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EDUCATION EMPLOYMENT
LINKAGES

**Learning to Fly:
Career Management Competencies in the School Subject
Classroom**

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Executive Summary

This report is concerned with the key transition support system of school-based career education. We argue that long-standing deficiencies in career education require a new framework to address young people's needs. We discuss exploratory research with two schools on how career management competencies can be put into practice to provide this new framework. We suggest that career management competencies have the potential to be a transformative “core service” in career education. They can re-invigorate the direction of schools and sharpen the focus for the New Zealand Curriculum principles and vision of young people becoming confident, connected, actively involved lifelong learners.

School-based career education need transformation

For some time, young people have been telling us – through numerous national and international studies based around interviews, surveys, and field observations – that they feel overwhelmed, lost, and frustrated in their attempts to enact a successful transition from school. Research into the state of, and relationships between, various transition support systems confirms these experiences. Many of those systems seem to lack the necessary flexibility, clarity, and fitness-for-purpose to meet the learning challenges and labour market conditions of the twenty-first century.

Schools are mandated to provide career education for all students, particularly those most at-risk of failing to make a successful transition. However how, and how well, schools actually do this varies widely. Drawing on previous research¹, we can categorise three persistent and long-standing problems: inequitable access, marginalisation, and lack of fitness-for-purpose.

Access to career education is inequitably provided within the school because it is deliberately designed, or forced by lack of resourcing, to target select groups of students. Schools target those most at-risk of leaving without qualifications by helping them to find options for ongoing learning and/or employment. Schools target those who are university-bound by helping them clarify multiple pathways and interests. However the majority of students are left without the tools they need to manage their pathways. Models for apportioning the available (human and other) resources are unable to recognise that *all* young people need career education.

Career education is marginalised in several ways. Firstly the activities are often regarded as an interruption to subject class work (the “real work” of school). Career education has typically been regarded as distinct from the rest of the curriculum. Secondly it is often conflated with vocationally-oriented courses such as those funded by the Secondary Tertiary Alignment Resource (STAR) or run through Gateway, for which career advisors are often the designated coordinators. Those courses may also be (erroneously) perceived by teachers and parents as interventions for less academically able students. Similarly since the inception of vocational advisory and personal counselling roles in schools since 1948, careers advisors have typically been nearer to retirement age and perceived to be weaker teachers, contributing to the sense that career education is not core business for the school.

¹ See Wilson & Young, 1998; Education Review Office, 2006 & 2009; Vaughan & Gardiner, 2007; and Vaughan, 2008b & 2010.

Research further suggests that most career education is not fit-for-purpose and young people are not developing the kind of tools they need for managing life and work beyond school. Most career education programmes privilege the gathering and distribution of information. This helps young people to make short-term connections but it does not help them develop the longer-term capabilities for managing work and learning throughout (a changing) life and world. Many career education activities derive from early 20th century models of vocational guidance, which emerged to deal with the issues of industrial expansion and involved negotiating a fairly stable and linear progression of occupation, self, and labour market. However modern societies present quite different career-related challenges: greater occupational diversity and flexibility, geographical mobility of work and workers, technological transformation, and labour market unpredictability. People need different tools to conceptualise and manage these things.

What the three flaws in career education highlight is that much of the *context* for career education – certain occupations and labour market arrangements, skills and competencies required for work and life, people’s aspirations, and the state’s ability to provide security to citizens – has changed, while the career education *framework* remains as it was. This suggests that we need something more than additional resources, more planning activities, or another way to gather, distribute, and match information. These may fill some important gaps in the short term, but to make those or any other changes really useful, we need an altogether different career education framework.

Career management competencies offers a way forward

Career management competencies can reframe career education in a way that better serves young people as lifelong learners and participants in society. Career management competencies have only recently been introduced through the Ministry of Education’s (2009) updated guide to *Career Education and Guidance in Schools* – a document that is usually only read by the careers advisor and careers team. However the suggestions for implementing career management competencies implicate subject teachers, as well as the careers team.

Career management competencies have three dimensions (Ministry of Education, 2009):

- *Developing Self-Awareness* –building and maintaining a positive self-concept; interacting positively and effectively with others; and changing and growing throughout life.
- *Exploring Opportunities* –participating in lifelong learning to support life and work goals; locating information and using it effectively; and understanding the relationship between work, society and the economy.
- *Deciding and Acting* – making life and career-enhancing decisions; making and reviewing learning and career plans; and acting appropriately to manage careers.²

New Zealand’s development of career management competencies has followed that of the United States, Canada, Australia, and countries in the European Lifelong Guidance Policy Network. They all share the idea that everyone has careers, that they require lifelong management, and that this requires intentionality and pro-activity on the part of the individual. Unlike the concept of “skill” which emphasises the possession of knowledge or the ability to do something, competencies emphasise performance and *mobilisation* of the

² Recently the Ministry of Education’s Crown Agency, Careers New Zealand, split the last competency, *deciding and acting*, into two competencies: *making choices and decisions* and *taking action*.

skill or knowledge in specific contexts. In other words, career management competencies reconceive careers work as being about “fostering learning and personal development rather than about helping individuals make difficult choices or overcome moments of crisis” (Hooley, Watts, Sultana & Neary, 2011 draft manuscript).

Exploring the integration of career management competencies into subject classes

Career management competencies take their cue from the notion of *key* competencies, developed by the OECD to describe the kinds of things that all people need for contemporary life. This suggests an immediate link between the three career management competencies and the five key competencies³ in the New Zealand Curriculum. The latter are positioned as “the key to learning” in any field and “both an end in itself (a goal) and the means by which other ends are achieved” (Ministry of Education, 2007, p. 12). The key competencies should thus thread their way through all subject areas in the curriculum.

In much the same way, the Ministry of Education (2009) suggests career management competencies be integrated into the curriculum. Students might develop career management competencies in *any* learning area. For example, students could develop *self-awareness* through teachers asking them about the skills and knowledge they bring to, and can develop within, a subject, and discussing how these skills and that knowledge can be transferred, to new contexts, including in specific employment contexts.

Career management competency development might also work well in *specific* curriculum learning areas. For example, students in science could interview people about the impact on science on their jobs; talk with people in industries that draw on more than one area of science (e.g. horticulturalists drawing on ecology and chemistry to affect pest control); or investigate business opportunities in the wake of scientific developments. This makes for a claim that “all teachers are careers teachers” and that this shift does not have to be an additional or burdensome one (2009, p. 25).

Since schools vary in their understanding of career management competencies (and anecdotal evidence suggests that many teachers have never even heard of them), the ability and commitment to integrating them into the curriculum will vary. Thus our research questions were designed to be exploratory in nature:

1. What could career education look like if framed in terms of career management competencies?
2. What kinds of learning, teaching, and leadership opportunities might emerge?
3. How might the school be internally or externally networked differently?

