CREATING AND EVALUATING IMPACT:

A RESOURCE FOR CREATIVE ARTS RESEARCHERS

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Published in New Zealand by:

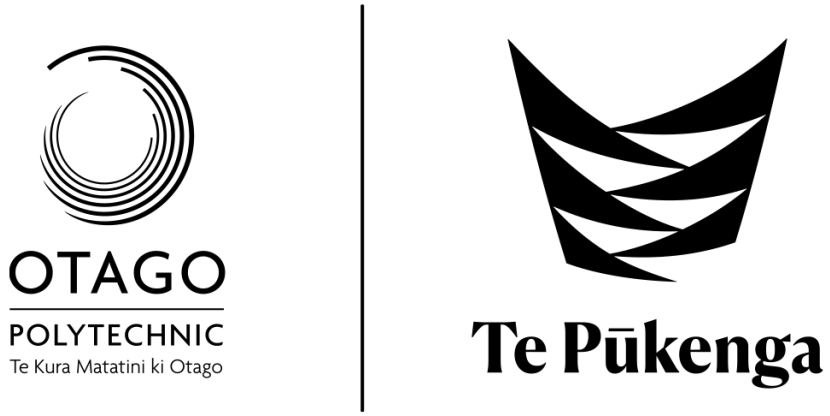
Otago Polytechnic Press
Te Pūkenga Publishing Group
Te Pūkenga - New Zealand Institute of Skills and Technology
Forth Street
Dunedin 9016
www.op.ac.nz

ISBN 978-0-908846-96-2

DOI https://doi.org/10.34074/book.312

Copyediting: Rosemary McBryde
Design and typesetting: Te Ikahoungata Robertson

First published 2024



CONTENTS

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

The concept of "impact" has grown in currency and prevalence in New Zealand research environments over recent decades. In 2015, the Ministry of Business, Innovation and Employment (MBIE) established the "joint pillars of excellence and impact for the research system." In a 2019 position paper, MBIE updated this vision, calling for publicly-funded research to maintain "line-of-sight to impact" whereby "each researcher and institution understands their part in the bigger picture – how their activities have or could contribute, directly or indirectly, to the shared endeavour of impact for New Zealand."

Concurrently, The Report of the PBRF Review Panel in 2018 had research impact as a recurring theme, with the authors noting "[the] persistent concerns about the ability of peer review panels to assess the quality of research engagement and impact [...] and the contributions that many researchers make to a vibrant research environment" (p. 62). They suggested that their recommended changes would "place more value on the impact of research" and "provide a more obvious pathway for staff to have the impact of their research recognised" (p. 65). Since then, the Sector Reference Group – responsible for making recommendations to the Tertiary Education Commission (TEC) about the design of PBRF – has established a working definition for research impact: "a positive effect on, change, or benefit to society, culture, the environment, or the economy at any level, outside the research environment" (p. 11). This definition is close to that used by MBIE: "a change to the economy, society or environment, beyond contribution to knowledge and skills in research organisations."

The aim of this publication is to explore how notions of "impact" operate and can be translated into a creative arts research environment. This aim is informed by three related observations:

1. Researchers in the many fields of creative arts practice believe their work matters.
To be fair, most researchers in most fields probably believe that their work matters, but for creatives, there often seems to be more at stake. Perhaps it is because of longstanding Western ideologies that have promulgated a notion that "great art can change world" – and certainly, we can always think of examples of art that have indeed reshaped our sense of possibility and knowing. Perhaps it is because of an equally pervasive belief that art can represent a higher (if not *the* highest) mode of intellectual accomplishment. Or perhaps it is because of the significant overlap between their professional lives – as researchers, as creative arts lecturers and tutors – and their personal identities as practising artists. There is much to unpack from these sentences – and we will wilfully avoid doing so – but it speaks to the keen sense of importance felt by those actively working in the creative arts research fields.

2. Creative arts researchers struggle to articulate *why* their work matters and what difference it makes.
Again, we can cite a handful of possible causes: the perceived challenge of knowing, let alone conveying, deeply personal and subjective responses to artistic practices; the difficulty of using language to describe other media forms; and a potential misalignment between different perspectives on what artistic validity and success looks like in any given social and cultural context.

3. It is of increasing importance for creative arts researchers to explain why their work matters.
The status of "impact" is growing not only within current research discourse and frameworks, such as PBRF[1], but also in contemporary culture more generally. In 2022 Creative NZ published "Changing the story on arts, culture, and creativity in Aotearoa," which serves as a practical guide for strengthening the collective voice of the sector, particularly in the face of economic ideologies that overlook the benefits of a thriving creative nation. This can be read alongside Creative Waikato's large-scale project "Wellbeing and Arts, Culture, Creativity" (2022). Informed by extensive quantitative and qualitative research by Huber Social, the report documented a number of social impacts of the arts sector, such as: "Engagement with arts, culture and creativity positively impacts wellbeing" and "access to arts is important to everyone." The research was informed by several purposes including: "support[ing] ongoing advocacy around the value of arts, culture and creativity in our communities" and "help[ing] arts organisations better understand their impact and to support future activity" (Huber Social, 2022). We share with these publications several fundamental similarities in aim: to improve communicative abilities amongst practitioners around the value of their work; to grow common and shared terminology that articulates this value (note, for example, the consistencies in titles between the Creative NZ and Creative Waikato reports); to locate evidence-based methods that support claims of value; and to recognise the multifaceted forms of value and impact that arts practices can take.

Using This Resource
This publication is written primarily for creative arts researchers – those who are operating within the tertiary sector research ecosystem. That is, we are principally focused on conceptions of impact that would be relevant to those preparing for a PBRF portfolio submission, academic funding opportunities, or academic promotion. That said, there is no inherent reason why the key ideas cannot be applied in wider research contexts, both public and commercial. And it is also not to discourage tertiary sector researchers bringing wider notions of impact (for example from the Creative Waikato report on arts and wellbeing) into their own research frameworks. Indeed, as we will explore in the following chapter, an important step – for researchers and non-researchers alike – is understanding what "impact" might look like according to the context in which their work is developed and disseminated. The resource is also written for people in the broader ecosystem, such as research managers and funders, who are interested in the impact of research. These people may be helping researchers identify and gather evidence of impact, or they might be evaluating the evidence of impact provided to them by other stakeholders.

The following chapters do not provide a "step-by-step" or "one-size-fits-all" guide to impact. Rather, we present a series of topics and perspectives on the subject, each one of which prompts questions and suggestions for further consideration. These open-ended prompts are complemented by short case studies from a variety of disciplines. Our commentary alongside each case study frames them in terms of different types of impact; many can be read as impactful in multiple strands. There are two ways in which readers might make use of this material:

1 The text of this book was completed prior to the cancellation of the 2026 PBRF Quality Evaluation. We believe impact and measurement thereof are likely to remain of high importance for tertiary researchers in any future evaluation frameworks.

- As a starting point for designing their research and planning for the impact they wish it to have, and to increase the impact they are already having; and
- Retrospectively understanding how their research may be considered impactful.

Alongside these case studies are recommendations for further reading, including some impact case studies from the United Kingdom's Research Excellence Framework (the British equivalent of PBRF).

Underpinning this approach is the assumption that impact is pluralistic and idiosyncratic: researchers may find something below that is directly relevant to their own work. More likely, however, we envisage researchers taking away principles and strategies that can be creatively applied and aligned to their own disciplines and individual projects. Consider, then, the material that follows to be a multifaceted toolkit, with the individual pieces of vocabulary and ideas ready for deployment as needed.

In the next chapter we explore what kinds of impact creative arts researchers might have and for whom and how creative arts impact might occur. The steps along this pathway are opportunities both to increase impact and to gather evidence of impact. Chapter 3 looks at different kinds of evidence that can help to build a story of creative arts impact and where that evidence might be found. We explore different kinds of impact in more detail: economic and policy impacts in Chapter 4 and social and practice impacts in Chapter 5. Finally, in Chapter 6 we take a step back to look at what to do with evidence of creative arts impact and to consider some bigger questions.

A final assumption concerns the extent of impact measurement. Some of the case studies presented are fulsome in their development of impact strategies; others are in preliminary phases and/or may have lesser potential for quantifying forms of impact. We subscribe to the core tenets of the Creative NZ and Creative Waikato reports, which is that impact can be as much about telling a strong(er) story as it is about gathering data. As we will see, *any* evidence of impact is better than no evidence of impact. We therefore encourage creative arts researchers to approach the material below openly: simply locating one way of documenting impact will help strengthen the narrative around why the work is significant, why it matters.

Figure 1. Children at Tate Britain. Image © Lesley Brook.

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CHAPTER 2: UNDERSTANDING AND CONCEPTUALISING YOUR IMPACT

In academia, "impact" has often been treated as synonymous with "journal impact factors." "Impact factor" is a tool developed by academic publishers to quantify and document the supposed importance of a journal within its field: the impact factor of a journal relates to the frequency with which an "average" article from that journal is cited. The basic rationale here is that a citation speaks to the influence (that is, the impact) of scholarly work on other academic research. While this mode of thinking can be critiqued, it speaks to two important themes that will recur through this resource: a desire to "measure" impact using objective evidence; and the benefit of having an objective underpinning and informing the research impact (in this case, aiming to influence an academic community).

It can be easy to focus on a research output and passively treat impact as anything that happens after dissemination. Indeed, for many artist-researchers, they may be less interested in evaluating the "impact" of their work/research – it is the act of putting a work into the world or field that constitutes the primary contribution, as opposed to consideration of measurable outcomes or findings, social benefits, and so forth. Yet there is much to be gained from exploring how and why and for whom your work might be impactful. Understanding your own objectives is crucial because it will shape not only the types of impact you will seek to evaluate, but also how you will evaluate them, and potentially also the very nature of the research project. Impact is not just something that happens after the fact; it is something that we can plan for. The following section provides a series of initial questions that will lead to better *strategies* for creating impactful work and analysing this quality. These prompts should not be approached as linear steps, so much as interrelated ideas that collectively contribute to a fuller understanding of impact.

What kind of impact do you want to have?
We suggest you begin with some big-picture questions, such as:

- What impact do you as an arts researcher want to have?
- What are your objectives?
- Why do you do what you do?
- Beyond any personal motivations, such as curiosity and creative stimulation, what would you like your work to accomplish or achieve?
- What contribution would you like to make to our society – locally, nationally, even globally?
- What is the change you would like to make?

Once these questions have been answered, you might identify a host of ways of conceiving impact:

- Influencing other artists, such as extending the boundaries of artistic practice in your discipline;
- Evoking emotions such as joy and fun and pride in your audience;
- Shaping how people in your audience think, such as changing how people see themselves or others;
- Encouraging people to participate in arts initiatives;

- Prompting a change in people's behaviour;
- Helping make a case for policy or law change within an organisation, a region or our country;
- Contributing to the arts economy.

