

## Designed Generalization from Qualitative Research

Ian H. Falk

Universitas Mahasaraswati, Denpasar, Bali, Indonesia

Universitas Andi Djemma, Palopo, Southern Sulawesi, Indonesia

John Guenther

Batchelor Institute of Indigenous Tertiary Education, Darwin, Northern Territory, Australia

---

In our earlier work on generalizing from qualitative research (GQR) we identified our two-decade struggle to have qualitative research outcomes formally “listened to” by policy personnel and bureaucratic systems in general, with mixed success. The policy sector often seems reluctant to acknowledge that qualitative research findings can be generalized, so impacts tend to be informal or simply ignored. The “official” methodological literature on generalizing from qualitative research is epitomized by Lincoln and Guba’s (1985) still oft quoted, “The only generalization is: there is no generalization” (p. 110). We now understand there are many alternative possibilities for generalizing. In this paper we hope to provide a platform for discussion on GQR. We suggest Normative Truth Statements (NTS) as a foundation. NTSs, used in our proposed generalizability cycle, are a potential key to ensuring designated qualitative research methodology provides a capacity for generalization—and therefore be considered as a valid form of evidence in policy decisions. In other words, we need a platform to articulate how to design qualitative research to maximize the type and scope of generalizability outcomes, referred to here as Designed Generalization from Qualitative Research (DGQR). Five steps of DGQR, using progressive NTSs in the generalizability cycle, are proposed as a way forward in understanding how generalizing from qualitative research may be made more transparent, accountable, and useful. The five steps are illustrated by reference to two example studies.

*Keywords:* policy, impact on policy, qualitative research, generalizing from qualitative research, designed qualitative research, vested interests, leverages for listening

---

### Introduction and Positionality

The authors’ interest in generalizing from qualitative research (GQR) arises from more than 20 years of qualitative research work (Falk & Guenther, 2007; Guenther & Falk, 2019a, 2019b, 2021), in a variety of contexts across Australia and Indonesia. Many of the issues we have researched (e.g., education and training, biosecurity, domestic violence, justice, and child protection) have generated findings which could have been taken up powerfully to effect positive changes in government policies and their implementation, but often were not. In this work, we have often been frustrated by the lack of useful quantitative research on these issues (sometimes based on poor data quality, insufficient data, or an inability to untangle the complex

causal logics from the multiple factors that produce outcomes). This is particularly true for program evaluations that we have conducted.

Where quantitative research has failed to explain how and why observable changes occur, our work has often unpacked the theoretical and philosophical bases for changes we observe through research and evaluation. For many policy advisors this at times creates “light bulb” moments of understanding but fails to translate into changed policy because the findings are “just” qualitative. We believe that a new language and discourse associated with qualitative research will help shape changes that will see GQR impact on policy outcomes more widely, notwithstanding the possibility of entangled, non-linear, and relational pathways from qualitative evidence into policy (Torrance, 2019). The entanglement of data in the process of policy development does create risks which need to be acknowledged. For example, the use of evidence to inform policy may result in an unethical support for a policy which increases the possibility of harm to its objects—data and policies are not value-free, and researchers need to tread carefully to avoid getting caught in a trap in which policy drives evidence, in the guise of evidence-based policy (Greener & Greve, 2014). Recognising these traps, we are arguing for ethical qualitative research, built on axiological assumptions that support the development of contextually responsive policy outcomes.

From the broader perspective of the history and philosophy of science, we have followed the development of thinking on generalizability from Aristotle (384-322 BCE) to Bacon (1561-1626) then to Newton (1642-1727), Linnaeus (1707-1788), Darwin (1809-1882), Einstein (1879-1955), and Carnap (1891-1970). Common themes are evident. The search for “what counts as truth” underlies all. The debate about “what counts as evidence” – observable phenomena, *a priori* knowledge, and experimentation figure prominently. It was the work of Bridges (cf. 2017, Chapter 12) that provided us with the clue to link old and new approaches through his and others’ ideas of “truth claims” (cf. Ellis et al., 2014, p. 735; Margolis, 2004, p. 614) and propositions. We recast these claims as “Normative Truth Statements” (NTSs) and so developed a cyclical approach to developmental generalization which is relevant to any research, qualitative or quantitative, both stemming as they do from the same history of science and natural philosophy.

Our conclusions, in both our recent papers (Guenther & Falk, 2019a, 2019b) are that there is ample justification for Generalization from Qualitative Research (GQR) from history. Qualitative research which is *designed* shifts the focus on generalization from being an incidental product to a focus on generalization being a *process* that can be designed and accounted for. Designed generalization from qualitative research is the term the authors use for qualitative research which specifies how they use the generalizability cycle with cyclical NTSs as steps in achieving transparency and therefore increasing probability of trustworthy generalizability. That is, it makes explicit that NTSs (assumptions) hold true in this and other contexts, and in turn this increases the confidence research end users have in justifying applications based on qualitative research. These conclusions are developed in this paper in the hope of establishing a new discourse of GQR which can act as a common platform between researchers and policy sectors.

Two other aspects of our positionality are the limitations and cautions we see inherent in what we discuss here. After all, there are many kinds of generalizations, and while we respond to this point in the fifth column of the table in the Appendix, the point needs careful attention.

First, we realise we may be judged somewhat idealistic in suggesting Designed Generalization from Qualitative Research (DGQR). It is, however, idealism born of frustration arising from more than two decades of research, most of it in partnership with the policy sector. It is not born of an idle thought, but of a long-held belief that something was wrong with the relationship between qualitative researchers and the policy sector. This led us to question the

premise of “thou must not generalize,” treating it as an NTS which formed one step in the generalizability cycle related to qualitative research methodology.

Second, not all qualitative research lends itself to generalization, nor is it intended to. Our intent in this paper is to suggest a way in which researchers and the policy sector can engage about generalizability, not to suggest that *all* qualitative research *should* be generalizable. Nor are we suggesting that all qualitative research should have a policy outcome (Hammersley, 2013).

Third, there is much to work through in the DGQR agenda. From our experience so far, GQR must be dealt with on a case-by-case basis. That may at first seem cumbersome. However, if DGQR is used to open discussions between the sectors over specific points that may be needed to apply to other contexts, then it provides a good structure for discussions, especially if it is used to engage in interactions and communication that hit on leverages for listening and vested interests for both parties. One aspect of this is that DGQR has the potential to clarify what can and may be generalized, and to do so by building into the research design, rather than attempting to justify generalization retrospectively.

Fourth and finally, there may be an issue within some of the qualitative (and indeed quantitative) research methodology fraternity about how the original Lincoln and Guba NTS “there is no generalization” (1985, p. 110) and imperative against GQR might be renegotiated. Notwithstanding the historical precedents for GQR, detailed in our earlier work (Guenther & Falk, 2019b), we are conscious of the contested position of qualitative generalization in the literature subsequent to Lincoln and Guba’s (1985) assertion. One strand of commentary within the research pertaining to the discourse of self-justification was a growing observation that generalization was happening whether it should or not. Robert Stake (1978) recognized early that generalization occurred and externalized the phenomenon by attributing generalization to the actions of end-users or observers. Denzin (1983, p. 133) rejected generalizability as a goal deferring to the role of interpretive research as a means to inform “personalized local practice” (p. 142). But even with Denzin we see a hint of contradiction in his description of these practices as “routinized. . . phenomenological productions” (p. 142) implying the possibility of generalizability. Others emphasized the context-specificity of qualitative research (Wainwright, 1997), which in their view limited generalization to other similar situations (Creswell, 1998). Hammersley (1990) argued that ethnographers are generally “not very effective in establishing the typicality of what they report. And in the absence of such information, we must often suspend judgement about the generalizability of their claims” (p. 108). Since then, the arguments against GQR have shifted somewhat to consider *how* generalization occurs (Chenail, 2010; Lewis et al., 2013; Patton, 2015; Tsang, 2014) but not how to design qualitative research for generalization, that is DGQR.