To begin exploring these questions we held two workshops with a group of careers advisors, curriculum leaders, and subject teachers from two different secondary schools. We invited these schools based on our prior knowledge of them as having principals and at least some teachers who were familiar with key competencies, and as having dedicated careers advisors who were interested in 21st century learning.

The first school, Mosely College, is a medium sized, provincial/rural, decile 6 school with a sole career advisor heading up a Pathways Department with one support staff member. Career education is well supported by the senior management team and features in staff professional

³ The key competencies are: relating to others; participating and contributing; managing self; using language, symbols and text; and thinking.

development. Usually career education at Mosely College involves subject teachers in teaching careers as a separate topic within a subject time slot (e.g., in Social Science at Year 10) and/or subject teachers being explicit about which careers fit with their subject areas. Being a small school, the careers advisor is able to form relationships and offer advice on a personalised basis to nearly all students.

The second school, Otatau High School, is a large urban, decile four school. The careers department includes a Head of Department, two Gateway coordinators and one support staff member. There is an emphasis on career education throughout the school, particularly through its academies and specialist schools in business, construction and the services. Career education is usually taught as a unit of work either during subject class time or in an allocated time slot such as form time. Subject teachers also make career education explicit when they talk about what careers fit their curriculum subject areas. The careers advisor sees her job as “seeding” career education throughout the school.

Two of the subject teachers – both in English - from our school workshops went on to try out career management competencies in their classrooms.

Interpretation #1: career management competencies as job research skills

Anna, the teacher at Mosely College, co-wrote and co-taught a research unit in English with the careers advisor in her Year 10 low literacy class. The unit involved students in oral, visual, and written research on a career of interest to them. Lauren, the careers advisor, established relationships with students through the co-teaching arrangement, enabling students to feel confident about the possibility of approaching her later for advice. This arrangement also familiarised students with resources (e.g. Careers New Zealand website, Just the Job television series, Jobs Galore listings). Students could then use these resources, and conduct an interview with someone about their career (e.g. the nature of work, conditions, entry and ongoing learning requirements). Students considered their own interest in, and ability to engage with, these or other possible careers.

Anna’s approach made careers work in class explicit. Career education and career management competencies were seen as much the same thing: skills to gain a job. Career education was understood as the responsibility of both the subject teacher and the careers advisor. Anna focused on the key competency of *managing self* and linked it to the career management competencies of *self-awareness* by looking at whether the students were capable of achieving academically; *exploring opportunities* by looking at alternative pathways if the students did not succeed in the present one; and *deciding and acting* by students making informed choices about what to do next.

The intent of the research unit was that students would learn skills useful for finding any job (not just the one they were currently interested in) and would be able to consider both a first choice career and pathways to it, as well as alternatives in case they were unsuccessful regarding entry criteria or tertiary education requirements – something likely to be a reality for these low literacy ability students. However Anna was aware that she also walked a fine line. Like most teachers, she wanted to encourage students to have great expectations of themselves and for their lives. However she also wanted to protect them from mistakes and disappointments and this might mean giving them a difficult “reality check” about their current capabilities.

Interpretation #2: career management competencies as learning-to-learn capability

Tanya, the English teacher at Ottaua High School, led her department in restructuring and coordinating the plan for English teaching across all year levels. Teachers developed a scaffolded set of overarching inquiry questions, one for each year level, and foregrounded one key competency in particular at each year level. For example aspects of the overarching inquiry question “Where do I fit in?” were designed to develop the key competency of *relating to others* at Year 10. Students could choose texts from a range of possibilities and develop a direction in which to explore them.

Tanya was interested in this more student-led approach for two reasons. Firstly she wanted to increase student engagement which had been low partly because teachers tended to “talk at” the class about texts they (and not students) had chosen. Secondly Tanya wanted students to develop learning-to-learn dispositions by allowing them to draw on their individual and cultural understandings to interpret the text, not only finding knowledge *in* the text, but bringing who they are (their own experiences, perspectives, and understandings) *to* the text.

Tanya used the key competency of *managing self* in her Year 9 low ability class as a means to engage students in learning about the career management competency of *self-awareness*. Students chose one text from either “The Karate Kid”, “Remember the Titans”, or a text of their choice approved by the teacher. They analysed determination and perseverance in their texts. Tanya noticed that it was no longer possible to “talk at” students since they were reading different texts. The teacher’s role had to shift to being a “guide on the side” rather than a “sage on the stage”, and students were immediately more engaged in their learning.

Tanya used the key competency of *participating and contributing* in her Year 10 high ability class in a similar way. Students chose from the provided 2011 Year 10 texts of “The Blind Side”, “The Power of One”, “Percy Jackson” or made a personal choice. Students could then choose to answer one of the following questions, designed to help students develop their own ideas and thinking: How could one person make a difference?, How does one person in your life make a difference?; How I would change the world?; or a topic of their own choosing. Although Tanya knew these students were already confident and secure in their ability, she noticed that students produced much stronger essays in their exams, vastly more creative speeches in class, and covered a wider range of topics than usual. Not only were students more engaged in their own work, but each student’s work helped engage others.

The discipline of English provided students with the opportunity to “look into” other worlds and other people’s lives, and how they were located in relation to that life or situation. Thus key competencies were a necessary first step in learning about self which could be followed by a second step of developing career management competencies – i.e. first “knowing self” and then “making decisions”. Tanya’s approach encouraged students to *explore opportunities* through the characters and situations of a text, relate these to *themselves* and consider how they are in the world (imagine different ways of being in the world and consider where they do, and can, participate and contribute). While career information and advice was not explicit in this approach, the idea was that greater self-awareness would lead students to *make decisions and take actions* in ways that were well-informed – not just by labour market information but by a sense of themselves and their capabilities.

Locating forms of career education that can be transformational

Besides the two interpretations we have discussed, there are likely to be many more possible approaches to career management competencies in subject classes. This is both the strength

and potential weakness of a curriculum that does not prescribe what teachers should actually do. All competency development requires creative, carefully designed, and rich environments in which students can develop *for themselves* the competencies they need to flourish both at school and beyond school, into work and further learning. *Career* management competencies are well placed in this regard because existing career education activities are closely associated with situated and authentic learning.

Existing careers activities could be shifted away from their common focus on information (often of short-term value) and having experiences towards the building of long-term career management capabilities. Workplace-based learning and participatory experiences (e.g. “taster” courses, work experience days, tertiary campus visits, talks from former students or industry representatives) are useful. But they are also limited in their capacity to benefit students for long-term career management.