Who would you like your research to benefit?

We can already see that impact can take many forms depending on the research and researcher context. Related to this is the question of whom the research is going to benefit. Once you have identified a target audience, it is about fostering *their* ability to engage with the work – remember that you cannot have impact without reaching other people. In many artistic contexts, your audience will comprise those who visit your exhibition or attend a show. It is important, however, to be discerning and critically-minded when thinking about how to engage with these people. This may prompt the following questions:

- Who would you most like to reach and influence, to be amongst your audience? It might be your hapū, youth, farmers, women, people at risk of sea level rise, and so forth.
- Who would benefit most by being in that audience relative to the project's aims?
- How will they know about it? Which promotion channels will reach them (social media, community newspaper, radio)?
- Do you need them to come to a venue? Can you choose a venue that is accessible and welcoming to them, physically and/or culturally?
- Do you want your work to be freely available, or can your target audience afford to pay for it?
- When will your target audience be available to engage with the work? How much time commitment will it require? Will this likely align with their broader schedules (e.g. work, school, family commitments)?

These questions may appear mundane, but the answers have important ramifications: if your audience *needs* to get to a venue that has no carparking available, are there other options for people to travel? If you think the demographic with the most to benefit from your work are youth, then you may need to engage with them through social media rather than community newspapers.

Thinking through these questions will help maximise the reach of your disseminated research, thereby increasing the potential for impact. Depending on the context and discipline of your work, there may be opportunities to make research freely available to grow your audience. Examples of this could include:

- A mural on a bus shelter – seen by many members of the public on a frequent basis and over a long period of time;
- A public exhibition of art or a free performance;
- Open access publication of books, journals and catalogues, for example Scope: Contemporary Research Topics (Art & Design);
- Public research talks and/or re-presenting work as part of an educational resource;
- Photographs on Flickr or Instagram, for example Dunedin School of Art Flickr albums of exhibitions;

- Video or sound recordings that people can watch and listen to for free, on your personal website or Vimeo or YouTube; and
- Books held by New Zealand and international libraries.

We encourage researchers to consider the most efficient and effective pathways for reaching audiences, rather than undertaking many activities that take a lot of time. Pursuit of these pathways may also need to be balanced against other factors, particularly the notion of "quality assurance" if you are operating in a PBRF framework. Research disseminated only through social media, for example, may reach a wide audience (and thus have the potential for impact), but may struggle to be recognised for its quality given the lack of editorial checks in this forum. An alternative strategy can be seen in the work of visual digital artist David Green who creates free public installations which may be quality assured, for example by Dunedin Dream Brokerage, and *then* provides access to the video documentation of those installations on his Vimeo account. The social media, therefore, is an extra element that extends the reach of his work and facilitates engagement by a wider audience.

Figure 2.Time and Tide, by David Green. Image © Justin Spiers.

It is also important to consider impact for Māori from your work, to ensure that your research does not have negative impacts for Māori, and to achieve positive impacts for Māori if appropriate. For Māori creative arts researchers, benefiting Māori from your work may be a high priority and your impact pathway, plan and evaluation will reflect this[2]. For non-Māori researchers we recommend that you give consideration to the following:

- How does your research sit in relation to the principles of Te Tiriti o Waitangi? How are you demonstrating Te Tiriti principles? Are you being a good Tiriti partner?
- How might your research potentially benefit Māori? How can you increase the likelihood of benefit for Māori from your research?
- Is your research of relevance or interest to Māori? How does Māori representation benefit your research?
- Are there implications around collecting data? How will you honour Māori data sovereignty?

Who are your stakeholders?

The stakeholders for your research are not just the beneficiaries (for example, audiences) discussed above. For instance, if your research is seeking to be impactful via changing local government policy, then the beneficiaries are those who would be positively affected by that policy change, but the stakeholders will include people in influential decision-making roles at the council. Stakeholders also include those who can help you to understand and/or connect with your audience, or provide a venue or other valuable in-kind support. Relationships with these stakeholders are critical as they become partners in achieving impact. Your stakeholders also encompass those who are the audience for your impact evaluation. Note the slight variation in focus: here, we are concerned with the people to whom you wish to demonstrate that your research has been impactful.

Understanding your stakeholders is informed by why you are wanting your work to be impactful in the first place. You may simply wish to reassure yourself that your work is making a difference in the world, but there will likely be other reasons for evaluating your research impact, such as:

- To include in an application for promotion or for an award;
- Demonstrating your artistic significance in your discipline;
- As part of your evidence portfolio in the Quality Evaluation of research for the Performance Based Research Fund (PBRF);
- To demonstrate the effectiveness of a funding grant and/or to highlight a track record when applying for new funding;
- Collating the evidence and findings of impact evaluation and publishing these as a standalone research output or as a counterpart to a research output (see Chapter 3 on Ethics).

In each of these cases, the stakeholders are different – a promotion committee/line manager vs. other academics vs. the PBRF assessment panel vs. a funding organisation vs. an academic community. While there may be overlap – most of the stakeholders would likely value research that has impact on

2 The authors are not Māori and cannot speak to Kaupapa Māori research.

a local community group – each type of stakeholder will prioritise different forms of impact for different beneficiaries. It is, accordingly, important to understand whether your form of impact is going to be recognised as you want.

Luke McConnell and Jordan Foster's work on student involvement in research projects demonstrates how impactful work would be valued in contrasting ways by different stakeholders. In a PBRF framework, benefits for students and teaching practices do not count as evidence of research impact, even if this has been meticulously planned and documented. On the other hand, this kind of work could be very useful in an institutional context as strong evidence of the integration of research and teaching – which then may be looked upon favourably for promotions or awards. One strategy for McConnell and Foster could be to develop their findings and impact evaluation and publish this as a case study relating to Design pedagogy. Measurement and significance of impact would thus become the research focus, with any resulting output likely being suitable for a PBRF portfolio of evidence.

LUKE MCCONNELL AND JORDAN FOSTER

Luke McConnell and Jordan Foster presented *Taking the Leap: Exploring the Transformative Impact of Student Participation in Creative Research Projects* at the Creative Research Symposium held at Wintec | Te Pūkenga, April 2023. Their paper discussed approaches for student involvement in research practice with a focus on authentic collaboration through project-based learning. They considered the impact and risks of this model, sharing key learnings along with feedback from their students.

Much of the paper focused on Te Ruru Light Festival, the first opportunity for involving students in a large research project. As one of the lead researchers on the project, Luke acted as the client for the second-year students, while two colleagues supervised design and communication students. The communication students were tasked with developing a digital marketing plan which included promoting the festival and building audience engagement through social media. The design students were tasked with developing a visual identity system for the festival. The students pitched their logo ideas and once Luke and Jordan had selected one, they worked collaboratively in small teams to design and implement a series of deliverables. The students worked closely in teams for the implementation phase of the project.

Student feedback highlighted the merits of this approach, with one reflecting, "in that phase [second year] of study you get stuck in fantasy land. Having a real-life project pulls you in to respond in a practical way." It was clear that by participating in a larger research project with funding to implement the work, students learned about themselves, just as much as they learned about working as a team, setting up files correctly, and meeting print deadlines.

Through this project, Luke and Jordan discovered the impact and benefits for all involved. Learners became more deeply engaged, fostering a more immersive learning experience. They had the opportunity to test their skills and authentically collaborate in real-world scenarios with lower pressure, aligning with industry practices. They could also witness the tangible impact of their efforts, providing valuable opportunities for self-reflection and growth.

From a researcher's standpoint, the project yielded significant advantages. Their research outputs were more widely disseminated, amplifying their reach and relevance. Researchers involved in Te Ruru Light Festival could also dedicate more time to refining and enhancing these

outputs, ultimately resulting in more robust research and therefore stronger submissions for the Performance-Based Research Fund (PBRF).

For teaching staff, the benefits were broad. Opting for a research project over a client-based one can significantly reduce anxiety among teaching staff by alleviating the pressure to consistently deliver professional-standard work. The real-world constraints and challenges encountered foster authentic reflective discussions among students, enhancing the learning experience. Teaching staff reflected that this approach keeps teaching fresh with a diversity of content, eliminating the monotony of repeating projects annually.

The design industry also reaped notable benefits from this approach. Graduates engaged in the project displayed a heightened awareness of industry practices, enabling them to seamlessly integrate into the workforce. Additionally, involving students in an internal research project did not detract from paid opportunities within the design industry, thus preserving job prospects for our graduates. Despite the wide range of benefits, the pair also identified some risks as relating to timeframe, workload and delivery, and have since developed mitigation strategies.

In conclusion, integrating research and teaching practices can have numerous benefits for both students and staff. Collaborating on projects with wider dissemination and industry relevance allows students to contribute to real-world initiatives and gain valuable experience. The low-stakes umbrella of research provides a safe way to implement a constructivist project–based learning approach where collaboration is authentically modelled.

Having considered some of the broader conceptual issues, we can turn towards the crux of the issue – how you are able to progress from simply stating that your work is "significant" or "important" to having verifiable evidence that supports such statements. We now look at the potential pathway through this process.

What is the pathway from research to impact?

A logic model is a useful starting tool. It typically has five stages[3]:

Inputs – Activities – Outputs – Outcomes – Impacts

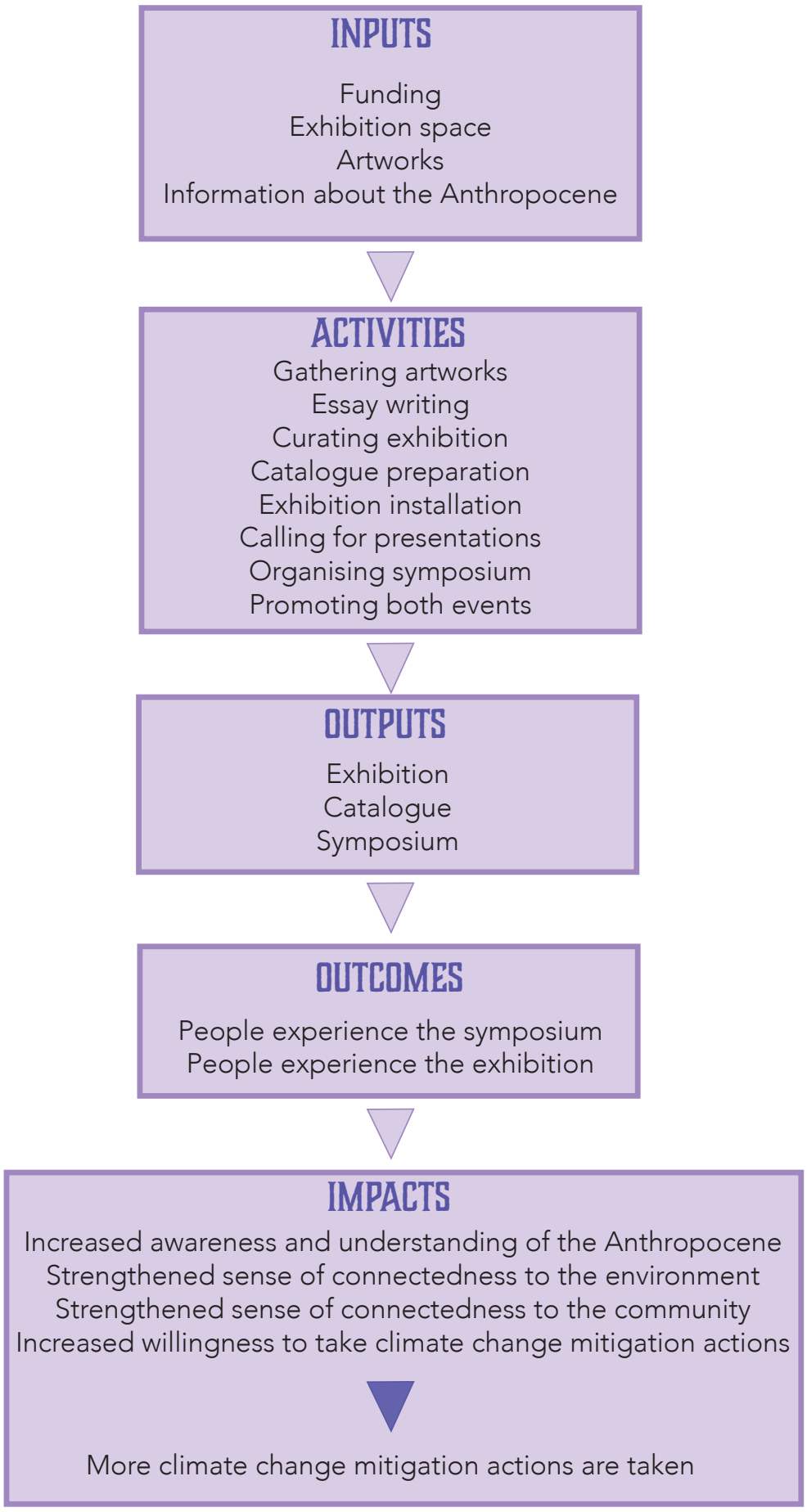
- Inputs include factors such as your time, funding, or use of facilities and equipment.
- Activities comprise the reading, thinking, planning, creating, installing, performing that go into a research project.
- Outputs are the research outputs, such as a score, a recording, a painting, a script, a show, a design.
- Outcomes often involve people engaging with your work – whether listening, watching, thinking – and may include *using* your work.
- Impacts are the changes that result from those outcomes; they may be immediate or longer-term. There may also be intermediate as well as larger-scale impacts with a given project.

3 The logic model is called a results-chain framework in MBIE's 2019 Impact of Research position paper (see Chapter 1).

The first three stages are probably familiar, so where the logic model is useful is in prompting further consideration of the Outcomes and Impacts phases, as this distinguishes between things that *happen* (for example, attendance at an exhibition) and the *consequences* of such happenings (for example, changes in attitudes).

The following example frames a project in terms of a logic model. The exhibition *The Complete Entanglement of Everything*, held at the Dunedin School of Art in 2020, was conceived by Bridie Lonie and curated with Pam McKinlay and Marion Wassenaar as a multidisciplinary exhibition of artworks responding to the Anthropocene.

Figure 3. Riders, Jenna Packer, acrylic on canvas, 2020, 559x711mm. Exhibited in The Complete Entanglement of Everything, 2020, curated by Bridie Lonie, Pam McKinlay and Marion Wassenaar. Image credit: Jodie Gibson. Image © Dunedin School of Art, Otago Polytechnic | Te Pūkenga.


INPUTS
Funding
Exhibition space
Artworks
Information about the Anthropocene
ACTIVITIES
Gathering artworks
Essay writing
Curating exhibition
Catalogue preparation
Exhibition installation
Calling for presentations
Organising symposium
Promoting both events
OUTPUTS
Exhibition
Catalogue
Symposium
OUTCOMES
People experience the symposium
People experience the exhibition
IMPACTS
Increased awareness and understanding of the Anthropocene
Strengthened sense of connectedness to the environment
Strengthened sense of connectedness to the community
Increased willingness to take climate change mitigation actions
More climate change mitigation actions are taken

It is important to note that this process is rarely linear. For example, the activity of calling for presentations results in other inputs from presenters. Reviewing the exhibition, both by word of mouth and in print or digital media, are activities that occur after the exhibition has opened and, hopefully, result in more people experiencing the exhibition. An additional output was a Flickr album of photographs of the exhibition which reaches a different audience later. There might also be additional serendipitous impacts – for example a symposium might result in an artist's work heading in a new direction, or two artists becoming collaborators on a different project.

We suggest you add to your logic model as many steps and arrows as you need, so that you unpack sufficiently the pathway between from your inputs through to your impacts – this will connect back to many of the questions we posed earlier. For instance, engagement by audience members with your work is not impact *in and of itself*, but it is probably a necessary step on the pathway between your research output and the impacts you want to see (Brown and Novak-Leonard, 2013) – thus, we return to the question of what strategies are you going to employ in order to facilitate that engagement?

The logic model will also help you decide which impacts you want to *evaluate*, to provide you with evidence that your research has been successful or not in this regard. These questions might be useful to narrow your focus:

- What does success look like for different forms of impact?
- If you are seeking to implement a change of some kind, how much change can you realistically expect?
- What are the underlying assumptions that feed into this evaluation? Is there existing evidence that speaks to these assumptions?
- Which of the possible outcomes are essential to achieve the desired impacts? Which can we ignore for our evaluation?

This process will help you to focus your impact evaluation strategy on the details that matter the most. You can prioritise the impacts you would most like to achieve, and simplify your logic model by removing anything that is not actually necessary to achieve your desired impact. In the case of The *Complete Entanglement of Everything*, the focus was narrowed down:

- to the exhibition, rather than the symposium;
- to emotional impacts for exhibition visitors rather than increased awareness and understanding; and
- to impacts shortly after the exhibition rather than longer term behaviour changes.

The evaluation of the impacts was designed accordingly.

To conclude this chapter, we present the Fitzwilliam Museum case study. It is an excellent example of an arts project that was designed to achieve a particular goal for a specific demographic. The evaluation of the effectiveness of the community interaction was tailored accordingly. Several different ways of gathering data were used at different points in time to build a composite picture of impact for participants. It neatly highlights, therefore, how consideration of the big-picture issues we have presented above can lead to a well-designed, robust and impactful final project.

FITZWILLIAM MUSEUM

The Fitzwilliam Museum in Cambridge, United Kingdom, held an outreach activity for mothers with low levels of educational achievement and their young children. The Museum had a clear impact goal, to overcome social exclusion barriers that prevented this group from visiting an art museum. To achieve this goal, engagement with the group was achieved through a play group at a suburban community centre, so the mothers were invited to participate by someone they knew. Two visits were designed for the mothers, who were aged 17 to 22, and the preschool children. At each they were welcomed, given morning tea, and introduced to one aspect of the museum collection through storytelling. They visited the relevant collection displays, then engaged together in a hands-on workshop activity that related to the story and the display.

The impact of the outreach activity for the group was formally evaluated using mixed methods:

- Short informal interviews during the museum visits, which were recorded and transcribed.
- Ethnographic participant observation during the museum visits, documented by fieldnotes and photographs.
- A questionnaire, during the second museum visit and at the play group before and after the museum visit, which used a Likert scale to explore development of participants' views about visiting the museum.
- An invitation to write or draw a personal meaning map, to gather on a blank page any unstructured thoughts associated with the concept of "Fitzwilliam Museum," before and after the museum visits.

Being able to triangulate data from different sources and over time was a strength of this evaluation. The Fitzwilliam Museum was able to identify the barriers and motivators for visiting the museum. The study identified what helped the mothers to relax and enjoy the visit, for example by giving the mothers toy animals to distribute to their children during one of the storytelling sessions. The mothers' confidence in visiting the Fitzwilliam Museum increased, and they were more interested in doing so again. The outreach activity was effective in overcoming the barriers to inclusion for these young mothers.

The evaluation was not simply an exercise in demonstrating the impact of this particular outreach activity. It shows that suitably designed public engagement activities can be effective at breaking down barriers to include people who might not otherwise engage with an art museum. Reflecting on the results can contribute to design of improved outreach activities in future, at the Fitzwilliam Museum or elsewhere. The study also tested a range of qualitative methods of evaluation research which can inform future evaluation research.

Jensen, E. (2013). Reconsidering the Love of Art: Evaluating the Potential of Art Museum Outreach. *Visitor Studies,* 16(2), 144-159. http://doi.org/10.1080/10645578.2013.827010

Figure 4. Fitzwilliam Museum, Cambridge. Image © Chris Robinson Creative Commons Attribution NonCommercial license 2.0

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CHAPTER 3: GATHERING EVIDENCE OF IMPACT

Once you've identified which impacts you want to achieve and evaluate and how they might occur (Chapter 2), you can start to consider the kinds of evidence that might be helpful and how to gather this evidence. Multiple pieces of evidence together can illuminate different aspects of your impact, and help to support the inferences about how your research has, or is likely to have, contributed to that impact. Consider gathering different types of evidence, collected in different ways or at different times, to strengthen your impact narrative.

What can you measure?

The hypothetical case of an exhibition is useful for illuminating some different types of measurable evidence:

- How many people visited? This might be ticket sales, or bookings for a free event, or an audience count.
- What were the demographics of visitors? This information could be gathered at point of sale or booking.
- Did visitors include particular groups, such as children? Group visits may have been arranged.
- How many books or postcards or similar products related to the exhibition were sold?
- How many copies of a free information sheet or catalogue were taken or downloaded?

It can be helpful to provide contextual information around this data – for instance, audience figures for this year's event compared with last year or with comparable events. Audience size can also be considered relative to the venue capacity or local population – if you are wanting to engage with non-urban communities, then 100 attendees in a small town could be significant, even if this number may appear small. You can also use averages and estimates if necessary. Other contextual information might include the time commitment by your audience when engaging with your work.

What existing sources of evidence can you use?