### Structure and Summary of This Paper

We have structured the article to provide the rationale and positionality of the topic, issues, and authors upfront, above. Through establishing a set of five steps in the DGQR process, we broadly aim to render the issue of generalization in qualitative research more transparent, and thus make the bases for generalizing more trustworthy. This, it is hoped, should make both researchers and end-users such as policy personnel, more confident about what it is they can claim is generalizable.

To summarise and foreshadow what follows in this paper, we develop the notion of Designed Generalization from Qualitative Research (DGQR) as a concept that provides one way in which qualitative research can be designed to ensure greater trustworthiness in generalizing (one way or another) the outcomes, be that for policymakers or other researchers. By “trustworthy” we are referring to Normative Truth Statements (NTSs) providing rigor,

credibility, authenticity (see Patton, 2015, p. 58 for a more detailed discussion of trustworthiness) as a pivot-point for testing the NTS, which in turn allows us to judge if that NTS is likely to hold true. The nature of the potential generalization will also become clearer as a result of the particular NTSs involved.

It is worth noting here that NTSs have similarities to, and differences from Dewey's "warrantable assertions" as Martin (2003) suggests that "Dewey asserts that the idea that logic 'discovered' truths should be deconstructed in favor of a search for 'warrantable assertions'" (p. 425). A warrantable assertion is a kind of NTS in that both are tentative statements to be subjected to testing and adapting, that is it does not have to be based either on deductive or inductive analysis. Dewey (2018) believed that "all logical forms (with their characteristic properties) arise within the operation of inquiry and are concerned with control of inquiry so that it may yield warranted assertions" (Kindle location 137). In some cases, NTSs and a warrantable assertion could take the form of a hypothesis or even an assumption. However, when establishing transparency in the process foundational to claims of generalization, Bridges' (2017) NTSs provide a distinguishable identity in their role of guiding generalization processes.

The new research field drawn on in the following discussion is around the nature of vested interests. Our guiding question for this paper is "How can we establish a common platform for a new dialogue about trustworthy generalization between policy and the qualitative research sector?" This question breaks down into a combination of theory, philosophical position, power, and structure. So, if theory and philosophy do not align with the structures and power that create policy, it is proposed there would be a reduction in the likelihood of one influencing the other, regardless of the kind of research. There are of course many examples in which quantitative science in particular disciplines are ignored by policy makers, for example in the climate change debate (cf. Gillard, 2016) for which power is exercised through ideas and discourses. Power is especially in evidence when there is a pressure to align activities and rhetoric with proposed policy initiatives, more obvious, for example, during an election campaign. For example, the conflicting research on climate change versus economic growth provides ample scope for political delay. The bureaucratic and political structures hold power and money that have the ability to shape philosophical positions which then enable evidence to be ignored (Dockweiler et al., 2015). As Bridges (2017) notes, "the relationship between intellectual inquiry in its 'disciplined' forms and structures of power is an interminable wrestling match" (p. 27). The dynamic among philosophical position, policy, and strategy is what is referred to here, and is more generally described as "vested interests" (Moe, 2015). It is our experience as cited early in Falk and Guenther (2007) and Guenther and Falk (2019a, 2019b), that qualitative research, including evaluative research (Guenther & Falk, 2021) is impacted more than quantitative in regards to its uptake because of the strong ontological positioning of many politicians as "realists" embedded on some version of the quantitative economic tradition who view truth, as they might say, "objectively".

The five steps we suggest in the DGQR process can be used as a foundation for methodology justification and research and evaluation practice, and as a guide to end-users on the extent and scope of possible generalizability. These five steps are foreshadowed and briefly explained now for the reader's convenience, then discussed more fully following the overview:

### **1. Step One: Identify foundation NTS for testing through the DGQR process**

In the first step, researchers should work from the assumption that qualitative research *is* generalizable, starting with an initial NTS for later refinement and testing.

**2. Step Two: Plan to refine NTSs within the Generalization Cycle (GC)**

The second step lends itself well to action research cycles but could function well in sequentially designed research projects in different contexts, or over time. We provide examples of sequentially designed projects in our previous papers (Guenther & Falk, 2019a, 2019b).

**3. Step Three: Identify vested interests to communicate the generalizables of the research**

The third step recognizes that there is often a broad array of stakeholders with vested interests in the outcomes, not just the researchers. For example, in evaluative research on programs, there may be community stakeholders as participants or beneficiaries, funders such as philanthropic organisations, governments interested in policies and their implementation, and providers of similar programs in other communities.

**4. Step Four: Strategize interactions to communicate the generalizables of the research**

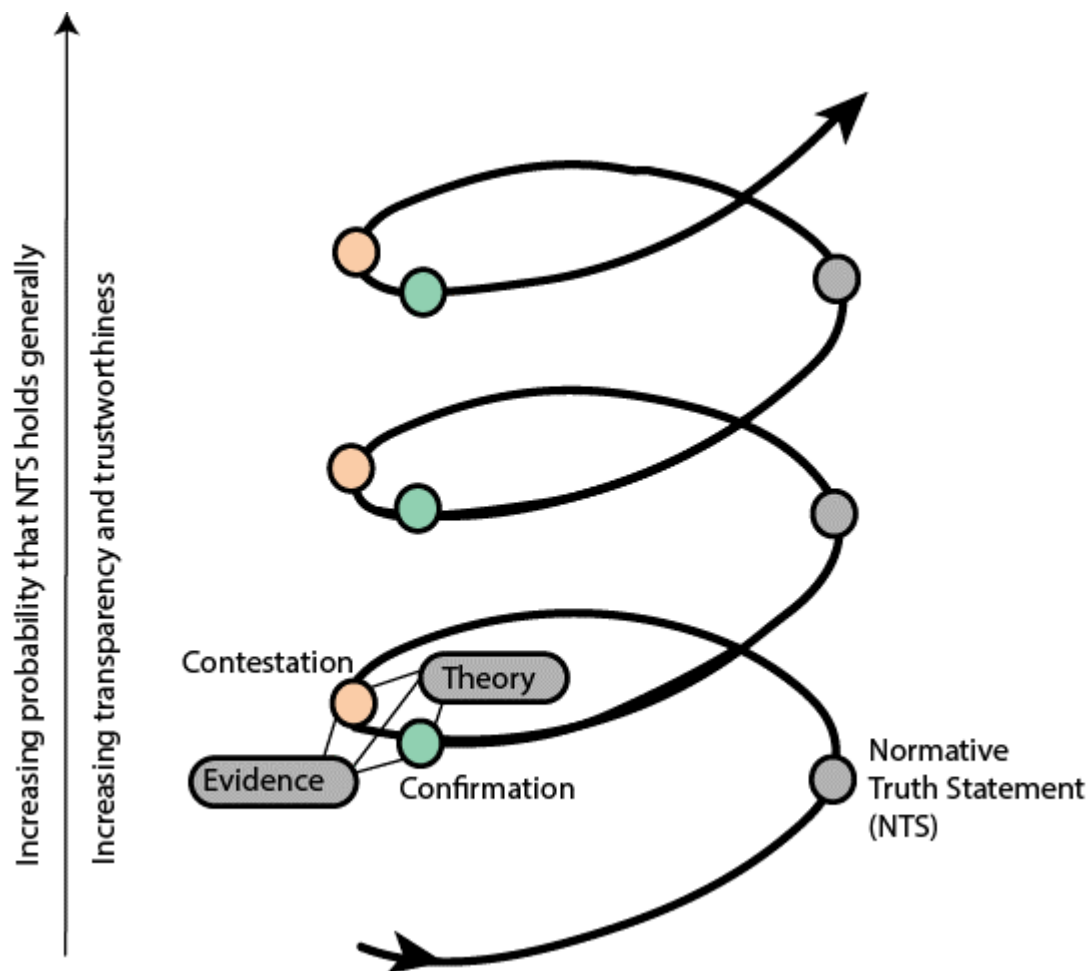
In the fourth step, researchers must proactively create spaces for stakeholders to engage. For example, we have used public seminars as a way of bringing vested interests together. In this process we lay out the messages in a way that is designed to provoke a response.

