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LINKAGES

Career Education Networks and Communities of Practice

A report from the School–Communities strand of the Education Employment Linkages project

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Abstract

School-based careers advisors have been given a key role in assisting young people in transition from school to work and further education. Their role is especially significant in light of the strategic importance attached to career development for workforce preparation and development policies. However major changes in the nature of work and in contemporary transitions from school, as well as shifts in career education theory and delivery, mean that careers advisors are often left playing continual "catch up" challenge in terms of knowledge and expertise. Meeting the needs of young people today now involves establishing a far wider range of working relationships inside and outside of the school and managing far larger volumes of constantly changing information than ever before.

Some careers advisors have addressed these challenges by working closely with the School Support Services pathways advisors to form dynamic, cross-linking, networks alongside and outside of existing organisational structures. These decentralised networks include careers practitioner associations and policy developers and crucially also include a range of people formerly considered peripheral to career education - industry consultants, school support staff, and community coordinators. Far from being a simple personal engagement, the activity of networking on an informal face-to-face and virtual basis is a source of shared learning, knowledge production, and knowledge management. It allows a community of practice to be built across schools, education sectors, and community organisations (including employers and industry) on a regional and national basis. This inclusion of new community membership helps shape the ongoing development of career education. However it also signals a thorny issue around the role of nonteaching support staff in career education models that are moving towards curriculum-based, teacher-qualified activity and delivery. We suggest that the selection and training of careers staff needs to take account of new network and community membership and to enhance individuals' capacity to engage in networking. We also suggest that networks and networking be recognised and valued as a professional activity. Networks can be further developed as communities of practice, perhaps with the assistance of a "professional spine" to give cohesion to what is a diffuse set of ideas, activities, and actors in a very dynamic environment.

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Executive Summary

The nature of contemporary pathways and the transition from school to work and further education involves more information and greater possibilities, from a wider range of sources, than ever before. This represents a particularly challenging union of opportunity and responsibility for young people and for those who support them through career education. The changing world of work has given the work of careers practitioners[1] a new significance, coming to be framed as "career development" in order to signal its strategic significance in public policy. The new significance of careers practitioners, especially school-based careers advisors, has placed new demands on their skills, knowledge and professional identities—demands that many recognise but are struggling to meet. Careers advisors are in fact faced with a double challenge here. Firstly, careers advisors must support young people to make new life decisions and manage role changes (e.g., becoming tertiary students, employees or learner-workers) under social and economic conditions that are very different from ones they experienced in their own transition from school. Secondly, careers advisors must come to terms with the impact of social, economic and technological changes on their own careers and work practices. They face a reconceptualisation not only of career education, information and guidance for the 21st century, but also of their role in relation to school and community, in ways that confront their existing knowledge and skills base, and therefore also their personal and professional identities. This reconceptualisation of roles is particularly pertinent given that careers advisors are, increasingly, just one of the many resources available to support young people in transition.

In view of the complexities in careers advisors' work and role reconceptualisation, we decided to focus on *networks*, as a social structure characteristic of contemporary society's attempts to deal with uncertainly and complexity (Castells, 2000). Social networks in particular are now more significant in the labour market by virtue of enabling people across different positions in an organisation or hierarchy to have more of a role in information flows and innovation, and to achieve things beyond the capabilities of institutional or organisational structures alone. We therefore saw networks as a key mechanism for interconnecting the worlds or network "nodes" with which careers advisors need to engage, enabling them to build on informal and formal relationships outside of traditional reporting and work relations. The central characteristics of networks—as a focus on relationships, an ability to shift and respond to events and a tendency to coalesce around a few central or particularly significant nodes—are critical for the ability of people (e.g., careers advisors, teachers in different schools, employers, industry brokers and parents) to work together—not only to "get the job done" but also to reconceptualise what that job is or could be to best support young people in today's world and for the future.

The activity of *networking* has long been recognised as a task or activity of career guidance practitioners and more recently in addition as a competence that guidance practitioners should have in order to successfully undertake their work with young people and adults. Networking requires careers advisors to have the skills to be successful in existing social support structures and to be active agents in changing these structures. It also demands a

[1] The dynamic environment within which careers quidance practice now operates, means that there are now a number of actors within careers practice in school communities, all of whom to various degrees can be considered careers practitioners.

reconceptualising of how careers advisors develop their knowledge base, how they learn on and through the job and indeed how their initial and continuing professional development can support them to acquire and perfect their networking skills.

A networked and networking approach to career education is therefore not only a logical one but is already part of work practice for some working in the career education system, especially in school and school-related "nodes". This research explores how these networks operate with a dynamism and fluidity of people-based and ideas-based relationships. It is written as a contribution to the broader Education Employment Linkages study that examines links between education and employment. This report focuses on the role of career education as a mediating factor in supporting successful transitions for young people and in particular on the role of careers advisors and the networks they use to assist them in carrying out their role.

In parallel, an understanding of how young people network to assist themselves in making career transitions is essential in order for careers advisors to assist them appropriately. Despite its evidence and importance as both a competency and an activity of career guidance, networking has received little or no attention internationally in both theory and research on career development. However, there is a large body of literature and research on networking itself: on network characteristics, on the network society, on the growth of social networks and on the role of new technology in supporting such growth (see, for instance, Castells, 2000; Sabel, 1991; Shirkey, 2008).

In this context and in the conditions of increasing complexity facing young people in making education and employment choices, particularly in an information-overload scenario, we decided to use networks as a tool to analyse the New Zealand career education system—a system that itself is complex in its aims, participation and activities.

Using a "fractal" approach that examines a repeating motif to illustrate something at another structural level, we focused on sets of networks used by careers advisors, generated and maintained in one particular geographical area. These sets were expansive in nature and crossed organisational lines, linking school and community and built on an understanding of changes in the world of work. In particular we explored the network behaviour of nine regionally based national pathways advisors[2] and two schools within one region. Using a snowballing effect, we interviewed the pathways advisors and the people or representatives from organisations that they had named as very important in their network, albeit within the budget, time frame and methodology of our project and key informant availability.

The results of our study show that pathways advisors' career education networks frequently emphasised network learning capacity. Within the large school, roles in the transition team were not fixed and have been refined over time according to staff skills, interests, knowledge, availability and connections outside and within schools. In the small school, the careers advisor has worked to create a "web" throughout her school and links to a regional team of schools and early childhood centres. She describes herself as a voracious reader, and is an organiser of careers events, attends careers conferences and is an active member of the Careers and Transition Educators Association (CATE). She also taps into other networks through the school's membership of a cluster in another education initiative and picks up professional development that she can use in her career role.

[2] The national pathways advisors are contracted to the Ministry of Education through School Support Services and provide support to secondary schools on career education matters.

CATE, the Career Development Association of New Zealand (CDANZ), the Industry Training Organisation (ITO) advisor, the industry consultant, the Career Services manager and Ministry of Education senior advisor were all named as key learning or capacity-building sources in the networks of the school-based careers advisors and the pathways advisors, as adding value and richness to their work to enable them to be more efficient and effective. Two virtual sources were also frequently named as vital nodes in the networks: the Future Pathways wiki and the Career Services website.

All the key informants felt that they could not do their job without networks; that networks were a given and enabled them to "work smarter". They understood their networks as being as much about sharing information as carrying out actions. Such networks primarily developed through the need to find alternative routes other than those already established within school hierarchies to meet new work demands placed upon them. Many suggested also that the networks were invariably part of other networks and that some links were more influential and important than others.

Most informants also pointed to their networks as sources of shared learning, knowledge production and knowledge management. Their networks were structures outside of formal organisational ones and allowed ideas to usefully collide. We think these networks and network connections can usefully be understood as communities of practice, exemplifying the way career education "resides in the skills, understanding, and relationships of its members as well as in the tools, documents, and processes than embody aspects of this knowledge" (Wenger, McDermott, & Snyder, 2002, p. 11).

Networking is also a necessary relationship in a community of practice—that is, where groups of people who share a common set of issues interact on an ongoing basis in order to deepen their knowledge and expertise. Knowledge in this context is understood as more than information codified in documents, artefacts and procedures. Knowledge is also embodied within people as tacit knowledge built up through experience. Tacit knowledge comprises that deep understanding of systems that is difficult to codify, yet it is that knowledge that enables dynamic responses to specific situations. Because tacit knowledge is difficult to codify, the sharing of tacit knowledge requires interaction between people and informal learning through conversations, storytelling and coaching and the like, which is what occurs through networking within a community of practice. If networking were recognised and fostered as an integral part of communities of practice, schools and the wider communities involved in career pathways would improve their management of knowledge in this domain and its development.

There are four major policy implications from this research, outlined in brief below and discussed in full in the conclusion.

Recognition of the value of networking in career education

It is now impossible to conceive of a successful career education programme in a school without this external dimension, in which the construction of networks and networking play a key part. Networks and the activity of networking are not only ways to produce and manage career education knowledge, but are also a framework for understanding that knowledge is "... not an object that can be stored, owned, and moved around like a piece of equipment or a document. It resides in the skills, understanding, and relationships of its members as well as in the tools, documents, and processes than embody aspects of this knowledge" (Wenger et al., 2002, p. 11). Because the Ministry of Education does not direct activities at the day-to-day

level, it is up to each individual school to specify tasks for their careers advisors and other careers staff—including whether networking is a task for them to undertake. Given that outdated forms of career education are still favoured in many schools and that there is a general propensity for networking to be understood as a personal rather than professional activity, it is likely that networking is undervalued in terms of time and resources allocated to it as an activity. At present its status is really an unofficial response of careers advisors and other co-ordinators (inside and outside the school) to a structural/systems deficiency.

Networks are for learning and building communities of practice

The career education networks reported on here show well-regarded and useful links not only to professional organisations like CATE and CDANZ but also to government agencies, professional development organisations and to independent consultants in industry and careers practice, industry bodies, individual employers, sports clubs, ex-school students and teachers within the school and at other schools. They also link to virtual nodes such as the Career Services and Future Pathways websites. And they include enduring links to particular individuals even after those individuals no longer work for the organisations that may at first have prompted the links. Various combinations of these people and organisations are represented in networks that informants specifically named as important for their learning. While communities of practice are a natural part of organisational life, they are usually not recognised or valued, but they can be fostered and should be because career education is likely to gain a lot from acknowledging the value of the shared learning that already occurs. Learning networks and communities of practice create an environment of continuous professional development, they are fairly efficient and they provide a space for the informal and highly contextualised learning of everyday life and work. The latter (learning in everyday life and work) generally receives very little attention in educational literature but our key informants have highlighted it as critical in their work. Formal leadership can be included in this to form a "professional spine" which takes the diffuse efforts of the different services and makes them coherent, without threatening them (Watts, 2009).

Redefinition of "the community" in communities of practice and network participation

Our key informants identify a wide range of important people and organisations in their networks. It is clear that our informants are increasingly working with "the community" outside of schools that includes family/whānau, employers, industry bodies, tertiary education organisations and other agencies and organisations that assist young people in transition. This has meant that "the community" in a community of practice has also expanded to include people who would otherwise have only been the recipients of whatever the school and the career advisor delivered. Some of these people have now moved into being collaborators and generators of career education. However there are both significant structural opportunities and limitations to people's participation that have implications for career education in practice. Secondary Tertiary Alignment Resource (STAR)-funded courses and the Gateway programme have acted as catalysts for building school–community relationships. The trend to employing support staff (rather than teachers) as Gateway co-ordinators has the advantage of using their existing community contacts and nonteaching status (to which many employers respond well). However, the use of support staff also raises issues about developing a school-wide approach to career education because support staff are not able to join curriculum committees or other teacher-specific school leadership activities and responsibilities. This leads to a narrowing of the domain—the common set of issues, practices and knowing—within a career education community of practice.

The selection and training of careers advisors and support staff

The careers advisor network-building and networking role requires a high level of interpersonal skills, commitment, relationship management, knowledge management and reflective capacity. It is clear that competence and willingness to engage in networking within and outside of the school, and throughout the community, are essential for careers advisors to undertake their role. Individuals differ significantly in their capacity to do this, particularly given that the primary roles and identities of most are those of teachers with career education coming as a (later) addition. As self-managing entities, schools in New Zealand can create their own individual school selection criteria for careers advisors and careers support staff. Therefore they may be able to increase the capacity of careers advisors and careers support staff through criteria that includes prior and continuing professional development (including formal qualifications) in the careers field. There may also be scope for the Ministry of Education to support this. The competencies approach developed by Cedefop (European Centre for the Development of Vocational Training, 2009) could be a useful starting point for developing these criteria. This could be part of New Zealand's quiet attempts to address careers guidance as very "weakly professionalised" (OECD, 2004a). If a whole-school approach to career education is to be taken seriously, then in-school networking becomes even more important. This means the issue of support staff involvement (or not) in curriculum committees and the like is critically important, particularly as they are likely to continue to play an important role in connecting schools with community members such as employers.

Chapter 1. Introduction: The Changing World of Work and Career Education

This report examines the networks operating for contemporary career education in New Zealand. The networks are used by those directly responsible for undertaking or managing career education with secondary school students—careers advisors and transition staff—to carry out their work and enhance their own capabilities through shared learning.

This research report is part of the "school–communities" strand of a broader programme of research, Education Employment Linkages (EEL). EEL looks to understand and improve the formal support systems that help young New Zealanders make good education–employment linkages to benefit themselves, their communities and the economy. The school–communities strand of the research is focused on the intersections of school and community (parents, employers, tertiary institutions and industry organisations) and takes an *educational* perspective which places learning at the centre of the research.

We continue our previous interest in career education in this report because career education has a specific educational aim—to prepare young people currently in school for the process of leaving school by assisting them to "develop self awareness, become aware of opportunities, make decisions and plans, take action" (Ministry of Education, 2003, p. 7). This report focuses on school-based career staff in particular because they are seen by government as a crucial part of the formal support systems that help young New Zealanders in transition from school to work. Career education in schools occurs under the auspices of National Administration Guideline (NAG) 1.6 which specifies that schools must:

> provide appropriate career education and guidance for all students in year 7 and above, with a particular emphasis on specific career guidance for those students who have been identified by the school as being at risk of leaving school unprepared for the transition to the workplace or further education/training. (Ministry of Education, 2007)

Careers advisors are the designated teachers in schools who have responsibility for this area and utilising and managing career education funding and material resources. These resources include Career Services' paper-based and Web-based tools, the Ministry of Education's Career Information and Guidance Grant (CIG) and Secondary Tertiary Alignment Resource (STAR), and the Tertiary Education Commission's Gateway programme. The careers advisor role in New Zealand schools first emerged in 1948 and while it is up to each individual school to manage and determine duties, careers advisors are likely to have responsibility for some or all of the following: providing up-to-date career information to students; providing careers guidance to students; working with school curriculum committees to support or integrate STAR-funded or Gateway programme learning; organising or co-ordinating career education learning activities; liaising with parents, local employers and tertiary education providers; and gathering school- leaver destination information.