Learning-to-learn and reflective strategies are a useful way to reframe these activities. For example, a careers advisor (or another teacher) could talk about employability (throughout life) with students, not just about specific employment options as the next step. The careers advisor or workplace-liaison coordinator could use the process of reflection – well-recognised as a strategy for promoting deep learning – and get students to use digital and web-based technologies to reflect on their experiences (e.g. in workplaces or at tertiary campuses) and its meaning in their lives.

Subject teachers could focus more deliberately on working with students’ current understandings and giving them time to think and talk about *how* they are learning. A science teacher might not only put up a “Where To?” (Careers New Zealand) poster about science-related careers in their classroom. They might also engage students in authentic experiences of scientific work and support them to engage with science communities of practice so that students can make real meaning from the information in the poster (see Vaughan, 2012 in press).

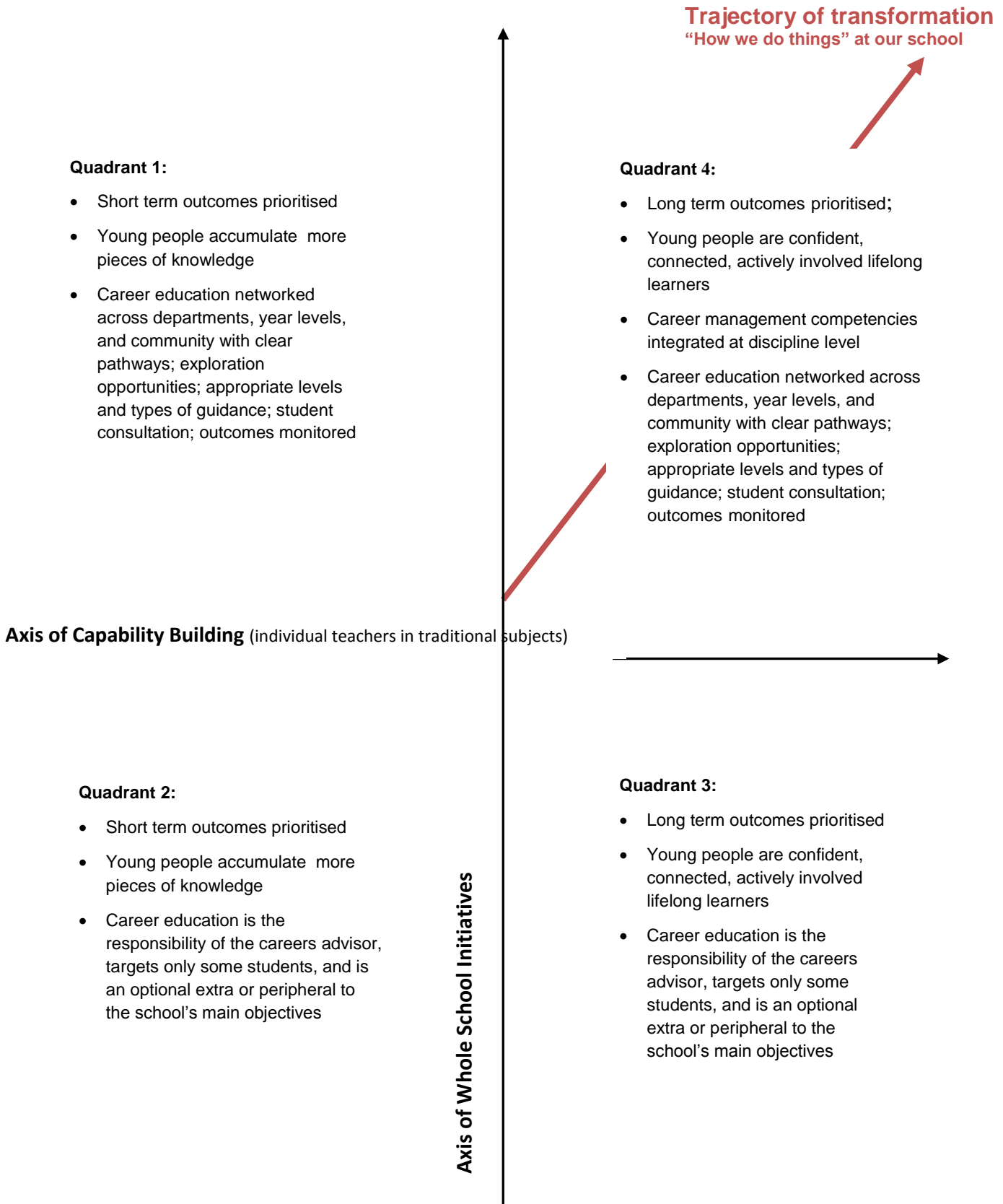
We have seen an approach at Mosely College that makes career information and advice explicit in the subject classroom. It uses the “texts” of career information on websites and perspectives from oral interviews as the means through which students can consider a career *and* learn how to find out (in the future) about other careers. We have seen another approach at Otua High School which fosters deep thinking for students but has only an implicit link to career information and advice. Nevertheless, in our view, this second approach has greater potential to be linked explicitly to careers in ways that will help students develop long-term capabilities.

We have attempted to build a thinking guide (see following diagram) around career education and competencies using the dimensions of whole-school initiatives and capability-building. The following diagram shows interprets whole school initiatives as valuable (Quadrant 1) but only one part of the picture because they are less likely to develop students’ long-term competencies.

The diagram also shows that capability-building approaches by individual teachers (Quadrant 3) are also only one part of the picture because they rely too much on standout individuals and may not translate across the school. Ideally whole school initiatives and capability-building come together through a “trajectory of transformation”, indicated as Quadrant 2. Work in this quadrant is most likely to maximise students’ long-term interests as citizens managing their work and learning throughout life.

Teachers or others working with schools might like to try plotting their school’s career education programme, using the two axes and the four quadrants.

Figure 1 A framework for thinking about career management competencies in the whole school context



Challenges to long-standing school relationships

For schools moving into transformational Quadrant 4, there are significant challenges for in-school and external relationships. Subject teachers may resist taking responsibility for careers work if they and the school continue to regard it as distinct from the main learning areas. For example, instead of the sole possibility of sending students to the careers advisor for one-to-one guidance, teachers might work alongside careers advisors and careers advisors might have a curriculum consultant or coordination role. Teachers and careers advisors could think together about the needs of particular students and how they could be addressed through class activities, perhaps drawing on careers resources where appropriate. Subject teachers might also work with other subject teachers across learning areas to create rich learning contexts where students can get a more authentic feel for what it might mean to actually work in careers related to that field.