**5. Step Five: Evaluate and communicate NTS messaging for policy personnel**

In the final step, it is important to gather the feedback from Step 4 and assess how well it resonates with policy stakeholders. Here we attempt to determine how the language of the NTS is picked up by stakeholders for use.

These steps emerge from our earlier work (Guenther & Falk, 2019b), in which we describe a “generalization cycle” (GC) as shown in Figure 1 below.

In summary, the process is captured in this diagram which shows a series of qualitative research iterations which are firstly based on an NTS, then tested with theory and empirical evidence. This process results in confirmation or contestation of the NTS. With each iteration, the new evidence allows for a refinement or adjustment of the NTS so that there is increasing probability that it will hold true. In our earlier work we provided examples of how the cycle works with a reference table to publications from our earlier work (Guenther & Falk, 2019a) summarized for convenience in the Appendix.

**Figure 1**

*Note.* The generalization cycle (GC) from qualitative research (Adapted from: Guenther & Falk, 2019b).

## Two Case Studies

Using the above findings and the Generalization Cycle as the basis, the paper now presents two case studies, each of which provides the reader with examples of the kind of information we have used over the years in developing the five steps. Each of the five steps relates to a stage in the process of making transparent the methodology lying behind the capacity to generalize. Following presentations of two case studies we will unpack each step, connecting back to points in the theoretical and empirical literature to justify our argument for DGQR.

The two case studies help illustrate aspects of the issues involved in DGQR. The first case study is of the development of a First Nations independent school in Arnhem Land, Australia. The second is a decade long project establishing biosecurity policy in Indonesia.

### Case Study One: Evaluation of a Homeland Independent School

This example is not shown in the table in the Appendix as at the time of writing the project was just in its early stages. However, as a new evaluative research project it builds directly from the learnings of studies 5, 11, and 13 as outlined in that table, and can build in

elements that could be generalizable. Notably we have taken NTSs related to the importance of local aspirations, how success is defined by the community, and local ownership as givens, and these are reflected in the evaluation design, reflecting Step One of the DGQR process.

## **Design**

The evaluative research is designed as a 3-year participatory action learning project. The premise for the design is the NTS of Study #11 shown in the Appendix: “Successful education is redefined in terms of community aspirations and alignment to philosophical standpoints,” and from Study 13: “Local ownership enhances training and employability.” As such the research will demonstrate success, not on the basis of the usual metrics of educational success (standardized tests, attendance, retention, and completion) but on the basis of community-owned metrics which are being negotiated as part of the action research process. So, the assumptions of the project are directly aligned with the ideological assumptions of the community it is conducted in. At one level, this project extends the context of previous similar research (Study #11) and provided that the research confirms the NTSs, it will give greater confidence that those statements can be applied to other similar contexts. As the project progresses, we expect to refine the NTSs as well (as per Step Two), providing conditions on their application, and this could lead to creation of new additional NTSs.

## **Vested Interests and Strategies**

The purpose of the homeland school is to provide an education for Australian Aboriginal young people on “Country”<sup>1</sup> with a focus on building pathways to working on Country and maintaining language and culture. Initially, funders of the school included philanthropists and a land management organisation associated with the Indigenous Protected Area the homeland is located on. The school was granted independent status at the beginning of 2019 but was previously governed through a Memorandum of Understanding (MOU) with a government school operating in the same region. The vested interests of that school, including the Department of Education attempted to block the school’s registration through legal processes. So, the vested interests we identified as Step Three included the local homeland community, the funding organisations, the Department of Education, and the school with the MOU. There were competing interests here and it is worth noting that the homeland school board have specifically asked the researchers to engage with these vested interests, consistent with Step Four. The arguments were based on compliance and capacity issues and the reasons for blocking the registration were probably more about money than about legalities. Federal moneys flow to the Department of Education on the basis of enrolments. The shift to independent status means that the federal funds flow directly to the school.

The independent homeland school, while having to abide by the relevant acts of parliament that govern education in Australia, has a lot more freedom to apply curriculum and focus on local priorities (built on local ontologies, cosmologies, epistemologies, and axiologies). In one sense the vested interests are now the local communities/outstations in the school’s region, who are driving an agenda aligned to local philosophical and theoretical standpoints. Having said that the federal government which now funds the school, is not a passive or altruistic bystander. It has expectations of the school that ensure compliance with westernized epistemologies and ontologies.

## **Evidence into Policy**

---

<sup>1</sup> Country is a term used in Australia to describe the land to which First Nations People belong.

The process of DGQR, as it is being developed through the design of the current project, built on Studies 11 and 13, allows us (the academic and community-based researchers) to articulate an example for a good education, not just for the three homelands involved in the current study (or the 40+ communities involved in Studies #11 and #13) but for governments who are looking for practical solutions for what is often framed as an “intractable” (Disbray, 2017, p. 237; Wilson, 2014, p. 13) problem (improving educational outcomes for Aboriginal people). That articulation has (through Study #11) created a new language which we described as “Red Dirt Thinking” (Osborne & Guenther, 2013) as a way of shifting discourses away from narratives of deficit towards thinking that reflects and respects the ontologies and epistemologies of the people we have been working with. We deploy evidence that disrupts assumptions by falsifying old NTSs which find their way into political discourse. Publishing in peer reviewed journals plays a role in this; not just one article, but multiple articles over a long period of time using the same Red Dirt metaphor and the same underpinning logic. Six years on from the inception of the idea, Google Scholar searches for “red dirt” reveal more than 100 articles about research on remote education for Indigenous students. This is a slow process and we do not claim to have busted the lingering myths that are associated with the old NTSs, but we have observed a change in language of bureaucrats and some politicians that shows they understand and accept the new propositions presented in the NTSs developed through our (mostly) qualitative research work. The developing nature of this work is reflected in Step Five of the DGQR process, and we will continue to publish from the findings of the evaluative research—and this is at the fore of the researchers’ plans for the upcoming work in 2021.