We chose to focus on career education networks and network collaborators because these form a key dimension of career advisors' work practices. Also, the role of career education networks has received almost no attention to date in national or international research and literature. The research reported here on networks and networking centres upon how school-based careers advisors in New Zealand might most usefully respond to the challenges they face in supporting young people in transition from school and therefore also their changing role in the school and community.

The fields and processes with which careers advisors' work is concerned have changed markedly in recent times. Preparing students for the world of work, helping students discover and translate their interests into career-related choices and supporting students to make successful transitions from school are all significantly different processes now because they involve a significantly different world than was the case even 20 years ago, let alone when careers practice first emerged through vocational psychology in the early 20th century.

Careers advisors are in fact faced with a double challenge—each one an echo of the other. Firstly, careers advisors must support young people to make new life decisions and manage role changes (e.g., becoming tertiary students, employees or learner-workers) under social and economic conditions that are very different from ones they experienced in their own transition from school. Secondly, careers advisors must come to terms with the impact of social, economic and technological changes on their own careers and work practices. They face a reconceptualisation not only of career education, information and guidance for the 21st century, but also of their role in relation to school and community, in ways that confront their existing knowledge and skills base, and therefore also their personal and professional identities. This reconceptualisation of role is particularly pertinent given that careers advisors are, increasingly, just one of the many resources available to support young people in transition.

The changing world of work

The role of the school-based careers advisor is intricately bound up with the purpose and role of compulsory schooling and the political, social and economic pressures that have shaped, and continue to shape, the way in which schooling serves the needs of contemporary society.

Schooling has always had multiple and often contradictory aims, of which some have been more privileged than others at different points in history (Egan, 2001). However, preparation for the world of work has always been in the mix to some degree, explicitly or implicitly. This preparatory role has been emphasised in more recent times as economic pressures have been increased and work has become not just a key means and indicator of social participation but a key indicator of economic participation critical to national prosperity. For confirmation of the importance of work here we need look no further than the generally accepted understanding of transition-from-school as *transition-to-work*. Just what kind of work people transition to, and what they need to make the transition successful, are things that have changed significantly in the move from a 20th century model of industrialisation to a 21st century model of post-industrial economies or knowledge societies (notwithstanding the different definitions and analyses of the detail in these terms).

De-industrialisation in advanced capitalist states and the growth of employment in the service sector have reshaped work opportunities and work-skill needs. Rapid technological change based on digital information and communication technological platforms together with successful industrialisation in the so-called "developing" economies of Asia and South America have increased the uncertainty of competitive pressures on firms. The speed of change has also demanded more flexibility from education and training systems. Their incapacity to respond and to adapt at a similar speed has created gaps between supply of education and training and labour market demands. The response of such firms to this uncertainty is a demand for workforces to be flexible, both functionally and numerically, and for businesses to take on a learning centre role. With the breakdown in the ethos and structures supporting the "male breadwinner" bringing home a family wage, more women have entered the workforce, increasingly into work areas previously dominated by males. These pressures, including the effects of global competitiveness and global economic

interdependence (e.g., banking crisis), challenge traditional notions of careers in terms of stable, long-term employment (Hall, 1996) and consequently the role of schools in the transition process.

Politically, longstanding policy goals to secure full employment have been replaced by a policy focus on maintaining a low inflation rate and acceptance of a "natural" rate of unemployment. The neoliberal political framework supporting this in turn undermined the social structures within the welfare state that afforded people security in the face of economic insecurity and their subsequent inability to engage in paid work and further training. Increasingly there is an expectation that individuals should bear the risk of economic change by managing their lives so as to be continually "employable" and by securing social inclusion through paid work rather than the fall back of social welfare. These political shifts place pressures on schools to produce young adults who understand the need to be employable. The point at which young people are transitioning between school and beyond is the point at which young people start to become responsible for themselves. Consequently, it becomes incumbent upon schools to be more attentive to the transition process from school to employment and/or further education than previously. There is also a growing political demand for efficiency of investment in education and training and an awareness of the cost to taxpayers of dropout in tertiary education.

The changing notion of career and schools' response

The post-industrial world of work has led to a growing acknowledgement that people are likely to have "multiple careers" (Cheng, 2007) that for some may be "protean" in form—increasingly managed by the learner rather than only by the organisation for which they work (Hall & Mirvis, 1996). The concept of "career" has moved away from being seen as an outcome—getting or keeping a job—to an evolving sequence of life experiences over time (Arthur, Inkson, & Pringle, 1999). For young people in school, it is no longer a question of receiving career guidance to make single vocational matches based on aptitudes revealed by narrow school-based achievement and/or extracurricular interests. The constantly changing nature of occupations and identities focuses attention on *managing* life, career, work and learning decisions *throughout life*. Policy documents around the world therefore cite the role of tertiary education now as one of preparing people for a life of greater complexity involving frequent job and contract status change, greater probability of self-employment, geographical and occupational mobility and working in world of more fluid organisational structures (Santiago, Tremblay, Basri, & Arnal, 2008).

The response by many young school-age people to these pressures, reinforced by their parents and peers and supported by evidence that tertiary-qualified people earn more over their lifetimes than nontertiary-educated people, has been to seek formal education beyond secondary school in polytechnics and in universities. This has entailed an increased number of young people staying longer at school in order to gain the necessary qualifications to enter formal tertiary educational institutions.

As young people have stayed at school longer, schools have had to respond by catering for a broader range of students with a wider range of abilities and interests. This has created a huge challenge to schooling's previous focus of selecting and catering largely for university-bound young people, rather than nonuniversity-bound young people who could previously have left early and been reasonably assured of securing employment anyway. Government policies and schools have responded by providing a wider range of options to students which have tended to become known as "pathways" linked to post-school "destinations". The broadening of in-school programmes and pathways has generally been about responding to the most immediate

demands of retaining and motivating students (with explicitly relevant courses) as well as being an attempt to better align schools with the world beyond schools including tertiary education, workplaces and communities. These policies and practices correspond to the shifting meaning of career. Thus "career" can be seen in *life* pathways terms and career education can be understood, not as a "next-step" preparation, but as a process of building capacity and capabilities for meaningful transition and future work and life choices, and integration of life's different domains—throughout the person's entire life.

Complex pathways, complex transitions

In many ways these changes have been successful insofar as they have offered up new and different pathways which are either not oriented towards university or do not assume or preclude it one way or another. For example, STAR was established in 1996 and is deliberately flexible in enabling secondary schools to provide or purchase tertiary-level courses to meet students' transition needs as they see fit. These needs include facilitating students' transition to the workplace, or motivating them to achieve at school, or supporting them to explore career pathways and make informed future work and learning decisions. The Gateway programme established in 2002 is more tightly bounded than STAR and focuses on the immediate transition to work through a classroom-based and workplace-based learning programme. The introduction of standards-based secondary school qualifications in New Zealand in 2002 also brought a great degree of flexibility to course content and the kind of learning that can be formally recognised.

While changes to school programmes have opened some doors, they have also contributed to making the transition *through* school (and beyond) more fraught. The amount and breadth of transition and careers-related information to be considered and the expectation that it will be considered, rather than left to chance, is a major stress for many young people who struggle to come to terms with this increasing "responsibilisation" (Vaughan, 2005; Vaughan, Roberts, & Gardiner, 2006) and a lack of clear information about the labour market (Higgins & Nairn, 2006). Students must now make decisions about different pathways through school, which are increasingly directly as well as indirectly linked to pathways beyond school. These decisions include ones about in-school qualifications and in-school subject pathways, and assessment credit types, credit numbers and credit combinations, and generally take into account the occupational and lifestyle possibilities for their future as framed by their family's aspirations as well as their own, the advice of teachers and the promotional material supplied to schools by tertiary education (including industry-based) providers. Research shows that these pathways through school are constrained and fine-tuned according to each school's own timetable and curriculum and different combinations of standards used to assess subjects seemingly in common across different schools (Hipkins & Vaughan, with Beals, Ferral, & Gardiner, 2005). In other words, students must pay close attention to understanding pathways through their particular school and make careful use of any handbooks and guidance provided by the school. Neither they nor their parents have any blueprint to which they can refer.

The situation beyond school is even more complex for young people following a partial deregulation of the tertiary education system which gave rise to an explosion and duplication of post-school products and services for young people to consider. Although duplication is now seen as counterproductive by the Government and is being reviewed, the number of qualifications generated by Industry Training Organisations (ITOs) as well as other tertiary providers is broad and, by world standards, unusually so. This makes for a daunting array of possible pathways for young people to consider. And it means that career information and career guidance, while essential, is not sufficient to support young people to deal with

complex pathways and transitions. This is because individuals differ in their capacity to source information, to interpret it, to relate it to themselves and their circumstances and to make meaningful decisions based on it. So good- quality career education is vital because it incorporates (labour market and tertiary education) information but crucially it provides additional tools that "equip students to develop their careers throughout their lives. People continue to learn to do this long after they leave school, but what they learn at school is a crucial start" (Ministry of Education, 2009, p. 7).

The changing world of careers advisors' work

The changing world of work has given the work of careers practitioners a new significance, coming to be framed as "career development" in order to signal its strategic significance in public policy. As Herr, Cramer, and Niles (2004) describe, earlier career concepts derived from the emergence of vocational psychology and vocational guidance to deal with key work-related issues in the first half of the 20th century: industrial expansion, intensifying immigration and occupational diversification, and the family and neighbourhood no longer being able to serve as the primary source of information or job allocation. Careers counselling and careers guidance took over in the second half of the century and grappled specifically with the relationship between work choices and education, and their integration with other life roles in family, leisure and mental health. Career guidance's elitist overtones—the well-educated corporate employee tracking *his* way to the top—have been superseded by *career development* which addresses itself to a more diverse population that is making, and responding to, a more complex range of demands (Peterson & González, 2005; Watts, 2004).

So career development—as a behaviour and a set of career interventions (Herr et al., 2004)—is no longer about people making an initial occupation decision and assuming that vocational identity; it is about people of *any* age and *throughout* life, as they make education, training and occupational choices and *manage* their careers (International Symposium on Career Development and Public Policy, 2006, emphasis added). The significance of the transition decisions made by young people, and especially the basis on which they are made, points to the crucial role of the school-based careers advisor at this time. Thus the work of the careers practitioner now links the pursuit of individual occupational fulfilment to national and global issues of employability and workforce development. At an individual level, career development is not only about fostering individuals' participation but also their progression and development (Watts, 2001). At a policy level, career development is about fostering workforce participation and development of all people for the purposes of community, society and economy at local, national and global levels. In other words, career development and career education is increasingly understood as a public good as well as a private one. And the school-based careers advisor becomes significant not just for their role in helping individual students understand their interests and translate these into their individual tertiary programmes and employment situations, but also for their role in national employability strategy and workforce development. The transition-from-school is therefore not only a high-stakes affair for young people, but also for careers advisors who co-ordinate career education as the initial foundation of career development for young people (it is also a high-stakes affair for schools and for the "destination" organisations, tertiary education institutions and employers who work with young people after leaving school).

The new significance of careers practitioners, especially school-based careers advisors, has placed new demands on their skills, knowledge and professional identities—demands that many recognise but are struggling to meet. A 2007 survey of careers advisors and STAR and Gateway co-ordinators found that over three-quarters of responding careers staff reported that

increased awareness of the importance of career education had improved their status within the school as well as created additional demands on their time and skills. Many also cited challenges in dealing with new pressures on students and the often differing expectations of students and parents. More than two-thirds cited an increase in administration and over half cited an increase in reporting requirements for STAR and Gateway. Sizeable proportions reported that meetings with employers and tertiary providers (40 percent) and school/kura careers planning (39 percent) had increased, although similar proportions of staff thought things were about the same in these cases. There were few cited decreases in work but notable exceptions, reported by around a third, were a decrease in time to work with individual students and time to reflect/plan/share ideas. More than half also reported that lack of time was generally the main barrier to providing career education in their school (Vaughan & Gardiner, 2007).

However, given that careers staff were experiencing new demands in their roles, it is perhaps not surprising that they signalled an interest in professional development and identified their most significant achievements as being related to their own upskilling. Most (76 percent) belong to CATE and would be able to access some professional development through this association. However, few had a formal qualification in career counselling or career education (there were just 9 percent with a Graduate Certificate in Career Development, 3 percent with a Graduate Diploma in Career Development and 3 percent with a Diploma in Counselling) or were members of CDANZ which requires professional practitioner qualifications for membership. Access to professional development through a CDANZ avenue is therefore extremely limited.

The lack of formal careers qualifications is likely due to a combination of factors. Firstly, there is no formal requirement by both the Ministry of Education and individual school management that careers advisors have a recognised careers qualification. As schools in New Zealand are self-managing entities and therefore not subject to any specific instruction from the Ministry of Education, it is up to individual schools to formally require careers advisors to have a recognised careers qualification. Secondly, there are no official guidelines and procedures to assist schools in the selection of a careers advisor. Thirdly, career education is only one of the roles carried out by careers staff. Less than a fifth of those surveyed in 2007 reported being in solely careers-related roles and just under half reported having three or four roles spread across a range of categories including careers advisor/transition teacher, STAR and/or Gateway co-ordinator or guidance counsellor, senior manager (or other school-wide work) and subject teacher. Careers staff are in fact more likely to identify primarily as teachers—a role for which they are already qualified and with a professional association (PPTA) to which nearly all belong.

Fourthly, and in a related vein, since the majority of careers staff are in the later stages of their own career, they may not feel that they want or need another formal qualification or that they have the time and energy to work towards one. Over two-thirds of careers staff surveyed in 2007 had been teachers for 16 years or more, were more likely to be female and were older (than their noncareers teaching counterparts responding to NZCER's National Survey of Secondary Schools, 2006). Nineteen percent indicated they were quite likely or most likely to retire in the next five years and a further 10 percent indicated they were quite likely or most likely to leave teaching in this time.

Finally, noncounselling careers qualifications for school-based careers staff have only been developed in recent years. Furthermore, these kinds of courses may still be establishing their presence or credibility among potential students (note that only 6 percent of survey respondents (Vaughan & Gardiner, 2007) are currently studying towards a careers

qualification). This is likely to be a hangover from the establishment of the careers advisor position and the Department (now Ministry) of Education's Psychological Service in the 1948–62 period which created vocational advisory and personal counselling roles in schools (Working Party on Guidance in Secondary Schools, 1971). From the outset different training, role expectations and professional identifications have been the norm.

