

Research design

Chapter summary

In reading this chapter on research design you are invited to consider the overall approach that you select to integrate the different components of your study. This needs to be done in a coherent and logical way that addresses your research question, situates the topic you are investigating and considers carefully the participants, context and contribution to the field. The design of your study can become a blueprint for others to follow, a map setting out how they may contribute to the field by building on and extending your work. When working with creative methods we consider how we can work in ways that honour the context, participants and researcher. In this chapter we invite you to consider different ways to design creative research that can connect with the topic you are investigating and your research questions in education contexts, whether formal or informal. We highlight that designing research is an enactment of both creative and critical thinking. This chapter connects with cases to extend your thinking about research design through:

- design thinking in the informal learning space of an art gallery between teachers and artists and the researcher;
- activism with children and art making with an artist-researcher;
- art exhibition installation and performance research;
- creative and cultural practice and education research as a way to investigate wellness; and
- questions of identity and positionality.

Introduction

This chapter attends to the ways creative research design can diverge from the Euro-Western conventions of designing research and how researchers position themselves in and with the research. The process of design directly influences each of the processes of the research and its outcomes. Creative research may be co-designed with research collaborators and participants, other artist-researchers, industry, funders, teachers, artist-students and/or others. Facilitation, collaboration and negotiation are key. This is how different perspectives, ideas and privileges all come into play with varying effects and affects that become a part of the methodological approach. How much of the research design is tied down in the

beginning becomes a matter of methodology and the context. It is important to understand your context before you begin designing your research, so this chapter should be read in conjunction with Chapter 3, which covers context setting in detail.

Research design may become influenced by emergent forces through facilitation, collaboration and negotiation, and the gathering and analysis of data, which can be developed if allowance is made for the affordances and constraints that may occur. The chapter demonstrates how research design has a key relevance to the research to be carried out. We invite you to consider:

- how to design creative research for use in formal and informal educational settings;
- generating and working with research questions;
- engaging with partners and collaborators;
- developing over time: installations and participant engagement;
- creative cultural practices: weaving knowledge;
- designing good-quality research; and
- ethical considerations.

Designing creative research in education

Designing research has as much to do with the research topic or question as with the process and outcome of the research. The ‘why’ of your research design has to do with what you want to problematise, question, respond to and what you want to document, continue, appraise, evaluate or improve. Designing research is concerned with being prepared for the unexpected, thinking through what might and might not happen. It involves thinking about research questions and experiences and attending to how things may happen. Design involves thinking and doing in complex situations. The potentials and pitfalls of what your research experience could be, and that of participants and other stakeholders, are first and foremost about its design. Key leads may emerge from each research activity and it is up to you and your research design to consider whether – and, if so, how – to follow each lead.

Designing research involves acting with creative and critical thinking. It requires critically thinking about the possibilities and constraints of the process and action of doing research. Thinking comes to the fore in methodology, where it becomes a way to see (Eisner, 2002; Cahnmann-Taylor, 2008), feel, experience and theorise what you include in, and what you exclude from, the research. Thinking creatively attends to both slow and fast thinking (Kahneman, 2011, pp 12–13). Kahneman describes thinking fast as automatic, with intuition, sensations and affects, and thinking slow as effortful – in the detail and with processes (Kahneman, 2011). Thinking fast and slow encompasses thinking in the moment, in practice, while making, in reflection and with reflexivity and theories, among other research-

related examples. Thinking about research design involves both slow and fast thinking as you create the shapes and forms of your research project.

Research design is about facilitation, collaboration and negotiation and keeping in mind your research question (see below for more on research questions). Facilitation includes facilitating the possibilities of your research, and facilitating people and actions to move towards an answer to your research question. Collaboration is key, and how you want to work with others, individuals and communities is a guide to how to conduct the research. Negotiation of research needs to be enacted in conventional and creative research methods, but understanding where research can be positioned is central to working with others and in communities. The research design may be developed and negotiated with collaborators, other researchers, participants, stakeholders and research partners.

Questions to consider in designing research include the following.

