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# Using phenomenography to build an understanding of how university people conceptualise their community-engaged activities

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## ABSTRACT

Higher education institutions are seeking greater community engagement through academic, social and civic activity. In response, researcher attention has turned to impacts on students' education, and benefits to both university and community partners. This phenomenographic study examines how a diverse group of teachers, researchers and administrators at one New Zealand university conceptualised their involvement in community-engaged learning and teaching. We identified an outcome space where university people conceived their community engagement in three ways: within an expert/novice discourse, as advocacy, and in the most complex conception, as reciprocal learning. When working with and within communities, we suggest that university people should be supported to approach community engagement as reciprocal learning rather than adopting approaches that render community partners in passive roles.

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## Introduction

Engaged research, teaching and service are gaining prominence in higher education in response to renewed calls for universities to embrace their 'third mission' of social and civic engagement (Andrews, Weaver, Hanley, Shamatha, & Melton, 2005; Krčmářová, 2011; O'Connor, Lynch, & Owen, 2011). There appears to be widespread acceptance that more effective integration and interconnection between universities and communities would be beneficial for all concerned (Butin, 2010; Smith, Else, & Crookes, 2014). Such views represent a shift from assumptions that community partners provide the social issues or problems for investigation, whilst universities provide the necessary teaching and research towards some form of resolution (Holland, 2005). Engaged scholarship has emerged as an academic response to asymmetric power relations between higher education institutions and community partners (Peterson, 2009). Despite diverse definitions of what is meant by engaged scholarship, a key principle that recurs in the literature is a commitment to reciprocal benefits for universities and community partners (Holland,

2005; Smith et al., 2014). In New Zealand, the political case for higher education's increased engagement with local and regional communities often manifests as science communication. Protagonists argue enhanced communication between scientists, the general public and policy-makers will lead to a better-informed and more scientifically literate society (Gluckman, 2013). The recent launch of *A nation of curious minds – he whenua hihiri i te mahara* (Ministry of Business, Innovation & Employment, 2014) has as one of its four goals the enhancement of 'citizen science'. This national strategic plan for *Science in Society* calls upon the science sector, including higher education institutions, to be more engaged with the wider community. The emphasis in such arguments favours benefits to the recipients of engagement and makes considerable demands of academia, yet may pay insufficient heed to potential reciprocity between academic and community partners.

A substantial focus of international research regards the effects of community engagement on students' learning. The situation in New Zealand, whilst less prolific in research terms, reflects similar trends. Community engagement is found to help students acquire skills such as critical thinking, cultural and social understanding, self-motivation, teamwork and workplace learning (Cech, 2014; O'Connor et al., 2011). Additionally, these studies suggest that students develop social responsibility, self-confidence and civic engagement.

The experiences of and benefits to community organisations feature to a lesser extent in research into engaged or applied learning contexts. Nevertheless, researchers espouse the potential gains for the community, if partnerships between the institution and community organisation are undertaken with consciousness and care (Peterson, 2009), and where institutions attribute value to local/traditional/lay knowledge (Holland, 2005; Klein et al., 2011).

The university academic is the node least represented in the research nexus of community engagement. The experiences of academics are likely to be reflected in research findings relating engaged scholarship to research practice, commonly summed up as bridging the theory-practice divide (Kearins & Fryer, 2011; Medaglia, 2011). Occasionally, research illustrates how academics interpret their community engagement through volunteering or service (Spalding, 2013). Smith and colleagues (2014) have outlined challenges faced by academics endeavouring to relate their engaged scholarship to institutional performance expectations, and achieve reward or recognition. Given their pivotal position in facilitating community-engaged learning and teaching (CELT), we suggest the need to find out more about how university people perceive their community engagement. In doing so, we may contribute to a growing understanding of engaged scholarship as a tripartite relationship between university CELT practitioners, students and community.

This article describes a study at one research-led university in New Zealand that is advancing its CELT. In general, community-engaged scholarship may not yet be as well developed in New Zealand as in some other countries, although some significant research-led developments in CELT are taking place at this institution (Tolich, Shephard, Carson, & Hunt, 2013). Community engagement takes many forms across the university: as a strategic aim, a set of practices to develop relationships with sectors of the community, as service and community/continuing education, as research, teaching and learning. Students may encounter integrated workplace learning that includes practicum, placements or internships. Some courses at undergraduate level and at professional master's and

doctoral levels involve community-based research. A recently opened university volunteer centre continues to evolve partnerships with community organisations, and invites students (and staff) to share their time, energy and talents. Responding to this institution's strategic focus on community engagement, a special interest group formed to support research into CELT.