The lack of clarity around role has also manifested through idiosyncratic delivery and management of career education and unequal access by students (Wilson & Young, 1998), and the privileging of information distribution over the teaching of longer term career management strategies and skills that might arguably be more fit-for-purpose (Vaughan, 2005; Vaughan & Gardiner, 2007). Schools vary in the way that they involve careers advisors in decision making about, and use of, careers-related funding such as STAR and the CIG, with some evidence that careers advisors have little say over the spending priorities (Vaughan & Gardiner, 2007) and some evidence that principals have not always delegated STAR funding to STAR co-ordinators (who are commonly also the careers advisors) to use (Vaughan & Kenneally, 2003).

Schools have also prioritised different groups of students within their school and community and although many target groups such as at-risk, Māori, Pacific, refugee and gifted students for career education, there is evidence that significant groups of students have no experience of careers activities or any contact with the career advisor. The Education Review Office's 2006 evaluation found that secondary schools were weak in the areas of: meeting the career needs of diverse groups of students; involving family/whānau and communities in career education programmes; and reviewing the effectiveness of their own career education activities (Education Review Office, 2006).

The Competent Learners at 16 project found disturbing levels of nonparticipation in careers activities in its sample of 158 Year 11 students and 260 Year 12 students. Nearly half were unable to respond to questions evaluating the usefulness of *talking with teachers or careers advisors*, *visiting tertiary settings and careers expos* and *carrying out careers/life planning projects* because they had never done these things at school (Vaughan, 2008). This is consistent with survey findings that most or all Years 11 and 12 students participate in careers activities just 22–38 percent of the time (Year 11) and 36–52 percent of the time (Year 12) (Vaughan & Gardiner, 2007). Even taking this into account, along with acknowledging the overrepresentation of more privileged students in the Competent Learners sample, who are less likely to be in a target group for career education (i.e., at-risk, truant, Māori), and that students will find different activities useful and at different times, these kinds of findings suggest a selective provision of career education activities:

> which are more about intervention than something for all students that is integral to being in, and preparing to leave, secondary school. It is consistent with National Administration Guidelines 1.6 but seems inconsistent with the Ministry of Education's school support publication *Career Education and Guidance in New Zealand Schools* (2003, p. 7) which spells out the aims of career education and guidance in terms of students developing self-awareness about opportunities and for making decisions. It looks even more inconsistent with career development trends which emphasise careers guidance for everyone and in a lifelong sense, not just at the point of leaving school. (Vaughan, 2008, p. 50)

However, the shift in the significance and status of the careers practitioner role, and the acknowledged importance of career education as the initial career development service for young people, have prompted a recent rewriting of the Ministry of Education's career education guide for schools (Ministry of Education, 2009) and the production of several Career Services publications on career education (Career Services, 2009; Hodgetts, 2009), as well as a new set of Career Services Web pages and a suite of Web-based resources (see

http://www2.careers.govt.nz/career_education.html). These have built on the work done through the 2006–7 Creating Pathways and Building Lives (CPaBL) collaboration between the Ministry of Education, School Support Services and Career Services, which attempted to bring more cohesion to career education in schools. CPaBL was built upon lessons from the 2005 Designing Careers Pilot and reflected the Ministry of Education's response to the then-Government's Youth Transitions Strategy. It was designed to address careers advisors' limited capabilities, opportunities for career development and capacity to deliver career education to Māori and Pacific students; low awareness among students of career education's value; limited time allocation and funding for career education; and the undesirable gulf between school, labour market and family (Hodgetts, 2009).

As CPaBL developed, the strategic value of a school-wide approach to career education and the close involvement of school management was underscored (Education Review Office, 2009). Notably this has been taken further by the Ministry of Education and Career Services who have placed the needs for young people in the 21st century at the centre of developing career education in their recent guides which emphasise the development of "career development competencies" through the key competencies in *The New Zealand Curriculum* (Ministry of Education, 2007). This is line with international trends. However, it does raise interesting questions about the role of the careers advisor in schools now. For instance, as Shirkey has shown in his work on the demise of professions based on scarcity models, traditionally the work of careers advisors tended to be organised around things that were scarce—labour market information, tertiary institution information and vocational testing—but these things are now readily available through public information websites, marketing material and online self-testing resources. If people have access to what was previously scarce and in the sole domain of the careers advisor, and schools take seriously the Ministry of Education's suggestion that "all teachers are career teachers" now, what should the designated careers advisor be doing? We explore the possibilities through this research on their career education networks and networking.

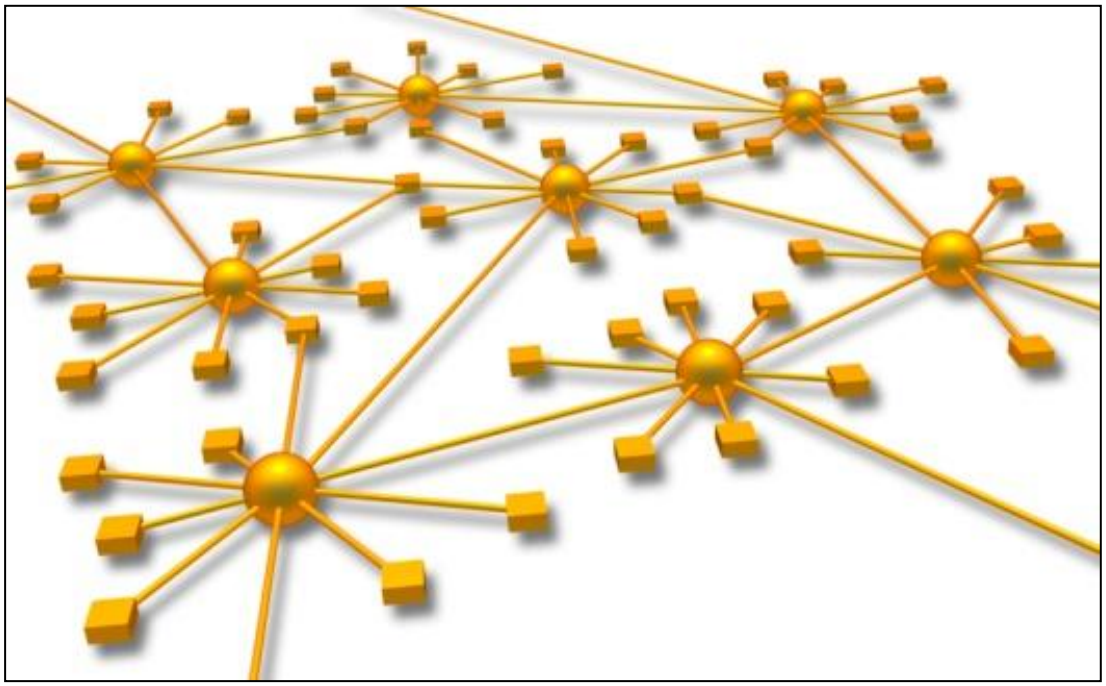
Chapter 2. Methodology: Career Education Networks

Network characteristics

We began exploring the ways in which people involved in career education were thinking about, and managing, the changes to the world of work and career education. We turned our attention to the idea of networks and how approaches to career education that employ these might better meet the modern needs of young people in transition and the careers advisors who support them.

Networks are simply systems made up of interconnected things or people, which constitute the "nodes" of the system. Computer-to-computer links, electricity power grids and the circulatory system in the body are good examples of networks, as are social groupings such as those formed around particular interests such as a motorbike community or wikipedia. Networks are characterised by the centrality of relationships to their workings, their fluidity (the network can shift and respond to events) and their tendency to coalesce around a few central or particularly significant nodes. Some networks have a simple *centralised* architecture like a hub with spokes. Others are *distributed* and can be visualised as a net. A third type, *decentralised* networks, have a repeating pattern of a few particularly important nodes, each connected to a set of other less important nodes. Decentralised networks seem to be the type we observed in this research.

Figure 1: Decentralised network



While networks are not in themselves new, they have become more important in recent times as organisational structures have loosened and new technologies have emerged (Bradwell & Reeves, 2008). The "network society" has come to be seen as a social structure characteristic of contemporary society, emerging from the attempts of organisations and individuals to respond to a social and economic world that has become more uncertain and complex (Castells, 2000). Social networks in particular are now more significant in the labour market by virtue of enabling people across different positions in an organisation or hierarchy to have more of a role in information flows and innovation. Relationships, fluidity and particular node-significance feature in the ability of people to co-operate, with trust being a central tenet of those social relationships.

New technologies, now vital in social networks, have made forming any sort of group (from wikipedia to terrorist cells) easier and cheaper, and organisations benefit through better communication and more flexible structures that can achieve things previously out of reach for any other organisational structure (Shirkey, 2008). But above all, networks help people to manage complexity or address complex problems (problems that cannot be reduced to the sum of their parts). Networks help people with the enormous volumes of information and relationships that they must deal with in everyday life, and provide a means for approaching complex problems, big and small, from house renovations to climate change, or even managing the transition from school to work. They tend to operate above or alongside existing hierarchical organisational structures but offer a form of horizontal (nonhierarchical) cross-linking with actors focused on a common purpose (Bienzle et al., 2007).

Social networks necessarily involve *networking* or communications between network actors and members. Networking, as an activity of a guidance practitioner or career educator, was first identified in 1991 by the United Kingdom Standing Council for Associations of Guidance in Educational Settings. Networking has also been identified as one of the seven main groups of tasks undertaken by guidance practitioners and included tasks such as "supporting informal guidance sources", "advocacy" and "feedback" (Watts, 1994). In the most recent comprehensive international report on the training and qualifications of guidance practitioners (European Centre for the Development of Vocational Training (Cedefop, 2009), a competence framework for guidance practitioners was developed which included the following supporting competencies: "operating within networks and building partnerships" and "engaging with stakeholders". The following tasks characterised these competencies:

- identifying the range of networks relevant to one's work role;
- exchanging information with network members;
- identifying stakeholders;
- developing and maintaining relationships with stakeholders (Cedefop, 2009, p. 85).

It is clear from these reports that guidance practitioners internationally have identified networking as a key competence and task that enables them to undertake their work. However, the research literature for career guidance pays no attention to date to this aspect of guidance practitioners' work. Indeed, networking does not appear as either a competence to be acquired or as a professional development tool in literature on the training of guidance practitioners. This study is the first time internationally that networking as a careers advisor and guidance practitioner task or competence has been examined. It is also interesting to note that while career education and guidance is a learning activity, the links between career education and guidance and learning theories are often overlooked, and that networking is viewed more as personal engagement than community and shared learning and therefore not

as a professionally important activity. We attempt to explore the career education and guidance and learning relationship in this study.

The Ministry of Education guidebook, *Career Education and Guidance in New Zealand Schools*, identifies "networking between schools" as "vital for sharing information on effective career education and guidance initiatives and activities that are taking place in the school's region and around the country. Clustering is successful in fostering effective learning communities" (Ministry of Education, 2009, p. 20). It goes on to suggest that "career education leaders *may* be responsible for maintaining networks with businesses, education and training providers and parents, and encouraging their involvement with the school" (p. 29). However, there is no other mention of networks or networking in relation to careers staff. An appendix to Career Services' recent guide, *Career Education in Practice*, mentions networks for new careers advisors, suggesting they identify people within the school who are responsible for aspects of career education and are senior management career education "champions", as well as "find out about existing links" with people in the community (Career Services, 2009, p. 43).

The Ministry of Education guide does make an explicit suggestion about networks in terms of suggested learning outcomes from career education for young people: "demonstrate … the importance of support networks (Year 9)", "establish a support network (Year 11)", "maintain a support network that suits their life and career interests" (Year 12) and "utilise a support network for transition to further education or training or work (Year 13)" (p. 47). Other research confirms that identifying and using networks and networking is an important part of young people's capacity building in career education and with regard to their transition from school to work (Stokes, Stacey, & Lake, 2006). And there are volumes of research and policy on helping schools network with each other—usually conceived of as school clusters (see, for example, schools networking to embed enterprising culture within clusters of schools based on the characteristics unique to their individual communities (Roberts, Bolstad, and McDowall, 2009)). However, networks and networking are not identified as important for the school staff who support young people in career education.

We therefore picked out the idea of networks as an interesting tool in analysing New Zealand's career education system—a system that is complex in its aims, participation and activities. Networks emphasise relationships, resilience and flexibility—all things crucial both for young people making successful transitions *and* for the careers advisors supporting young people. Decentralised networks allow for the fact that support systems for young people might be indirect (e.g., professionally developing the careers advisors who support young people) as well as direct (e.g., involving a careers advisor discussing the future with a student), and might be informal (e.g., a careers advisor and an employer having coffee together) as well as formal (e.g., a funding line from an agency to a school). Personal networks, such as those developed by those involved in career education, are "not only helpful for individual problem-solving, but also compensate for institutional deficits. Precarious or missing institutional resources are substituted by personal relations" (Bienzle et al., 2007):

> While co-operation represents the working ties between individual actors, co-ordination can be understood as the fine-tuning or the targeted alignment of actors. The special element in networks or nets from this perspective, is the fact that a number of (autonomous) actors are all linked to one another through specific ties and form a system in their entirety. Accordingly, they form a horizontal, heterarchical structure without centres. While co-operation refers to the working ties of individual organisations, network refers to the huge number of co-operating partners. However, differentiating between the terms co-operation and network is not always applied with sufficient distinction; they are occasionally viewed as interchangeable, and the terms used synonymously. In practice though, the concept of

> networks is far more complex and in no way clear-cut. Network-type forms of co-operation do not necessarily exclude or generally replace hierarchical control. Networks are increasingly organised in accordance with hybrid patterns. This means that different control patterns like hierarchy and heterarchy emerge side by side and are capable of interlocking. (Bienzle et al., 2007, p. 14)

Our key informants phase of EEL thus looked at some key networks and their dimensions that operate to support career education for young people at school and how these networks do, or might, challenge a more "traditional" or vocational match-based system of career education.

A fractal approach to key informant interviews

We took a "fractal" approach and focused on an area we thought could shed light on the whole system. Fractals are geometric shapes with parts that are miniature copies of the whole shape. Some plants, for example ferns, are fractal in nature because they exhibit the same shape structures at every level of scale. Fractals therefore involve repeating motifs or patterns. This gave us the idea for how we could study the sets of networks generated and maintained in one particular geographical region in order to understand what does or could happen at other levels or in other areas. We therefore looked for an entry point through a range of nodes in a network to plot out or understand the regional network as well as we could, and how it "scaled up" or could be expressed in other regions.