- What is your role in the research? (For example, are you a creative practice researcher working with others and canvassing their opinions, such as a choreographer-researcher teaching a troupe a new dance and gathering feedback data from the troupe?)
- What kinds of relationships do you want your research to foster?
- What kind of data do you want to generate?
- What do you want to do with the data?
- How do you want to analyse the data?
- What are the ethical issues in your research?
- Is a formal research ethics process necessary to your project?
- How are you considering your well-being and the well-being of others in the research design?
- What strategies will you employ to disseminate your research findings and who are your intended audiences?

Generating and working with research questions

Once you have decided on your research topic, you need to define your research question or questions. Leavy (2017) suggests a process of narrowing focus from a broad topic to one that incorporates elements like specificity in cohorts or experiences, location and relationships between participants. One example Leavy gives is from a broad focus of bullying, which can be then narrowed by location, and then by cohort or relationship. We build on Leavy's work to unpack this in Table 2.1 by general theme, location and relationship to demonstrate the potential for this kind of thinking. Remember as you read this example that this is one way to approach the research design. Table 2.1 demonstrates how you can narrow down your focus as you design your research, and each line presents a different way of thinking.

Table 2.1: Thinking about research design

General theme	Location	Relationship
Bullying	Bullying in the playground	Playground bullying between young primary school-aged children
Bullying	Bullying behaviours in multicultural schools	Bullying behaviours among pupils in multicultural high schools
Bullying	Bullying in the staff room	Bullying between colleagues in the staff room

Source: Developed from Leavy (2017, pp 55–7)

Each of these focused topics would result in very different research projects, participants and contexts. The topic's viability should be checked by sampling the published literature. At the time of writing, when we checked the literature on 'bullying in schools' in Google Scholar, there were about 350,000 results. When we added 'arts education' to bullying in schools, we got over 88,000 results. When we added 'playgrounds' to 'bullying in schools' there were about 24,300 results; then, adding arts education, we had about 18,500 results. However, when we searched for 'creative methods' with 'bullying in schools' we got 40 results with varying relevance to the focused topic. A quick look at some of the literature's results, abstracts and key words will enable you to gauge the viability of researching your topic.

When you design research one of the things you need to consider is the research question or questions. Thinking about design and questions is contextualised by a methodological framework and/or by a theoretical position. As you create your research questions you also need to be aware of your own position, where you are coming from – your lens for seeing the world, if you like. We ask the question: how are you privileged as a researcher and how does that frame your research?

As you develop your research design you need to consider the influences of your philosophical assumptions and consequently determine how these are significant to decisions relating to the research, including research questions, goals and outcomes. The assumptions that have implications for research have been defined as:

- ontology – the nature of reality, or claims researchers make regarding knowledge;
- epistemology – how individuals arrive at that knowledge and how researchers justify those claims;
- axiology – the role of values and how the researcher acknowledges values in research; and
- methodology – the process of research. (Creswell and Poth, 2017, p 20)

Methodology also includes how the research is framed by the researcher, and how the method and theory are enacted. You as the researcher are the one that links the methodology, methods and approach with the research question, together with

your beliefs, views and values (Kara, 2017; Mason, 2018, pp 237–8). Methodology is how your beliefs, views and values interact with your positionality, your context and your research project.

Five commonly used methodologies include positivist, realist, constructionist, interpretivist and transformative. There are diverse approaches to each of these methodologies which enable different perspectives of ontology, epistemology and axiology to develop, and what types of methods are used. Kara (2017, p 48, table 2.1) lays out some of the methods and approaches undertaken. This is not exhaustive but can be used as a guide for further work in developing your methodology.

As you develop your research design, your research question(s) can focus the methods and methodology you use, and your emerging design will influence the way you respond to your research question(s). Some researchers will generate a research question that considers ‘what, why and how’. Other questions will be constructed in different ways, perhaps by starting with a creative practice such as dance or painting and allowing the question to emerge from the ‘material thinking’ in practice (Bolt, 2010, p 29). At the heart of your research design, you will need to consider how the research question affects the type of research you want to conduct. It may be research that describes or investigates a problem