Careers advisors may feel threatened by moving away from a model of career guidance organised around things that were scarce, such as labour market information, tertiary institution information and vocational testing. With these things now readily available through websites, marketing material, and online tests, resources no longer reside in the sole domain of the careers advisor, and it is not so clear what careers advisors should be doing, whether they can do it, or how they can be supported to do it (Vaughan & O'Neil, 2010). However it is clear that, as the demands of career education change, things are moving “beyond the capacity of the one career advisor. It requires significant knowledge of curriculum design and development (Hodgetts, 2009, p. 41). The questions are whether subject teachers are ready, willing and able to engage with careers advisors in this way, and whether careers advisors have the professional capacity to consult at a wider curriculum level. Schools, and especially careers advisors, might need to critically rethink accepted ideas about career guidance only being delivered on a one-to-one and in-person basis, or career education being conducted only through explicit and formally-designated careers activities run by the careers advisor or team. Serious competencies development for students is likely to mean serious changes for people’s professional domains.

Reciprocal responsibilities and benefits for schools, community, and employers

There are also challenges for the relationships that schools have with employers and community groups. Some of these relationships are fostered informally through teachers’ and parents’ connections and others are organised formally through Gateway, STAR, competitions and initiatives (e.g., the Smokefree Stage Challenge, Education for Sustainability, the Electro-Technology ITO’s Bright Sparks club, and the Build-Ability Challenge competition).

There are many benefits from these relationships. School and student benefits include chances for Gateway students and school leavers to be “placed” with employers; up-to-date information for career advisors to give students about learning and work opportunities with employers; opportunities for students to have one-off or regular, medium-term experiences in workplaces; student engagement with a community of practice in specific industry areas, and more opportunity for the school to service its community (including closer ties with parents). Benefits for employers include employee recruitment opportunities, taking an active role in growing and renewing the industry, publicity and increased goodwill, and “giving back” to the community.

Once we start thinking about career education in terms of competencies and capabilities, those relationships can become more than information sharing or reporting ones. They can become

relationships of reciprocal responsibility for the benefit of students, school, community, and industry. This reframing would likely involve teachers and workplace supervisors making explicit agreements about the point of school-workplace learning (e.g. Gateway) and of learning itself. Teachers may also need to take the lead here, balancing the different interests involved in school-work partnerships, such as those revealed in other research: employers seeking new recruits, industry representatives looking to grow and sustain the industry, ITOs wanting to secure new trainees, and tertiary education providers wanting to enrol new students (Tertiary Education Commission, 2003; Vaughan & Kenneally, 2003).

Moving from a delivery to capability-building model

It is clear from other research that changes of this order require a significant commitment by the government and by teaching staff to professional development. The Curriculum Implementation Exploratory Studies project contains some useful lessons for how the integration of career management competencies might be encouraged and supported. Cowie, Hipkins, Keown, & Boyd (2011) use the idea of “horizontal learning” which “typically involves consolidating on ways ideas might translate to practice, filling in gaps, reworking areas where new horizons have opened up and the school now considers they have not yet explored the full potential...and looking back to align new practices with changes made during earlier explorations”. Cowie, et al (2011) cite James Paul Gee’s likening of horizontal learning to a time of “mucking around” and “getting used to the water” before people eventually jump in and swim⁴ as essential preparation for challenging developments.

Just as the New Zealand Curriculum is a non-prescriptive framework and teachers need to learn how to give effect to it, career management competencies demand horizontal learning so that everyone – careers advisors, subject teachers, curriculum leaders, students, the principal, the Board of Trustees, local employers and industry representatives, and local tertiary education provider representatives – is up to speed and working together.

Previous research shows that, while career information and career guidance are essential, *they not sufficient* to support young people to deal with complex pathways and transitions. Thanks to our schools and teachers, we have been able to “test the water” on how career management competencies in subject classroom settings might shift careers work away from out-dated information and guidance *delivery* to longer-term *capability building* for the 21st century. We hope you find this a useful start to further conversations about the creative possibilities, and valuable outcomes, for students.

4 See Gee, 2004, p.60.

Chapter 1. Career management competencies: a core service for young people

Young people do not need to be persuaded to consider the future. They already have powerful interests in the self-constitution of their own lives. (Slaughter, 2002b, cited in Lloyd & Wallace, 2004, p. 175)

Young people do think about the future, and their own future specifically. But right now, and for some time, young people have been telling us – through longitudinal studies, interviews, surveys, field observations, and anecdotal evidence – that they feel overwhelmed, lost, and frustrated. There is good reason to consider where our systems are too inflexible, too unclear, and just plain not fit-for-purpose for the learning challenges and labour market conditions of the 21st century.

New Zealand research about, on, and with young people in transition from school to work and further learning has revealed the widespread involvement but lack of effective coordination between government agencies (Higgins, 2010; Bovin, Harland, & Grace, 2011), the poor quality and misguided nature of career education (Education Review Office, 2006; Vaughan, 2011), and the failure to recognise young people’s changed transition trajectories and expectations and provide appropriate pathways (Vaughan, Roberts, & Gardiner, 2006; Vaughan, 2008b; Middleton, 2010). Young people face a world of de-industrialisation and “multiple careers” (Cheng, 2007), where occupational flexibility, geographical mobility, rapid technological change, and unpredictability in the labour market are the norm. These new norms herald complex reconceptualisations of career as “evolving sequences of life experiences” (Arthur, Inkson, & Pringle, 1999), that may, for some, be “protean” in form – managed by the learner rather than only by the organisation for which they work (Hall & Mirvis, 1996) – and that involve working in a world of more fluid organisational structures (Santiago, Tremblay, Basri, & Arnal, 2008).

Schools have helped create more opportunity for young people by broadening their learning programmes to retain and motivate a more diverse range of students, for longer periods and into a wider variety of post-school educational and work pathways. However, the underbelly of greater choice is the increasing “responsibilisation” of young people: they must make more decisions about possible learning pathways (and different assessment options) through school, in addition to making decisions about an ever-expanding array of work and learning pathways from school and after school, and do it in a way that individualises the risks (financial and opportunity costs; changes in identity and lifestyle) and structural constraints (Vaughan et al., 2006).

It is clear that, while career information and career guidance are essential, *they 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. It is also because we do not have good systems in place to help young people develop those capabilities. Good-quality career education is vital because it incorporates (labour market and tertiary education) information but crucially career education can also provide 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)

In other words, the key features of career education include supporting young people to develop capabilities for the long term and that at least some of this development occurs *before* full entry to the labour market and further adult learning.