We deliberately chose to examine some networks that were expansive and crossed organisational lines and went outside the school into the school–community and seemed to be built upon an understanding of the changes in the world of work and therefore to the role of the careers advisor in supporting young people into that world. We deliberately did not examine those that only looked inward (within the school) because that expressed a fast-fading model of career education.

Our fractal approach and focus on networks lent itself to a sort of snowballing method, which we adapted from other work at NZCER on future-focused education issues and self-generating networks for knowledge building, learning and change which focused on studying the "vanguards" (people who lead the way) and "nodes" in networks (see Bolstad & Roberts, 2010; Roberts and Bolstad, 2009; Roberts & Gardiner, 2005). We identified some of the key informants whom we knew would be involved and important in a network. We then extended from these contacts (or "nodes") into a particular region, interviewing people or representatives from organisations that had been named as very important in the network. This means we did not know at the outset exactly who we would interview, nor how many people it might involve. We did not follow up every possible interview as it would make this part of the project unwieldy. We simply made the best decisions we could, on balance, given our budget, time frame, methodology and key informant availability.

We identified the nine regionally-based pathways advisors as our entry point into a set of networks. We already knew that all nine worked as a network in their own right, sharing information and developing practice in their field of supporting schools in career education. We also knew that they would be able to provide insight into their network and how it linked into other networks, including their close connections with clusters of schools in each of the regions represented by one of the nine pathways advisors.

We also chose two schools within one region to visit and based our selection on a pool of possible schools provided by the pathways advisors network. We had asked each of the nine pathways advisors to nominate several schools they knew of that were making good use of networks, had careers advisors who were thinking deeply about career education (beyond

meeting immediate everyday demands) and were using all three major youth transition funding resources (CIG, Gateway and STAR). From this pool of possibilities provided, we chose two schools within one region to give us perspectives and contacts within one local social and economic context. We also chose two schools that would give us comparison points on decile (deciles 3 and 8), school roll size (one large and one small) and transition department size (one sole charge position and one team).

In total we formally interviewed 18 people who were identified by informants as particularly important for the networks in the region and that interviewees at "Big High School" and "Small High School" had identified as important in their networks. These 18 people comprised:

- nine pathways advisors
- five school-based careers advisor staff from two different secondary schools
- one national Career Services manager
- one national Ministry of Education policy advisor
- two industry representatives linked with two different ITOs.

We also talked with a private-practice careers consultant (and former CDANZ executive member) informally. We interviewed four school careers staff as a group, as they worked as a team, and followed up with separate interviews for the careers advisor and the team leader.

We ran a one-day workshop for the nine pathways advisors who are also used to working together. This allowed us to use their interactions as part of the interview material. We followed up with a second separate interview for the two pathways advisors who worked as a team in the region we had chosen for school interviews. We interviewed everyone else separately. Everyone was interviewed face to face except for the two industry representatives who were interviewed by telephone (we had met one, in person, fortuitously, during some of the school interviews).

We asked interviewees to describe their role and tell us about the nature of their networks. We then asked them to draw their networks on large sheets of paper that we provided and tell us about the connections represented and their significance. We also asked for examples of when things had particularly gelled, appeared to fall apart, most energised them and challenged them personally and professionally.

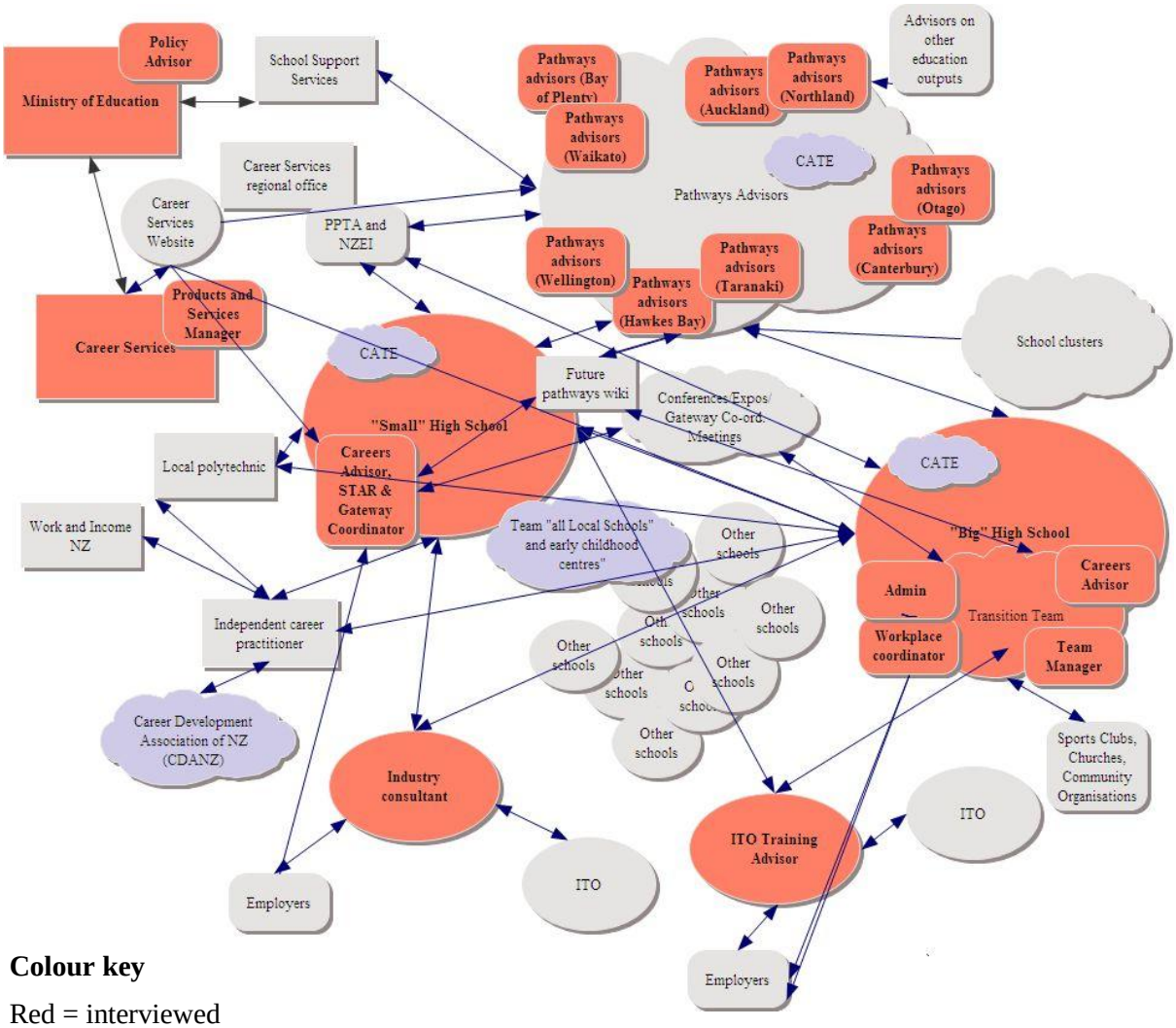
As we interviewed people, we found that some names came up repeatedly as important "nodes" or contacts across a number of organisations or individuals. For example, we found the industry consultant because people at Big High School, Small High School and a pathways advisor mentioned him. And we found the Future Pathways wiki because several different people mentioned it as important in their work.

Chapter 3. Findings: Career Education Networks

In this section we present the results of our research and interviews. We firstly provide an overall representation of the career education networks we identified and then go on to outline the network positions and links for each "node" or sets of nodes (person or organisation) represented.

Figure 2 is a grand-scale version of the networks that each of our interviewees described. The diagram does not contain all the detail they provided in their own drawings but it does amalgamate the most significant and frequently named relationships and connections into one drawing.

Figure 2: Career education networks within and outside of selected region



Colour key

Red = interviewed

Grey = vital links identified by researchers and interviewees

Purple = interviewee significant formal professional identity

The positioning and nature of the links between different nodes in the regional career education networks are shown in Figure 2. Nodes shown in red denote people or organisational representatives we interviewed. Nodes shown in grey denote organisations or people to which they had a link vital to their work and their networks. Nodes shown in purple denote a professional identity or organisational representation (more than membership itself) embodied by people we interviewed (e.g., some interviewees had an important formal function within the organisation). To protect the identities of the schools and people we interviewed, schools involved are simply referred to as "Big High School" and "Small High School".

Key informant profiles: their networking and their networks

Profiles of networks and their characteristics

Our key informants' network drawings were quite different with regard to content and structure (the links between different parts of the network). Most informants drew themselves at the centre of their network(s)—a fairly logical approach to locating oneself in relation to others—though sometimes their own role or representation of themselves was the last thing they drew in place. Several informants produced diagrams that were similar to hierarchical organisation charts. Others drew a series of hub-spoke configurations that "grew" from formal, organisational relationships. Still others drew complicated web-like configurations featuring not only people and organisations, but also ICTs and other resources, and sets of ideas that helped them in their work.

Despite these differences, all of our key informants felt that they could not do their job without networks; that networks were a given and enabled them to "work smarter". They understood their networks as being as much about sharing information as carrying out actions. Many also suggested that networks were invariably part of other networks and that some links were more influential and important than others. On this last point it was interesting to see that some relationships simply did not feature in some key informants' drawings. In these cases, the missing links were usually formal ones that had significance only for reporting and accountability purposes but did not feature in the person's mind as important at a daily level or in terms of their thinking about their role and work. It is possible that these relationships did not feature because they were taken for granted. It is also possible that relationships based around reporting and accountability are considered necessary but not particularly interesting when it comes to "working smarter".

The following discussion in this section describes in further detail the networking relationships and network nodes found amongst our key informants.

The pathways advisors

The pathways advisors are contracted to the Ministry of Education through School Support Services to provide support to secondary schools on career education matters, including schools' work with STAR, CIG and the Gateway programme.[3] The advisors are organised on a regional basis and each contract varies in terms of what it covers and the time allocated. For example, up until early 2010 all advisors worked to what was called "Output C6—future

[3] The pathways advisors were formerly called national STAR advisors or national STAR co-ordinators. These positions were originally created to provide schools with support and guidance on career education and flexible pathways and in using their STAR funding to support young people in transition (see the recommendations in the review of STAR, Vaughan & Kenneally, 2003).

pathways" (working with the CIG and STAR). Some also worked to "Output E2—effective teaching and pedagogy". For 2010 these outputs have been merged into one and reprioritised by the Ministry of Education as "3A—supporting middle leaders"—teachers who are not senior managers but lead in specific areas of effective teaching and learning (careers advisors may fall into this category).

The nine advisors interact as a national network in their own right, meeting regularly in person and virtually through the Internet to share information, develop ideas and work on translating policy into practice in specific contexts. They each work to a region and, within each region, each advisor has also created their own subregional network, including connecting into existing networks. While each advisor remains ultimately responsible for schools within their own region, most have formed into partnerships and work in tandem across two or more regions, maximising their conceptual and practical resources, often running workshops together, releasing information to schools on a joint basis and holding regular debrief sessions together.

The two schools described in the following subsections sit within the same region and since the CPaBL initiative, the pathways advice responsibility to these schools is shared by two pathways advisors. Both pathways advisors see their work roles and outputs as increasingly integrated across different contract outputs—for example, they had already begun integrating outputs C6 and E2, giving themselves "permission" to build teams and capacities. While each output is related to a specific area, they are able to borrow from each for the purposes of weaving career education throughout the curriculum and across the school.

In their work roles therefore, pathways advisors play a key role through their inter- and intra-regional networking in building relationships between others who are organisationally, occupationally and spatially separated, yet who have common issues and problems to deal with. They tend to see their work as integrating the different contract allocations to get more school support value than the sum of the contract parts:

> If we did not choose to work together, we could have two outputs each. That we saw a benefit to C6 in creating teams and another part of our work is developing leaders, and then effective pedagogy, is the umbrella over the top, then enhancing Māori potential. All of a sudden we could bring people together within schools and within regions. (Pathways advisor)

At the same time, the pathways advisors, through the networking they do between themselves and the networks they help form in their regions, are key developers of knowledge in the domain of careers servicing and are also key agents in the sharing of that knowledge within and between the networks so formed. Much of this knowledge is tacit knowledge developed out of experience and which can only be shared through networking interactions. The pathways advisors' network drawings frequently emphasised these interactions and saw them as learning connections and as integral to their capacity to network. They saw career education as being about building the capacity of people to learn for themselves, and their networks as supporting this. Consequently their own learning was important as it was the only way they can support others (note that Career Education survey (Vaughan & Gardiner, 2007) showed in-school advisors as picking out their own learning and development as a significant achievement):

> We take from one place into another. We learn from one output area and make it better for another ... it's a joy to work with all output areas using *The New Zealand Curriculum* as an umbrella. (Pathways advisor)

A good example of the role pathways advisors play as both developers and disseminators of knowledge through their networking can be seen through innovations in the STAR and Gateway programmes. STAR and Gateway overlap a lot:

> The interesting questions asked by schools are about the synergies between STAR and Gateway. Like, how can we support a mass of activity? Like, how do you employ someone through Gateway that works in the STAR field as well? So the questions are about clever use of the total pathways pool wisely without breaking rules. (Pathways advisor)

The pathways advisors, because of their functional positions working within and across schools in regions, and through working across different output areas, are in an ideal position to perceive the nature of STAR's openness and Gateway's prescriptiveness and the synergies between them and ways they have cross-fertilised each other. One [pathways advisor felt that although Gateway demands certain school–community relationships, the concept of encouraging such relationships originally began with STAR:

> When we started with STAR, it was about developing community relationships. Gateway developed from out of that [relationships idea]. [A former Ministry of Education official had pointed out to us that although there were initially] no checks and measures built into [the design of] STAR … it left schools open to create and be innovative … [and while some schools did not] use [STAR funding] in the way envisaged, the numbers [were] small in comparison to divergent ways that schools have worked out to meet the needs of their own communities. Gateway does force certain relationships but it's borne of the STAR concept (Pathways advisor)

The entry of community relationships fostered by the STAR programme into school career networks has also, through the pathways advisors' functional roles, led to innovations within school careers services' structures. In particular, the learning and dissemination by pathways advisors has led to more widespread employment of nonteaching staff within school careers' structures:

> For Gateway, you need a person to run it and that is usually not a teacher. So schools have had another person in the mix. Instead of a STAR co-ordinator and advisor for XYZ being a teacher, the school has now allowed a specialist for Gateway—often employed because they have good connections into the community. And it has given permission for schools to work in teams, to use other community relationships for STAR. (Pathways advisor)

"Big High School" transition team

"Big High School" is a decile 9 school with around 1,000 students. It has a transition services team of four people with distinct roles, as shown in Table 1 on the following page. These roles are not fixed and have changed and been refined over time, according to staff skills, interests, knowledge, availability and connections outside and within the school. For example, the careers advisor is new to the role but has been a teacher for many years. He uses his teaching experience and his role as a teacher to be on in-school committees, where he may have some influence in having aspects of career education linked in to the school curriculum. The administration assistant has particular community connections through her other job and her family she is able to use these to generate and pass on ideas for community links or placements that might benefit students. The transition services manager is not a teacher so she has no involvement in teaching or with teaching-related activities such as relief teaching or serving on committees. She describes this as "sidestepping other demands" that might conflict with her transition role. However, she also acknowledges that not having any link to senior school management is a weakness of the transition team and believes they need more connections with the rest of the school.