Table 2.2: Methodologies, ontologies, epistemologies and methods

Methodology type	Positivist	Realist	Constructionist	Interpretivist	Transformative
Sub-divisions include:	Post-positivist	Critical realist	Postmodernist Grounded theory	Phenomenologist Symbolic interactionist Hermeneutic	Participatory Feminist Emancipatory/activist User led Decolonising
Ontology (how the world is known)	Facts and phenomena exist independently of people	Facts and phenomena are entwined in complex contexts	People construct facts and phenomena	People interpret facts and phenomena	People, facts and phenomena can combine to create change
Epistemology (how that knowledge of the world is learned)	Through observation and measurement	Through assessment of complexity in context	By creating meaning from experience	By identifying and interpreting multiple realities	Through relationships with people and the environment
Methods likely to be used	Randomised controlled trials, surveys, technology-based methods	Mixed methods	Interviews, arts-based methods, discourse analysis	Interviews, focus groups, participant observation	Arts-based methods, interviews, community-based research

Source: Kara (2017, p 48)

or issue. It may be a project that wants to explain how something happens. It may be a project intended to activate or change a situation, or to evaluate an intervention. Leavy suggests that research can also ‘evoke, provoke or unsettle’ (Leavy, 2017, p 7). This is a particular strength of creative research in developing embodied, creative and action-based responses and generating new ways of thinking and doing.

In the next section of this chapter we offer a number of case studies for you to consider various ways of formulating a research design. The following case studies provide inspiration for approaching, working in and establishing the context in educational spaces:

- design thinking in the informal learning space of an art gallery between teachers and artists, where the researcher blogged the research activities each day;
- activism with children and art making with an artist-researcher;
- art exhibition installation, performance research and focus group interviews; and
- creative and cultural practice and education research as a way to investigate wellness and identity.

Each of the case studies focuses on research designed in different ways. Each project involves collaboration: collaboration and action with pre-service teachers and artists in a museum environment and blogging the research process (Thomson, 2012); with children in a classroom community (Liversedge, 2014); and with a community (Cole and McIntyre, 2004b; Smith, 2017). Each case study features creative making processes, including song writing, traditional Māori cloak weaving (Smith, 2017), theatre, installation practice and focus group interviews (Cole and McIntyre, 2006) and workshops facilitated through diverse art-making forms (Thomson, 2012). The research projects use these creative and mixed, interdisciplinary methods to conceptualise and theorise their pedagogical inquiries.

Despite their similarities, these case studies have very different approaches, from the design of the research questions that reflect on their intent and contexts to how they generate responses to the research questions. In choosing case studies focusing on collaboration, we are focusing on research design that includes creative outputs and experiences of making, and the non-textual, which could include video, performance, song, dance, activism, art exhibitions and installations, festivals and events. Each case study shows different perspectives, privileges and ideas on doing and thinking about research. We share these to scaffold and inspire your thinking.

Designing research projects for an embodied experience

An embodied response is one that takes into account, and considers what can be learned from, the person’s sensory experience. In designing research to generate an embodied experience, the following case study uses facets of the design thinking

process in developing research with collaborators and users. Design thinking is a cyclic process of five stages:

- empathy as developing understanding of the problem to be tackled;
- defining the problem with the people you are working with;
- ideation (that is, generating ideas) to challenge the assumptions of the issue at hand and to develop multiple innovative potential solutions;
- prototype as experimenting with ideas, materials, tools and techniques; and
- testing out the approaches.

This process can also be iterative. Ideation is a key stage in the case study and its iterations. There is a constant use of visual ideation with post-it notes, drawings and diagrams in the documentation. Affinity mapping used in user-experience design is a way of thinking about how to clump, cluster or group ideas. In conventional research it may be thought of as analysis. However, in this research design it is used collaboratively for data gathering within the embodied experience of the research immersion.

CASE STUDY 2.1: DESIGN THINKING, IDEATION AND AFFINITY MAPPING

Who and where: Pat Thomson, the Tate Summer School Professional Development team and artist-facilitators in London, UK (Thomson, 2012–19).

What: The researcher Pat Thomson and the Tate Schools and Teachers team worked with artist-facilitators to deliver an intensive workshop summer school for teachers over a number of years.