Measures like those above tell you how many people were reached and who they were. They show the potential for impact amongst this audience, but do not establish that any of those people were actually impacted in some way by their experience. We suggest two ways of addressing this. The first is to find evidence of specific impacts for people, which we cover in the next two chapters. The second is to acknowledge that evidence of impact is interlinked with wider research around the importance of the arts. It is well documented that a variety of publicly available art events and a healthy arts sector enrich public cultural life. One impact of creative research is, therefore, an increase in cultural capital. It offers something new to broaden the range of cultural experiences available to a community – regardless of whether those exposed to the creative research were affected significantly or at all – simply because people had and took the opportunity to attend. Alternatively, you could draw an inference that some of those exposed to the creative research must have been affected by it, that increased awareness, interest, appreciation, engagement or understanding must necessarily have occurred as a result of exposure to the new or rediscovered work or new perspective provided in the creative research.

You might also look to findings from other organisations that speak to the benefits of artistic work. For instance, the research conducted by Creative Waikato and Huber Social, mentioned in Chapter 1, established significant links between engagement and participation in the arts and increased wellbeing for individuals and communities. There may be ways to align your work with such findings – in particular by utilising the terminology and conceptual frameworks of these reports – thereby invoking a wellbeing impact on your audience. You would need to cite the reports and wider research that justify these assumptions. In doing so, this helps shift the narrative from unsubstantiated claims of "art is good, therefore, my work is impactful" to providing tangible evidence of how your work speaks to these conclusions about the arts in society. Similarly, if the composition of your audience is important, explain why the benefits for certain groups can reasonably be assumed to be different or greater than for other audience members.

The previous paragraphs highlight the potential latent in evidence from previously-conducted evaluations and research. You might also be able to utilise data that has already been collected by a gallery, an association of artists, a local authority, or Ministry of Culture and Heritage. Agents, galleries or venue managers might also be able to give you valuable information about who your audience members were. This can help you to plan for future impact; it might give you the opportunity to reach out to past audience members, with ethics approval, to ask about the impact for them. There may even be wider population data available about awareness and understanding of an issue that can serve comparative purposes in your context. As with any analysis of data, you will need to be cognisant of sample size and scope, but these kinds of sources can be useful for providing a baseline for your own evaluation, to demonstrate what change you might have helped achieve.

Jon Wilson's case study is an example of a retrospective evaluation of impact using data sources that were already available. Online sources of evidence were supplemented by requests for additional information from collaborator Matt Galloway. Of particular interest is the publicly available video of feedback compiled by Wildsound Festival.

JON WILSON: SHINE ON FILMS

Jon Wilson is a cinematographer and film-maker who lectures in Communication Design at Otago Polytechnic. As Shine On Films, Jon has been involved in a wide variety of film projects.

Jon was the Director of Photography for the feature film *I Survived a Zombie Holocaust*. Funded by the NZ Film Commission, the film's scriptwriter and director was Guy Pigden and producer Zoe Hobson. Jon worked with the director to create the visual language and style for the film. Throughout the shoot, Jon supervised the camera and lighting department to implement the director's vision. He also worked on the final outputs with the picture grader. The film was screened at prestigious festivals including the 2014 A Night of Horror International Film Festival (Australia), the 2014 Sitges - International Festival of Fantastic Cinema (Spain), Frightfest London and the Screamfest LA Horror Film Festival. The film was screened on TV in Germany, and the DVD has been distributed through Vendetta, covering NZ and Australia, the US, UK and Germany. The R16 rated film is still available on DVD and on video on-demand distribution through iTunes and Amazon. Audience reception has been positive with 52% of Amazon reviews giving the film five stars.

Jon Wilson was the Producer and Director of Photography on the film *Winter's Blight*, working with writer and director Claire Campbell. This 14 minute stop-motion film was shown in over 25 international film festivals over a two year period, contributing to audience experiences worldwide. Locally, it was shown in the Ka Mua, Ka Muri exhibition at Otago Museum from 9 December 2022 to 14 May 2023 which had 32,000 visitors. The film is now available free to view online where it has received over 30,000 views.

One of the many positive comments left on Vimeo is "Made me shed tears, thank you." An IMDB reviewer says: "Absolutely breathtaking! Just stumbled across this claymation short on YouTube. Not only is the animation and music absolutely beautiful, the story is full of heart and love. So happy I stumbled across it." Another review describes it as a "Wonderfully simple, extremely touching and beautifully animated stop motion short." Wildsound Festival has compiled video of audience feedback to *Winter's Blight* from the April 2020 ANIMATION Festival. At 57 seconds into the compilation of feedback, a reviewer says "Absolutely blown away by the camera movement, transitions, editing, sound design … 10/10 on all technical aspects." Then at 2.34, another reviewer says "to the direction of the animation and the shots – gorgeous, very engaging, beautiful, yep, wonderfully done."

More recently Jon Wilson worked with designer Matt Galloway in a project funded by the Ministry of Culture and Heritage, to creatively explore how the Clyde dam has affected the area and its people. With permission from dam owner and operator Contact Energy, Jon filmed the dam inside and out. Drones operate using GPS, so it was challenging to fly inside the turbine hall because of the magnetic field which generates electricity from the rotating turbines. Jon also made sound-recordings of the turbines and the water, and of Brian Turner reading some of his poems, reflecting on the relationships between the people and the water and the dam.

The final result was four short films forming an audiovisual exhibition, *The Power that Flows Through Us*; a trailer is available on Vimeo. The exhibition was installed in Cromwell's Historic Precinct for public viewing from 25 November 2022 to 6 January 2023. A free newspaper combined Matt's writing and Jon's photographs with contributions from many others reflecting on aspects of the dam's construction and operation. It is estimated that about 80% of the 5,000 copies were taken by exhibition visitors.

Figure 5. Clyde dam. Image © Jon Wilson.

How do you gather evaluation evidence?

To gather your own evaluative data, you will need to think about whether, when and how you are going to engage with your audience. Are you trying to evaluate impacts that your audience members are aware of or impacts that they might not be aware of? If the former, then you can ask audience members to tell or show you the impacts for them. For example, direct evidence of people's thoughts and feelings might be obtained by asking members of your audience. Alternatively, you might consider ways of discovering impact other than asking directly. Audience responses might provide indirect evidence of impacts for them, or you might be able to use proxies or indicators that indirectly show that these impacts have been achieved. Alternatively, again, you could blend approaches and utilise other ways of finding out about impact to validate or verify what audience members tell you directly. We will give examples of types of evidence in later chapters for different kinds of impact.

You will also need to consider the timeframe of your evaluation – instantaneous or over a period of time? If it is the latter, it increases the likelihood that your research is only one contributing factor to the impacts which you identify. It might be helpful to ask participants to select from a list of multiple potential influences of their awareness and understanding, or even to rank the relative importance of those multiple influences.

Formal methods of evaluation research include questionnaires, focus groups, interviews and Q methodology. Action research, narrative enquiry or ethnography might be appropriate. Other options are participant observations, PhotoVoice, and textual analysis of audience responses to your work.

These kinds of methods will require ethics approval. This ensures that you and your research participants are protected and your findings are publishable. You will need to consider, for example, how to recruit people to participate in a focus group or interview. You could approach audience members directly at or after an art event, or you could invite people interested in participating to contact you, distributing your invitation through social media, or using a QR code on a programme. A narrative inquiry investigation into arts impact might use interviews in addition to other sources of data such as participant journals (White and Hede 2008). Having reference materials such as an exhibition map, catalogue and set of photos proved useful for interviews when evaluating *The Complete Entanglement of Everything*, as it helped people identify features they wanted to talk about.

If you are surveying visitors, there are a variety of strategies available:

- Provide visitors with a paper questionnaire to fill in before they leave;
- Offer visitors a downloadable app that not only provides information but also invites them to answer some questions;
- Have someone conduct an exit survey;
- Provide visitors with a card with a QR code linking to an online survey link they can fill in later.

Sometimes an exhibition is in a venue that attracts a specific audience so you know who many of the visitors are. For example, the Dunedin School of Art has exhibitions periodically in a local law firm, for their staff and clients. Other groups might include members of a theatre association, followers on a social media page, or people subscribed to a gallery mailing list. With permission, you could distribute your survey to such groups.

The kinds of impact you are seeking to evidence will influence your survey design, with options including:

- Questions where respondents choose one answer out of many, for example on a 5 point Likert scale from "Not at all" to "Very much so";
- Questions where respondents select all statements that describe their response, for example "I learned something about climate change," "I feel encouraged to care for the environment," "I feel more hopeful about the future," "I don't feel anything changed for me";
- Open questions where respondents can make their own comments.

To gather evidence of a change in audience members' attitudes or intentions, it is possible to survey people on the way in and then again on the way out. This was done for the environmental art installation *Pollution Pods* (Sommer, Swim, Keller & Klőckner, 2019).

We have talked in this and the previous chapter about planning for impact from the outset. Ideally you will be thinking about your impact in advance, so that you can set up opportunities to gather evidence as you go, as in the Fitzwilliam Museum case study. It is also valuable to keep watch for impact evidence that you might notice incidentally rather than actively seeking out, such as verbal feedback

from someone after an artist talk or a comment in your social media feed. Collate this evidence as you find it, so that you can review it later and decide what to include in describing your impact. As was seen in Jon Wilson's case study, impact can be assessed retrospectively.

How do you decide which method/s to use to gather evidence?
The selection of method to gather evidence will depend in part on the researcher's impact objectives and decisions about what kinds of evidence are sought for which desired impacts. But the method also depends upon practical considerations that influence the evaluation.

1. Time
When deciding how to collect evidence of impact, you will need to consider the time required. Some ways of gathering impact evidence take more time than others: interviews and/or focus groups, for example, require more coordination of people than sending an online survey. You may be able to minimise the time involved by building evidence-gathering into your performance or exhibition event and by using pre-existing sources of information where possible.

You will also need to think about whose time is involved: Yours? A third party, such as gallery or theatre staff or volunteers? A colleague you can collaborate with? A research assistant? If you have limited time, or limited money to pay someone else, that might influence which types of evidence you can gather and which methods you can realistically use to gather evidence of impact.

Another time-based aspect to consider is when your desired impact is likely to occur, and hence when to evaluate the impact. The moment when someone encounters your creative work is the earliest that impact can occur. Impact might also occur as your audience members process what they have experienced, making meaning from it, consciously or unconsciously, perhaps as they leave the venue or on the way home. During the days that follow, even weeks or years later, impact might be increased as they are reminded of their experience of your work and draw new meaning or associations from it. This process has been described as the arc of engagement (Brown & Ratzkin, 2011). Different kinds of impacts might occur, and potentially be evaluated, at different times.

2. Budget
In addition to time, what other resources might you need to carry out your evaluation? And what does this cost? You might need funds for:

- Printing and postage (for example, sending out surveys);
- A prize draw to incentivise participation;
- Koha to thank participants;
- Others' labour to undertake the evaluation.

What budget do you have? Can you apply for funding, internally or externally, for your impact evaluation? If possible we recommend planning your impact evaluation upfront and building the associated activities and costs into your research funding application. If your evaluation is limited by available funding, that will influence how focussed your evaluation strategy needs to be.