Some of the changes to roles within the team have occurred through changes at policy and funding levels. For example, the school ran a Gateway-style class using STAR funding prior to becoming eligible for Gateway funding. Now, with being able to offer a dedicated and funded Gateway programme, STAR funding can be used for other individualised programmes and school-wide initiatives.

Table 1: Roles of the transitions services team at a "big high school"

1. A transition services manager, who:

- oversees the work of the team
- manages the local region Future Pathways wiki (see below)
- liaises with tertiary providers, ITOs and local industry and employers
- co-ordinates use of STAR and Gateway funding.

2. A careers advisor, who:

- teaches the generic components of Gateway courses
- teaches STAR-funded life skills courses
- provides one-on-one career guidance for students (and with their parents)
- manages any school-wide career education resources (e.g., The Real Game, jobs-by-interest, tertiary marketing and other information)
- liaises with universities.

3. A workplace co-ordinator, who:

- liaises with employers to place students in Gateway programmes or employment.

4. An administration assistant, who:

- manages databases and accountability reporting for Gateway and STAR classes
- manages financial records
- administers student coursework for STAR and Gateway.

The transition services "team" has been so constructed in order for the school to be more effective and efficient in meeting the complex demands placed upon them:

> If each person has a specific focus, there are better relationships within the team and better relationships established with others (e.g. work placement co-ordinator can just focus on those relationships). I've seen schools where one person tries to cover all but it's not as good. [The careers advisor] has a clear careers focus. It's wonderful because he covers Gateway too so he's still linked in to students not headed for university. Many career advisors have gone to university themselves so they tend to be focused on that. So his focus is clear but broadened by Gateway. (Team manager)

In creating these more specialised roles within the transition services team, each team member is constrained in the networking and the networks to which they are functionally aligned. Nevertheless, by working together, the team is able to create channels for sharing information, building and expanding networks and creating new connections. This works within the school

hierarchy as well, where the nature of the team is understood and staff know they can approach any one member of the team with information or for advice, knowing this information will be shared among the team or the advice draws on the expertise of the entire team. The decision to have two part-time (20 hours per week) people in the roles of administration assistant and work placement co-ordinator was a deliberate one and designed to draw on two different sets of skills.

The transition services team also belongs to and uses the local regional school career education wiki, where careers and transition teachers share information, ideas and questions about community and employment placements, workshops and conferences, interact with local regional pathways advisors and discuss policy and practice. It is an efficient way to share information and ideas, as well as a professional development tool. "Small High School" (see following section) is also a member of this wiki.

"Small High School" careers advisor/STAR co-ordinator/Gateway co-ordinator

"Small High School" is a decile 3 school with less than 300 students. Unlike "Big High School", "Small High School" does not have a transition team. It has a transition centre with one teacher. However, the school guidance counsellor does work with students aspiring to go to university. The transition centre teacher is the careers advisor and runs STAR and Gateway. She sees great advantages in the school and transition centre being small and able to offer the pastoral care that is critical to good transitions.

Because she and the guidance counsellor work with different kinds of students, they can provide pastoral care to all the students between them. They have developed a system that uses the resources available and works with the school year, the student year levels, the school curriculum and the school timetable.

The STAR and Gateway courses offered are determined by students' requests and interests. The courses and community contacts supporting them are (re)established each year on this basis. Being a small school means the emphasis goes on meeting the specific needs of individual students and being creative about use of the STAR funding by using informal networks.

The transition centre teacher also works with Team Sub-Region X to which schools at all sector levels (early childhood, primary, intermediate and secondary) belong. The network has remained strong through changes in the principals of the various schools, testament to the shared vision of providing seamless transitions for students by sharing test results and other information.

She is a voracious reader, organiser of events, attender of conferences and active member of CATE. She also taps into other networks through the school's membership of a cluster in the Extending High Standards Across Schools (EHSAS) initiative and picks up professional development that she can use in her careers role.

She strongly believes the key role of the transition centre is as a space for personalised learning, and runs the transition centre—a large room with an adjacent smaller room—accordingly:

> This room runs like a student centre. We call it the Gateway room but half the students are in other things. It is a place where students can come and do different programmes. Gateway students who are not in workplaces do their theory in here. We can have a Year 11 student struggling with maths right beside someone doing Year 13 physics. We are so little that our school brings in—by distance—courses that we cannot offer.

Despite their sole positions within "Small High School", the transition centre teacher and the school guidance counsellor network together and network across the school and in the process learn and share knowledge:

> We are able to get to know the kids really well. We have peer support co-ordinators too—the Year 13 dean co-ordinates that, so does the guidance counsellor. They learn lots about the students and then they talk to me. It's about intelligence sharing and cunning plans.
>
> The hardest thing for me is when we just can't seem to find what [the student] is after ... I think it is wrong when kids fix their mind on something and don't explore enough.

In contrast to individuals in the "Big High School" transition team, the transition centre teacher actively engages in wide networking. She uses the small size of the school and of the local community to her advantage:

> I don't have the ongoing frustration of not seeing kids. I know my kids.

Correspondingly, and somewhat ambiguously, by networking widely so as to bring "the wider community" into the pastoral care offered in the transition centre, the value that those "other", nonteachers themselves can bring to "Small High School", and so deepen the knowledge base through their networks and networking is undervalued. The transition centre teacher for instance worries about the dangers of handing over responsibility for careers to relatively inexperienced people such as teacher aides:

> It's only because I have sufficient clout that I can make things happen for careers. But teacher aides have no clout. I can hold my ground, they cannot. The support person who works with me tells me that support staff are not seen as equals. So it results in a downgrading of careers and at a time when there is a push to all these other things. I wonder at [support staff] knowledge in terms of the curriculum framework and units. If you are support staff and don't know the National Qualifications Framework, you are reliant on unit providers to get your [assessment] material. How can you fit things to the student if you can only have what others choose to provide you with?

Career and Transition Education Association Aotearoa (CATE)

CATE is a professional organisation for people working in the fields of career and transition education and focuses its attention on career education for young people in transition from school. Hence most of its members are school-based careers advisors, transition teachers, STAR and Gateway co-ordinators. All of our key informants were members of CATE, and several had formal management and organisation responsibilities. CATE has a regional presence as well as a National Executive, which meets three times a year. Through its regular meetings, CATE provides a focus for careers staff to interact and thus acts as a structure for networking to take place and knowledge, particularly tacit knowledge, to be shared.

Future Pathways wiki

The Future Pathways wiki is a website for careers staff (including careers advisors, STAR co-ordinators, Gateway co-ordinators). The wiki was established by the pathways advisors who continue to be major contributors of information to this site. Others, for example the transition team leader at "Big High School", are also active contributors to the wiki (and "Big High Schools"' transition team leader is one of three wiki organisers). Much of the wiki space is devoted to notices posted by school careers staff suggesting get-togethers to discuss issues with STAR and Gateway, as well as post comments about workshops attended, pool resources for STAR courses or share information about employment and tertiary learning opportunities

available to students. The local pathways advisors also use the wiki to share information from the Ministry of Education and post notices about upcoming workshops.

Wiki provides an interesting example of a social network (in the technological sense) that efficiently facilitates the communication of information between a group of people who share interests, issues and problems. In contrast to CATE, however, the use of wiki seems limited to the dissemination of information and is little used as a site for "virtual" interaction. The wiki, as currently used by the networking community, is therefore somewhat restricted as a networking vehicle to develop knowledge.

Career Development Association of New Zealand (CDANZ)

Like CATE, CDANZ provides a professional organisation for careers practitioners. However, CDANZ focuses on career development in a wider range of settings than school and has a particular focus on promoting professional standards and careers practitioner qualifications. It has links with professional counterparts in other countries. It provides a structure for networking, although it is less used than CATE because very few school-based careers advisors are members as membership is dependent on having (or currently studying towards) professional careers qualifications. However, several of our other key informants were members of CDANZ.

Industry Training Organisation training advisor

The ITO training advisor works with secondary schools across the region as part of Gateway programmes and packages towards national certificates. He also provides mentoring support for apprentices and is an accredited assessor. He was identified by both individual members of the "Big High School" transition team and the careers advisor at "Small High School" as being a critical link in their networks.

The ITO training advisor developed the position out of a passion for the industry and recognition that his break into it came via a teacher who cared enough to steer and support him into it. Initially his training advisor role was a broad one but he has developed his particular interest in students and the lack of close links between schools and industry into a role with a specific focus on young people. He has been a proponent of the Gateway programme and involved in putting together packages using unit standards (US) at Level 3 for schools:

> Achievement standards don't really cut it for many kids—too much theory for them and not enough hands-on. A lot of woodwork teachers had been industry people, trying to find something that would link better for students.

He credits his success to listening to what schools were saying about wanting closer links and their ideas for helping students, and what he has learnt about their subject lines and timetabling systems. He developed a 20-credit training package based on what would work for the school. The credits used in the school workshop were originally at US Level 2 but once Gateway came along, he moved to US at Level 3, realising it would benefit students more to have credits at a level recognised by tradespeople and which go towards a national certificate.

He also saw the benefits for his ITO. Using Gateway gave his ITO an advantage over the polytechnics that were largely focused on STAR-funded courses. It allowed the ITO to gain access to potential new trainees and new employers:

> We treat students exactly like apprentices. We visit them in the same way and we get two bites of the cherry—we get a potential new trainee and a new employer who hasn't necessarily trained before.

He cites the ITO's own market research as showing that just over a quarter of their Gateway students in the region go into apprenticeships after leaving school. He thus describes Gateway as "a major coup" for creating a platform for these links, essentially enabling his ITO to formalise a relationship with schools, trainees and employers.

Industry consultant—industry trainer, worker and accredited assessor

The industry consultant combines a number of roles to work with almost every secondary school in the region. He estimates that 20 percent of his time is spent as a trainer for tertiary providers, an accredited "roving" assessor with an industry training organisation, a licensed industry controller for specific practices and an advisor on industry practice and assessment. The consultant was identified by both individual members of the "Big High School" transition team and the careers advisor at "Small High School" as being a critical link in their networks.

He estimates that the other 80 percent of his time is spent working with schools, running STAR-funded courses and Gateway programmes. He also runs a weekly interschool industry competition known as Team Region X for a small group of students at Years 11, 12 and 13 who think they might want to get into the industry area. Industry guests regularly drop in to give tips to students, and the competition builds up to regional and national competitions hosted by an industry organisation. The consultant relies on schools to identify the students, most of whom go on to take up apprenticeships or do industry courses with tertiary providers. He estimates that another 10 percent of those doing industry courses or apprenticeships discover that they do not want to go into this industry after all:

> It's great that they do change their mind. It annoys me when people pay big money to do these uni or polytech courses and they get out into the industry to apply it and it's not what they expected.

He claims that within two years of graduating from a polytechnic, 80 percent of people are no longer in the industry because they have not had the opportunity to really experience the industry lifestyle. Team Region X aims to give people a real-life experience, as well as link the students to industry professionals.

As with Team Region X, the consultant relies on schools to identify and place students into the STAR and Gateway classes. For Gateway he uses his role as an accredited assessor to talk to local employers about what tasks they can give students during their workplace-based learning and then he matches those tasks to unit standards that the student can gain. He uses a collection of verifier forms he has built up and finds these help employers to work with the students. Although he is the assessor, he cannot see every part of the tasks that make up a unit standard so he relies on employers acting as verifiers (that the student really can perform the task competently) and this means his relationship with the employer is critical—especially since employers do not always have the experience or knowledge to be able to plan the learning tasks for students or what exactly to show students.

He runs STAR-funded after-school and holiday programmes for students too. "It doesn't take long to see where schools are focused—some will say '80 percent of our students go to uni' and others will say '80 percent of our students go into employment'".

Both the ITO training advisor and the industry training representative engage in networking as a means to achieve their interests. Both are personally passionate about affording opportunities to young people through learning at work, yet both use this passion in working

to the ends of the organisations through paid employment (the industry advisor is self-employed). Their networking, and the networks so formed, in this sense are purely instrumental, in that they serve to directly match the interests of four parties (the learners, the schools, the employers and themselves).

In addition to the instrumentality of this networking, however, each is also building knowledge, both codified and tacit, in the careers education domain, particularly that knowledge about careers that lies within the community outside of schools. The opportunity to share and use that knowledge is variable however. On the one hand, their knowledge of the fit between workplace learning opportunities and unit standards is well used by schools and codified into their transition qualifications. On the other hand, there are limitations in perception over whose knowledge is legitimate, particularly that knowledge held by careers advisors, thus correspondingly with whom to share information:

> The biggest success is that schools are employing people [for Gateway] who have never been teachers. No disrespect to teachers but we have more success with people who have had outside lives. If you've gone from school to teachers' college to school, you can be isolated from what we call the real world ... People employed through Gateway already have networks—have communication and relationship links with the outside, they know how to deal with people in a real way, not based around academic stuff. (ITO training advisor)

Certainly, the ITO training advisor and the industry consultant see themselves as legitimate holders and disseminators of knowledge. For instance, in commenting on the decision by the Tertiary Education Commission to pull out of the convening and localised support for Gateway co-ordinators, the ITO training advisor stated:

> It could become too loose, especially when staff change and then they are just learning off other Gateway co-ordinators.

There are thus some tensions with regard to the knowledge transferred in the networking between those "outside" schools and career advisors "within" schools.

Career Services manager

Career Services is a government agency that provides independent career information, advice and guidance aimed at all New Zealanders with particular emphasis on career planning throughout life. The Career Services website provides career and labour market information about a very wide range of jobs, links to other relevant organisations and research, and offers advice aimed at specific groups (e.g., parents and family/whānau, school students and practitioners). Career Services also offers a range of services and resources including material for school students (e.g., Plan-It, Jobs Galore, CareerQuest, The Real Game), online chat with career advisors, and online self-assessment tools.