Our research was initiated through the auspices of the CELT special interest group and formed one aspect of a broad enquiry with several aims. Firstly, the group endeavoured to document the range of CELT taking place within the university. A second aim considered the relevance of an Outreach Certificate as a model for all divisions. The division of science currently awards a Science Outreach Certificate, recognising the extra-curricular activities of community-engaged students who do not gain academic credits for their activities. Thirdly, we sought to better understand how staff and students involved in all aspects of community engagement understood and articulated their involvement. This article specifically focuses on how staff in our university conceptualised their CELT activities.

We used phenomenography to explore how CELT practitioners reflected on their experiences. Phenomenographic approaches aim to produce insights into collective human experience (Åkerlind, 2012). The growing popularity of phenomenography in higher education research reflects the approach's focus on how differing conceptualisations of phenomena are situated within and related to a given context (Entwistle, 1997). Researchers place emphasis on constituting categories of different meanings relating to how particular phenomena are experienced, in this case, experiences of CELT. Use of categories serves both to describe the different outcomes of analysis and to explore underlying meaning within categories (Marton & Pong, 2005). Following iterative analysis and re-analysis, researchers aim to identify a logically inclusive structure in their findings, referred to as an outcome space, where some categories are related to others (Marton & Booth, 1997).

## Methods

### *Participants*

Having received ethics approval, the research team approached university staff known to be involved in community engagement, or who supported student participation in community-engaged activities. Since staff members held a range of university positions (Figure 1) we shall refer to them collectively as 'CELT practitioners'. CELT practitioners undertook diverse forms of engagement, many describing their roles as providing outreach. Outreach consisted of organising or participating in school and public education, and awareness-raising activities. A number of CELT practitioners acted as advisors to national organisations, local government or community groups. Two CELT practitioners reported supporting local Iwi (Māori tribe) initiatives in health- or ecology-related matters. Three defined their practice as engaged scholarship. Where CELT practitioners described supporting student engagement, most opportunities took the form of students providing outreach to local schools. Other forms of student outreach or engagement included students participating in science expositions and careers events, working on an international research project, volunteering to offer advice in community accountancy and law centres, projects with a local Marae (Māori meeting house) and Science

Demographic variables	
Academic/non-academic position	Associate Dean, Head of Department; professor, associate professor, senior lecturer, lecturer, senior teaching fellow, research fellow, research assistant, science educator, programme co-ordinator, department outreach co-ordinator, Kaiāwhina Māori (Māori student guide)
Discipline	Accountancy, bio-ethics, chemistry, food science, geography, geology, health sciences, marine science, micro-biology, physics, science communication, statistics, Division of Sciences outreach team
Self-identified ethnicity	New Zealand/European, Māori, New Zealand European/Māori, Native American, Scottish, Canadian, USA, UK
Gender	9 female participants, 10 male participants

**Figure 1.** Demographic variation within the sample,  $n = 19$ .

Wānanga (learning opportunities involving indigenous approaches and contexts). Some student engagement took the form of research in the community as part of higher or research degrees, where staff supervised students.

Variation within a sample group is significant to phenomenographic research approaches. Researchers aim to maximise understandings of how the outcome space can logically relate to the population as represented collectively by the sample group (Åkerlind, 2005; Bowden, 2000). Nineteen participants volunteered to take part in semi-structured interviews, and we recorded the following variation in the sample (Figure 1).

Variation in this sample group is notable in terms of participants’ role in the university, the different divisions and departments represented, and near-even gender split. We envisaged this variation would support our investigation into the various ways that CELT practitioners across our university experience CELT.

**Interviews**

Phenomenographic approaches to interviews are designed to encourage interviewees to reflect on their own experiences, shifting private actions onto the public stage (Trigwell, 2006). In this project, Researcher#1 conducted all interviews. Interviewees answered the same initial contextual questions relating to the types of community-engaged activities they had been involved in. Researcher#1 then asked for interviewees’ perceptions of how students and community partners benefitted from community engagement and any personal gains they had encountered. If uninitiated by interviewees, Researcher#1 inquired how community engagement had impacted on interviewees’ educational practices and requested situated examples. At any point interviewees could divert conversation in a direction meaningful to them, prompting a range of unstructured questions to elicit affective responses to community engagement. Most interviews lasted between 25 and

40 minutes; thereafter Researcher#1 prepared all transcripts verbatim from audio recordings.

### **Analysis**

Analysis began once all transcripts were prepared. A core team of three members remained consistent throughout the research process, although two further members participated at different times. Researcher#1 conducted close reading of all transcripts, seeking common themes in the conceptualisations of CELT described by the interviewees. The research team then adopted a data pooling approach, combining short excerpts of transcripts regarded by Researcher#1 as representing certain conceptualisations (Marton, 1986). Early in the process, four members of the research team met to read through the same transcript excerpts. We interrogated one another's analysis to achieve some form of consistency in the category descriptions. Iterative analysis continued over the course of several months as the core researchers revisited the data. We reduced the number of categories to three by focusing increasingly on the critical variations within the experiences discussed by interviewees (Marton & Pong, 2005).