3. Ethics

If you intend to gather information from audience members, you may need approval from your institutional ethics committee. The type of information you are gathering, how and why, will affect whether this is required. Generally speaking, you will not need ethics approval if your information gathering is within scope of the original work and if the information is only for evaluation purposes and not for a further research output. This might include:

- A visitor's book;
- Keeping a record of unsolicited email, social media or verbal feedback;
- Records of audience attendance;
- Gathering anonymous responses or feedback from audience members.

Conversely, ethics approval would be required if you are either gathering personal information from audience members beyond the scope of the original work (a survey or interview or observation), or if you are using personal information (from any source) as research data whether for outputs such as another creative work or a journal article. If in doubt, please check the process and requirements in your institution, and seek guidance from your ethics committee chair or a creative research person on your ethics committee.

In the previous chapter we described the logic model for the impact of the exhibition *The Complete Entanglement of Everything* and how the focus of evaluation was narrowed down to emotional impacts shortly after the exhibition. The type of impacts being evaluated drove the choice of methods, Q methodology and semi-structured interviews. This research project is described in the case study.

Figure 6. Tales of Sorrow and Regret and Wanderer: Dromaius Novaehollandiae and Last Plague, Wool and Mixed Media, Michele Beevors. Exhibited in The Complete Entanglement of Everything, 2020, curated by Bridie Lonie, Pam McKinlay and Marion Wassenaar. Image credit: Jodie Gibson. Image © Dunedin School of Art, Otago Polytechnic | Te Pūkenga.

BRIDIE LONIE: THE COMPLETE ENTANGLEMENT OF EVERYTHING

In 2020 Bridie Lonie, Pam McKinlay and Marion Wassenaar curated an exhibition at the Dunedin School of Art, *The Complete Entanglement of Everything*, featuring artworks in which artists were responding to climate change and other effects of human activity on the environment. Lead curator Bridie Lonie hoped that this exhibition would have emotional impacts which might contribute to increased pro-environmental behaviour amongst visitors.

Lesley Brook undertook an evaluation of the exhibition's emotional impacts for her Master of Professional Practice research with ethics approval. She used Q methodology, asking the 25 research participants to sort 54 photographs of the artworks they had seen in the exhibition, according to the strength of their emotional responses to them. The photographs were sorted into a pyramid shape, with the artworks to which participants had the strongest negative emotional responses on the far left, and the artworks to which they had the strongest positive emotional responses on the far right. Lesley then asked participants to explain their four strongest positive and four strongest negative emotional responses.

Statistical analysis of the Q sorts of photographs revealed five types of responses. The level of participants' prior experience of contemporary art was one factor explaining the differences between the groups. The second factor was the different ways in which participants perceive negative emotions. For some participants, feeling negative emotions is seen as a positive experience because the work successfully moved them. Personal differences between participants, affecting how they responded to the artworks, accounted for the variance within the five groups, although the types of influences of their emotional responses were consistent (Brook, 2022a).

Semi-structured interviews were also carried out with the same participants to explore the particular hopes that the curator had for the impact of the exhibition. The exhibition succeeded in increasing participants' sense of connectedness with other people, their sense of connectedness with the environment, and the connectedness between their thoughts and feelings (Brook, 2021).

Participants were also asked to describe how they feel about the effects of human activity on our world, to identify which artwork or artworks most closely represented how they felt about that, and whether they thought or felt differently about the effects of human activity on our world after experiencing this exhibition. Answers to the last question provided additional evidence of impact of the exhibition, for 71% of participants. For six, this impact was reinforcement or strengthening of what they already thought and felt about the environment. For another six participants, the impact was being encouraged by such a large community of local artists addressing environmental issues. For five more participants, the exhibition changed their perceptions, either of every day and local things, or of how they viewed art or artists (Brook, 2022b).

This evaluation research did not only provide evidence of the impact of this exhibition for visitors. Using Q methodology successfully has provided another tool for researchers and research impact practitioners to use to evaluate research impact. The interview data also provided insights into the various factors that influence the formation of emotional responses to art. These insights are relevant for curators and artists seeking to understand and increase the influence of art in speaking to current social issues.

Putting it all together

While some evidence of impact might be better than none, not all evidence of impact is equally persuasive. We have already discussed the limitations of audience reach evidence, which should be complemented by evidence of actual impact or justification for drawing an inference that impact has occurred for your audience. Even retrospectively, a logic model can help you to understand the pathway beyond your research outputs. Use that to critically analyse possible sources of impact evidence. What does a particular piece of evidence say about the impact you have achieved? How do all the pieces of evidence fit together? Then you will be able to make good choices about the best use of your time and resources – in achieving impact, gathering evidence of impact, and produce a compelling narrative about what you have accomplished and for whom.

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CHAPTER 4: ECONOMIC AND POLICY IMPACTS

Economic and policy impacts may be two areas less familiar to creative researchers working in a tertiary sector context: in part, because institutionally-supported artistic outputs are not always designed for a commercial market; in part, because of prevailing ideologies around the separation of art and commerce; and, in part, because of the tendency to view creative contributions as being in service of wider policy discussions, as opposed to constituting research in and of itself. This being said, there are a number of ways in which creative research might lead to economic and policy impacts.

Economic impacts

From an economic standpoint, generating revenue is perhaps the most straightforward impact that creative work can have. This point needs, however, to be treated cautiously. Per the definitions of impact discussed in Chapter 1, the income generated for the researchers (e.g. from commissioned work) is unlikely to register as impact; but you could use the sales as evidence of impact for others benefitting from this economic activity. This could include:

- Agents/galleries through sale of artworks;
- Venues from ticket sales for events;
- Retail outlets from the sale of books and catalogues and any associated merchandise.

Profit is often commercially sensitive, but revenue can be a suitable proxy measure of economic activity. Depending on the purpose for which you are gathering evidence of impact, you may be able to provide commercially sensitive information on a confidential basis, or otherwise speak about your impact in more general terms. You can also cite evidence of how well your work has sold relative to other similar work, such as booksellers' lists. In some instances, such as music charts, it would be necessary to have an understanding as to how such metrics are calculated (e.g. streams vs. purchases) so that you can properly contextualise the economic impact.

Economic impact can also be measured through indirect contributions to revenue streams. For instance, if your event is attended by a number of visitors to the region, then they may also be paying for local accommodation and hospitality. Evidence of this kind of economic impact might come from reports prepared for arts agencies and local authorities. Your research might have also been a contributing factor to the economic success of a larger-scale project – such as composing music for a film. While your exact contribution may be difficult to quantify in this respect, you can still cite overall data that enhances the narrative of value around your research. A report for Dunedin City Council has identified that the arts and culture sector, with 2,440 jobs, generated $247 million of GDP for the city in 2022.

On a related point, there may be some instances in which your own research on an artist (whether fine art or another discipline) has led to renewed interest in them, thereby increasing market demand for their works. A case study from the 2014 Research Excellence Framework (REF) in the United Kingdom found that an individual's research into Renaissance painting, curating and attribution led to significant economic benefits for "institutions and individuals involved in the art market, in particular the auction-house sector, galleries, and museums" (University of Leicester, 2014).

Dr Margo Barton's work demonstrates how impact can be viewed in different ways according to how the various data points are collated and presented. In this case study, the collection of audience statistics and broader economic information speak to the impact of a singular output, the 2023 iD Dunedin Fashion event. This may be important in a PBRF context, where an "output" needs to be defined and identified. An alternative approach would be to consider impact longitudinally – what data can be observed over a number of years? – and tell a story about the enduring economic impact of the festival on the city. There are other pieces of impact evidence alluded to in the narrative about her work: these include exploring the educational benefits to emerge from the institutional partnership; practice impacts, which could be quantified in terms of new collaborations to develop out of the festival; or social impacts, around sustainability of materials used and how audiences have responded to this.

MARGO BARTON: THE ID DUNEDIN FASHION WEEK

Professor Margo Barton was formerly a fashion designer and milliner and has been involved in fashion education since 1987. Having attended the Mittelmoda Fashion Designer Awards in Italy in 1999, Margo returned home with the aim of establishing a similar event in Dunedin. Margo worked with Geoff Terpstra and Ryan Craig to develop and establish the iD International Emerging Designer Awards, which have been held since 2005 as part of iD Dunedin Fashion Week. The iD International Emerging Designer Awards attracts high quality entrants from around the world, helping to develop their careers through creating a range of opportunities for emerging designers.

Through Margo, the event developed a strong association with Otago Polytechnic | Te Pūkenga, benefiting students and staff and fostering relationships with international fashion schools. This association helped Otago Polytechnic win the hosting of the 25th Annual International Foundation of Fashion Technology Institutes (IFFTI) Conference in 2023, held immediately following iD Dunedin Fashion Week. This was only the second time this conference has been held in the Southern Hemisphere.

All attendees at the iD International Emerging Designer Awards benefit from the exposure to a diverse range of ideas – whether in the form of becoming a more conscious consumer, a retailer who considers picking up a new designer, a fashion student who considers an alternative material, or an established fashion designer who has their own practices challenged.

According to the iD Dunedin Wrap-Up Report, the 2023 iD International Emerging Designer Awards had 128 entries from 33 schools across 14 countries; 32 finalists were selected in December 2022 with 25 travelling to Dunedin to participate. Fashions from 23 established and emergent New Zealand designers were also shown. The two iD Shows on 31 March and 1 April were attended by 2,200 people, with an estimated 5,000 additional attendees over the full calendar of events. Sixty-five models of diverse ages, ethnicities and sizes took to the catwalk. Including the digital programme, there were over 10,000 visits to the website idfashion.co.nz over the month of the 2023 event and 26,000 page views.

Web viewers were mainly from New Zealand (81%), with 6% from the UK and 4% from Australia. ID has 5,640 followers on Instagram, and during the month of the event had post reach of 21,300 and engagement of 11,700. ID has 9,600 Facebook followers, and achieved reach of 26,000 and 7,500 page visits at the time of the event. Many (42%) ticket purchasers were from out of town, including 4% international and 10% North Island, and they stayed an average of 2.4 bed nights. As well as the iD Shows, there were 31 other events as part of iD Dunedin Fashion 2023.

These included exhibitions, talks, fashion shows, tours, workshops and retail experiences. Over half of these events were free to attend, making iD accessible to everyone. The full iD budget, including contra amounts, was nearly $600,000 from over 40 partners and funders. The event survey has estimated a total economic benefit from iD Fashion 2023 to the city at just over $10 million, a major impact to emerge from this undertaking.

Figure 7. Kahuwai by Amber Bridgman, modelled by Kelli Te Maihāroa, iD Dunedin 2023. Image © Chris Sullivan/Seen in Dunedin.