We spoke to the manager responsible for developing and maintaining Career Services' products and services for delivery. Networking is critical to her role in thinking about how to best frame, as well as meet, client and practitioner needs, and then develop services and resources ranging from those delivered in person to paper-based to ICT-based (information and communication technologies). Her network drawing underlined her bridging role between clients and practitioners, and the way she utilised a great number of informal connections in order to keep informed of developments in practice, policy and client demand.

Ministry of Education policy advisor

As the Government's advisor and provider of strategic leadership in education, the Ministry of Education sets the overall direction and requirements for career education in schools, and

funds it through the CIG and STAR. We interviewed the policy advisor responsible for overseeing the national careers and transition work, a role that included contributing to policy for both STAR and the Tertiary Education Commission's Gateway programme.[4]

The policy advisor described combining her existing experience and expertise at a practitioner/operational level with a strategic awareness in order to work well in the policy arena. She saw her role as one of being a connector—of ideas and people. She worked closely with the pathways advisors, who were intermediaries between the Ministry of Education and schools. Despite not having a direct advice role for schools (as the pathways advisors did), she tried to visit schools as often as she could and enjoyed being informed by the ones "right on the edge of practice" and discussing ways to overcome issues with them. Networks were therefore vital in enabling her to maintain "real-world" links with schools and other organisations and people, and ensure that the policy work was meaningful for "on-the-ground" work. Her drawing of her own networks was the closest one we saw to the concept of a decentralised network.

The policy advisor often provided contacts to people on the ground so that centrally-based policy analysts could talk to them. A key part of her role has therefore been a communications one, both within and outside the Ministry of Education. She described wanting to increase understanding within the Ministry of Education of the importance of careers activity in schools and to remind policy analysts of the "policy gaps" in understanding between on-the-ground work and policy work that make moving things along in education difficult if those gaps become too great: "In the Ministry of Education, the leap is often too far and you can't make it too far when you are dealing with schools."

In a similar fashion to the ITO training advisor and the industry consultant, the networking of the Careers Services manager and of the Ministry of Education policy advisor is about bridging between different groups of people or organisations. The Career Services manager understood this to be her role *within* her own organisation. She had recently shifted roles and understood this shift as embodying a shift that Career Services was trying to make from teams working in silos with a significant focus on face-to-face contact with clients to an integrated team approach to developing more cost-efficient and technically-focused services for clients. Thus her challenge was to help "close the philosophical divide" in engaging with different teams and theoretical positions on the delivery of services such as career guidance for the purposes of thinking creatively about the delivery of career education and how young people might be engaged with it.

The Ministry of Education policy advisor had a similar bridging role which she conceptualised as a communications one, involving finding a common language so that ideas could be usefully exchanged and thinking about career education could be mutually enhanced. Communications were particularly important when her role involved sometimes having to convey policy decisions that were unpopular to some groups. In these instances, she learnt to have a thick skin in order to handle criticism, while keeping herself open to listening to people's concerns. She brought an acute understanding of the differences in drivers for policy analysts and people working "on the ground" to her view of the Ministry of Education as "a service". She therefore included in her communications role a commitment to being accessible to people, and to using accessible language in emails, including translating policy "edu-speak" for them so that policies could become a meaningful product in the world:

[4] This policy advisor has now left the Ministry of Education.

> Analysts do delve deeply into things from the policy perspective but we don't always know what it will look like at a practical level on the ground. At some point things need to move from that language to another language that makes things work on the ground.

Nevertheless, because of their key functional positions within the sector, both the Career Services manager and the Ministry of Education policy advisor were also key holders of knowledge, particularly that knowledge at the leading edge, such as career development competencies. However, because of their positions, and their spatial distance, there is a sense of them filling networking roles as interested outsiders to the school and regional networks. Thus with this outsider's view, they are able to see the potential in different ways of doing things and perhaps in imagining how that might happen.

Chapter 4. Discussion

Formal and informal relationships are critical

All our key informants produced networks drawings that combined formal links (e.g., funding and accountability) with informal links (e.g., chats over the teacups). While some relationships might not be mandated or formally structured, the realities of the job "on the ground" meant that certain informal relationships "naturally" developed while other relationships became formalised through necessity. In other words, some relationships occurred by design others by opportunity.

Not all of the important relationships involved our informants directly. Occasionally there were important connections between people and organisations that supported a key informant in their role but without any direct interaction. This often manifested as acknowledgement of an important connection via another connection, such as the school–Career Services relationship that pathways advisors described as indirect to them but important for schools to have established so they could work with the pathways advisors. In some cases, the important connections were ones that helped to "get the job done"—for example, connections to institutions that facilitated a "transfer" of students into another education course. In other cases, they were ones that generated and transferred ideas that might ultimately lead to rethinking the means for supporting students or even the bigger picture of youth transition and careers theory—for example, ideas on how to integrate STAR courses and Gateway programmes within schools.

Informants rarely made an explicit distinction between the formal and informal in their drawings and explanations however. Instead they focused on the significance of relationships generally and which ones they found most useful in their work:

> The differentiation between formal and informal actions, which is important from an analytical point of view, is often less significant for people acting professionally. They experienced both as closely related. Formal and informal actions mostly occur simultaneously. Initially formal ties are enriched through growing personal acquaintance and informal contact. Viewed from a temporal perspective, they can be regarded as a continuum. The combined characteristics of formality informality in routine work is what defines the working relationship. (Bienzle et al., 2007, p. 12)

The Career Services manager, for example, described some of her important connections as being with people who became friends as well as colleagues or ex-colleagues—something that created both opportunities and careful consideration at times. She described taking advantage of friends at work-related events to seek their professional input and support: "I don't exactly use my friends but I do ask favours. But I don't always seek them out in the job they are my friends first. They're part of the richness. It's great that they keep popping up at events."

It is partly her new role, through Career Services' recent change in organisational structure, that has emphasised the importance of these relationships, albeit in new ways. In moving from an operational role to a strategic one, she has had to rethink her role away from working alongside others in a hands-on way to working *through* them in an indirect but more strategic way: "It's about *shifting networks up* to a more strategic level" (emphasis added).

The Ministry of Education policy advisor cited relationships as the most critical part of her work. She described herself as a "relationship manager" who needed to bridge between the

policy focus of the Ministry of Education, the organisations and their different agendas with which it must work, and the general public to whom it has a responsibility. Changes in the Ministry of Education's policies meant that her own relationships could change dynamically.

One of her most useful connections was an informal one with another manager, with whom she has regular morning coffee discussions. She described these meetings as leading to closer links between the work areas of each manager and facilitating a better "big picture" understanding for each. She describes this "enrichment through networking" as a success in terms of an intertwining of the personal and professional: "it's a feature of our personalities—we get along really well—as much as it's about content and bouncing ideas around".

All of the nine regionally-based pathways advisors saw the major part of their role as being about building relationships—ones that would facilitate better transitions for young people. They saw themselves as working *alongside* schools and school personnel. Sometimes the advisors saw themselves as conduits between existing networks. There were also clustering effects evident in their network drawings and these clusters strengthened the overall network and cohesiveness through their ability to connect with other subnetworks.

The careers advisor at "Small High School" uses her informal networks and contacts to help her think about how to support her students. Although she did not have direct links with every student in the school, she described resourcefully forming a "net across the school" by capitalising on the formal links that other teachers have with students. So, for example, her "net" includes working with certain subject teachers, the Year 13 dean who also happens to be the Year 9 health teacher and the Years 9 and 10 Dean who is also a teacher who was involved with Career Services' Designing Careers initiative of 2005 and now runs The Real Game in the school. She also used her sporting and family contacts to good effect here, describing herself as "cunning" in using these to build relationships with the young people involved in the sports, and finding out about their interests and concerns in order to better serve them in her school-based role. She had also found the sporting context useful for connecting with adults also involved in career education or related areas who might collaborate on actions to support the students. In her eyes, these kinds of connections were preferable to many of the formal, structured ones established via funding, accountability and resource support relationships, where she believes that personality clashes within the group have hindered her being able to do her job well or those people have not seemed helpful or useful.

The "Small High School" careers advisor also works closely on STAR hospitality courses with the local hospitality industry consultant to leverage his connections. As a local chef and an accredited hospitality industry assessor, the consultant has organised a regional team of students for hospitality competitions and helped established a school café where students can learn and practise their skills including extending these to serving skills. The consultant also takes on students as volunteers or temporary employees to help with one-off industry projects or hospitality events. He describes a win-win situation where he gains a helping hand for the event and students gain an authentic learning opportunity. This also allows him to spot talented, hardworking and committed students whom he can help place into full-time employment when they leave school.

The ITO training advisor who also works with "Small High School" describes the way relationships have become so critical to his work with local schools and that of his ITO that relationship management has moved from an informal to a formal role in the ITO. The training advisor role entails visiting employers and trainees, sometimes to discuss specific things but also to just "catch up". However, his ITO has now instituted a skills broker role—essentially a marketing manager sympathetic to the trade but not actually a tradesperson, who

forms "another link in the chain" and picks up on "hot, cold or warm leads", matching students or potential employees to employers. The training advisor sees further opportunity for informal connections, which may become formal ones, through interactions at the annual CATE conference and national managers from ITO regularly attend specifically in order to establish relationships with schools. Although the training advisor is disappointed that the Tertiary Education Commission no longer convenes regional meetings for school Gateway co-ordinators, he regularly attends meetings hosted by schools in his local region that have formed their own group to share ideas, in the absence of formal Tertiary Education Commission support.

"Big High School" also uses informal relationships to good effect. Although supporting students takes place through a transition *team* with distinct and designated roles, each team member called on a set of networks involving informal as well as formal contacts. Since the careers advisor was new to the role, he felt free to call upon careers advisors at other local schools so he could learn the "tricks of the trade" and he had taken to encouraging ex-students to visit the school and talk to current students—something that benefited his learning as well as that of the students. These activities form an essential part of student support, alongside more formalised Career Services resources and information gathering from New Zealand Defence Forces and regionally-based tertiary institutions. The workplace co-ordinator and the team administrator both see their roles as being about creating informal contacts and turning them into useful education–employment linkages for the students. The workplace co-ordinator has established formalised relationships with ITOs and other Gateway co-ordinators in the region. But a major part of her success lies in using "word of mouth" and following up on leads that appear out of conversations. She has also successfully used her partner's position with the local radio station to glean or share information that might help students find work or work experience.

The "Big High School" team leader has a formal role for administering the local region Future Pathways wiki and encourages interactions at all levels of the casual and formal. Along with her many formal activities, the team leader reports using her personal connections to advance the cause for student transition support, encouraging people in her family to use their positions and contacts to share information and discuss issues, using contacts through her local church and seizing random opportunities like "popping next door to talk to the builders working there".

All our key informants used a combination of formal and informal connections in establishing and maintaining networks useful for their work. They even moved informal connections into more formal ones once a certain "tipping point" had been reached—for example, the Ministry of Education policy advisor making an informal coffee discussion a regular informal event, a school–ITO relationship manager being appointed by the ITO, and two pathways advisors reorganising their separate, regional work into a dual-region approach with both advisors working alongside each other. Moreover, what were sometimes formal connections by design (e.g., reporting relationships or co-operative relationships for a gain on each side) enabled further connections by opportunity.

Shared learning in networks

In almost all cases our key informants used the formal/informal combined networks to trade information that would make their work more efficient and give them access to different options for students. However, they also used "neighbour interactions" (Davis, Sumara, & Luce-Kapler, 2008) whereby agents (including ideas, queries, artefacts and images, as well as actual people) in a complex system can affect each other's activities to exchange ideas and

think about their work in different ways. In affecting each other, our key informants were trying to make use of, or establish, networks with "structures which allow ideas to bump into each other" (Davis et al., 2008, p. 199). The structured ideas-bumping included demonstrations and discussion around use of Career Services resources, the regular pathways advisors' get-togethers and also involved virtual structures like the regional Future Pathways wiki which mainly operated for information trading but certainly have the technological and participatory potential to be used for forum discussions and commentary on posted research papers and professional development workshops.

Having ideas "bump together" was really important to our key informants because of their genuine dedication to their work. Had they been merely carrying out tasks, they would have remained working at the information-trading level. However, their descriptions of what they did and how they did it suggest a much deeper engagement, even if time, energy and other resources sometimes precluded all the desired deep engagement.

For example, the Ministry of Education policy advisor understood the connecting of ideas to be crucial to her job. She felt most energised when people appeared to be "*seriously* thinking about the senior secondary environment" in terms of what is happening now and the future, and beyond the day-to-day operations related to careers work. She reported the most valuable conversations as those where:

> … people are probing, when they do not use phrases like 'when I was a principal ...' or 'the manual says we should'. It's good when there are deep questions, when people are willing to talk to the people actually working in the environment.

At "Small High School", the careers advisor reported constantly questioning her ability to do the job well:

> Many families here, [in a school that is] decile 3, do not want kids to take [student] loans. It is hard to convince people that it is okay to invest in yourself and take a loan. It is hard and I ask myself [with each student]: Am I doing the right thing, encouraging you to borrow for education? Will this person be committed enough to see it through?

Beyond reflection on how best to support students, this careers advisor reported contextualising her work in a bigger picture, making use of professional development opportunities and leveraging her existing informal contacts. She reported that she "reads frantically" and always creates or takes opportunities to talk about careers to people who seem interesting and to ask ex-students "Did we give you everything you needed from school? How did you get into what you are doing now?" She particularly values her longstanding informal relationship with a local career and employment consultant, a former member of the CDANZ executive. She cites the way he has "fed" her ideas via invitations to careers workshops with guest presenters and his being available to discuss the ideas and their possible practical implications:

> I get ideas from conferences but it's about knowing what to do with them [that he helps with].

Communities of practice

The ideas-bumping and integrated purposefulness of our key informants' networks suggests that they can in fact be considered as "communities of practice" where:

> ... groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis ... These people don't necessarily work together every day, but they meet because they find value in their interactions. As they spend time together, they typically share information,

> insight, and advice. They help each other solve problems. They discuss their situations, their aspirations, and their needs. They ponder common issues, explore ideas, and act as sounding boards. They may create tools, standards, generic designs, manuals, and other documents—or they may simply develop a tacit understanding that they share. However they accumulate knowledge, they become informally bound by the value that they find in learning together. This value is not merely instrumental for their work. It also accrues in the personal satisfaction of knowing colleagues who understand each other's perspectives and of belonging to an interesting group of people. (Wenger et al., 2002, p. 7)

Our informants had certainly recognised the value of collective learning. The local pathways advisors who work with schools and participate in CATE events and management have recognised that networks can, if not managed, cut across each other. For example, school staff are limited in how many times they physically leave the school for events and with workshops or events for CATE, CDANZ, School Support Services, the Ministry of Education and Career Services, it quickly becomes unmanageable for the school and the individuals who do, or want to, attend. However, merging activities was tricky too because not everything that one organisation provides is relevant for everyone. Some people, for example, do not want to know about *The New Zealand Curriculum* they just want to know about how to manage their STAR funding and courses. In recognition of this, the local branch of the CATE network was rethought and made more virtual, contacting people just several times a year through email. This ensured that learning did not become a burden of multiple unrealisable possibilities and that more people could participate in fewer events, thereby increasing the exchange or "bumping" of ideas.