Re-positioning guidance for lifelong learning and work

To this end – long-term capability building while still in school – career management competencies have recently emerged in international and New Zealand policy. Career management competencies address people’s capabilities to build successful (working) lives in de-industrialised, knowledge societies. New Zealand’s career management competencies, like those in Australia, Canada, the United States, and across Europe, describe the dimensions of capabilities for finding and interpreting labour market information, testing out possible work and learning options, and formulating and enacting plans in ways that are consistent with a well-developed sense of one’s own values, priorities, abilities, and long-term interests. New Zealand has three designated career management competencies designed with these things in mind: developing self-awareness, exploring opportunities, and deciding and acting.⁵

Career management competencies sit within the rubric of what in recent times has become known as “career development”. Unlike the idea of “career guidance” which has emphasised assisting people to make an initial occupational decision and assume a fairly fixed vocational identity (e.g. one career for life), career development emphasises the process of people, at any age and throughout life, making education, training, and occupational choices, and managing their careers.⁶ Career development is therefore both an individual behaviour (what an individual does themselves to manage and develop their work/life) and a set of interventions (what guidance services provide for assisting with management and development). One of the most important aspects of a shift from career guidance to career management is the emphasis on individuals as playing an active role in their own development regarding work (and learning).

The term “career development” also signals another important shift: where career guidance addressed itself to individual, personal needs, career development serves a public, as well as private, good. It sits at the nexus of government responses to economic and social pressures. It must address governments’ needs both to reduce costs (e.g. associated with low school achievement, tertiary education drop-out, occupational detachment, insecure employment conditions) and to provide an appropriate and adequate level of core services to citizens. The aim of career development is therefore “a dynamic balance between aspirations and realisations, between personal goals and labour market demand” (Watts, 2011, p. 2). In other words, there must also be a balance between targeted and intensive services and systems (e.g. for at-risk groups or specific situations) and core services and systems (International Symposium on Career Development and Public Policy, 2011).

⁵ These are designated by the Ministry of Education. Recently its Crown Agency, Careers New Zealand, has split the last competency, *deciding and acting*, into two competencies: *making choices and decisions* and *taking action*.

⁶ In some parts of Europe the term “lifelong guidance” is preferred and in others the term “career guidance” has taken on a broader meaning, very similar to the meaning of “career development” as used in New Zealand, Australia, Canada, and the United States.

We see career management competencies as residing within the domain of a core service. Because everyone needs the capabilities to manage their work and learning options continuously throughout life, everyone needs to be supported in developing such capabilities. School is an obvious site in being able to reach nearly all young people. While competencies or capabilities cannot be *delivered* in the same way that some services can, the context and support for their development can be provided and supported. In New Zealand, career management competencies are to be developed through schooling. Career management competencies follow the development of the New Zealand Curriculum and key competencies. Like key competencies, career management competencies place the 21st century learner at the centre, emphasise lifelong learning, meta-cognition, and the ability to transfer learning to different and future contexts. Guides published by the Ministry of Education (2009) and Careers New Zealand⁷ (2009) have suggested that schools incorporate career education, framed by the three designated career management competencies – developing self-awareness, exploring opportunities, and deciding and acting – throughout their entire curriculum. The Ministry of Education describes career management competencies as “a framework for designing career education and guidance programmes in schools” and suggests that each one “involves a set of understandings, skills and attitudes required to successfully manage life, learning, and work” (2009, p. 7).

In this report we explore how career management competencies could actually work in schools. We ask what they could mean for how schools conceive their career education provision within the ambit of their wider purposes, and what difference career management competencies could make to how young people learn about, and enact, their transition from school to work and further learning.

Our overall argument in this report is that career management competencies represent a necessary shift from careers information and guidance *delivery* to longer-term *capability building*. The potential of career management competencies lies with them:

- Being a foundation for career education
- Providing a dimension that makes other careers activities more meaningful
- Using the disciplinary lens of each subject
- Demanding rich learning opportunities and engaging pedagogies.

Throughout the rest of the report we build our argument based on findings from our research. The following sections discuss:

- the **origins, purposes, and significance of the concept of competencies** for schools, alongside the persistent issues in career education and what career management competencies can offer
- details about our research design, participants, and activities
- our participating subject teachers’ and careers advisors’ exploratory interpretations and implementation of career management competencies in classrooms
- the **possibilities for collaborative work** (with subject teachers, careers advisors, curriculum leaders, and industry) to provide the kinds of learning opportunities and pedagogies needed by young people making the transition from school

⁷ Careers New Zealand was formerly known as Career Services until a name change in 2011.

Throughout the report you will find diagrams that we have created in order to move our own thinking along and model the thinking of others, including the teachers who took part in exploring career management competencies in their classrooms. We encourage you to consider these diagrams alongside the text of our argument and how you might use, or even redesign them, according to your career education context. The final diagram in the final section represents our thinking about how to usefully consider where a school is positioned in terms of supporting young people to develop career management competencies.

Chapter 2. Career management competencies: origins, significance, and why we need them

Career management competencies are important because they constitute a core service. If everyone needs to manage their careers (work and learning) in a life-long and life-wide sense, then all students need to build capabilities for doing this – not just low-achieving students and those deemed to be at-risk. Career management competencies are potentially a framework or a set of core organising principles around which other career education activities and programmes can cohere.

The Ministry of Education describes the three competencies – developing self-awareness, exploring opportunities, and deciding and acting – as involving “a set of understandings, skills and attitudes required to successfully manage life, learning, and work” (2009, p. 7). However, career management competencies are relatively new and would not have been seen in published form by teachers and careers advisors until early 2010. Anecdotal evidence suggests that few schools, teachers, or careers advisors know exactly what they are or whether and how they might offer transformational possibilities for career education.

Nevertheless, career management competencies offer promise in two, related dimensions: firstly they can address persistent problems in the nature and structure of career education in secondary schools, and secondly they can help students to determine and understand the relevance of their school learning to their ongoing learning and work after leaving school.

Career education programmes and activities in New Zealand

The current situation for career education in New Zealand, within which all careers advisors would be familiar, is that career education is mandated under New Zealand’s National Administration Guidelines (NAGs) (Ministry of Education, 2010) for schools. NAG 1(f) 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. (NAG 1(f))

The Ministry of Education provides secondary schools with a Careers Information Grant (CIG) to assist with associated costs in career education. It also provides Secondary-Tertiary Alignment Resource (STAR) funding to support short introductory courses, longer learning programmes at tertiary level, and courses offering industry-based standards at levels 1, 2, and 3. The Tertiary Education Commission provides schools with funding to run the Gateway programme, offering students a mix of classroom-based and workplace-based learning programmes towards industry qualifications.

Although schools are self-managing and can choose how to configure their career education staffing and programme content, there is usually a designated careers advisor who coordinates careers activities. In larger schools, there may be a “pathways” or “transition” team, which often includes a guidance counsellor and various coordinators of workplace-liaison and tertiary-level learning programmes. Career education activities are offered to all students by year level, to some students according to prioritised groups, and/or on an as-and-when-required basis, instigated by the individual student or a teacher.

The careers advisor and/or team oversee the collection and supply of tertiary education and employment information, career planning resources and tools, and school leaver destination

data. They coordinate work experience or vocationally-oriented courses or programmes, student visits to tertiary campuses and career expos, and the development and delivery of classroom-based career education activities (sometimes linked to school subject choice and planning). They also build and manage networks with community, industry bodies, employers, and tertiary education institutions, and offer one-on-one careers guidance sessions to students.