Policy impacts

Policy impacts may overlap with economic factors insofar as the former will often be shaped by the latter (for better or worse). Policy impact encompasses not only government or council legislative changes, but also contributions to these debates, if your work is being cited as evidence for changes or amendments. Policy change might be achieved through direct influence on decision-makers and their advisors, or indirectly through facilitating popular support for change amongst relevant communities of practice. These different but complementary approaches will require different strategies for disseminating research to the target audiences and stakeholders.

For creative arts researchers, they may not be explicitly involved in the mechanics of the policy change, so much as helping others communicate the need for change and/or strategies by which this could happen. Design projects, for instance, could be critical in summarising and conveying complex information in a manner that the public can grasp easily, which, in turn, facilitates advocacy at a policy level. Artist researchers may help people process and develop thoughts about a topical issue. In these cases, it is important to be able to articulate a story that illuminates this trajectory – how your research led to engagement which led to action.

Policy impact could also be framed in terms of shift at an organizational or industry level, whereby new approaches or practices are adopted based on recommendations to come through your research. In 2019, Dr Catherine Hoad and Dr Oli Wilson of Massey University produced a report for APRA-AMCOS New Zealand titled *Amplify Aotearoa: NZ Music Community Diversity Survey,* which gathered significant demographic data on music industry practitioners as well as the challenges and barriers they face. A key finding concerned problems of gender discrimination and harassment in the industry, one outcome of which are shifts in the management of music venues to create safe spaces for diverse audiences.

Abby Dalgety's case study reveals a challenge for creative researchers intersecting with policy spaces insofar as the broader contributions to the issue can be difficult to frame in terms of "outputs" (as conceived in a PBRF context). One strategy would be for her to publish some of the initial findings – for instance, as a journal article or a public discussion paper – which could then serve as documented pieces of evidence within policy debates. If the advertising industry engaged with such publications, this would then speak to the impact and quality of the output. A real strength of this research is that the impacts in terms of policy (when they occur) are very easily defined and recognised as significant. Similarly, with this creative work engaging with a much broader societal issue, there are likely to be other sources of data and studies that speak to the efficacy of any changes.

Rebekah Harman's case study on sustainable textile practices presents an interconnection between aspects of social impact, discussed in the next chapter, and policy impact. As she notes, the long-term goal is to influence policymakers, utilising verifiable data gathered through her team's extensive scientific testing. Yet there is also a recognition that this potential can be enhanced if the broader public have a better understanding of the issues at play. The case study also offers excellent demonstration of some of the methodological strategies and requirements outlined in the previous chapters around ethics and utilising a broad variety of channels to communicate research findings to diverse audiences.

ABBY DALGETY: YOUTH AND NEW ZEALAND ALCOHOL ADVERTISING ON SOCIAL MEDIA

In New Zealand, a social media feed from a brand or organisation is classified as an advertisement, whether it is a paid advertisement or regular content. This means that everything that is published on digital platforms must adhere to the New Zealand Advertising Standards Authority. However, the digital sphere is vast, and the ASA relies on the general public to file a complaint when they see content that does not adhere to their rules and regulations. The ASA also relies on social media platforms not showing restricted advertising to users under 18. The assumption is made that all users enter their correct age information when signing up for a social media account.

Abby Dalgety, a Communications tutor at Wintec | Te Pūkenga, has conducted research on how young people interact with age-gating restrictions online, with a particular focus on how this subsequently intersects with alcohol branding and advertising. Youth were often unaware they did not have their correct age on their social media profile, with 75% of respondents stating they signed up for a social media account at 11, when all social media platforms available currently require a minimum age of 13. Age-gating systems and controls therefore provide little deterrent to those minors, who then access messages that were designed for an older demographic in New Zealand. Although not necessarily malicious in intent, her research uncovered that minors see alcohol messaging frequently on social media, despite age-gating restrictions.

Recognising this ease of access for underage audiences, instead of fighting for stricter rules and regulations, Abby has turned her research focus on educating alcohol brands on the positive impact of socially responsible advertising on digital platforms. Abby's background within the creative advertising industry has allowed her to approach this research with a better understanding of the role that advertising and marketing plays within our economy – the alcohol industry, for example, spends NZ$80 milllion a year on advertising and sports sponsorship resulted in better industry engagement – as well as an understanding of the factors which would lead to change from an advertising perspective.

Her aim is to form a value proposition as to why alcohol brands should conduct themselves more responsibly online. This value proposition would encourage alcohol brands to embrace social responsibility as a genuine response to their consumers' beliefs, rather than as a marketing gimmick. It is known that the effects of alcohol bear costs on the country's economy (e.g. in the health sector) and, therefore, there is an incentive for alcohol companies to be agents of change, if only for the broader economic reasons.

The important thing about approaching policy-based research from an advertising perspective is that it opens up potential for disseminating findings in a more accessible manner to the public. Abby advised Guyon Espiner for his 2023 book for adults *The Drinking Game*; the sales of this book indicate the potential of moving this policy discussion into the broader public sphere of New Zealand. Abby has also developed a publication for the New Zealand Advertising Agencies and made submissions to the Sale and Supply of Alcohol (Harm Minimisation) Amendment Bill championed by Green Party politician Chlöe Swarbrick in early 2023. While this policy change was unsuccessful, it indicated to New Zealand advertising agencies that change in this area was a matter of "when" not "if."

REBEKAH HARMAN: SUSTAINABLE FASHION

During her Master's degree studies in textile design, Rebekah was drawn to the enormous negative impact that textile production has on the natural world. Key problem areas for textile production are high use of energy, chemicals and water – yet we all wear clothing made from textiles every day, so these consequences appear hard to avoid.

Working with scientists, Rebekah has developed a body of new research motivated by a desire to lower toxic chemical use within textile production. Research shows that the use of Nonylphenol-Ethoxylates (NPEs), an auxiliary chemical used in textile production, causes widespread harm to ecosystems. While some international data has been gathered on this topic, there was no known data collected in Aotearoa New Zealand. In response, Rebekah established and lead a research group to gather this data. Their starting point has been to determine the level of nonylphenols present in wastewater from the first launder of 15 new activewear garments purchased in New Zealand, using close replications of studies conducted in Europe. Their findings show that all garments studied present detectable levels of NPEs, with 13% above the threshold for causing major damage to ecology. This is hugely problematic and toxic to both New Zealand and international ecosystems, with the chemical being able to travel huge distances.

As a researcher, Rebekah is aware that data published in journals often doesn't reach the general public, yet her data is information the general public should know about. For instance, it is generally agreed within textile research that the full production of one cotton t-shirt uses over 2,000 litres of water. This is a startling fact, and when she shared this via social media a few years ago, most people were shocked that this was the case. This has led her to create a social media campaign as part of the international activist movement, Fashion Revolution Week. The campaign drew attention to the garments people most love and care about. Rebekah, with ethics approval, interviewed a small group of people living in the Waikato on the following issue: what makes people retain clothing items, and continue to wear them over several years? Working with a digital storyteller, she wrote up short stories with beautiful imagery, and supplemented these with facts from Fashion Revolution. Now, the messages could reach a wider audience, with many posts having about 1,000 views and some being shared by Fashion Revolution.

These twin research projects are part of a longer-term goal to get legislation changed within New Zealand, so that (like the EU) as a country we no longer allow clothing to be imported that has used NPEs in production. In the interim, conducting upscaled studies will be beneficial to gathering more data, as will continuing broader public engagement campaigns in order to increase awareness of these challenging and confronting day-to-day ecological issues.

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https://doi.org/10.34074/scop.1021002

Figure 8. Too hot to handle at 20° warming? (2022), by Down The Rabbit-hole Art Collective, multimedia work comprising a framed photograph, a video work, and 3D coccolithophone models under a bell jar on a light table. Works by Down The Rabbit-hole Art Collective (DTRH) 2022 came about from a series of conversations with marine scientists and botanists including Linn Hoffman (Botany). Thanks to Jamie Perrelet (Holistic Science UK, BC) for the 3D printing file "3D Printing the Long Term Carbon Cycle," and assistance from William Early, Lynn Taylor (Sandpit Collective) for 3D modelling and printing. Image © Pam McKinlay Art+Science Project.

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CHAPTER 5: SOCIAL AND PRACTICE IMPACTS

The impacts observed in the previous chapter affect people – whether through increased economic activity for an organisation or better policy that improves lives and wellbeing. But such impacts on other individuals may be considered second-degree, insofar as they typically flow on through institutions or broader cultural spheres. This chapter examines forms of impact that have a more direct relationship with other people, which we categorise as social and practice impacts.

Social impacts

It is axiomatic that many artists are driven by a desire to effect change on individuals and the society in which they live. If you want to change society, then you need to connect with individuals; if you connect with an individual, then there is also possibility of improving society. The challenge often lies in reducing a major issue to impacts that can be evaluated. We may want our research projects to shape conversations around climate change, for instance, but without clear objectives and strategies, such goals can become too high-level and disconnected from the artistic practices themselves. In terms of the logic model of Chapter 2, the "outputs" may not be strongly connected enough to effective "outcomes" and then "impacts." In part, this problem may relate to general project design, but it also requires some sharper thinking around social impact and what this might look like.

One helpful way of categorising social impacts for individuals uses an AEIOU model. While developed for science communication (Burns, O'Connor and Stocklmayer, 2003), these principles can be adapted as follows:

- **Awareness** – for example, of an environmental issue.
- **Emotional responses** – these may be positive or negative. Feeling sad or angry or upset may be entirely appropriate given the subject matter of the artwork. In fact, some people see this as a positive experience, even if the emotions are negative.
- **Interest** – for example, in the artist and their other work.
- **Opinions** – for example, attitudes towards other people.
- **Understanding** – for example, of a social phenomenon.

If there are changes achieved for people in any or all of these areas, then these may be considered important impacts, even more so if this leads to behaviour change. For example, changing people's awareness of the contribution others make to their community, or understanding of cultural differences, or interest in the history of their community, could all contribute to breaking down prejudices and barriers and increasing community connectedness. This, in turn, can result in people working together in ways that they did not do previously, such as the artists and scientists collaborating in the Art & Science projects case study below.

But how might you find evidence of these impacts for some of the members of your audience? The answer revolves around providing people with the opportunity to engage, reflect and share their thoughts and feelings about their response to art. These sources of evidence can be broken into

two basic types: informal modes of engagement which are included in the scope of the artistic work, and formal evaluative research. Remember that if you intend to use the information that audience members provide for further research, not just evaluation, you will need ethics approval to gather the information even in informal ways from audience members who need to give informed consent for the use of their personal information (see Chapter 3).

Audience engagement evidence

Your creative work might incorporate an opportunity for people to take subsequent action:

- To find out more – either there and then or later – such as through interactive digital stands, a webpage, a podcast or a formal paper;
- To support a cause, such as signing a petition or making a pledge;
- To receive something, such as subscribing to a newsletter.

