li> <li>• Number of patents awarded</li> <li>• Number of projects picked up by industry and put into practice</li> <li>• Number of units manufactured/sold</li> <li>• Royalties paid on intellectual property</li> <li>• Number of times research has resulted in changes to professional practice and/or policy</li> <li>• Number of books/articles published/sold</li> </ul>
Scholarship	<ul style="list-style-type: none"> <li>• Number of programmes theories are taught in/number of students enrolled in those programmes</li> <li>• Number of citations by other researchers of original work</li> <li>• Number of books/articles published/sold</li> <li>• Number of times research has resulted in changes to professional practice and/or policy</li> <li>• Renewal of cultural practices measured through increased activity in relation to scholarship endeavour</li> </ul>
Creative work	<ul style="list-style-type: none"> <li>• Number of performances of a play/dance/performance</li> <li>• Number of people visiting an art exhibition and/or number of times exhibition picked up/toured</li> <li>• Number of books/performances/publications sold</li> <li>• Renewal of cultural practices measured through increased activity in relation to creative work</li> <li>• Changes to policy and/or community practices</li> <li>• Royalties paid on intellectual property</li> <li>• Number of citations by other researchers of original work</li> </ul>
Consultancy Professional practice	<ul style="list-style-type: none"> <li>• Hits on peer reviewed website</li> <li>• Number of times research has resulted in changes to professional practice and/or policy</li> <li>• Number of other professions/organisations adopting practices</li> <li>• Endorsement as best practice through benchmarking or similar activities</li> </ul>