Formal research and anecdotal evidence show that many career education activities and programmes in schools lack focus or principles around which they can cohere. The problems are fairly well known and there have been attempts to address some of them. However, these have tended to suffer from a lack of shared vision, practical coordination, and sustainable approaches across those involved – schools, teachers, and careers advisors, government agencies, practitioner associations, families, industry and employer representatives, and other community groups. So it is useful here to discuss the problems in order to understand how those problems manifest and how career management competencies might provide a more promising direction and focus. We categorise the problems into three main areas – inequitable access, marginalisation, and lack of fitness for purpose – and discuss them in the following subsection.

Career education's three major flaws

Inequitable access

The first flaw is that not all students in school receive, or engage with, career education. Students report a disturbing level of non-participation in career education. Over half of the respondents in the *Competent Learners at 16* study (Wylie & Hodgen, 2007) could not evaluate the usefulness of careers activities in their school because they had never experienced or participated in them – even though they were senior secondary school students and could have been expected to have had some experience of career education by that stage of their schooling (Vaughan, 2008b). In 2007, school careers staff reported on participation in careers activities by senior secondary students. Their estimates by year level for a range of listed careers activities were for participation rates of just 22–38 percent for Year 11 students and 36–52 percent for Year 12 students (Vaughan & Gardiner, 2007). Some schools surveying their own students have found that they did not even know where the school careers office was located (Education Review Office, 2008).

There is also evidence that some school principals do not direct their schools' STAR and CIG funding to their careers advisors and STAR coordinators,⁸ and/or do not involve them in decisions about careers-related spending priorities, and the funding arrangements do not require this to happen (Vaughan & Kenneally, 2003; Vaughan & Gardiner, 2007). Other evaluations of career education have found its delivery and management to be idiosyncratic and inequitable (Wilson & Young, 1998), and unlikely to improve without support because schools are weak in reviewing their own career education provision and therefore unable to evaluate its effectiveness (Education Review Office, 2006).

Marginalisation

The first flaw is underwritten by a second: career education tends to be seen as peripheral to the school's main functioning and goals. Sometimes this is because career education activities

⁸ These two roles are often carried out by the same person.

are more likely to occur near the end of a student's schooling or only for the most senior students. It can also be marginalised by its association with vocationally-oriented pathways which are typically lower status than academic pathways.

STAR courses and Gateway programmes are generally considered part of career education because there is some overlap between career education and vocational education as it relates to the transition from school. Firstly, career education can be an important feature of vocational education and/or transition services in terms of exploration of options through experience-based learning about work. However, vocational education and transition services are usually focused on preparation for specific occupations so do not in themselves constitute career education (which is focused on exploring many occupations and developing the capabilities to make informed choices among them).

Secondly, careers advisors usually manage, and sometimes teach in, transition and vocational education programmes like STAR and Gateway programmes. Careers advisors are often also the STAR coordinator for their school. The Ministry of Education's *STAR Coordinator Draft Position Description* describes the position objective as coordination and management of STAR funding "in accordance with the school's STAR policy/procedure and with the statutory requirements of National Administration Guidelines 1(f)" (Ministry of Education, 2012). It is not surprising then that STAR, Gateway, and career education have merged to some extent in people's minds. School practices and government policy suggest such a merging.

However, any conceptual and semantic confusion between "vocational guidance" and "vocational training" or between "career education" and "vocational education" (Watts, 2009) does not serve the cause of career development or the needs of students well. STAR courses and Gateway programmes are frequently seen by teachers and parents as an intervention for less academically-able students (though in fact they can be used to extend able students). Moreover, those programmes are timetabled in ways that preclude students from combining these vocationally-oriented courses with other, traditionally academic ones (Hipkins & Vaughan, with Beals, Ferral, & Gardiner, 2005) and can restrict students' pathway options for tertiary education (Madjar, McKinley, Seini Jensen, & Van Der Merwe, 2009). They also usually involve only a small proportion of a school's students, contributing to the sense that they are somehow peripheral.

Careers work in schools is also marginalised in other ways. The careers office may be located in an out-of-the-way space within the school and only visited by students at the instigation of students or another teacher. Careers staff are seen as having less important roles than those of other teachers. That may be because, as a 2007 national survey of careers staff found, careers staff were usually only part time in the role and reported struggling to find enough time to do the job well and manage new demands on their skills (Vaughan & Gardiner, 2007). In addition, very few careers advisors hold careers-specific qualifications, and they are not legally required to.⁹ A lack of clarity around the role, training expectations, and professional identity has existed since the establishment of the careers advisor position in 1948, and anecdotal evidence suggests that the position has often been used by schools to "reward" teachers on their way to retirement or sideline those tired of classroom teaching (Vaughan & O'Neil, 2010).

⁹ There is currently debate about encouraging or requiring careers-specific qualifications amongst the career education community, including the Ministry of Education, Careers New Zealand, the Career Development Association of New Zealand (CDANZ), and Careers and Transition Educators Association (CATE).

Raising the status of career education and professional capacity of careers advisors by encouraging and supporting a school-wide focus on career education was a specific aim of the Ministry of Education-led *Creating Pathways and Building Lives* (CPaBL) initiative.¹⁰ However, CPaBL involved less than a third of all secondary schools and ran for just two years (2006–2007). However, new resources continue to be developed, and the lessons learned and good practice developed through CPaBL continue to be disseminated (Education Review Office, 2009; Hodgetts, 2009). Other new initiatives and policies related to career education continue to be developed or supported by the Ministry of Education and Careers New Zealand.¹¹ It remains to be seen whether and how other schools can develop and sustain some of the more successful approaches that emerged through CPaBL, while the overall position of career education in so many schools is so marginal.

Lack of fitness for purpose

The third and perhaps most significant flaw is that the overall framework for careers work in many schools is not fit-for-purpose in today's world. Many careers activities are still rooted in a system that derived from early 20th century concerns with industrial expansion, occupational diversification, and the inability of family and neighbourhood to continue serving as a primary source of career information or job allocation (Herr, Cramer, & Niles, 2004). However, the assumptions of this approach – individualised and unconstrained choices, a meritocratic and fair world of work, and a belief that work is the most important thing in people's lives – have helped produce conceptualisations of career as a fixed sequence of stages.