Collective learning was an explicit part of the discussion with all nine pathways advisors who described themselves as a "learning community" or "professional learning group". For the pathways advisors, making a difference for young people went hand in hand with their own learning:

> Some of the best ways of working outside the square happen with people not already in the square.
>
> I realised there was a greater purpose to it all than I had ever realised.
>
> [When working with some staff], I was reminded to never make assumptions about where people are at, but think and ask first about what it is you want to learn and take away.
>
> I've realised everything I've been learning is part of this work ... [I've learnt] self-belief and to believe in the knowledge and wisdom I've had in all areas of life.

This emphasis on their own learning and collective learning with school staff was also evident in their network drawings. One pathways advisor even referred to their drawing as a "wonderweb" and several others based their drawings around their own positioning within their own whānau/family, community and iwi networks and their learning from occupying roles in contexts often otherwise considered peripheral to schools, tertiary institutions and employment settings. The idea of situating oneself and career education work in relation to all the dimensions of one's life highlighted an important point that several of the key informants made: knowing your own strengths, weaknesses and existing knowledge, skills and experiences makes it easier to work with others. For the Career Services manager and the pathways advisors in particular, knowing oneself made it possible to make the best use of networks because it required being reflexive about one's own role or "node". As one pathways advisor said: "I need to be clear: Am I an energiser? A facilitator? A deliverer of solutions? A conduit for ideas?"

Our key informants built, and participated in, communities of practice alongside their business or functional responsibilities such as allocating resources, managing processes,

assigning roles and reporting business or functional outcomes to the appropriate people or agencies within their organisational structures. For instance, the transition services team at "Big High School" is a functional unit. Such structures may also include project or operational teams that have predefined objectives and people committed or directed into the team. The STAR and Gateway programmes can be viewed as operational teams.

These organisational structures are distinct from but relate to communities of practice. They become communities of practice at the point where their collective involvement in their work is developing knowledge about their practice. In contrast to the assigned roles, reporting relationships and accountabilities of functional units or operational teams, this social structure is based on collegiality and participation with members connected by "interdependent knowledge, not interdependent tasks" (Wenger et al., 2002, p. 43). As one of the pathways advisors commented:

> [before we started working as a partnership across the regions] I never had the opportunity to chew the fat about my work. I just used to do it unreflectively. [Now] we work together and debrief and learn together.

In a similar vein, the transition teacher at "Small High School" and the transition team at "Big High School" both participate in (and the transition team at "Big High" helps to manage) the local regional career education wiki (first established by the pathways advisors and managed by the transition team at "Big High School"), where careers and transition teachers share information, ideas and questions about community and employment placements, workshops and conferences, interact with local regional pathways advisors and discuss policy and practice. In contrast to the goal-oriented purpose of formal organisational structures, collective involvement in these wiki develops some knowledge about career education issues and practices (especially for new careers advisors and STAR co-ordinators) through connections that are collegial and that require participation in order for knowledge to be developed. This is a great solution to the issue of distance which mitigates against opportunities for direct interaction. The wiki provides some "craft intimacy"—close interactions around shared problems and sense of commonality (Wenger et al., 2002).

It is not surprising then that our key informants frequently cited trust as a critical feature of their best relationships and suggested that without it, there could be no networks and no collective learning. Some pathways advisors explained that their own credibility was the building block for trust-based relationships. Two of the advisors described leveraging existing trust-based relationships and their own credibility for their work in the CPaBL initiative:

> I put [success with CPaBL] down to development of personal relationships in those schools—my relationships with them and the one with Career Services. Between the partners and the schools, we developed relationships on which to base the work. And we had proximity—we could get to [each other] on a regular and sustained basis. For example, a school might say, we have a staff meeting, could we unpack a bit of CPaBL at it and can you come?

However, when trust and credibility are over-leveraged or nonexistent, networks and especially communities of practice can be very difficult to establish or sustain. Several key informants commented on the undue haste required to form relationships for CPaBL, especially ones across organisational lines:

> It felt like an imposition, to have to get on with these people ... Nobody—not Career Services, not School Support Services, not Ministry of Education—had any time to think how to make this effective. So everyone felt defensive ... They were being asked to form teams and make a commitment. And they didn't! School Support Services and Career

> Services perceived that they were both competing for a dollop of dollars that helps create staffing. So we were all foisted into a partnership yet were competing.

Trust is also a key factor in moving long-term commitment and presence into building a community of practice. The Ministry of Education policy advisor saw one of her greatest advantages in relationship creation, as well as management, as being her "role stability" which enabled trusting relationships to be created. Her role stability has made an impact in terms of enabling her to get to know others, their roles and challenges, and to seek out the relationships that facilitate both her work and theirs:

> I am the only person who links to all the other groups [at MOE]. I have sought these relationships out ... I can't do my job properly—personally or professionally—if I can't hear stories from both sides ... It's ideal for linking to tertiary policy. Other people within my team had never even heard of [the tertiary team] because there was no [formal] link. But the tertiary team identified me [as useful] because of my role stability and my links to others.

However, it does happen that teams change and projects end so a community of practice then becomes a very good knowledge management system (i.e., the knowledge does not reside within one person who can leave and take it with them). In government agencies such as the Ministry of Education, where policies and priorities shift and people working there consequently may change their focus, it is in fact the community of practice that becomes the source of stability. As many of our key informants suggested, holding onto jobs or organisations or institutions—and even roles—is no longer as useful as holding onto ideas, principles and self-knowledge. In such situations of flux, the "professional spine" managed by active people within CATE, CDANZ and Career Services as core participants in communities of practice, becomes a critical source of stability.

Chapter 5. Conclusion: Implications for Policy

The nature of contemporary pathways and the transition from school to work and further education involves more information and possibilities, from a wider range of sources, than ever before. This represents a particularly challenging union of opportunity and responsibility for young people and those who support them through career education. A networked and networking approach to career education is not only a logical one but is already part of work practice for some working in the career education system, especially in school and school-related "nodes". This research has explored how these networks operate with a dynamism and fluidity of people-based and ideas-based relationships. The research findings have policy implications and at several different levels. These are spelt out in the following subsections.

Recognition of the value of networking in career education

This study has shown the critical role played by networking in enabling careers advisors to "work smarter". To be successful, career education must therefore involve engagement of school and community. It is now impossible to conceive of a successful career education programme in a school without this external dimension, in which the construction of networks and networking play a key part. Networks and networking also distinguish themselves as tools for career education in that they are arguably less used for other teaching subject areas where changes in knowledge and practice and the speed of change may not be quite as frequent or rapid as those occurring in career education right now and where the work does not demand school–community connections in the same way.[5] In contrast, networks are distinguishable in career education due to the dispersed nature of the work and the lack of formal structures of support within schools.

Networks and the activity of networking are not only ways to produce and manage career education knowledge, but are also a framework for understanding that knowledge is "... not an object that can be stored, owned, and moved around like a piece of equipment or a document. It resides in the skills, understanding, and relationships of its members as well as in the tools, documents, and processes than embody aspects of this knowledge" (Wenger et al., 2002, p. 11).

It is up to individual schools as to whether networking is a task for careers advisors to undertake. Whilst some schools support or expect this activity, many are still working with older models of career education and it is likely that networking is not common practice, nor recognised and supported as a professional activity in schools. Networking is therefore very likely to be undervalued at school level in terms of time and resources allocated to it as an activity. At present its status is really an unofficial response of careers advisors and other co-ordinators (inside and outside the school) to a structural/systems deficiency. The Ministry of Education might consider reviewing existing guidelines for the work of careers advisors to emphasise the importance of time and resources to be devoted to this activity at school level. The Ministry of Education might also consider examining any dependence on the goodwill,

[5] We do acknowledge that some schools have created interdisciplinary subject areas through the National Qualifications Framework and that some schools have also been working closely with community through initiatives such as Education for Enterprise.

interest and commitment of an individual careers advisor to engage in such activity, especially outside of formal school hours.

Networks are for learning and building communities of practice

This research has shown how the shared learning aspects of networks can usefully be thought about as communities of practice. However, these networks and communities are broader than the professional organisation of CATE, to which nearly all school-based careers advisors belong, and CDANZ, to which a small number of school-based career advisors and a large number of other (careers-qualified) careers practitioners belong. The career education networks reported on here show well-regarded and useful links not only to professional organisations like CATE and CDANZ but also to government agencies, professional development organisations and to independent consultants in industry and careers practice, industry bodies, individual employers, sports clubs, ex-school students and teachers within the school and at other schools. They also link to virtual nodes such as the Career Services and Future Pathways websites. And they include enduring links to particular individuals even after those individuals no longer work for the organisations that may at first have prompted the links. Various combinations of these people and organisations are represented in networks that informants specifically named as important for their learning.

Many of the learning networks and communities of practice exist *alongside* formal organisational elements such as the transition team within "Big High School", the regional subregional networks of pathways advisors, and the transition teacher and school guidance counsellor at "Small High School". Other communities of practice are informal and purely relationally-based, such as those between the ITO training advisor and employers, between the ITO training advisor and Gateway co-ordinators and between the industry consultant and employers. Others are a mix existing alongside formal projects or functional units and build on personal relationships, such as those between pathways advisors and school personnel on the CPaBL project and the relationships between the Career Services manager and school contacts. Some, such as the regional network of pathways advisors, are recognised as having the purpose of developing knowledge, though they may not be recognised by the practitioners as a community of practice. Others may be more explicit in their learning purpose as communities of practice such as the subnetworks between pathways advisors and school personnel, and between the Career Services manager and school careers staff.

Fostering learning networks and communities of practice with a "professional spine"

Given our key informants' statements about the importance of shared learning and belonging to a community of practice in order to do their career education work, it seems reasonable to think about how these connections and communities might be fostered. The first step is in recognising that while communities of practice are a natural part of organisational life, they are usually not recognised or valued. Paradoxically, even if recognised, communities of practice cannot be developed in the same way as formal organisational structures. As Wenger et al. (2002) argue, any power to control a community of practice is always mediated because a community of practice is based on collegial, not reporting, relationships. Nevertheless, organisations can do a lot to foster healthy communities of practice through arrangements that "value the learning they do, make time and resources available for their work, encourage participation, remove barriers, [and] integrate them into organisations by giving them voice and legitimacy" (Wenger et al., 2002, p. 14).

There is of course a risk of overmanaging and second-guessing the domain of the shared learning network or community of practice which can place new demands and expectations that may be inconsistent with the common ground that draws people together as a community. Similarly, the provision of resources often carries with it accountability for their use and a focus on short-term results, which again may not be consistent with the interest of the community of practice. Formal institutionalisation of a community of practice as an organisational structure also risks containing the domain within bounds that members do not share, and with it the space on how to present ideas, how to decide which activities to pursue and to raise tentative or half-baked ideas. The community of practice as a result ceases to be such, merely another, not necessarily useful, institutional structure. Several of our key informants were open about the challenge of managerial legitimation during the CPaBL initiative. While overall judged to be successful, the value to the community of practice was challenged by the haste with which CPaBL was implemented amongst many of the members, by the unequal power relationships amongst the CPaBL partners and the competition for funding this engendered. In contrast, at the local level, the community of practice was often recognised as of value in advancing the CPaBL initiative, often through the development of personal relationships. This suggests that the key would be to acknowledge and work with the personal relationships and take the *time* to develop other ones.

Career education in New Zealand is likely to gain a lot from acknowledging the value of the shared learning that already occurs. Learning networks and communities of practice create an environment of continuous professional development, they are fairly efficient and they provide a space for the informal and highly contextualised learning of everyday life and work. The latter (learning in everyday life and work) generally receives very little attention in educational literature but our key informants have highlighted it as critical in their work.

This is not to say that no formal professional leadership can be shown. Career Services, the Ministry of Education, CATE, CDANZ and School Support Services have all worked independently and co-operatively at different times to show leadership. Career Services in particular has developed a number of initiatives since the key informant interviews—including a career education section on its website and a subscriber newsletter—and is acknowledged internationally as providing one of the best all-age services to embed careers practice in many sectors and at many levels (Watts, 2007). With continued work (and collaboration), a "professional spine" may explicitly emerge which takes the diffuse efforts of the different services and make them coherent, without threatening them (Watts, 2009). The benefits of fostering shared learning networks, communities of practice and continued development of an explicit "professional spine" would logically transfer to school students and young people in transition because these are capacity-building activities and structures which echo the capacity-building structures and activities of *The New Zealand Curriculum* (key competencies) and career education. However, further research in this area could contribute to more understanding about whether and how this happens.

Redefinition of "the community" in communities of practice and network participation

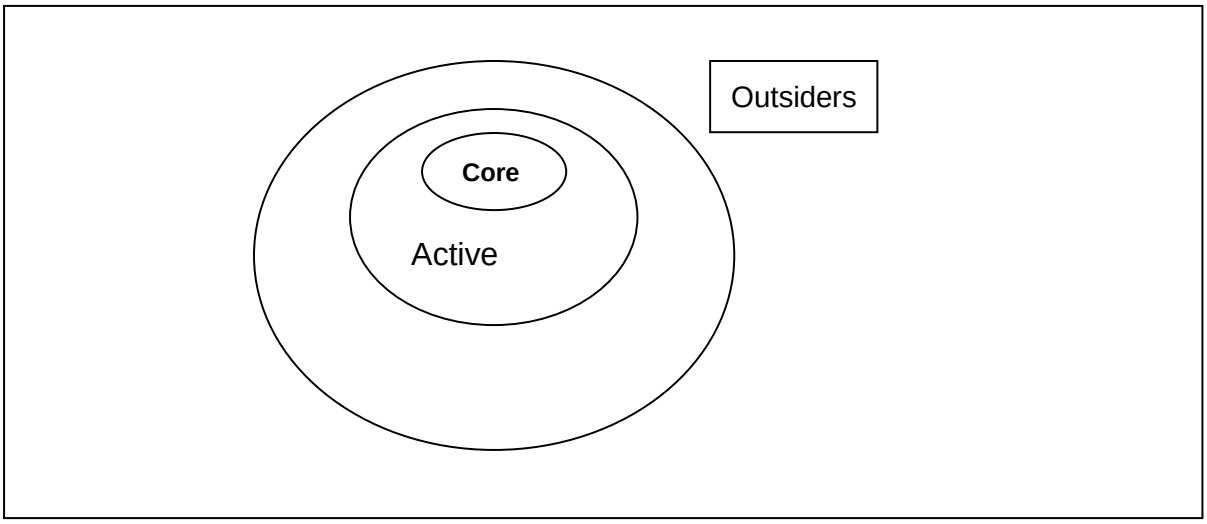
In identifying networks and communities of practice, this research also raises some interesting questions about membership of the community. Our key informants identify a wide range of important people and organisations in their networks. It is clear that our informants are increasingly working with "the community" outside of schools that includes family/whānau, employers, industry bodies, tertiary education organisations and other agencies and organisations that assist young people in transition. This has meant that "the community" in a community of practice has also expanded to include people who would otherwise have only

been the recipients of whatever the school and the career advisor delivered. Some of these people have now moved into being collaborators and generators of career education.