Broadly, the conceptualisations we identified focused on subject knowledge expertise, advocacy for subject knowledge and personal learning. We articulated structure late in the analytic process, at which point the core researchers considered relationships between the three categories constituting the outcome space.

### **Rigour, reliability and validity**

The iterative and collaborative nature of this study enabled the research team to maintain awareness of rigour, validity and reliability as described by Trigwell (2006) and Åkerlind (2012). As part of our ethical commitments to research participants, we offered transcripts to interviewees for personal review. Four of the interviewees responded to our offer, one modified the transcript to highlight emphasis in conversation. We achieved a parsimonious outcome space by regular robust review of the descriptions of categories (Marton & Booth, 1997) and addressed the issue of reliability, seeking to ensure that those categories were easily recognisable by others (Trigwell, 2006). During the final stage of analysis Researcher#2 read each transcript to ensure that all of the categories could be easily identified within them. The validity of our conclusions is primarily based on showing the appropriateness of the internal logic of how the categories relate (Marton, 1986), and by examining the categories in the light of how they make sense amongst related studies documented in the literature.

The findings contribute to greater understanding of the CELT context at this university. We suggest the findings have interpretative usefulness for CELT practitioners at other universities at similar stages of implementation.

### **Results**

We observed an outcome space where the conceptual meanings that CELT practitioners attributed to their community engagement at university appeared relative to one another and could be described as a hierarchical organisation of three categories. The three related

categories advance in complexity of how staff perceived their own and their students' involvement in community engagement.

The simplest conceptualisation that we identified reflects an understanding of CELT within an expert/novice discourse. We detected an underlying message of experts 'giving back' or 'service' to a community that has paid for the privileges embedded within the construct of a 'higher' education. A somewhat more complex conceptualisation includes this service interpretation, but extends to incorporate elements of advocacy for the subject area or discipline within the community. Concepts of reciprocity begin to emerge through advocacy if CELT practitioners accept notions of giving and receiving by both university and community. The university as a knowledgeable critic and conscience of society, working interactively in, with and for society, underpins this interpretation. Yet the university remains senior knowledge-making partner, rendering the metaphor of being the conscience of society highly apt. Our most comprehensive conceptualisation embraced both of these simpler conceptualisations, but extended to expressions of co-learning. This conceptualisation interprets much of what occurs in community engagement in terms of learning by all parties involved. It is particularly notable that this conceptualisation, presented as 'community engagement as reciprocal learning', reflected diverse and quite complex understandings of learning.

### *Relating an expert/novice discourse to perceptions of learning and teaching*

The first category we identified in interviewees' reflections of community engagement related to an expert/novice discourse. The expert/novice position was apparent in the way that some interviewees spoke of their personal involvement in community engagement as a unidirectional flow of information: 'I think it is our responsibility to go out and I guess just communicate science and an interest in it'. Whilst one implication is a transmissive process for the community, CELT practitioners spoke of how beneficial this type of activity was for students. They emphasised how CELT offered teaching opportunities for students, important to developing personal understanding of a subject. Irrespective of who was doing the teaching, the discourse remained one of experts teaching novices.

Science CELT practitioners, in particular, were aware of their position as experts within their domain, and frequently referred to their perceived responsibilities in this role:

The biggest role of outreach in the 21st century is to engender a sense of trust in science from the public, that the public can trust science. That science is presented, is delivered, you can't say the truth if you know what I mean, is delivering something that is solid yeah. [pause]  
There's a process you go through and if science says this, you can rely on it.

Engagement in this instance relates to establishing reliability of information for the purpose of public good, and enhancing scientific knowledge represents an important public service. Attributing values such as 'trust' and 'reliance' to knowledge draws on community engagement as a form of accountability. These values seemed to transfer and justify the practice of outreach itself. CELT practitioners who taught in and researched non-science fields did not appear to conceptualise community engagement with the same attention to gaining public trust. This structural variation within conceptualising relationships with community partners presented some interesting questions about



expert/novice discourses within different domains of knowledge. We should note that our research population consisted of fewer CELT practitioners from non-science fields, and limited our exploration of internal differences within this conceptualisation.

The expert/novice conception of community engagement can reference other more complex conceptions without necessarily holding them. The following articulation of an expert/novice discourse appeared located in an interviewee's discussion of the institution:

I do a range of outreach activities all of which never get reported to anyone, but which are really important to me because the last couple of years I've come to the conclusion that the scientific, well, the university system, the way we fulfil our role as critic and conscience of society rubbish, you know like that, we can't just sit here in our ivory towers and not do things that helps the population.