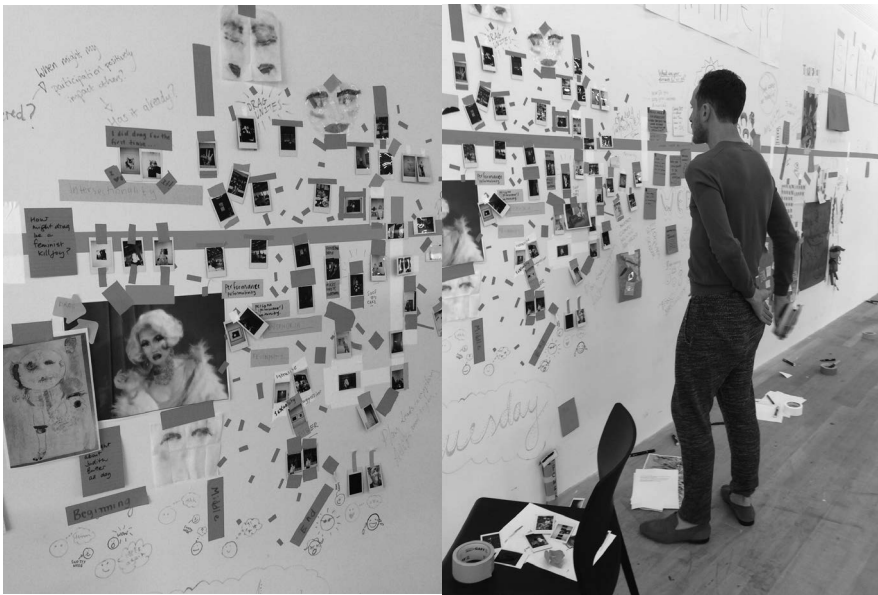
Why: The researchers and artist-facilitators aimed to understand how education happens in museums and to develop new ways of teacher development in this context.

How: Over five days, the artist-facilitators devised a series of active learning and reflection experiences for the participants responding to prompts from the gallery's collection and the artist-facilitators themselves. Each day's activities were themed with events or offerings to prompt thinking and doing facilitated by artists in a 'pedagogy of encouragement' (Thomson, 2014b). The activities were proposed by the invited artist-facilitators working in collaboration with a schedule of reflective activities, making, performing, ideation and looking at artworks in the collection and special exhibits.

There were reflective activities to develop ideas of what it means to teach art and what it meant to the participant to be both a learner and a teacher. Pat Thomson documented the programme on her blog and took field notes; videos, photographs, artworks and artefacts were made; there were a participant diary room, debriefing

notes and 'reflection grid' (Thomson, 2013b); insight into diverse artists' worlds; sensory experiences (Thomson, 2019); and zine and gif-making workshops (Thomson, 2017), among other making and reflecting experiences. The 2017 summer school used timelines and affinity mapping (Thomson, 2017) and theming to document learning activities about gender and the possibilities of drag to play with gender. Drag – dressing in another gender's clothing, sometimes with 'larger-than-life' personas (McIntyre, 2018) – was one of the many gender identities used to inquire 'how making and being with art can support young people to explore and express their gender identity, thinking through teaching and learning practices' (Thomson, 2017).

Photos 2.1 and 2.2: Ideas about gender and representation in the 2017 summer school



Source: Thomson (2017)

Tips

- Understanding the dual position as both researcher and participant in the experience is key in this research design. This position allows and attends to affordances – what the research activity attends to is pivotal to the design.
- Consider working up from the ground as in this case study, rather than imposing a research idea. However, don't forget the importance of planning.
- Continuous blogging can support data analysis by theming. Thomson's daily blogging documented how she started to theme her analysis, during and after the experience.

Traps

- The amount of data produced in one iteration of the summer school was substantial, and this can cause problems later in a project, without careful planning of time and resources.
- Confidentiality and anonymity can be impossible to achieve in group research. It is vital to provide initial information about this, or consent to take part will not be fully informed.
- Data may be difficult to remove from the pool of data if a participant wants to remove their contribution from the project.

Reflective questions

1. How does this research approach to learning experiences allow for affordances (how the context or environment complements the research approach)?
2. What do you imagine are some of the constraints of this research approach?
3. How do you think this generative approach could be used in other contexts?
4. What does this way of working inspire for you in your research design?