Relationships and communication are key to this process. Over the years our team of researchers has deliberately created opportunities to engage with influencers, not as lobbyists, but as researchers presenting findings. We do this through conventional means (e.g., through media, publications, and conference presentations) but perhaps more importantly through relationships we form with the key stakeholders we identify in areas of policy design, implementation, and in educational practice. The findings not only have utility for policy, but they also become a reason for building close relationships with stakeholders that can use and promote the findings. The theme of “communication” is articulated in more detail in Case Study 2 following, as this research spanned more than a decade.

## **Case Study 2: Establishing Biosecurity Policy in Indonesia through Bilateral Relations**

The second example is based on a 10+ year research and policy engagement between Indonesia and Australia, whose overall purpose was to build national awareness of the need to address biosecurity in a cross-portfolio, multi-sectoral way (Falk et al., 2012, 2017). First, we outline the way goals/NTSs shifted as evidence and perspectives were gathered (Steps One and Two). Secondly, we identify the vested interests of the stakeholders (Step Three), since, as will be seen, these played a major role in leveraging whether or not the evidence would be listened to (Step Four). Finally, we articulate the “leverages” which were retrospectively found to trigger a stakeholder to listen (Step Five). When evidence is listened to, its generalizable results have a chance of being used.

### **Design**

The research is broadly described as multi-site, multi-method (Falk et al., 2012). It developed incrementally based on emerging results. Initial goals, documented in reports of outcomes, conference papers, and research findings from 2007 to 2011 (Falk et al., 2012) were



set, and became the de-facto normative truth statements (NTS), as per Step One of the DGQR process.

The overarching goal, which also stands as the first occurrence of a firm NTS, is found in Falk (2007), “to proactively manage incursions and threats (from Indonesia into Australia) through the development of community approaches as a partnership between countries” (p. 1). As it eventuated, the term, proactive, was enacted broadly, starting with a focus on how communities could be involved in enhancing biosecurity strategies to improve food security. As the project unfolded, it became evident that communities could only be given a warrant for action with the endorsement, at least, of “higher” policy bodies, especially the national government. Towards the middle of the 10-year period, with evidence supporting a national thrust, “proactive” was expanded to include policy and strategic influence of national policy personnel. Activities such as meetings and conferences deliberately aimed to have a policy influence, by involving different policy personnel in the proceedings. While in the early years, such involvement was nice to have, it later became essential.

There are three examples of the way in which policy became involved. One was the hosting of focus groups led by a senior figure in the Indonesian Department of Agriculture in 2016, with the purpose of designing the best possible way for Indonesia to profile and coordinate biosecurity activity. Of note is that the contact with the senior figure was through one of the project’s core partners as old friends from university days. The second event was the hosting in 2018 of a top-level biosecurity workshop by the national research organization. The purpose was to bring senior representatives from sectoral stakeholders together to design the shape of Indonesia’s biosecurity policy future. Once again, the contact was made initially through another core member. Throughout the 10-year period, personal contacts provided the link to key people, and those links occurred through both the project management team’s strong relationship and the partners’ relationships with senior figures.

The third is the impact of having the core group as from 2007. In addition, there were about 10 Ph.D. and Masters-by-Research students in the initial core research team who enrolled early in the process. Without exception, these personnel were promoted during their relationship with the project. For example, one became a deputy vice chancellor of his university, while another became a senior policy officer in the central government. All became influential in their areas. Moreover, their research was focused on different perspectives, investigating a different aspect of the main problem, and all were published as chapters by an international publisher (Falk et al., 2012). Biosecurity became instantiated in their workplaces and with their colleagues, as well as in their own identities.

In other words, the NTSs evolved inductively as data provided evidence (Step Two). In the early stages, the NTS was about effective community engagement to combat biosecurity issues. Gradually, the evidence pointed to the need for coherent policy, and so the final NTS became “effective national biosecurity policy is underpinned by effective community management of strategies”. The final few years of the project then tested this NTS with the results as outlined in the following sections of this Case Study 2.

Two lessons emerge from the above story. One is that personal relationships do matter for research influencing policy to achieve generalization to other contexts. The other is that the characteristics of the relationships matter significantly, supported by McCambridge et al. (2014) in the Vested Interests section of this paper.

## **Vested Interests**

The primary interest of Australia’s funding bodies in entering any international partnership lay in acquiring advanced and existing knowledge and awareness of pests and diseases and other related biosecurity issues. Within the frontline managers of the in-country

Indonesian work, there was a second vested interest evident from the first Biosecurity Summit (Falk, 2007) onwards which was to influence policy at the national level towards adopting an explicit biosecurity agenda and strategies. The then Director General of Higher Education in the Indonesian government attended and participated in the Summit and engaged in periodic communication thereafter. That is, there were two levels of activity in the project's more than 10 years: one was the evidence to support strategies and policy development from community to national level; the second was as set of activities, meetings, seminars, conferences, and "Summits" aimed at influencing policy at all levels, especially national. Critical to application of the research to a more general audience, these activities helped with the identification of vested interests (Step Three).

For the Indonesian partners, the vested interests were multiple. The involvement of the university partners was enabled by partial funding of research projects, used to build the evidence base. The internationality was another major drawcard and vested interest. Policy personnel were vested in the career possibility of a new way of making a difference in national policies around food security, with the possibility of international funding for some work. As well, the audiences at national conferences provided a good platform for promulgating existing government activity in biosecurity and food security.

Two strands of activity can be seen in the establishment of the Biosecurity Policy in Indonesia. Parallel with the academic work which provides the "evidence" for the policy, there is a series of meetings, conferences, and summits to profile and direct the evidence to stakeholders and decision-makers. The non-evidence strand is vital. This is the work that provides the opportunity for interaction. As the first report on the Summit 2007 concluded, for influence on policy and practice to be successful, the project should fund "Strong and effective communication and interaction [that] underpins all processes. A research-based communication strategy must parallel other research and development activities" (p. 4). In research terms, this was conceived as "A framework for social capital. . .which outlined the various interactions between various development stakeholder groups" (Falk, 2007, pp. 2-3). Here, "influence on policy" equates to the degree to which the policy personnel consider the generalizable outcomes to be trustworthy.

### **Evidence into Policy**

In looking back over the last 10+ years of the project described in this case study, and in consideration of establishing a new dialogue for DGQR, it is helpful to identify a collection of those things that have caused those in positions of power (regarding policy) to listen. The sequence of the items below will change, though all the items will all be present in some force.