This interviewee reflected on the importance of CELT from a personal perspective, but significant to the expert/novice discussion, was critical of the ways that universities might assume more complex integration with community. The data suggested that knowledge privileged as research outputs, and not necessarily as engaged scholarship, is likely to maintain an expert/novice discourse. As noted by the interviewee, staff involvement in community engagement may not be seen as important within the institution.

A striking feature of some interviewees' reflections within the expert/novice frame was an apparent disconnect between their roles of researcher and teacher, to the extent that their research appeared some conceptual distance removed from their students: 'They always talk about doing research-assisted teaching and learning, research-aimed teaching, so I always try and bring some of my research into it and that, I guess, is some sort of outreach to the undergrads.' In this regard students become the recipients of outreach, not unlike members of the community.

Within an expert/novice discourse, university CELT practitioners will assume the most senior role in a community-engaged relationship. This relationship is varyingly characterised by benevolence, responsibility or accountability, yet places emphasis on transmission of information.

### *Translating expertise into advocating subject knowledge in, with and for the community*

Interviewees' perceptions of community engagement as advocacy acknowledged greater reciprocity in the process of engaged scholarship, and attributed societal significance to the production of knowledge. On one level, interviewees reflected that their CELT might inspire young people to study science: 'The reason I say yes to these things is just the hope that I can influence somebody, or I can stimulate someone to take science or become an environmental scientist.' But in a different sense, this advocacy attempted to redress a societal imbalance: 'Overall it's about engaging those Māori students to high school level into realising that science is a viable option for study, for career pathways.' In this regard, community engagement worked as a recruitment tool for study at university, but also as a tool to help society change. Inferred in both of these comments were longer-term aims to build capacity within or to empower communities.

Other interviewees vocalised how their involvement in community engagement took a proactive stance to up-skill community partners or develop active citizenship: 'There are



so many social issues out there today which require a bit of scientific thinking if you like, you know, making an informed decision. So the more scientifically literate citizens you can have in New Zealand the better.’ We identified this viewpoint as something other than a simple expert/novice interaction, as some interviewees understood ‘being informed’ to include developing critical tools to engage with expert knowledge (emphasis from interviewee):

The things that we are doing, how appropriate are they? And if they’re not appropriate how do we go about changing things? And to actually realise that **they** [children] **can** change things because a lot of people grow up into the world thinking that this is how the world **is**, and therefore this is how it should be, and they don’t necessarily think beyond that. And our role is to draw children into critical engagement.

Perhaps being expert and having expertise represent differing conceptualisations of community engagement. The interviewee described having a facilitative role in developing critical engagement, but the comment implies that responsibility for challenging expert knowledge or initiating change remains with the community partner. Interviewees who spoke of advocacy additionally demonstrated a sense of personal responsibility that translated to teaching as a form of citizenship or altruism:

... we should really encourage and recognise any service, that’s service to the department, the university and the community, and a lot of these students have had experience on the other side of it haven’t they? They’ve received benefits of service of others, so they should be giving some back.

A tenuous balance between recruitment potential, advocacy and giving back hangs in this comment, illustrating a more complex conceptualisation of advocacy. Students, as former beneficiaries of community engagement themselves, are expected to put their education to altruistic uses on behalf of the university and wider community. Reciprocity in this regard represents a multifaceted return on what you once received. Other perspectives offered by interviewees recognised how knowledge generated in the university domain has the potential to become politicised or of direct use within a community-engaged context, providing important learning for university students:

Just seeing people grateful that you filled in some real blanks that they had in their understanding of where it all fits. It might be a political issue for them, but the science is part of it . . . and you never think about that until you go out in the community and see it from their perspective.

It’s also important that [students] realise that people are interested in what they’re doing you know. As well it’s about, you know, [students] should think about that, what they’re doing is of interest to society and is important to society.

Conceptualising community engagement as advocacy recognises that knowledge and learning function within complex social contexts with purposes beyond simple transmission of information. The potential for community engagement as reciprocal learning was acknowledged in these comments, yet appeared unrealised to some extent by suggestions that students were not aware of how their knowledge might contribute to society. In such circumstances, the community, bereft of an opportunity to act as co-educator of students, may be left providing problems for students to solve. Indeed, in this category of description the role of community partners appears most unstable in terms of an engaged relationship with the university. Unless the role of teacher is developed to

create meaningful engaged learning opportunities, community engagement as advocacy might retain overtones of a simple expert/novice discourse between university teachers, students and communities.

### *Transforming advocacy to reciprocal learning*

Community engagement as reciprocal learning represents a conceptual understanding of the fluid and distributed roles of learner, teacher and site of learning. In this regard, engaged scholarship offers the potential to redefine where learning takes place, who acts as teacher and how learning can be co-constructed: 'In my head the CELT, it comes back in; something is internalised. At the very least the student is learning, yeah, something, and in the ideal [emphasis] interaction, the community is really informing so much of that interaction.' Emphasis is placed on learning by all involved as an anticipated and inevitable consequence of engagement. CELT practitioners presumed capacity to teach and to learn amongst community and academy as a starting point, rather than an intended outcome of community engagement. Reciprocity in the learning process was further considered achievable if university teachers presumed competence amongst their students:

[Community engagement] recognises that students don't come to these kinds of things as empty vessels. They bring their own experiences and skills to these kind of things, and so I think in that sense it's empowering to the students as well; 'oh what I do matters, I can make a contribution there'.