These opportunities create evidence that demonstrate how many people were sufficiently interested to remain engaged and commit more of their time after experiencing your work.

There are many ways to gather feedback from those engaging with your work. These methods can be embedded in your performance, exhibition or event, providing opportunities for visitors to leave behind tangible evidence of the impact for them. The most familiar example is the visitors' book, but often that just records initial enjoyment of a creative output. To tease out deeper impact than this, you could adapt the visitors' book so that audience members are invited to record their responses to a question or provocation instead. You could also use Post-It notes on a wall or display board, to encourage participation, or a posting box to keep responses confidential.

Audience feedback and responses can also be gathered online. A hashtag is a great tool for monitoring and gathering evidence of this kind; it is also recommended that you respond to your audience on social media to encourage their engagement. Members of your audience might also provide evidence of the impacts of your work for them on websites associated with your project – such as a gallery or theatre page.

Audience participation indicates a level of engagement and interest, but how they engage can tell you more about the impact for them. Consider inviting audience members to respond to your work or a question about your work in any of the following ways:

- Make a short video, and upload their response to your work (a hashtag might be useful or a website to which they can easily upload material)
- Take photos of the work that affected them the most and post it online with a brief statement about why they chose this work;
- Draw their response to a question or inspired by what they are thinking or feeling;
- Make something out of, for example, LEGO® or modelling clay;
- Dress up in the clothes provided and photograph themselves, or feel fabrics, style garments on a mannequin, and reimagine designs using silhouettes of garments as at the Fashion Fwd exhibition at Otago Museum in 2021;

- Invite audience members to share their own stories about memories of objects and experiences which were prompted by your work;
- Record their own comments on an app or at a laptop station.

How people behave can also be an indicator of impact. What are people talking about and what have you heard that might demonstrate increased awareness or interest? If you are present, what have you observed of affective responses, such as people weeping afterwards or giving a standing ovation? What might gallery staff or volunteers or a reviewer be able to tell you that they observed or experienced? If there was a group visit, can the group facilitator provide a testimonial of the discussions within the group after their experience of your work? In a United Kingdom context, one such testimonial noted a work "engag[ing] a number of boys who were usually reluctant to get involved in class," and included a quote from one of those students (University of Bristol, 2014). Creative feedback opportunities like these can be designed with the desired impact in mind. What kinds of responses might you elicit? How will you interpret this information?

The Dunedin School of Art at Otago Polytechnic holds an annual art and science project which culminates in a public exhibition. A paper survey of exhibition visitors explored their changed perception of art, science and its relationships. This project also impacts on the practitioners, both artists and scientists, who appreciate the new opportunities which the project provided.

ART AND SCIENCE PROJECTS

Since 2013, curators at the Dunedin School of Art at Otago Polytechnic have organised and held an annual exhibition of art and science collaborations with scientists from the University of Otago. Initiated by Ruth Napper at the University of Otago and Peter Stupples at the Dunedin School of Art, and continued by Pam McKinlay, the artworks are inspired by and respond to the scientific ideas. The resulting exhibitions are open to the public and free.

Jenny Rock and Sunkita Howard investigated the impact for participating artists and scientists in the 2014 project, Art and Anatomy, organised by Peter Stupples and Ruth Napper. Feedback from the six artists and five scientists was gathered from multiple sources: "participants' written commentary in reflective notebooks that they were asked to keep (and in some instances queried via follow-up emails); evidence gleaned for modes of practice manifest in artists' sketchbooks; comments on the process recorded at debrief meetings and/or noted in subsequent conversations; and observation of artworks and associated documentation (for example, artists' statements and the exhibition catalogue)" (Rock & Howard, 2014, p. 142). Their analysis showed that the collaboration benefitted and opened new opportunities for the six artists and five scientists who participated. The artists appreciated doing group work, establishing new connections, accessing new materials/resources/places, and increasing their understanding of scientific methods and ideas.

Art and Light, in 2015, was the third of the art and science collaborations. Ruth Napper and Jenny Rock asked exhibition visitors to complete a short questionnaire on paper, which would evaluate the impact of the exhibition for the viewing public. The 83 respondents answered questions about "their professional backgrounds; what attracted them to the exhibition; how interested they were in learning more about the science represented; if the exhibition had changed their interest in an aspect of the science and/or their ideas about the role of art; and how they saw the relationship between art and science" (Napper & Rock, 2015, p. 75).

Visitors were motivated to attend the Art and Light exhibition because of an interest in science and/or art and/or how the two can be combined. The exhibition succeeded in attracting non-scientists to an artistic space. The results also showed that "exposure to the scientific aspects of light was effective in stimulating new interest in the subject" (ibid, p. 76). Forty-four percent of respondents agreed that viewing the exhibition had definitely changed their ideas about the role of art in society.

Figure 9. Art + Water exhibition 2019. Image © Pam McKinlay Art+Science Project.

Gail Pittaway and Catherine Wallace's work with Hamilton Book Month presents an example of a community project that is seeking to have positive social impacts: increasing reading amongst the community. As with several other case studies presented above, there are some good strategies in place to enhance the engagement and reach of the project (flyers, business stakeholders, bookmarks). Furthermore, the use of surveys and other forms of feedback allow for reflective practice and growth with each iteration of the event. One important point to make, however, is that these aspects should be distinguished from evidence gathered that pertains to the fundamental impact of the project – improving reading activity amongst communities. The social media material and other forms of community reach may be regarded as "activities" and "outcomes," to return to the logic model; these are crucial steps, but the "impact" itself will be the change in behaviour of individuals (who read more). If the organisation is not doing so already, we would encourage them to seek out targeted forms of data and evidence that can speak to their intended and noble aim.

GAIL PITTAWAY AND CATHERINE WALLACE: HAMILTON BOOK MONTH

Running regularly since 2014, the main goal for Hamilton Book Month every year is to promote reading and writing in the community. Gail Pittaway, at Waikato Institute of Technology | Te Pūkenga, and Catherine Wallace work with a small committee from the Friends of Hamilton Public Libraries, who administer the grants and funding. The organisation achieves their aims through events which bring readers and writers together in entertaining but informative and educative situations, at little or no cost to audiences. Ongoing community conversations – Bloke's Book Club and What Are Readers Reading? – are popular events which have taken on their own momentum outside of August, evidence that speaks to the success of fostering reading in the community.

As in previous years, the kaupapa of the 2023 edition was to provide free and inclusive access to events for diverse Hamilton and Waikato citizens. Their choice of authors also had a focus on supporting families and young people. Community libraries partnered with the organisation in several events and offered spaces where children's authors and Te Reo Storytelling events could occur, such as Rocket Story time at the Chartwell Library. Another collaboration which has grown over the last few years has been with the Waikato Museum. The organisers feel that their combined efforts benefit not only these important community institutions, by bringing audiences in to partake in the events, but also the wider cultural life of the community. Overall, Book Month fosters community engagement and a sense of ownership through a recurring festival devoted to especially local and New Zealand writers and readers.

The most obvious measure of engagement is attendance numbers. They hope for audiences of around 80-100 for the panel events and 25 for each of the workshops; in 2022, they could point to waiting lists for several of the workshops. As well as documenting the continued increase in audience numbers (as has occurred in the last two years), Hamilton Book Month has a Facebook group and a mailing list now with over 1,800 subscribers. With their bookmarks and fliers, delivered by volunteers to reach new audiences, they offer a wide range of opportunities to publicise these events and open up opportunities to give feedback. They regularly ask for and act on recommendations from our correspondents, participants and audiences. Volunteers and presenters are also asked to give written feedback at the end of each August, to enable reflection on the successful aspects or suggest improvements that can be made in future.

One further mark of past success is in the willingness of local groups and institutions to continue to work with Hamilton Book Month and align their own events with this month. In 2022, in conjunction with members of Creative Waikato, Hamilton Book Month held a free poetry walk through the CBD on Friday 26 August, National Poetry Day, with poets reading their work or chosen texts at the museum, outside Browser's Bookshop, outside Creative Waikato offices, the public library, and finishing at Wintec's Ramp Gallery. It was a great success and attracted a lot of attention, as well as a very large group of followers, many of whom travelled all around the CBD with the organisers.

Practice Impacts

As well as changing the opinions, beliefs and actions of audiences, researchers may also have impact on the practices of other artists. This kind of influence – the creative equivalent of an academic citation – may be harder to document, but it is worth reflecting on what people in your field are doing differently as a result of your work. Your work may have benefited a particular cultural community, if you have changed how other artists, curators and designers operate; or contributed to developments of practice within arts institutions and organizations. The evidence of practice impacts that you gather could include testimonials as well as supporting documentary evidence such as reports, social media and blog posts, newspaper or magazine articles, website content, or meeting minutes.

Examples of practice impacts will quite likely overlap with other forms of impact, such as policy or social, and are not limited to artistic practice. For example, in the United Kingdom, Iain Borden at the Bartlett School of Architecture, University College, London, conducted research into the urban practice of skateboarding. This helped change attitudes within local government, facilitating a campaign "to save a historic skateboarding site at the Southbank Centre in London, and to [move] to protect similar sites elsewhere," as well as informing the design of other skateboarding venues (University College London, 2014). This research thus impacted on subsequent cultural practices as well as influence on policy decisions. Another example from the United Kingdom highlights sustainability impacts. Research undertaken by Jonathan Chapman at the University of Brighton into emotional durability – designing products that people want to keep for longer – contributed to improvements in sustainable design at Puma and Sony (University of Brighton, 2014).

You may also be able to assess the benefits of changed practices for a community, city or region. A University of Manchester research team, for example, undertook a project supporting the work of theatre artists in international war zones. The research team could point beyond the adoption of strategies, resources and training for theatre performance in war zones, to the resulting educational impacts benefiting at least 14,000 children and social impacts for women and girls (University of Manchester, 2014). In this case, there was a strong correlation between practice and social forms of impact.

The impacts from Tony McCaffrey's work are numerous and sit across multiple categories, including practice, social, and policy influence, which reflects the fact that this is a body of research undertaken over many years. There are also lots of forms of evidence presented in this case study, including reviews and testimonials. This helps to strengthen the importance of the work, demonstrating its engagement with different audiences. The varied pieces of impact evidence and research outputs can be disentangled in order to show which aspects of the project have had specific and direct benefits to others, and which have had broader impacts in an artistic and cultural sphere.

TONY MCCAFFREY: THEATRE PERFORMANCE

Tony McCaffrey teaches theatre at the National Academy of Singing and Dramatic Art (NASDA), Ara Institute of Canterbury | Te Pūkenga. In 2004 he founded Different Light Theatre Company in Christchurch, an ensemble of people with intellectual disabilities, and he has continued to work with the company since then as its Director. The company devises and produces public performances in Christchurch, including in the Christchurch Arts Festival, and has also presented and performed in person and online at national and international conferences. Tony's research is interdisciplinary, at the intersection of theatre studies, performance studies and disability studies. He has published articles, chapters and books about his research.