- Funding
- International clout of bilateral nature of projects: (a) for governments, (b) for universities (the word, international, has high levels of acceptability in Indonesia)
- Ph.D. and master's students involved from 2007-2018 and were promoted in their organisations in that period, and their evidence is listened to above all else
- Coordinator lived in country
- Regular, at times insistent, communications of different kinds with team members

For example, for those stakeholders at the grassroots, such as university personnel, funding and personnel are prominent. For junior policy personnel at head office levels, bringing

something new to the policy table is more important, then all the rest follows. In other words, the more the evidence base hits at the vested interests of those concerned, the more likely it is to be listened to, and hence generalized. In this instance, generalization has been seen within all the sectors noted in this paragraph (academics, policy personnel) which has provided a more comprehensive adoption of biosecurity within the stakeholder perspectives. For targeted policy influence, this suggests the need to strategize the evidence by selecting key points from the research that can be used to build on the vested interests via the leverages above—in effect Step Four of the DGQR process. Leverages for listening are therefore the mechanisms for leverages for generalization.

As described above, the NTSs evolved inductively as evidence emerged. The first NTS was about effective community strategies and engagement to combat biosecurity issues. The emerging evidence pointed to the need for coherent policy (at all levels), and so the final NTS became “effective national biosecurity policy is underpinned by effective community management of strategies”. As has been described above, this evolving and cyclical development of NTSs based on emerging data, both tested existing NTSs through multi-site, multi-method research, as well as providing the basis for policy personnel to develop their own policy responses to what is now accepted as a priority for Indonesia. The policy responses are in effect the manifestation of Step Five, allowing the research team to critically evaluate the effectiveness of the uptake of NTSs in policy discourses and implementation.

## **Discussion**

Our underlying question in elaborating the steps in DGQR is “How can we establish a common platform for a new dialogue about trustworthy generalization between policy and the qualitative research sector?” In this section we further unpack the five steps we posited earlier in the article, and pointed out in the case studies, to argue the case for DGQR. Each step is listed, then the evidence found in the historical work, evident in the two case studies, is noted.

### **Step One: Identify Foundation NTS for Testing Through the DGQR Process**

This step is based on the assumption that qualitative research methodology can be designed in order to understand how and when the outcomes can be generalized. The key to DGQR is to identify or create a key Normative Truth Statement (NTS) which serves as the foundation for testing, researching, and refining the next NTS and hence the basis for generalization. In its first iteration, an NTS could be an untested assumption that is commonly held true, for example by “consensus” (Bridges, 2017, p. 195). However, an NTS must be true based on one or more bases of “truth claims” (Bridges, 2017). Note too that an NTS can be a positive or negative statement. For example, a truth claim based on “what works” (cf. Bridges, 2017, p. 194) could equally be phrased as what does NOT work. Regardless, by designing qualitative research projects around theories of truth, the foundations of generalizable statements are enabled.

In Case Study 1, the homeland independent school, the NTSs were developed following locally defined evaluative criteria, not according to the usual metrics of education success such as attendance and retention. For example, on the issue of success, the evaluation team (including the community researchers) have determined that success looks like a student who is able to read and write in her first language AND English, rather than English alone.

Case Study 2, the development of biosecurity policy in Indonesia, has been going for 10 years and learnings from rolling macro analyses are clear at this stage. For example, original NTSs were constructed retrospectively, but nevertheless built on previous work (see Appendix line #1, #9, and #10), were identifiable and could be traced through various developments. In

Falk et al. (2017), #12 in the Appendix, the NTS is identified as the usefulness of multi-site, multi-method data, and macro analyses in providing a strong evidence base for national policy. However, the first version of an NTS was about the community-level management of biosecurity. These seem far apart. The original community-level NTS gradually morphed into the nationally oriented one on the back of the continuing macro analyses. In fact, the early work was also multi-site, multi-method, and used macro-analytic procedures. These turned out to be the mechanism for establishing the transparency of the issues which could later be generalized to policy development.

### **Step Two: Plan to Refine NTSs within the GC**

In Case Study 1, the homeland independent school was in the first year of its 3-year evaluation, so the NTSs were frequently refined as part of the planned action research cycle. The test for the DGQR process will be whether the NTSs, as they are refined, allow generalizations not only to other independent homeland schools, but to the wider educational system. Tune into the next episode!

In Case Study 2, refinement of NTSs and their development were a product of the rolling methodology. Multi-site multi-methods approaches require careful and systematic analytic approaches, with ever-shifting goals for the next-step NTS. As described in Step One above, NTSs developed necessarily, in response to the changing scope and goals of the research. First, goals were driven by the need for grass-roots level information about what biosecurity and food security means to communities in Indonesia. This information was then used to develop the next set of goals with associated NTSs towards policy outcomes.

The plan to refine an NTS within a GC is of course a process of research design, which in turn leads to establishing the right research questions, framed around a problem within a congruent philosophical paradigm (Creswell & Poth, 2018). Refinement then becomes possible because of continuity and congruence with previous designs.

### **Step Three: Identify Vested Interests to Communicate the Generalizables of the Research**

For Case Study 1, the vested interests of the local community play a large part. The Board and funders (government and philanthropic donors) also have interests vested in the school's development, as does the research team themselves. An interesting point to be considered by the project is whether students themselves have legitimate vested interests in the school. One would think they do, but early on in the project, the voices of students were largely silent. So, in terms of communicating evaluation outcomes beyond the immediate case study site, perhaps to other communities or alternative funders, what we have attempted to do is align the researcher discourse with the corresponding discourse of internal and external vested interests. In part this is about addressing the concerns of these interests using their language (e.g., about student outcomes) translated from a community perspective, rather than from the powerful systemic hegemony. It is, as we note earlier, a potential "wrestling match" Bridges (2017, p. 27).

In Case Study 2, vested interests lay in every sector and stakeholder group. The university sector in Indonesia provides an extensive national network of 3,000 universities with local connections in 34 provinces, regions, and communities. University partners were and are driven by national research goals related to publications, research funding, and international partnerships. Without these three drivers, participation of these vital partners was impaired. Government personnel are highly responsive to the bureaucratic and political hierarchy. In terms of how research can influence policy, there are vested roadblocks along the way. Not only evolving policy emphases but bureaucratic procedures and legal matters all pose

challenges to policy development. For example, Indonesia has hundreds of rules and regulations broadly pertaining to biosecurity at pre- and post-border, and at the border stage. As with most countries, however, there are no coordinating measures (or policies) that can rationalize and harmonize these resources. Competing vested interests such as those of the university and government sectors can only be brought together over time and are usually wedged between other hot issues which take priority on a day-to-day basis. This point underlines how vital it is to have projects which have a longer timeline.

The challenge for both cases, as noted in the literature earlier (Dockweiler et al., 2015; Moe, 2015) is to achieve alignment between the philosophical and pragmatic positions of all the vested interests, including local stakeholders, to ensure that the message can be heard against the noise of competing interests.

#### **Step Four: Strategize Interactions to Communicate the Generalizables of the Research**

In Case Study 1, while we cannot yet say what has happened, the strategies for communication are already being formed. One approach is to engage the relevant government departments as evaluation respondents, thereby drawing them into a discussion about how the findings can be applied to other contexts. Likewise, philanthropic donors, who funded the evaluation are engaged as part of the project's reference group—we would expect them to support the ongoing development of the school in the other nearby homelands. And indeed, as the project develops, these nearby homelands are being engaged in the evaluation process with interviews and workshops to discuss emerging findings. We also plan to engage our audiences through use of targeted media, seminars, and conferences. Part of the strategy is to engage community members in the process of delivering the generalizable messages from the work to these audiences.