Understanding learning as a reciprocal process between students and community partners took on a relational dimension. Community engagement provided opportunities not simply to empower community partners, but students too. Altruism transformed to active citizenship.

Previously, we considered the idea that community engagement helps to make higher education relevant to the wider public beyond the university's role of critic and conscience. We turn now to the nature of learning that can occur during community engagement. Presenting community engagement as reciprocal learning, interviewees incorporated values of education by promoting active citizenship in the curriculum for students:

It's really good to give students feedback about the positive nature of their desire to contribute and participate, and particularly when, you know, there's all these signals from society about us becoming more individualistic. You know, expectations that universities are contributing to the greater good, and so actually helping students explore how they might do that.

Interviewees considered learning within a community context a more student-centred approach that built on students' existing interests or concerns: 'They seem to want to address real world problems, things going on here in their community. They see them everyday; they're concerned about them.' When interpreting community engagement as reciprocal learning, interviewees observed that engaged learning contexts supported approaches to learning and teaching that were more inclusive of diverse student abilities:

For many students they need that connection in our classes to say, 'ok you're telling me all this stuff with all this notation, all this mathematics with Greek letters and so on', and that's, some students just love that and lap up the maths. But many students in the lower level

classes want [to] say, well even in the higher level, want [to] say, 'ah ok, so you actually go out and do this'. You know, this is outside the classroom, so it actually is somewhere else, and it's a problem that people are interested in knowing the answer to.

Interviewees indicated that students were seeking to make meaning from educational activities, a situation demanding active teaching responses. Many interviewees in this study reflected how community engagement provided personal development and habits of mind for students not only in the sense of contributing back to society, but also in developing their own critical thinking:

You have a greater appreciation of how other people see that science, which makes you look more critically at what you're doing and why you are doing it.

We want to get our students engaging critically with what is being taught or with what is being put out there, so that they actually question the ideas that they are being presented with and don't just sort of soak them up as gospel. And that those ideas can be challenged, but only in a thoughtful and intelligent way.

The conceptual move towards meta-cognition in learning marks community engagement as reciprocal learning distinct from the two previous categories of an expert/novice discourse and as advocacy. The role of community partners has shifted to that of co-creator and active participant in knowledge building, a role that staff and their students have the potential to share in the relationship. And whilst we recognise that engaged research may not be possible for all university people, community engagement as reciprocal learning demands a far more facilitative and reflexive role of those involved in teaching.

## Discussion

This phenomenographic exploration of how university CELT practitioners conceptualised community engagement undertaken by their students and themselves has yielded a hierarchy of three conceptualisations of increasing complexity and relevance to the key principle of engaged scholarship (Smith et al., 2014). We do not suggest that individuals exemplified each conceptualisation, and it seems likely that many exhibited facets of each. Nonetheless, the three categories of understanding related logically to one another in the broad context of the scholarships of learning and teaching, and of engagement (Boyer, 1990). These categories make sense to us since each is readily described and related to recognisable phenomena in higher education. The hierarchical relationship between categories need not imply that some categories have greater social value, but could suggest developing complexity in how a phenomenon is experienced or made sense of (Åkerlind, Bowden, & Green, 2005).

The variations in the ways that CELT practitioners experienced their community engagement are described in Figure 2. The referential component defines how university staff perceived the relationship between role and knowledge-making by the various stakeholders. As many CELT practitioners express their community engagement through personal support of community-engaged students, we include the role of students as perceived by staff. The structural component maps the inclusive and increasingly sophisticated development of knowledge expressed by interviewees, and reflects the categories of phenomena described in the results section.

	<b>Structural development in knowledge-making</b>	<b>Referential (what is meant)</b>		
		Role of university CELT practitioner	Role of student	Role of community partner
<b>Relating an expert/novice discourse to perceptions of teaching and learning</b>	Transmission of information	expert	expert	novice
	Establishing reliability of information for public good	expert	expert	novice
	Engagement as 'giving back'	expert	expert	novice
<b>Translating expertise into advocating subject knowledge in, with, and for the community</b>	Recruiting under-represented students for university study	advocate	advocate	beneficiary
	Providing knowledge of direct use to a community	advocate	advocate	beneficiary
	Building community capacity	advocate	advocate	beneficiary
<b>Transforming advocacy to reciprocal learning</b>	Community engagement as reciprocal learning	reciprocal learner	reciprocal learner	reciprocal learner
	Engaged scholarship	reciprocal learner	reciprocal learner	reciprocal learner