Tony's work has provided learning disabled people in Christchurch with access to cultural activity and meaningful inclusion. There have been significant impacts for the members of Different Light who have had the opportunity to perform their work at international festivals and academic theatre studies conferences nationally and internationally, and have delivered live and pre-recorded presentations online. Participation in Different Light has given the learning disabled artists a voice, which some are now exercising beyond the theatre, advocating for people with disabilities via People First and Disabled People's Assembly.

Tony's latest book, *Giving and Taking Voice in Learning Disabled Theatre*, includes 20,000 words by Different Light members giving their own perspectives on the development of the company. The performers have since been invited to contribute a chapter to a new book being edited by Associate Professor Hilary Halba (University of Otago); the chapter content will provide additional evidence of the impact for the performers, and the invitation itself is a testament to the impact beyond the company.

Performances by Different Light, both at conferences and in public, have had an emotional impact for their audiences too, evidenced by standing ovations at the end of performances in San Jose, Leeds, and Auckland. Reviews also provide evidence of audience impact, such as Erin Harrington's review of *The History of Different Light*: "I admit that for most of the performance I have a pretty sizable lump in my throat" (Harrington, 2019). This reviewer has also previously written that the company's performances are "invariably engaging and thought provoking" (Harrington, 2011).

Tony has also seen a change in the funding landscape for disabled theatre in New Zealand. Different Light used to attract funding for community initiatives but in 2011 received a grant from Creative New Zealand under the funding category Creative Excellence. This was the first time competitive funding has been awarded to people with intellectual disabilities to tour theatre overseas (Mann, 2012).

Opportunities for Different Light to collaborate with international theatre groups are an indicator of his impact on the participation of disabled persons in theatre. Tony is also aware from personal communications that two theatre companies, Magdalena Aotearoa in New Zealand and the Margarita Vocational Training Centre in Athens, have used his first book as a guide to inform their own practice. The Magdalena Project website states: "Our thinking is also currently being challenged by a close reading of Aotearoa's founder of Different Light, a mixed ability theatre company, Tony McCaffrey, and his recent book INCAPACITY AND THEATRICALITY, Politics and Aesthetics in Theatre Involving Actors with Intellectual Disabilities" (McNamara, 2022).

Figure 10. Rehearsal for Faust.Us. Image © Different Light.

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CHAPTER 6: CONCLUSIONS

Once you have gathered evidence of the impact of your research, the final step is putting it all together. A narrative often serves as an appropriate and persuasive way to combine different pieces of evidence, to tell the story of how your creative research contributed to this impact. How you do this will depend on the reason why you are evidencing your impact; you may have to use a particular form, style or word limits for different stakeholders, whether that be your institution, a past or future funder, a PBRF portfolio or your own website. We also recommend you reflect on how this evidence of impact might be used to increase future impact. What have you learned that will inform your own and others' future practice to achieve greater impact? What have you learned that will inform the future evaluation of impact by yourself and others?

To provide a conclusion to this resource, we include a final case study from composer Sally Bodkin-Allen, based at Southern Institute of Technology | Te Pūkenga. Sally's account of the show provides an opportunity to consider how different strands of impact interrelate; but we are also interested in some of the rhetorical questions Sally has raised around evidencing subjective or intangible or apparent forms of impact. We imagine that some of these sentiments are those felt by other researchers; the subsequent commentary thus makes some suggestions, based on the themes of this resource, as to how these issues could be usefully addressed.

SALLY BODKIN-ALLEN: HOW DO YOU MEASURE THE IMPACT OF A NEW PIECE OF MUSICAL THEATRE?

In 2022, I finished a longstanding creative project called *18 Eden Avenue*. It is a musical that tells the story of three generations of women who live together in a rundown, once-grand mansion. The story was created by myself and Roger Gimblett, from a desire to create a small cast, original musical that could be performed by community and professional theatres throughout New Zealand and Australia (and potentially other parts of the world as well.) The show has a cast of six, three females and three males, and includes a varied age range, from teenagers to a grandmother. Roger was responsible for the book and lyrics, and I composed the music.

18 Eden Avenue was produced by Invercargill Repertory in August-September 2022. It was uncommon for the society to stage a previously unproduced work. Local director and Invercargill Repertory committee member, Jason Fraser, convinced them that it was a good idea to support the development of a new creative work. It also helped that Roger and I were not looking for any remuneration in the form of royalties. We gifted them a show that had none of the typical costs attached. From SIT, I was also able to access funding to cover the costs of the arranging of the piano vocal score (I co-arranged the score with SIT graduate Joseph O'Donnell) and recording of backing tracks and vocal tracks at SIT Sound (with Tom Tutahione, another SIT graduate).

Quantifying the impact of creative outputs is difficult. Creative works affect our emotions, they make us laugh, cry, and think differently about the world we live in. I sat in the audience for several performances and watched the ways people responded. I observed people crying and laughing during songs, but how do I measure the emotional impact on the audience? How can I possibly quantify that? It would be ridiculous to even try. People in my local community who saw the show have approached me and members of my family at random places to talk about the musical, saying how much they enjoyed it: another example of the impact that is not able to be objectively measured.

18 Eden Avenue received a standing ovation at every performance, the season sold out and an extra show was added. Surely this illustrates the level of impact it had as a piece of community theatre? At the same time, it needs to be acknowledged that this was a small theatre in a small city in New Zealand. How does this affect the way we measure the impact? Engagement from audience members through social media, also provides evidence of the impact of the show on those who came to see it. These include statements such as: "Congratulations to you all. We absolutely loved the show. All 6 cast members were equally as good as each other. Would love to see more of this sort of show" (2 September, 2022, Facebook comment); and "This has been one of the best shows I have been to at this theatre. So impressive, such talent and brilliant!!! Would love more of these" (2 September, 2022, Facebook comment). Of course, people who enjoy shows are more likely to post comments than people who do not. Is this a reliable way to measure impact? It is certainly authentic.

Critical recognition for musicals can come from things such as reviews and award nominations. Michael Buick, an award-winning and highly experienced musical director of Invercargill Musical Theatre shows, reviewed *18 Eden Avenue*, noting:

> Roger Gimblett and Sally Bodkin-Allen have written a great show. The characters are real, and the songs spin naturally from their dialogue. With several of the characters having a dramatic or dance flair, the usual suspension of disbelief about characters breaking into song, or choreography isn't as necessary . . . (Facebook post, 31 August, 2022)

However, opportunities to get further reviews are limited in cities the size of Invercargill. The show was nominated for seven OSTAs (Otago Southland Theatre Awards) and won two. Again, is this a way to measure impact? It reflects a degree of recognition by esteemed people in the same field. During the build-up to opening night, I was interviewed for three arts podcasts, one local, and two national, there was a feature-sized article on Stuff about the musical and a press release shared through local media outlets. Almost a year later when I was being interviewed on Radio New Zealand's *Three to Seven* show about another project, I was asked about the musical. While we were talking about it a listener texted in and said what a great musical it was. Is media coverage an element to consider when measuring the impact of creative works?

Economic impact is an obvious form of impact to reflect on. While the musical did not make any money for the writers in 2023, its sell-out season certainly would have generated income for Invercargill Repertory. Local businesses may also have seen some economic benefits from people travelling to see the musical from other centres, and from people dining out before the show. There is also an artistic impact on the people involved directly; it gave performers opportunities to perform, in this case, to create roles for the first time. It also had an impact on two SIT music and audio graduates; Joseph and Tom are both double-degree graduates. *18 Eden Avenue* provided a professional platform for them to use their skills.

For the writing team, there will be ongoing impact. The music can be listened to on Spotify and there are excerpts of the musical on YouTube. Sheet music for some of the songs can be bought from SOUNZ. The last six months spent emailing multiple theatre companies throughout New Zealand have finally paid off and Nelson Musical Theatre recently announced that *18 Eden Avenue* will be their first production for 2024. It will also be produced by a community theatre in Sydney next year. We hope that these productions will be the first of many throughout both countries and lead to the work being published and licensed.

Figure 11. The 'Three Strong Women' of 18 Eden Avenue, Meadow Bodkin-Allen, Julie Smith and Liv Cochrane in the roles of Poppy, Honoria and Sophie. Image © Monica Toretto.

A first response to this wonderful story of a creative project is that many of Sally's questions about impact can be answered, "yes"! That is, media coverage, audience responses, social media comments are all pieces of evidence of impact. We will return this point below, but there are several other threads to pull in terms of evidencing impact. It is noted that *18 Eden Avenue* was a rarity within the Invercargill theatre scene as a newly staged work – this is an observation that could be contextualised. How many local or new productions have been produced by Invercargill Repertory over a period of time? How many in other theatres within the city? In what year was the last new local production performed in Invercargill? Answers to these question speak to the work's significance in a specific location.

Sally notes some of the potential concerns about impact given the relative size of Invercargill. While this may affect the ability to garner, say, multiple reviews and varied media coverage, it should not necessarily diminish how one interprets audience levels. Ticket sales data or theatre size and total audience numbers can be used to tell a story about the extent of audience engagement, including compared with other Invercargill Repertory productions. Let's say, for argument's sake, that 1500 attended *18 Eden Avenue* over a season – it may seem like a low number in absolute terms, but it is also approximately 2.5% of the city's population. By comparison, a show in Auckland would need approximately 35,000 attendees to reach that same proportionate level. While more (absolute or relative) is not always more impactful, it is equally not the case that less is an indicator of lower impact. This speaks to the questions raised in Chapter 2: who does the work reach and does this exceed

expectations around bringing together an audience in a certain place? It would appear that there are good opportunities also to be measuring varied forms of past economic activity – ticket sales, revenue for the theatre, paid contributions to others; as well as the economic benefits that could accrue from future shows through licensing, streams and sheet music sales.

There are a number of valid points raised by Sally around the difficulty of quantifying other forms of impact, such as observable but informal audience responses, and the challenges of receiving sustained critical commentary in the wider media. The key point to emphasise from these observations is that the collection of myriad pieces of evidence, placed alongside one another, speak to the general impactful nature of this project. Put another way, the standing ovations are not necessarily evidence of economic and artistic impact, but, when appended to the measurable data, they support the broader narrative of benefit to the Invercargill theatre community.

We return, then, to a point made at the very beginning of this resource: when it comes to documenting the impact of your research, it is about the story that you tell. Furthermore, you now will have a better tools, strategies and an understanding of how to tell those stories. We encourage you to recognise and collect all of the evidence that emerges through your research and research impact processes. We hope that this will allow you to demonstrate and share the valuable contribution your creative research makes to society.