In Case Study 2, innumerable examples arose where interactive opportunities were created in order to involve the various cross-sectoral stakeholders. One notable one was that a government department was persuaded to host a set of focus group discussions to establish the preferred means in which biosecurity policy could be established with a national coordinating role. Another was through involving policy personnel in meetings and conferences in a more sustained way than simply a keynote or plenary address. A third was through the involvement of original university partners from the beginning to end of the 10-year cycle. During this time, the involved staff were promoted into more influential positions, and the role of networking was therefore foundational to success.

We note that the kind of engagement and participation we describe here for the two cases, does not guarantee acceptance of the NTSs, or translate into changed policy/strategy. Rather, it establishes relationships that make that acceptance and translation more likely without compromising the values of the local stakeholders with whom researchers work. One of the strengths of qualitative data is that it is philosophically aligned to subjective, value laden approaches rather than objective value free approaches. Truth, which we discussed earlier (Bridges, 2017; Ellis et al., 2014; Margolis, 2004), in the context of DGQR, then becomes the basis for knowledge translation, rather than a narrow quantitative definition of objective evidence.

#### **Step Five: Evaluate and Communicate NTS Messaging for Policy Personnel**

In Case Study 1, because the first round of data collection is only just complete, we have not put forward the generalizable messages to policy makers from Step Four though they are being formed, consistent with community demands for equity and educational and Indigenous human rights. However, as we move to the dissemination phase of our work what

we will do is intentionally seek feedback from outputs of our work, and further directly engage policy makers and their bureaucrats in a discussion about the implications of our findings. Part of the strategy is to provoke a response, which allows us to reflect on what has been heard by those policy makers and bureaucrats. The important point to note here, is that it is a planned process, not an ad hoc communication to an ambivalent audience.

Case Study 2 had built in evaluative points as the methodology spiralled, and to some extent the same policy personnel were able to be involved at key points. Communication of outcomes occurred several times a year through meetings, seminars and conferences or summits. This Case Study provides very strong evidence for the need to plan and structure into the research process opportunities for interactions and communicative points with the various stakeholder groups. Only by hearing feedback both ways, policy-researcher, can the research outcomes be shaped in such a way as to be heard by the policy/bureaucratic sectors.

Even with appropriate evaluation and communication, we cannot guarantee the translation of a NTS into the discourse and implementation of policy, such is the entangled (Torrance, 2019) and power-laden (Hammersley, 2013) nature of the relationship between research and the political. However, what we are suggesting is that the application of the five steps listed above does provide a way forward to increase the likelihood of qualitative evidence as trustworthy for policy design and implementation.

### Conclusions

To round off, what is clear from the examples detailed in this paper is that generalizing from qualitative research is a process not a single outcome. NTSs, provide the landmark points along the way, either within a single research endeavour, or across many. In the homeland schools example, NTSs can be established early in the project, and the research methodology can be adjusted for generalizability criteria. In both case examples, there were multiple research projects over a long period of time: the goals and NTSs related to the decade-long timespan and were cumulative.

For researchers, the benefits of DGQR are similar to those for policy personnel, in providing a clear and relatively simple set of five steps for evaluating the GQR. Drawing from the above examples and literature, the benefits to the policy sector in adopting a DGQR consciousness lie in two directions. The first is that they can trust GQR outcomes once they have worked with the researchers about how the research was constructed in terms of meeting GQR trustworthiness. The second, perhaps more importantly, is that the steps of sound DGQR forwarded in this paper provide policy personnel with the tools for assessing qualitative research for sound generalizability.

The common element to all successful adoption of research outcomes as a resource is as important to research adoption as the research itself, namely interaction. As noted early in the 10-year Indonesian example above, for influence on policy and practice to be successful, the project should ensure strong and effective communication and interaction. Interactions, developing more trusting interactions and over a longer period, allow discussion about the steps in the process of DGQR in the research under discussion and inevitably underpin all processes.

### References

- Arnott, A., Guenther, J., Williams, E., Dunbar, T. E., Murakami-Gold, L., Wearne, G., Tumminello, R. E., Blagg, H., & Falk, I. (2009). *Towards an investment framework to reduce family violence in the Northern Territory* (Vol. 1). Social Partnerships in Learning Consortium, Charles Darwin University. Darwin.
- Balatti, J., Black, S., & Falk, I. (2009). *A new social capital paradigm for adult literacy*:

- Partnerships, policy and pedagogy*. National Centre for Vocational Education Research. <http://files.eric.ed.gov/fulltext/ED507217.pdf>
- Bridges, D. (2017). *Philosophy in educational research: Epistemology, ethics, politics and quality*. Springer.
- Centre for Research and Learning in Regional Australia. (2001). *Learning communities in education and training* (Vol. 1 & 2). Centre for Research and Learning in Regional Australia, University of Tasmania.
- Chenail, R. (2010). Getting specific about qualitative research generalizability. *Journal of Ethnographic & Qualitative Research*, 5(1), 1-11.
- Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage.
- Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Denzin, N. (1983). Interpretive interactionism. In G. Morgan (Ed.), *Beyond method: Strategies for social research* (pp. 129-146). Sage.
- Dewey, J. (2018). *Logic - The theory of inquiry*. Saerchinger Press.
- Disbray, S. (2017). Policy and practice now. In B. Devlin, S. Disbray & N. Devlin (Eds.), *History of bilingual education in the Northern Territory* (pp. 237-246). Springer.
- Dockweiler, K. A., Putney, L. G., & Jordan, T. S. (2015). Enhancing the policy analysis process: Case studies using the layers of analysis framework. *Journal of Ethnographic & Qualitative Research*, 10(2), 87-103.
- Ellis, B., Home, R., Oldroyd, D., Nola, R., Sankey, H., Hutchison, K., Thomason, N., Wilkins, J., Forge, J., Catton, P., and Barton, R. (2014). History and philosophy of science. In G. Oppy & N. N. Trakakis (Eds.), *History of philosophy in Australia and New Zealand* (pp. 707-766). Springer Science+Business Media.
- Falk, I. (2007, May 24-26). *CRC NPB International Summit on Community Management of Biosecurity: Report on outcomes* [Paper presentation]. CRCNPB, Sanur, Bali.
- Falk, I., & Guenther, J. (2007, April 11-13). *Generalising from qualitative research: Case studies from VET in contexts* [Paper presentation]. AVETRA 10th Annual Conference, Victoria University, Footscray Park.
- Falk, I., Guenther, J., Lambert, T., & Johnstone, K. (2006, September 4-7). *Role of evaluation in assessing and developing communication and governance processes in an evidence-based policy development/implementation environment* [Paper presentation]. AES International Conference. Darwin.
- Falk, I., & Harrison, L. (1998). *Indicators of social capital: Social capital as the product of local interactive learning processes*. Centre for Research and Learning in Regional Australia, University of Tasmania.
- Falk, I., & Harrison, L. (2000). Indicators of social capital: Social capital as the product of local interactive learning processes. *Learning Communities: International Journal of Vocational Learning*, 1(1), 39-60.
- Falk, I., & Kilpatrick, S. (2000). What is social capital? A study of rural communities. *Sociologia Ruralis*, 40(1), 87-110.
- Falk, I., Ndoen, M., & Wallace, R. (Eds.). (2012). *Managing biosecurity across borders*. Springer.
- Falk, I., & Surata, K. (2011). Where 'The TVET System' meets the performativity of vocational learning: Borderlands of innovation and future directions. In R. Catts, I. Falk & R. Wallace (Eds.), *Vocational learning: Innovative theory and practice* (pp. 33-62). Springer Netherlands.
- Falk, I., Universitas Mahasaraswati Denpasar, Universitas Kristen Satya Wacana, Universitas Nusa Cendana, Universitas Sam Ratulangi, Pacific Institute for Sustainable