**Figure 2.** University CELT practitioners' conceptions of roles in community engagement.

It appears that a widely distributed conception of community engagement in our university positions community partners in passive roles as novice or beneficiaries of engaged activities. If university CELT practitioners conceptualise their role in the community-engaged process as 'experts' sharing their knowledge in an endeavour to render community members better informed on, for example, scientific matters, implications arise for community partners and students. Despite espoused values to contribute, inform and/or empower the community, the role or status accorded to community partners is liable to remain passive in the transmission or giving of knowledge. There has been an extensive debate occurring in universities on the theme of student-centred teaching versus teacher-centred teaching (O'Neill & McMahon, 2005). If students at university conceptualise their pedagogical situation as novices receiving learning from their expert teachers, it may seem appropriate for them to transfer this pedagogy to their own community-engaged circumstances.

An expert/novice discourse was particularly apparent in our data in science-based CELT (see also Cronin, 2010). From a science perspective, such representations lean towards a meritocratic position of the value of scientific knowledge in relation to other

forms of knowledge (Cech, 2014), although generally these are simultaneously underpinned by personal values. Cech (2014) argues that the promotion of the meritocracy of science, as an unbiased and fair system of knowledge advancement, represents a culture of disengagement in science, technology, engineering and mathematics professions from broader issues of public welfare and social justice. According meritocracy to scientific knowledge and scientists without question further reinforces the expert/novice position. Following Cech's argument, simply relying on science presented by an expert is not enough to facilitate deep learning. This university, like many others, promotes teaching strategies and expectations that encourage students to take deep approaches to learning (Säljö, 1979). In this regard, the university's guidance that students are supported to better understand the wider meaning of their learning, and seek connectivity of ideas and concepts, could be poorly served by a CELT model characteristic of an expert/novice discourse.

At a higher level of complexity, but clearly incorporating the expert/novice discourse, is a conception of community engagement bounded by New Zealand's Education Act, which defined universities as critic and conscience of society (Ministry of Education, 1989). It is important to note that phenomenographic analysis seeks to understand the diversity of how interviewees perceive their experiences of community engagement, not to categorise colleagues as certain types of educators. We read in the insights offered to us that for practitioners, community engagement carried far greater value than simply service. The outcome space of our analysis suggests interviewee perceptions of their involvement in community engagement readily progressed from an expert/novice discourse to conceptualising community engagement as a form of advocacy. Those who took on the role of critic and conscience of society described being active in and critically engaged with society, at the same time affording community partners a beneficiary role in the relationship. This conceptualisation may not extend in the same way to developing engaged teaching practices. A possible explanation might reflect how the emphasis on research performance measures in New Zealand and international universities marginalise the development of tertiary teaching practices and community engagement.

Our most complex conception represents community engagement as reciprocal learning. For some interviewees, engaged scholarship went some way to justifying public funding to higher education, and added greater justification for students studying at higher education institutions. Provision of experiential learning opportunities at university, such as community engagement, is more likely to lead to students developing habits of mind and dispositions inclined towards lifelong learning and greater societal engagement (Kuh, 2003; Peterson, 2009). Barrie (2007) places participatory learning as the most conceptually inclusive understanding of how university students develop the graduate attributes that higher education seeks. In Barrie's conceptualisation, participation includes social activities, extra-curricular study and out-of-class learning. Barrie (2006) also identifies that conceptions of enabling abilities and aptitudes are the most complex understanding of graduate attributes. Conceptualising community engagement as reciprocal learning facilitates development of graduate attributes as enablers of higher-order learning. In response, this research suggests we should be enacting a pedagogical shift from passive approaches to learning and teaching towards far more active approaches.

Yet to embed community engagement within university learning and teaching (and research), a university may require more than a minority of committed staff. Interviewees

indicated that whilst their conception of community engagement was as an active and morally just approach to learning and teaching, highly beneficial to students, university and community, a number of challenges existed to establishing and maintaining such an approach. Interviewees described how building relationships with community partners had placed demands on their workloads:

It takes university leadership to say this is valuable, people need to be, the amount of work that goes into setting up these things needs to be recognised in terms of, yeah, this isn't necessarily a standard paper [course]. Developing community relationships is hard work, time consuming.

Interviewees expressed a view that such workload demands might sway colleagues to maintain more conventional approaches to teaching:

It hasn't happened as much as it might because it is a simpler thing often to say, 'ok here's a text book, here's a set of notes, go teach from this . . . if I'm going to have to involve someone from outside then I'm gonna have to organise this'.