This type of conceptualisation has produced careers-related practices which attempt to predict and manage work and life choices through career planning activities and vocational aptitude and identity tests (Gysbers, 2003, cited in Capuzzi & Stauffer, 2006). Not only are the assumptions on which these sorts of practices are based culturally value-laden and biased, with an elitist overtone – the well-educated corporate man tracking his way to the top (Watts, 2004) – but they are out of step with today's world because they assume a predictability which is based on a notion of stability in self, occupation, and labour market (Savickas et al., 2009). These assumptions have led to the prioritisation of the collection and distribution of information. Information about student interests and ability, determined by school achievement results, is then matched to information about current tertiary education and labour market opportunities. It is not surprising then that careers staff have reported ensuring access to information and distribution of information as their main priority. Teaching longer-term career management strategies and skills that are arguably more fit-for-purpose in today's world is rarely part of current practice (Vaughan & Gardiner, 2007).

¹⁰ The Ministry of Education had two partners for CPaBL: Careers New Zealand and School Support Services.

¹¹ Currently the Ministry of Education is developing a range of initiatives under the "Youth Guarantee" policy umbrella and a focus on career education is included. It also funds the special project *Digital Pathways Development* (run by Team Solutions at the University of Auckland, see www.digitalpathways.org.nz) to support the integration of career education across the curriculum. The Ministry of Education has also recently been directed by the Government to lead the development of a more coordinated plan from all education sector agencies to increase education system performance for and with Māori, including Māori learners and whānau being well informed about career options and making good choices that keep career and education pathways open (Ministry of Education, 2011). Careers New Zealand has a suite of resources for schools, has remodelled its website, and is working closely with selected schools interested in improving their career education. It is also developing a set of "career education benchmarks" to guide schools in organising their career education programmes. Both the Ministry of Education and Careers New Zealand are endeavouring to coordinate their work more effectively and take leading, and supporting roles, accordingly.

Of course, up-to-date information about tertiary education and the labour market is critical to good decision-making. However, digital technologies, mass communication, social networking, and modern marketing strategies mean that we are now awash with information about an ever-increasing volume of possibilities. This situation can be overwhelming for young people. New Zealand school leavers report feeling confused by tertiary education and employment information, and lacking the capability to make sense of the information in order to make good decisions (Vaughan, 2005; Higgins & Nairn, 2006; Vaughan et al., 2006). Their sentiments echoed those of young people in Australia and England (Ball, Maguire, & Macrae, 2000; Stokes, Wierenga, & Wyn, 2003). Career education cannot just be about providing information, especially when so much of it is little more than marketing material provided by tertiary education institutions and industry.

The emergence of career management competencies in New Zealand and around the world

New Zealand's development of career management competencies closely followed that of Australia's "Blueprint for Career Development" which was developed between 2003 and 2008. Australia's Blueprint defines career management competencies as something more than technical skills and abilities and as involving "skills, knowledge and attitudes to make good career moves" which can be "developed and strengthened over time" (Ministerial Council on Education Employment Training and Youth Affairs, 2010). The Australian Blueprint was in turn modelled on the Canadian "Blueprint for Life/Work Designs" for which development began in 1998, closely following a model developed as the United States National Career Development Guidelines (National Career Development Association, 1993). The Canadian Blueprint captures a range of capabilities to be developed and located in the individual, emphasising intentionality and proactivity in managing life and work (National Life/Work Centre, 2010).

While the language of the Australian and Canadian Blueprints is very similar (Hooley, Watts, Sultana, & Neary, 2011, draft manuscript), the New Zealand, Australian, and Canadian career management competencies are also closely related to those used in European countries. These are known as career management *skills* but defined as "a whole range of competences¹² which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information, as well as the skills to make and implement decisions and transitions" (European Lifelong Guidance Policy Network, 2010).

Career management competencies in New Zealand, Australia, Canada, the United States, and Europe have taken their cue from the notion of *key* competencies, developed by the Organisation for Economic Cooperation and Development (OECD) to describe the kinds of things that all people need for contemporary life. Like the basis for key competencies, career management competencies acknowledge a 21st century knowledge society and changed conditions for life, career, and work. They also stress the need for people to learn, obtain, and maintain intentionality about their work and education choices, take a meta-cognitive view, and learn to apply learning to different situations. One of the most important features of the Blueprints (and the competencies) is therefore that they "attempt to describe a set of learning outcomes which can be focused on at different times during a life journey and to detail a developmental process through which these outcomes can be acquired", therefore reconceiving careers work "as being about fostering learning and personal development rather

¹² European reports use the word "competences" rather than "competencies" (see discussion in Sultana, 2009).

than about helping individuals make difficult choices or overcome moments of crisis” (Hooley et al., 2011, draft manuscript). This is consistent with thinking about career development as a core service.

New Zealand’s career management competencies, and likely those in the other countries cited, have their antecedents in the DOTS model developed by Law and Watts in the United Kingdom (1977). Originally the DOTS model had four dimensions: **D**ecision learning, **O**pportunity awareness, **T**ransition learning, and **S**elf-awareness. Later in Britain it was reworked into three aims (School Curriculum and Assessment Authority, 1995), which were finalised with their short names as: Self-development, Career exploration, and Career management (Qualifications and Curriculum Authority, 1999). The DOTS model has been so hugely influential that it has become fundamental, and therefore not always explicitly acknowledged, in policy and practice in career education around the world, including here in New Zealand. While the focus of what career education is about has remained consistently aligned with the DOTS model over the years, the idea of reframing it in terms of competencies is newer and potentially transformational.

This transformation is possible because all the career management competency definitions position “skill” as just one dimension of competency. Unlike the emphasis in “skills” on possessing knowledge or the ability to do something, competencies emphasise performance and *mobilisation* of the skill or knowledge *in specific contexts*. As with the OECD’s key competencies, prominence is given to learning that can be demonstrated in both today’s demanding contexts or in contexts that are currently unfamiliar to us (Rychen & Salganik, 2003). The subsuming of skills into competencies is the “something more” aspect of competencies which necessarily involve attitudinal and values dimensions, as well as those of knowledge, combined in ways that lead to action (Hipkins, 2008).

A particularly useful way to think about competencies, then, is to think of them as *capabilities* (Ministry of Education, 2007; Hipkins, 2011, unpublished manuscript) in the sense of education being about supporting young people to become who they are capable of being and what they are capable of doing (not just what they are capable of knowing or holding in their heads). In career education terms, this echoes longitudinal research findings on young people approaching early career development in terms of *who* they can *be*, rather than simply *what* occupation they might *enter* (Vaughan et al., 2006). It suggests a necessary move in career education away from delivery (of information and pre-packaged work experience) towards capability-building for considering possibilities and taking action throughout life as individual and societal situations and priorities change over time (Vaughan, 2008a).