- Development, & Lovett, J. (2017). *Opportunities and benefits for collaboration on Indonesian plant biosecurity: A bilateral approach*. Plant Biosecurity Cooperative Research Centre.
- Gillard, R. (2016). Unravelling the United Kingdom's climate policy consensus: The power of ideas, discourse and institutions. *Global Environmental Change*, 40, 26-36. <https://doi.org/10.1016/j.gloenvcha.2016.06.012>
- Greener, I., & Greve, B. (Eds.). (2014). *Evidence and evaluation in social policy*. Wiley Blackwell.
- Guenther, J., Bat, M., Stephens, A., Skewes, J., Boughton, B., Williamson, F., Woollorton, S., Marshall, M., & Dwyer, A. (2017). *Enhancing training advantage for remote Aboriginal and Torres Strait Islander learners*. National Centre for Vocational Education Research. <https://www.ncver.edu.au/publications/publications/all-publications/enhancing-training-advantage-for-remote-aboriginal-and-torres-strait-islander-learners>
- Guenther, J., Disbray, S., & Osborne, S. (2014). Digging up the (red) dirt on education: One shovel at a time. *Journal of Australian Indigenous Issues*, 17(4), 40-56.
- Guenther, J., & Falk, I. (2019a). Generalising from qualitative research (GQR): A new old approach. *The Qualitative Report*, 24(5), 1012-1033. <https://nsuworks.nova.edu/tqr/vol24/iss5/6/>
- Guenther, J., & Falk, I. (2019b). Generalizing from qualitative research: A reconceptualization based on vocational learning examples. In S. McGrath, M. Mulder, J. Papier, & R. Suart (Eds.), *Handbook of vocational education and training: Developments in the changing world of work* (pp. 1-19). Springer International.
- Guenther, J., & Falk, I. (2021). Generalising from evaluation. *Evaluation Journal of Australasia*, 1-17. <https://doi.org/10.1177/1035719X21993938>
- Guenther, J., Falk, I., & Arnott, A. (2008). *The role of vocational education and training in welfare to work*. National Centre for Vocational Education Research.
- Guenther, J., & McRae-Williams, E. (2014, April 22-24). *Does education and training for remote Aboriginal and Torres Strait Islander lead to 'real' jobs? Evidence from the 2011 Census* [Paper presentation]. AVETRA 17th International Conference, Surfers Paradise.
- Guenther, J., & McRae-Williams, E. (2016). What gaps need closing in remote Aboriginal and Torres Strait Islander training provision? *Research Today*, 17, 5-6.
- Hammersley, M. (1990). *Reading ethnographic research*. Longman.
- Hammersley, M. (2013). *The myth of research-based policy & practice*. Sage. <https://methods.sagepub.com/book/the-myth-of-research-based-policy-and-practice>
- Lewis, J., Ritchie, J., Ormston, R., & Morrell, G. (2013). Generalising from qualitative research. In J. Ritchie, J. Lewis, C. M. Nicholls, & R. Ormston (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 347-366). Sage.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Sage.
- Margolis, J. (2004). Knowledge in the humanities and social sciences. In I. Niiniluoto, M. Sintonen, & J. Woleński (Eds.), *Handbook of epistemology* (pp. 607-645). Springer Netherlands.
- Martin, J. (2003). *The education of John Dewey: A biography*. Columbia University Press.
- McCambridge, J., Hawkins, B., & Holden, C. (2014). Vested interests in addiction research and policy: The challenge corporate lobbying poses to reducing society's alcohol problems: Insights from UK evidence on minimum unit pricing. *Addiction*, 109(2), 199-205. doi:10.1111/add.12380
- McRae-Williams, E. (2014). Aspirations for meaningful livelihoods: Challenges of pathway



- navigation. *Journal of Australian Indigenous Issues*, 17(4), 57-71.
- McRae-Williams, E., & Guenther, J. (2016, June 20-22). *Our north, whose future?* [Paper presentation]. Developing Northern Australia Conference. [https://www.academia.edu/28187716/Our\\_North\\_Whose\\_Future\\_for\\_review](https://www.academia.edu/28187716/Our_North_Whose_Future_for_review)
- Moe, T. M. (2015). Vested interests and political institutions. *Political Science Quarterly*, 130(2), 277-318. doi:10.1002/polq.12321
- Northern Territory Council of Social Service. (2004). *Creating effective pathways to employment and training for the employment disadvantaged in the Northern Territory*. Charles Darwin University Learning Research Group and Northern Territory Council of Social Service.
- Osborne, S., & Guenther, J. (2013). Red dirt thinking on aspiration and success. *The Australian Journal of Indigenous Education*, 42(Spec. Issue 02), 88-99. doi:10.1017/jie.2013.17
- Patton, M. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4<sup>th</sup> ed.). Sage.
- Stake, R. (1978). The case study method in social inquiry. *Educational Researcher*, 7(2), 5-8. doi:10.3102/0013189x007002005
- Torrance, H. (2019). Data as entanglement: New definitions and uses of data in qualitative research, policy, and neoliberal governance. *Qualitative Inquiry*, 25(8), 734-742. doi:10.1177/1077800418807239
- Tsang, E. W. K. (2014). Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16(4), 369-383. doi:10.1111/ijmr.12024
- Wainwright, A. (1997). Can sociological research be qualitative, critical and valid? *The Qualitative Report*, 3(2). <http://www.nova.edu/ssss/QR/QR3-2/wain.html>
- Wilson, B. (2014). *A share in the future: Review of Indigenous education in the Northern Territory*. The Education Business. [https://www.nt.gov.au/data/assets/pdf\\_file/0020/229016/A-Share-in-the-Future-The-Review-of-Indigenous-Education-in-the-Northern-Territory.pdf](https://www.nt.gov.au/data/assets/pdf_file/0020/229016/A-Share-in-the-Future-The-Review-of-Indigenous-Education-in-the-Northern-Territory.pdf)
- Young, M., & Guenther, J. (2008). The shape of Aboriginal learning and work opportunities in desert regions. *The Rangeland Journal*, 30, 177-186. doi:10.1071/RJ07042
- Young, M., Guenther, J., & Boyle, A. (2007). *Growing the desert: Educational pathways for remote Indigenous peoples*. National Centre for Vocational Education Research and Desert Knowledge Cooperative Research Centre.