If the effort and professional development involved in establishing community engagement as reciprocal learning is not institutionalised within university systems, the likelihood of pedagogical transformation will be reduced, even if the outcome of diverse learning opportunities for students is widely accepted. In this regard, we agree with the findings of Smith and colleagues (2014), who propose that the workload demands created by developing community relations and partnerships, whilst meaningful and intrinsic to learning and teaching for some CELT practitioners, may continue to discourage others.

In some respects, the expanding literature on CELT is not necessarily congruent with our argument for community engagement as reciprocal learning. Much research and development work focuses on promoting CELT to overcome a dearth of such engagement in the twentieth century (Buys & Bursnall, 2007). We caution against emphasising what appears to be an expert/novice conceptualisation, refocused on achieving institutional gains and 'giving back' at the same time. The broad area of engagement described as knowledge transmission or knowledge-giving is, by its very nature, antithetical to notions of community engagement as reciprocal learning, even where focused on the roles of entrepreneurial academics (Bicknell, Francis-Smythe, & Arthur, 2010). On the other hand, some researchers in higher education explore what is happening to identify a forward trajectory for effective engagement. Gelmon, Jordan, and Seifer (2013) noted that: 'Engagement educates students for democratic citizenship, mobilises multiple forms of knowledge, and leverages the capacities of all the participants to improve community well-being' (p. 59). We take 'all the participants' to include university CELT practitioners as well as their students and community partners. Steps need to be taken for academic development to establish conducive conditions for engaged scholarship, and to enhance CELT practitioners' capacities to improve community well-being. Extant research identifies institutions and practices that encourage and support such engagement, for example, through academic tenure and promotion criteria (Gelmon et al., 2013; Smith et al., 2014). This research reinforces the perception that university CELT practitioners are seeking institutional leadership to further develop their community engagement commitments and scholarship.



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## References

- Åkerlind, G. (2005). Phenomenographic methods: A case illustration. In J.A. Bowden & P. Green (Eds.), *Doing developmental phenomenography* (pp. 103–127). Melbourne, Australia: RMIT University Press. Retrieved May 12, 2014, from <http://search.informit.com.au/documentSummary;dn=036631828706786;res=IELHSS>
- Åkerlind, G., Bowden, J.A., & Green, P. (2005). Learning to do phenomenography: A reflective discussion. In J.A. Bowden & P. Green (Eds.), *Doing developmental phenomenography* (pp. 74–100). Melbourne, Australia: RMIT University Press. Retrieved May 12, 2016, from <http://search.informit.com.au/documentSummary;dn=036631828706786;res=IELHSS>
- Åkerlind, G.S. (2012). Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*, 31(1), 115–127. doi:10.1080/07294360.2011.642845
- Andrews, E., Weaver, A., Hanley, D., Shamatha, J.H., & Melton, G. (2005). Scientists and public outreach: Participation, motivations, and impediments. *Journal of Geoscience Education*, 53(3), 281–293. Retrieved March 10, 2014, from <http://search.proquest.com/docview/202778942?accountid=14700>
- Barrie, S.C. (2006). Understanding what we mean by generic attributes of graduates. *Higher Education*, 51(2), 215–241. doi:10.1007/s10734-004-6384-7
- Barrie, S.C. (2007). A conceptual framework for the teaching and learning of generic graduate attributes. *Studies in Higher Education*, 32(4), 439–458. doi:10.1080/03075070701476100
- Bicknell, A., Francis-Smythe, J., & Arthur, J. (2010). Knowledge transfer: De-constructing the entrepreneurial academic. *International Journal of Entrepreneurial Behaviour & Research*, 16(6), 485–501. doi:10.1108/13552551011082461
- Bowden, J.A. (2000). The nature of phenomenographic research. In J.A. Bowden & E. Walsh (Eds.), *Phenomenography* (pp. 1–18). Melbourne, Australia: RMIT University Press. Retrieved May 12, 2014, from <http://search.informit.com.au/documentSummary;dn=120144805886039;res=IELHSS#page=7>
- Boyer, E.L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching. Retrieved December 8, 2014, from <https://depts.washington.edu/gs630/Spring/Boyer.pdf>
- Butin, D.W. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. New York: Palgrave Macmillan.
- Buys, N., & Bursnall, S. (2007). Establishing university–community partnerships: Processes and benefits. *Journal of Higher Education Policy and Management*, 29(1), 73–86. doi:10.1080/13600800601175797
- Cech, E.A. (2014). Culture of disengagement in engineering education? *Science, Technology & Human Values*, 39(1), 42–72. doi:10.1177/0162243913504305
- Cronin, K. (2010). The ‘citizen scientist’: Reflections on the public role of scientists in response to emerging biotechnologies in New Zealand. *East Asian Science, Technology and Society*, 4(4): 503–519. doi:10.1215/s12280-010-9154-x
- Entwistle, N. (1997). Introduction: Phenomenography in higher education. *Higher Education Research & Development*, 16(2), 127–134. doi:10.1080/0729436970160202
- Gelmon, S.B., Jordan, C., & Seifer, S.D. (2013). Community-engaged scholarship in the academy: An action agenda. *Change: The Magazine of Higher Learning*, 45(4), 58–66. doi:10.1080/00091383.2013.806202