However, there are both significant structural opportunities and limitations to people's participation that have implications for career education in practice. In any network, some nodes will be more important than others. Our key informants picked out their most important "nodes" and there were a few surprises including interesting gaps where the people or organisation branches that we expected to see named as important were not, even though there might have been a formal link in place. Communities of practice also tend to have a structure where participation is differential.

The following diagram is reproduced from Wenger et al. (2002) and shows participation levels in a typical community of practice. The core group, often comprising 10 to 15 of the whole community, are active participants in discussions, in debates and in identifying topics. Members of this group typically take on leadership roles. The active group is also small, typically 15 to 20 percent of the group. Members of this group attend meetings regularly, participate occasionally but without the regularity or intensity of the core group. Most of a community's membership are peripheral members. Peripheral members keep to the sidelines watching the interaction of core and active members. Peripheral membership is an essential component of communities of practice because these members gain their own insights from the discussions and put them to use in their own practices. Members move through different levels of participation depending upon their motivations to engage. Outsiders are not members of the community, but have an interest in it.

Figure 3: Different levels of participation in communities of practice



Source: Wenger et al. (2002), p. 56.

A key to a community of practice having a rhythm is the presence of a co-ordinator who organises events and who connects community members in public and private spaces. Similarly, all members need to feel like full members, particularly those on the periphery thus, rather than force participation, as with a formal team, a key to participation is to "build benches for those on the sidelines [and] make opportunities for interaction to keep the periphery engaged and connected, and to give active members leadership opportunities" (Wenger et al., 2002, p. 57).

Participation opportunities and limitations through Gateway and STAR

Viewed from this perspective, the community element within communities of practice in career education can be rather weak. Such communities have little rhythm to them due to fragmented co-ordination and little recognition given to the importance of scheduled events to foster a sense of identity and belonging to the community. For instance, within the region in which we focused our research, CATE connections have changed from scheduled regular activities to email contact several times a year. Similarly, the decision by the Tertiary Education Commission to cease convening regional meetings for Gateway co-ordinators can be seen as devaluing the rhythm of events that give communities life and a meaning to interact. The ITO training advisor, for example, while sympathetic to the tricky, multiple aims of schools and roles of teachers, is somewhat critical of some teachers' ability to connect with the industry and employment parts of the community:

> The best successes we have experienced is where schools are employing people [for Gateway] who have not necessarily been teachers. No disrespect to the majority of teachers, but we have had more success in Gateway, with people who have had outside lives. If they've gone from school to teachers' college to school they can be isolated from what we call the real world.

This statement is a good example of the two sides of having peripheral status in a community or network. On the one hand, the ITO training advisor reflects his felt illegitimacy within the teaching world and his subsequent limited voice within that world. On the other hand, he reflects the illegitimacy teachers have outside the teaching world (the "real world") and their subsequent limited voice in that world. From a communities of practice perspective the ITO training advisor and nonteachers in Gateway programmes are peripheral to communities of practice in careers education and do not feel they are full members. The same applies to teachers in the periphery of communities of practice in industry and employment areas.

This state of affairs is changing. The Industry Training Federation has been targeting schools and encouraging ITOs to build links with them for several years and aims to survey careers advisors in 2010. Many ITOs and schools have been actively working together to take advantage of the National Qualifications Framework and National Certificate of Educational Achievement development's intent to credential a wider range of learning possibilities for young people, and have developed learning and assessment packages and qualifications for secondary school students (Hipkins & Vaughan et al., 2005). However, these shifts take time to develop beyond simple information trading and co-operation to realise institutionally-specific benefits into legitimate voice and participation in a community of practice.

The Gateway programme in particular has acted as a catalyst for network and community development. Like the STAR resource, it has required school careers staff to develop relationships with people and organisations in the community (e.g., employers, industry bodies, tertiary institutions) in order to secure placements in work and further education for young people in transition beyond school. The relationships developed have at the same time brought people into the knowledge building of school careers staff communities of practice. The STAR resource tended to prompt relationship building with tertiary education providers in the main, as well as allowing for in-school delivery of course content (i.e. some schools and teachers were accredited to deliver and assess STAR-funded courses). So STAR did not demand that schools move beyond the traditional school–tertiary relationships, although some schools did. Gateway, on the other hand, is built upon workplace-based learning along with classroom-based learning. So there is no way to run a Gateway programme without schools building relationships directly with employers. As such, Gateway has taken the community-involvement strand of STAR and pushed it even further.

As a result of the required relationships with employers, many Gateway co-ordinators have been explicitly employed by schools because of their community contacts, rather than because of any career education knowledge or careers practice experience. Thus many Gateway co-ordinators are support staff, rather than teachers. The Gateway co-ordinators who are support staff have an advantage over teachers in relationship building with employers because of their nonteaching status. In addition to having existing contacts in the world of work, they can side-step difficulties in the teacher–employer relationship—frequently based on some seemingly intractable misunderstandings about each other's roles in young people's lives. Since most employers are small-to-medium-sized enterprises (SME) employers, it is likely that they share backgrounds, attitudes and preferences that do not sit easily with traditional models of schools as institutions and that they share a preference for nonbureaucratic structures and "doing it my way", experience over qualifications, and a reliance on informal connections and networking (Vaughan, 2002). Hence support staff as nonteachers and more peripheral to the traditional model of "school" may have an easier relationship with employers.

While these relationships help Gateway run well at a day-to-day level, they can also reinforce the peripheral status of support staff within schools—and therefore also within a community of practice. This poses some significant issues for career education in its movement towards curriculum integration. Since they are not teachers, support staff are not, and cannot, be members of curriculum committees and the like. This means there is a very weak link between school senior management and career education in respect of embedding career education or integrating it across the whole school. While the "Big High School" transition team leader saw the advantage of her nonteaching status in never being called upon to perform other roles in the school, such as relief teaching (an issue for careers advisors raised as far back as 1971 by the Working Party on Guidance in Secondary Schools[6]), she also acknowledged as problematic the lack of access to an in-school network at senior management level. Two pathways advisors also pointed out the difficulties of moving career education into an embedded model, when working with a wider range of staff:

> It's a joy to work with all output areas [career education, school leadership, etc.] using *The New Zealand Curriculum* as an umbrella. But ancillary staff who are part of [in-school] pathways teams were not already involved with The New Zealand Curriculum and did not get any professional development support—because they are not teachers. It's a big concern.

Theoretically, the limiting factor in the ability to shift into a genuine community practice here is the narrowness of people's domains—that common set of key issues and problems that motivate people to interact. Some of the "knowing" that occurred for our key informants concerned how to resolve immediate day-to-day problems and issues. For instance, participation in the local regional career education wiki by both the "Big High School" transitions team and the "Small High School" careers teacher, was principally driven by the common concerns about placements, community networking and innovative ways to use the Ministry of Education's funding streams for transition education. Similarly, the "knowing" between the ITO training representative, the industry consultant (and his role with STAR and Gateway classes), employers and schools was about the fit between employer's needs and the formal learning outcomes for the young person on work placement.

Whilst learning on how to deal with the immediate is a legitimate work concern that reflects the reality of day-to-day problem solving, the narrowness of purpose and diversity of informants' purposes and practices can limit the possibilities for wider and deeper interaction.

[6] The careers advisor has "tended to be thought of as the purveyor of career information, the person who maintains the school record system and like other teachers with 'free' periods a useful person to call on in times of teacher shortage" (1971, p. 15).

This is not to say that informants are unaware of the issues around the future of career education; nor is it that they do not recognise that this topic is one that they share. Most informants are active pursuers of professional development opportunities as individuals, and are members of CATE so cannot help but be aware that they share common interests in the future of career education. However, the immediacy of day-to-day work realities severely limits opportunities to interact more often and more widely and deeply, and so can push questions about wider areas of common interest to the background.

Because the communities of practice are narrow in their "domains", they tend to be invisible to those in the institutions with whom they work. Consequently, it is difficult for people in institutions to see the value in the knowledge the community develops and holds, and limits the number of people who could be participants in the community (Wenger et al., 2002). Many who could be core participants in developing knowledge are structurally placed in peripheral positions within the communities and do not feel they have the authority or the right to a voice, and the role of outsiders who have an interest in such communities and can see potential that those on the inside cannot with their focus on the immediate, is limited. By extending their domain (i.e., the specific or core knowledge developed, shared and maintained), other participants in career education communities of practice can gain legitimacy as knowledge producers and bearers in their area and be valued as a significant part of the school community.

Selection and training of careers advisors and careers support staff

The careers advisor network-building and networking role requires a high level of interpersonal skills, commitment, relationship management, knowledge management and reflective capacity. It is clear that competence and willingness to engage in networking within and outside of the school, and throughout the community, are essential for careers advisors to undertake their role.

Individuals differ significantly in their capacity to do this. One of the careers staff we spoke to was new to the job after being a classroom teacher for a number of years and was struggling to build and work with networks. There is specific mention of network building for new careers advisors (see Career Services guidebook). However, anecdotal evidence suggests that a large number of school-based careers advisors are teachers who may be retired into the position or rewarded with it for years of loyal service (the working conditions of most secondary school teachers do not involve having an office and telephone, as most careers advisors have). This anecdotal evidence, together with findings about age and experience from the 2007 survey (Vaughan & Gardiner), suggests that careers advisors might need extra support here.

The demonstration of the capacity to network (through previous behaviour) could become a criterion set down by the Ministry of Education in instructing schools how to select careers advisors. Similarly both the initial and continuing training of careers advisors, including tertiary diplomas in careers guidance, should attend to networking as a tool to enable careers advisors to perform their work. This might form part of the general (and currently gentle) trend in New Zealand towards professionalising career guidance in schools. Since the OECD argued that "using the standard criteria for a profession, career guidance is weakly professionalised in most countries ... [and] career guidance practitioners in many countries receive either insufficient or inappropriate training ..." (2004a, p. 83), guidance practitioner associations in Canada and Australia have published competence frameworks to support the training of careers practitioners. In Scotland, a country of comparable size and with a careers guidance delivery model similar to New Zealand, Careers Scotland produced a subject

benchmark statement, outlining the competencies required of those completing initial training courses in career guidance in Scotland. This statement, developed through stakeholder consultation, was endorsed by the Quality Assurance Agency (QAA) for Higher Education, by the Scottish Executive (government) and by the Institute for Careers Guidance (practitioner association). It is used to inform the development of initial and continuing training of guidance practitioners (European Centre for the Development of Vocational Training (Cedefop), 2009).

If a whole-school approach to career education is to be taken seriously, then in-school networking becomes even more important. This means the issue of careers support staff involvement (or not) in curriculum committees and the like is critically important, particularly as they are likely to continue to play an important role in connecting schools with community members such as employers. The OECD has noted the role that support staff play in many countries in career guidance delivery. The OECD handbook for policy makers recommended to governments to work with tertiary education institutions and career guidance practitioners to develop a framework that includes the competencies needed to deliver government policy goals, and which would cover all relevant settings in which career guidance is provided and all categories of staff OECD, 2004b.

Reconceptualising the school-based careers advisor role

While competency support at a personal and professional level and professional development are important, it may be particularly useful to think about these as dimensions of a general reconceptualisation of the careers advisor role. The introduction of the notion of "career development competencies" and current thinking to align these with core curriculum competencies (the key competencies) suggests quite a different approach than that of "delivering" career education through intermittent class activities, year level Careers Expo visits and one-on-one guidance. Given the emphasis on career *education* as opposed to only career information and guidance, and the trend towards a school-wide approach, such as that developed through the CPaBL initiative, the careers advisor role becomes one of managing and co-ordinating, as well as networking. If career education is a priority for the whole school, with the support of senior management, and the principal, board of trustees and guidance network (including counsellors, deans and form teachers), career education is not necessarily any longer something that only the careers advisor "delivers". The whole-of-school approach that this implies requires considerable co-ordination and delivery that is beyond the capacity of the one career advisor. It requires significant knowledge of curriculum design and development (Hodgetts, 2009, p. 41).

Currently the transition office or careers centre in many secondary schools functions as a hub for information distribution (pamphlets and resources are stored there), one-to-one meetings (careers advisor and student or careers advisor, student and parents) and career education lesson planning. However, it could become more of a management centre from which a careers advisor co-ordinates school-wide activities and provides professional development for other teaching staff. There are likely to be implications for the physical space here too.

The key challenge of careers practice in schools therefore seems based on the link between career development and lifelong learning—namely a move from a static model of content delivery to a dynamic model of capacity and capability building, whereby the latter are developed for both students *and* teachers (Vaughan, 2008). If arguably the job of a teacher is to prepare students to be successful in existing social structures *and* be active agents in contributing to changing those social structures (Skilton-Sylvester, 2003) (in other words, school is not only about preparation for work), then we need to support teachers (including,

and especially, careers advisors) to do something differently in preparing young people to think about their lives beyond school—something beyond providing more and better accessible information and something more like a different idea about what we think knowledge, learning and teaching actually are (Gilbert, 2005 Pink, 2005)—i.e. not just individually possessable "stuff" but stuff *you do things with*. For careers advisors, it means rethinking the position and priority of activities like provision of labour market information and use of older-style Career Services' resources like Jobs Galore and Plan-It. These are not unimportant but their place should be re-evaluated so that they form part of developing the competencies of students to find and (crucially) to *interpret* information and occupational possibilities as part of a life journey with multiple decision points, of which school is just one. These sorts of resources are still useful but the way they are used is what can make them fit for purpose in contemporary society and for the transitions that today's young people face.

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