## Appendix 1

**Table 1**

Study	Citations	Methodology employed	Context of generalizations	Type of generalization	Normative truth statement examples	Vested interests, structures, assumptions that cause a resistance to evidence
1	(Falk & Harrison, 1998, 2000; Falk & Kilpatrick, 2000)	3 Example studies	Community interactions and social capital	Theory of learning and social capital	Networks, trust and reciprocity underpin community-based learning	Axiological and ontological differences between establishment and provider expectations regarding “effective learning”
2	(Centre for Research and Learning in Regional Australia, 2001)	10 Example studies, 700 interviews	Delivery of vocational education and training in regional communities	Synthesis of findings, leading to principles of practice	Social capital underpins the effective delivery of vocational education and training in regional communities	Axiological and ontological differences between establishment and provider expectations regarding “effective delivery”
3	(Northern Territory Council of Social Service, 2004)	Mixed methods, reliant on 70 interviews	Employment disadvantaged groups	Theory as “practice principles” for strategic interventions	Integrated and inclusive service and policy coordination underpin better employment outcomes	Ontologies of disadvantage and deficit vs rights Siloed service providers and funding arrangements
4	(Falk et al., 2006)	Formative action evaluation, 42 interviews, purposeful and representative sampling	Domestic violence policies and programs	Application of theory to policy development, drawing on empirical data	Interconnection of knowledge and identity affects network functionality and policy effectiveness	Axiological and ontological differences between bureaucracies and providers’ expectations regarding “effective policy”

<b>Study</b>	<b>Citations</b>	<b>Methodology employed</b>	<b>Context of generalizations</b>	<b>Type of generalization</b>	<b>Normative truth statement examples</b>	<b>Vested interests, structures, assumptions that cause a resistance to evidence</b>
5	(Young & Guenther, 2008; Young et al., 2007)	Mixed methods, informed by four example studies	Vocational learning in remote communities	Theory for models of service delivery	Access to effective training is constrained by regulated training systems which fail to consider local aspirations for learning	VET system actors (funders, deliverers, industry bodies) Aligned epistemologies
6	(Guenther et al., 2008)	6 intervention examples, 84 respondents, mixed methods	Employment and training for welfare dependent groups	Theory development as implications for policy and its implementation	Foundation employability skills which build confidence, motivation and identity support welfare to work transitions	VET system actors (funders, deliverers, industry bodies) Economic theories, drawing on ontologies of welfare dependence
7	(Arnott et al., 2009)	10 evaluative example studies, 85 interviews	Domestic violence strategies	Synthesis from qualitative data for development of criteria for sustainable development	Effective domestic violence interventions are underpinned by local commitment.	Centralized funding and control structures Western ontologies and axiologies (legal structures)
8	(Balatti et al., 2009)	3 Action research example studies	Partnerships in literacy and numeracy programs	Theory for principles, application to policy effectiveness	Stronger partnerships lead to increased social capital and improves policy outcomes	Ontological status hinders change of values (axiologies) and practice
9	(Falk & Surata, 2011)	Macro-analytic theory-building supplemented by example studies	Social interactions for learning	Theory for policy and strategy	Social interactions are the mechanism of human behaviour change, whose effectiveness is dependent on the configuration of interactions for the particular purpose in different contexts	Epistemological: Different meaning of social capital from meaning as found in existing research

<b>Study</b>	<b>Citations</b>	<b>Methodology employed</b>	<b>Context of generalizations</b>	<b>Type of generalization</b>	<b>Normative truth statement examples</b>	<b>Vested interests, structures, assumptions that cause a resistance to evidence</b>
10	(Falk et al., 2011)	Multi-site, multi-issue, multi-methodologies	Strategies and policies for managing biosecurity across Indonesian / Australian borders	Analysis and synthesis of findings, leading to principles of strategy and policy development	Clearly defined purposeful participatory linking interactions produce strategies and policies that are effective in tailoring 'science' for local conditions, using local knowledge as the effective modifier.	Entrenched bureaucratic axiologies are a barrier to changes in policy and practice
11	(Guenther et al., 2014; Guenther & McRae-Williams, 2014, 2016; McRae-Williams, 2014; McRae-Williams & Guenther, 2016)	Two major Grounded Theory qualitative projects on education and training, >100 interviews and focus groups, multiple example studies	Remote education and training for Aboriginal learners	Theory building, principles for practice and policy, falsification	Coercive policies and strategies fail to improve education and training outcomes. Successful education is redefined in terms of community aspirations and alignment to philosophical standpoints.	Neo-liberal believers in (individual vs collective), economic theory for motivation Education systems (government and non-government), schools Compliance systems and structures that ignore the cosmological foundations of Aboriginal ontologies and axiologies

Study	Citations	Methodology employed	Context of generalizations	Type of generalization	Normative truth statement examples	Vested interests, structures, assumptions that cause a resistance to evidence
12	(Falk et al., 2017)	Multi-site, multi-issue, multi-methodologies; Four empirical example studies with additional national (Indonesian) validation processes	Building a knowledge base to support a national biosecurity body	Synthesis of macro-analyses inform a national focus for biosecurity policy	Analysis and synthesis of targeted empirical research studies supplemented by national validation processes provides a strong evidence base for national policy formulation and implementation	Entrenched bureaucratic axiologies and threats to epistemologies as barriers to systemic policy and practice changes
13	(Guenther et al., 2017)	5 Example studies, 69 interviews	Remote Indigenous adult learning	Falsification and theory building as principles for policy and practice	Human capital theory fails to explain training and employment uptake in remote communities. Local ownership enhances training and employability.	VET system, Training providers CDP providers, Closing the Gap (Human Capital Theory) proponents, Interventionist theories, Utilitarian ontologies vs Indigenous ontologies and cosmologies associated with connection to land and culture

*Note.* Research projects that build GQR through generalization cycles (adapted from Guenther & Falk, 2019b)

### Author Note

Professor Ian Falk, formerly Chair of Regional and Remote Education, Charles Darwin University, is now a consultant in community and regional development systems and adjunct at several universities in Indonesia, where he has been working for more than a decade on national biosecurity policy development. Professor Falk is also working as Team Leader of Counselling and Family Services at a major frontline social services provider in the Northern Territory of Australia. His research interests include qualitative methodologies, learning systems, social capital, leadership, and policy

Associate Professor John Guenther is the Research Leader for Education and Training, with Batchelor Institute of Indigenous Tertiary Education, based in Darwin, Northern Territory of Australia. Over the last 18 years John has conducted research and evaluation projects which have focused on remote contexts, covering all states and territories of Australia. While his work has focused mainly on learning, the intersections between training and education with health, wellbeing, traditional knowledge systems, economic, natural resource management, mining and a range of social issues, feature in his work. His research expertise extends from an array of practical qualitative and quantitative methodologies for research and evaluation, through to a range of theoretical and philosophical perspectives. He is interested in the translation of empirical evidence to policy and practice settings. Correspondence regarding this article can be addressed directly to: [john.guenther@batchelor.edu.au](mailto:john.guenther@batchelor.edu.au).

Copyright 2021: Ian H. Falk, John Guenther, and Nova Southeastern University.

### Article Citation

Falk, I. H., & Guenther, J. (2021). Designed generalization from qualitative research. *The Qualitative Report*, 26(3), 1054-1075. <https://doi.org/10.46743/2160-3715/2021.4644>

---

© 2021. This work is published under  
<https://creativecommons.org/licenses/by-nc-sa/4.0/>(the “License”).  
Notwithstanding the ProQuest Terms and Conditions, you may use this  
content in accordance with the terms of the License.