- Gluckman, P. (2013). *Interpreting science: Implications for public understanding, advocacy and policy formation. A discussion paper*. Auckland: Office of the Prime Minister's Science Advisory Committee.
- Holland, B.A. (2005). Reflections on community-campus partnerships: What has been learned? What are the next challenges? In P.A. Pasque, R.E. Smerek, B. Dwyer, N. Bowman, & B.L. Mallory (Eds.), *Higher education collaboratives for community engagement and improvement* (pp. 10–17). Ann Arbor, MI: National Forum on Higher education for the Public Good. Retrieved March 12, 2015, from [http://thenationalforum.org/wp-content/uploads/2012/10/Wingspread\\_05\\_Final\\_Monograph.pdf#page=10](http://thenationalforum.org/wp-content/uploads/2012/10/Wingspread_05_Final_Monograph.pdf#page=10)
- Kearins, K., & Fryer, M. (2011). Relating sustainability theory to practice at Auckland airport: An engaged scholarship endeavour involving students. *Corporate Social Responsibility and Environmental Management*, 18(3), 151–161. doi:10.1002/csr.270
- Klein, P., Fatima, M., McEwen, L., Moser, S.C., Schmidt, D., & Zupan, S. (2011). Dismantling the ivory tower: Engaging geographers in university–community partnerships. *Journal of Geography in Higher Education*, 35(3), 425–444. doi:10.1080/03098265.2011.576337
- Krčmářová, J. (2011). The third mission of higher education institutions: Conceptual framework and application in the Czech Republic. *European Journal of Higher Education*, 1(4), 315–331. doi:10.1080/21568235.2012.662835
- Kuh, G.D. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change: The Magazine of Higher Learning*, 35(2), 24–32. doi:10.1080/00091380309604090
- Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought*, 21(3), 28–49.
- Marton, F., & Booth, S. (1997). *Learning and awareness*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Marton, F., & Pong, W.Y. (2005). On the unit of description in phenomenography. *Higher Education Research & Development*, 24(4), 335–348. doi:10.1080/07294360500284706
- Medaglia, R. (2011). Engaged scholarship in research on information technology in government. *Information, Communication & Society*, 15(2), 246–259. doi:10.1080/1369118X.2011.605903
- Ministry of Business, Innovation and Employment. (2014). *A nation of curious minds: He whenua hiriri i te mahara*. Retrieved March 11, 2015, from <http://www.msi.govt.nz/update-me/major-projects/science-and-society-project/>
- Ministry of Education. (1989). *Education Act 1989*. Government New Zealand. Retrieved December 1, 2014, from <http://www.legislation.govt.nz/act/public/1989/0080/latest/DLM175959.html>
- O'Connor, K.M., Lynch, K., & Owen, D. (2011). Student-community engagement and the development of graduate attributes. *Education & Training*, 53(2), 100–115. doi:10.1108/00400911111115654
- O'Neill, G., & McMahon, T. (2005). Student-centred learning: What does it mean for students and lecturers? In G. O'Neill, S. Moore, & B. McMullin (Eds.), *Emerging issues in the practice of university learning and teaching*. (pp. 27–36). Dublin, Ireland: AISHE.
- Peterson, T.H. (2009). Engaged scholarship: Reflections and research on the pedagogy of social change. *Teaching in Higher Education*, 14(5), 541–552. doi:10.1080/13562510903186741
- Säljö, R. (1979). *Learning in the learner's perspective. 1. Some common-sense conceptions*. Gothenburg: Institute of Education, University of Gothenburg.
- Smith, K.M., Else, F., & Crookes, P.A. (2014). Engagement and academic promotion: A review of the literature. *Higher Education Research & Development*, 33(4), 836–847. doi:10.1080/07294360.2013.863849
- Spalding, R. (2013). Daring to volunteer: Some reflections on geographers, geography students and evolving institutional support for community engagement in higher education. *Journal of Geography in Higher Education*, 37(1), 59–64. doi:10.1080/03098265.2012.757300
- Tolich, M., Shephard, K., Carson, S., & Hunt, D. (2013). Co-managing the sustainability of university internship programmes in brownfield sites. *New Zealand Sociology*, 28(1), 156–171. Retrieved May 20, 2014, from <http://search.informit.com.au/documentSummary;dn=495099235316508;res=IELHSS> ISSN: 0112-921X
- Trigwell, K. (2006). Phenomenography: An approach to research into geography education. *Journal of Geography in Higher Education*, 30(2), 367–372. doi:10.1080/03098260600717489