Engaging with partners and collaborators

Case study 2.2 features how socially engaged art-making practices can lead to different kinds of research outcomes that extend the definition of what research can achieve. Engaging in partnerships with children can focus research on how and what they are interested in and what they want to amplify. The different kinds of data featured in this case study – writing protest songs, banner making, singing and protesting – contextualise children’s activism, which features and amplifies children’s voice and agency (Thomson, 2008; Lemon, 2007, 2008, 2019). There is some pushback against the idea that researchers can ‘give’ voice to participants or ‘share’ participants’ voices, because those voices are not the researchers’ to share (Jackson and Mazzei, 2008).

CASE STUDY 2.2: ACTIVISM WITH CHILDREN

Who and where: In 2014 the British artist Peter Liversidge worked with Year 3 children from a London school over four months. The aim was to develop an exhibition at the Whitechapel Gallery of the children’s song writing, with choral protest songs as the exhibited video and ‘sign paintings’ and banners.

What: The artist prepared a written proposal for the project and investigation and collaborated with others to implement the project. He worked with the children to develop songs such as ‘Less trucks and cars / More chocolate bars!’ and ‘No more dog dirt’ (Liversidge, 2014). These protest songs were performed and exhibited on video in a gallery setting.

Why: ‘Notes on protesting’ investigated children’s activism and what they wanted to protest about. It explored what and how you can change, and the rules of particular spaces and how to break those rules, moving from inside the school to the wider community.

How: Liversidge first worked with the children to create and put together brain maps of things that they liked and did not like. The banners were then developed so that people could see what the children were singing about and know that they were protesting (Liversidge, 2014). The outcomes, the exhibition and videos of the project show development of an approach of working with children to amplify voice, to show powerful activism from children and to pinpoint concerns the children have in their lives and local areas. The outcomes are very different from those that a survey of children’s opinions would generate, and powerfully illuminate children’s concerns to audiences.

Tips

- However complex your project may be, develop a concise proposal, summarising the project, to use as the project design artefact. Liversidge develops a very short one-page proposal for all of the artworks he facilitates. Other projects may need more comprehensive information, depending on the artist’s positionality and intent.
- Working with children in a classroom is very different from working with them in a museum context. Introducing children as artists in the art gallery is a powerful way to make connections with art-making processes, contexts and audiences.
- The video recordings of the development of the project, its performances and the artist working with children become integral to the research project. In the research design, consider how your project can be documented.

Traps

- Artist-researchers need to consider how their intention to develop artworks as research may intersect with children, the school and the art gallery. Failing to acknowledge the contributions of others could cause upset, conflict and reputational damage.
- There is a pervasive danger of being prescriptive, and so amplifying the researcher’s voice rather than the voices of participants. In this example, children were not involved in the initial proposal or design; however, the collective actions of the group show how children’s interests and views can be highlighted.

Reflective questions

1. In what ways does the research design allow children’s voices to be amplified?
2. What are the affordances of the art installation/project?
3. What do you imagine are some of the constraints of this research approach?
4. How do you think this generative approach may be used in other contexts?

Developing over time: installations and participant engagement

In case study 2.3, 'The Alzheimer's Project', the researchers designed interventions where caregivers have the opportunity to contribute their views to an exhibition installation. The research design is a considered response to the issue of asking for the participants' contributions. The researchers use an engagement approach, identifying carers, asking for contributions, thoughts and feelings to be jotted down and displayed in a public exhibition. The exhibition developed over the period of its display.

CASE STUDY 2.3: THE ALZHEIMER'S PROJECT

Who and where: Canadian researchers Ardra Cole and Maura McIntyre developed 'The Alzheimer's Project', a multiple art exhibition installation and performance research project, from their lived experience of caring for their mothers with Alzheimer's disease. This project was one of the first installation art projects (Leavy, 2019), developed and positioned as installation art where the audience engagement moves from passively consuming art to actively embodying responses to the artwork (Cole and McIntyre, 2004c; Bishop, 2012; Leavy, 2019; Tate, nd). Cole and McIntyre state that their research contributes to and invokes an ethic of caregiving, developing knowledge that communicates the complexities of caregiving (Cole and McIntyre, 2004b).

What: Over a series of three installation exhibitions in high-profile public spaces across Canada, Cole and McIntyre developed a mixed-methods research project that addressed 'how relational roles may shift through wellness and illness' (Cole and McIntyre, 2004a website, para 7). The installation incorporated a clothesline of collected clothing from patients, photographs of clotheslines and the fronts of carers' fridges with the ephemera of everyday lives, responses from carers, spoken-word performances and gathered artefacts from carers' lives. Participating community carers were invited to contribute to one-to-one and group conversations, and the audience contributed written responses and artefacts related to their experiences (Cole and McIntyre, 2004b). Carers added clothing and text contributions during the exhibition of the installation, with focus group and text additions and artwork.

Why: Cole and McIntyre wanted to highlight the plight of carers in this situation, to enable learning. As an early example of an art installation and socially engaged practice in research, the project focused on carers' agency and voice, contributing an 'aesthetic contemplation' (McIntyre and Cole, 2007, p 2) of the lives of carers. The researchers considered how images from the installation were interpreted, with the premise that there 'is no such thing as a one to one correspondence between message intended and message received' (McIntyre and Cole, 2007, p 2). The

researchers also focused on the audience's role as engaging with and reading the research (McIntyre and Cole, 2007).

How: The 'aesthetic contemplation' is a reflective process that arises from experiencing the installation. Affective experience, of perception and emotion, contributes to meaning making over time.

Tips

- The consideration of where exhibitions are to take place should be central to the research design.
- Take advantage of the diversity of installation practices. Multiple art-making processes can be exhibited together for an experience in which audiences can develop their own meaning-making through making connections.

Trap

- Audience and carer participation and engagement is difficult to plan and manage – what happens to your research when no one turns up or consent is not given?

Reflective questions

1. How could art installations be a way to enhance your research design?
2. What is possible when an ethic of caregiving, developing knowledge that communicates the complexities of caregiving, is enacted?
3. How can art-making processes exhibited together form an experience for the audience to develop their own meaning-making through making connections? How can this be incorporated into a research design?
4. How can engaging with art installations and exhibitions honour participant and audience voices? How can this be incorporated into a research design?
5. How else could researchers include scope for divergent response(s) to research questions?

Creative cultural practices: weaving knowledge

Creative and cultural practice and education research is a way to investigate wellness, identity and making techniques. In Hinekura Smith's PhD thesis, she developed and responded to her topic of what it means to live as Māori. She used a Māori Indigenous research methodology that is relational in its approach rather than a Euro-Western approach which centres on problematising an issue. Developing the research in this way allowed the research question to emerge from a narrative and lived experience of being raised as Māori in a colonised land. It also allowed Smith to respond to the question of 'How do Māori women reclaim "living as Māori" through the creation of storied whatu kākahu?' (Smith, 2017, p 30).

This is a decolonising approach to research. Decolonisation is ‘a shift of imagination’ (Patel, 2016, p 7) with the aim to ‘unsettle the very settler colonial logics that should be dismantled’ (Patel, 2016, pp 87–8). Decolonising approaches are perhaps particularly important in education research because Euro-Western education was historically, and is today, an instrument of colonisation (Patel, 2016, p 15). Today we all, colonisers and colonised, and those who may regard themselves as both or neither, have a role to play in decolonisation. In educational research, that role involves moving away from concepts of ownership, territoriality and ‘fixedness’, and towards concepts of sharing, relationality and mutability. This is not a simple or straightforward process (Patel, 2016, p 48), but neither is it doomed to failure, particularly as others have gone before to show us the way.

If you want to know more about decolonisation, we would recommend these readings:

- Moreton-Robinson, A. (2020) *Talkin’ Up to the White Woman: Aboriginal Women and Feminism*, University of Queensland Press.
- Tuck, E. and Yang, K.W. (2012) ‘Decolonization is not a metaphor’, *Decolonization: Indigeneity, Education & Society*, 1(1).
- Smith, L.T. (2012) *Decolonizing Methodologies: Research and Indigenous Peoples* (2nd edn), Zed Books Ltd.

CASE STUDY 2.4: KAHU AND RECLAMATION OF INDIGENOUS KNOWLEDGES

Who and where: Hinekura Smith’s PhD thesis develops a creative methodology of Indigenous knowledge and customs and a pedagogy of making kahu, a traditionally woven cloak of feathers and twine (Smith, 2017). Smith is based in urban Aotearoa New Zealand but closely connected to her Māori Marae, a place and house of gathering and connections on land of her Māori community.

What: Over a year, Smith and her participants met eight times to learn to make traditional Māori cloaks and to converse. They also wrote journals of their experience of living as Māori women, an experience which Smith (2017, p 47) described as having ‘variable’ opportunities available, as colonisation has disrupted Māori cultural life and customs. Smith prompted the journal writing by e-mailing her participant group a series of questions or statements to encourage the writing of the journals over the research period. The researcher, Smith, and her mother participated in the ‘data’ gathering, and this involvement and relationship are described in her thesis.

Why: Deeply influenced by the transformative praxis (Freire, 1972, 1993) of decolonising theories of education, and using a Kaupapa Māori model, Smith situated her research in the reclamation of Indigenous knowledge and practices of making cloaks using the process of weaving to conceptualise her theorisations (Smith, 2017).

Smith's experience as a Māori educator, of growing up and then teaching in western education systems, influenced her theoretical conceptualisation of the research as Indigenous, focused on Māori Indigeneity, reclamation, self-determination and relationships with materials, creative practices and customs.

How: Smith theorised the weaving, the tools and materials used in her workshops as an embodied practice of reclamation of Indigenous knowledge. She situated her research positionality through relationships with people, place, materials and cultural traditions and her practice as an educator. In the workshops, Smith taught her participants to weave traditional feather cloaks and audio-recorded these meetings. She analysed data from the journals and audio. Smith's theoretical framing of her research as Māori informs her research design through its engagement over time, pedagogical focus and reclamation of Māori traditional skills and cultural material practices.

Tips

- Early consultation with community and developing relationships is pivotal in developing research projects such as Smith's cloak-making project, and this influenced her research design.
- Positioning the researcher and the research in community, in praxis and in relationships adds complexity. Smith's project was deeply grounded in her indigeneity, community and pedagogical and creative practice.

Traps

- What happens if you can't reach the 'right' people? How can research happen if you are not given permission to go ahead from community leaders? Working with complexities of place, community and relationships can add risks to research design.

Reflective questions

1. How does your positioning as a researcher in the project affect your research design?
2. How can theoretical frameworks influence a research design?
3. How do you think creative practice could be useful in the reclamation of cultural knowledge?

Designing good-quality research

At the research design stage, it is important to think through and be able to argue the quality of research you are using to inform your work (Hammersley, 2009, p 26). Conventionally, reliability, replicability and validity (Bryman, 2016, p 41) are held to be the markers of quality research. Reliability refers to the measures you are using in your research, for scales, behaviours and attributes and

experiences. For example, a large urban-population school of 1,000 may give very different findings about an intervention compared to a very small, remote school with a population of 50. This example of school population is also related to replicability – how an intervention can be repeated, in different places, by different practitioners and with different participants. How valid is the research in intersecting and questioning the findings and what they appear to show? Validity has different forms, including:

- internal validity – whether there is a demonstrable relationship between cause and effect within the research context;
- external validity – the extent to which the results of a study can be generalised beyond the research context;
- measurement validity, also known as construct validity – whether a scale or test really measures what it sets out to measure;
- ecological validity – the extent to which research findings have relevance to real life; and
- testimonial validity – validity confirmed by checking with participants (Kara, 2020, p 90).

In contrast, creative research projects may seek more creative responses to the issues of reliability, replicability and validity. Sarah Tracy argues for eight criteria of quality (Tracy, 2010, p 838) that encapsulate the research elements:

- a worthy topic (relevant, topical, interesting);
- rigorous (suitably critical and rigorous methodology, enough data);
- sincere (reflexive and transparent);
- credible (detail and explanation, different perspectives and trustworthy findings);
- resonant (affective impact on audience, transferable findings);
- significant (making a contribution to different forms of knowledge, such as practical, theoretical, methodological and/or ethical);
- ethical (holistic); and
- coherent (doing what it claims to do, with its methods and methodology, and making meaningful connections throughout).

Other academic researchers look for different ways to express and affirm their research purpose. One example is the Interfaith Childhood Project, which explores connections and relationships in faith communities by art making and dialogue with children and their parents, schools and communities (Hickey-Moody, 2018; n.d.). This project gathered narratives of communities of migrants and what matters to them and how this mattering sustains connections (Hickey-Moody, n.d.). The project used concepts from Rosi Braidotti's posthuman research theory to make sense of our flexible and multiple identities (2013) in a world of digital 'second life', robotics, genetically modified food and the ethics of

affirmation. This positioning (Hickey-Moody, 2018) is informed by intra-active and diffractive methods and theories (Haraway, 1991; Barad, 2007) which are useful in working with complexity.

Ethics of creative research design in education

In each of the case studies discussed in this chapter the ethical positioning of the researcher is evident in the way the research is conducted. All of the researchers in this chapter are academics, based in education, and use creative practice as a part of their research process and output. An ethical approach is inherent in each of the projects. Smith's thesis contains a participant information sheet informing participants of the project and detailing what the researcher wants to do, how data will be generated and managed and what the participant will be doing. Based on this information, and sometimes further conversation, consent is gathered from participants. In Smith's case this process was approved by a university ethics committee, which constitutes a Euro-Western approach to research ethics. Indigenous research ethics operate very differently, emphasising principles such as relational accountability, communality of knowledge, reciprocity and benefit sharing (Chilisa, 2012, p 22; Wilson and Wilson, 2013, p 343). This means that Indigenous researchers who work in Euro-Western contexts can have considerable difficulty in reconciling the two different approaches to research ethics (Absolon in Kovach, 2009, p 153; Chilisa, 2012, p 76).

In other projects with practice-based researchers, community-based researchers and others who don't have access to formal ethical review processes, other means of getting agreement, consent processes and permission to use data materials need to be established. Each project will have its own ethical process to follow, due to its context. However, as creative methods are relatively new in education research and in creative practice fields, there may be some confusion or reticence to engage with ethical processes in universities (Bolt et al, 2017). Advice needs to be sought from a number of people: research supervisors, ethics committee chairs and ethics administrators are useful to consult. In projects that research Indigeneity issues and Indigenous communities, an advisory panel of community members and academics can be developed as a part of the research design. This panel is placed to consult on issues that crop up. Doing ethics applications in the university for research projects in education is a very common occurrence, as it entails working with others, finding out about their experiences and attending to contexts. As we saw in Chapter 1, in some parts of the world Indigenous peoples now operate their own ethical processes for research, so some research projects need to seek both Euro-Western and Indigenous ethical approval.

Research projects in all formal and informal educational contexts can highlight complex issues of dependencies, power relationships and consent when working with others. The research design is an act of ethical positioning of you as a researcher and as leader or facilitator of the research project and process.

Conclusion

In this chapter we have discussed four different case studies to expand the idea of what research design can do when incorporating creative methods. A common theme in the case studies is collaborating with communities to make creative outcomes as a part of the research design. In Thomson's research, the creative experience intervention and artist-facilitators changed over the project; however, there were stages of consultation with research partners, attention to ethical aspects, collaboration with artist-facilitators, the creative practice experience as a week-long intervention, and pre- and post-intervention data gathering. Then there were more stages: reflection, analysis of the gathered data, and report writing, publication (blog, creative, fictional, scholarly and academic) and presentation.

Designing research involves both creative and critical thinking. It encompasses what you will be doing and how you as a researcher prompt and respond to experiences, situations, contexts, people and materials. It can be daunting to design a research project, but equally it can be exciting to think through the possibilities of your research. This is a starting point to consider – the what and how of the ways we intend to work that honour the context, participants and researcher. Thinking about what you are doing and what you are asking others to do is what you are designing – will these 'doings' generate the data you are expecting? And perhaps some that you are not expecting?

Another starting point to reflect on your design is understanding and acknowledging the privilege it is to enact research. Discussing your research design with colleagues is a great way to check its coherence and your sense-making. In the following chapters of this book, each of the case studies has a research design that you can explore further by examining the sources cited.



CHAPTER DISCUSSION QUESTIONS

1. What creative approaches resonate with you as you design your research?
2. What lenses of thinking or privilege influence how you construct your research design?
Consider your ontology, epistemology and axiology lenses.
3. How will you construct an argument that demonstrates the quality of your research design?
4. What are some different ways you can design research that honour participant voice in creative ways?