Competencies and *The New Zealand Curriculum* (NZC)

Career management competencies hold out potential to address career education’s structural flaws of inaccessibility, marginality, and lack of fitness-for-purpose through their conceptualisation in terms of learning-to-learn, meta-level and transferable learning, and their applicability to all learners – the core service idea. Since they constitute a broad framework rather than a prescription, they can work well with the existing key competencies in *The New Zealand Curriculum* (NZC): *managing self, thinking, participating and contributing, relating to others, and using language, symbols and texts*.¹³ The NZC positions competency as the key to learning in any field and “both an end in itself (a goal) and the means by which other ends

¹³ For more detailed discussion on the emergence of, and relationship between, *The New Zealand Curriculum*’s key competencies and the OECD’s key competencies, see Hipkins (2006, 2010b, 2010a).

are achieved” (Ministry of Education, 2007, p. 12). In other words, students both learn to be competent in five key dimensions (the end or goal) through various social contexts (which demand the combined *use* of skills, attitudes, values, and knowledge) and they learn other specific things (e.g. how to write a well-argued essay, how photosynthesis works) through a focus on competency development.

Rather than adding three more competencies, the Ministry of Education’s Career Education guide describes career management competencies as reflecting the NZC’s overall vision and values, and as having a relationship with the key competencies. It provides the following diagram to illustrate what such a relationship might look like. It shows, for example, that the career management competency of *developing self-awareness* has a particularly close relationship with the key competencies of *managing self* and *relating to others*. The key competency of *participating and contributing* is shown matched with the career management competency of *deciding and acting*.

Table 1 Matched-up career management competencies and key competencies

Career management competencies	Link to the key competencies
Developing self-awareness – young people understand themselves and the influences on them.	Involves managing self and relating to others.
Exploring opportunities – young people investigate opportunities in learning and work.	Requires students to think critically, use language, symbols and texts, and relate to others.
Deciding and acting – young people make and adjust their plans, manage change and transition, and take appropriate action.	Involves students thinking constructively and preparing to participate and contribute throughout their lives.

This match of career management and key competencies is useful for showing how the ideas fit together and overlap. Just as teachers at “early adopter” schools have used plain language translations of key competencies to link to already-familiar ideas in their own schools (Hipkins, 2010c), these matches of key competency-to-career management competency provide a handy way to begin to think about the two sets of competencies. This is how they were first introduced to teachers participating in the Digital Pathways Development (DPD) professional learning, where the diagram was adapted and colour-coded for teachers new to working with career management competencies. However, sticking with these matches long term may be misleading as an approach to teaching and learning for competency development longer term (and DPD is currently rethinking these matches for its work in some schools).

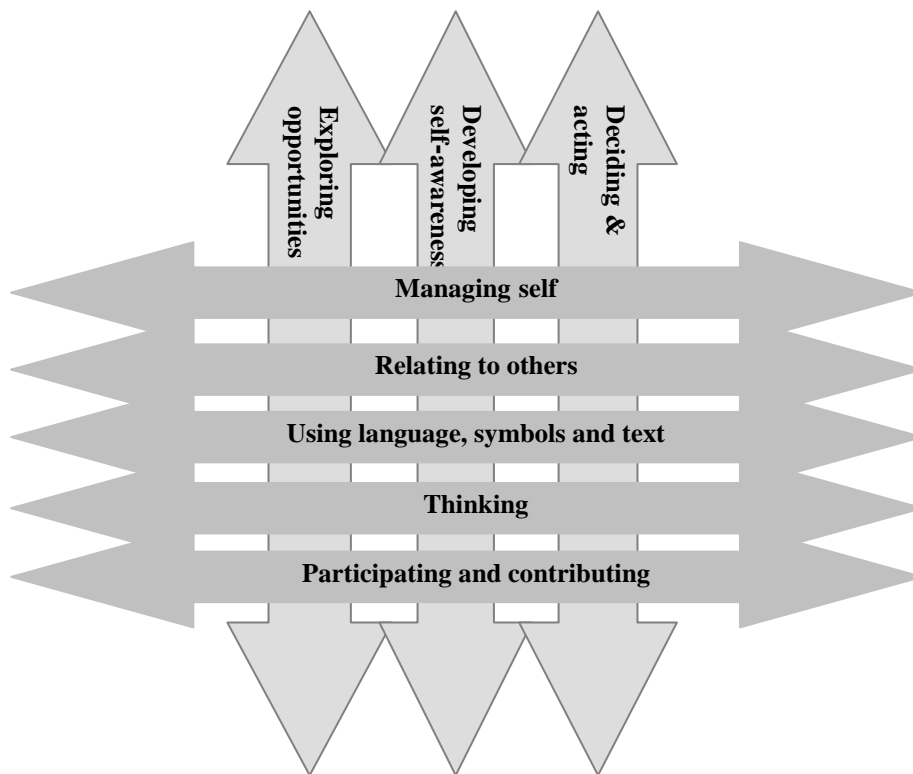
Both the NZC and recent research suggest that, in practice, key competencies are mostly used in combination. One study shows that teachers initially see particular learning areas having a more natural “fit” with particular key competencies before moving on to actively explore how to build up the links between subjects and competencies (Hipkins, Cowie, Boyd, Keown, & McGee, 2011, p. 41). Another study on reading and *using language, symbols and texts* found that:

As the research progressed it became more and more clear that, regardless of which key competency was foregrounded, the same ideas surfaced. That is, we found that there is a group of ideas that do not ‘go’ more comfortably with one key competency, but rather, it is more the case that they are engaged when any of the five key competencies is being modelled and discussed. (McDowall & Twist, 2010, p. viii)

It may be most useful, then, to think of one set of competencies (key or career management) as always implicating the other. Students would learn to be competent at the five key

dimensions (as the competency building blocks) *and* the three careers-specific dimensions, with all of them woven through each other and all of the other learning opportunities and subject areas. The following diagram illustrates one possible interpretation of the career management competencies–key competencies relationship.

Figure 2 Co-implicated career management competencies and key competencies



Competency integration in the classroom

The idea of competency co-implication suggests that schools could integrate career management competencies in subject learning. Indeed this is what the Ministry of Education, its DPD initiative run by Team Solutions, and Careers New Zealand have suggested. The Ministry of Education envisages this could have wide benefits:

A career education focus can facilitate the integration of different learning areas within the school-based curriculum. Career education often provides a context that crosses traditional subject boundaries. (Ministry of Education, 2009, p. 36)

The Ministry of Education’s guide (2009) provides a range of ideas to support teachers here. Firstly it offers some broad ideas about developing students’ career management competencies in *any* learning area – for example, to develop students’ *self-awareness*, it suggests asking students about the skills and knowledge they bring to, and can develop within, a subject, and discuss how these can be transferred, including in specific jobs. Secondly it provides examples of using career management competencies in *specific* curriculum learning areas – for example, English teachers might use work experience or workplace visits as the basis for commercial or creative writing, and have students make oral or written presentations (including blogs or drama) based on an interview with someone about their career journey or an investigation into options and requirements for a career in a chosen

industry. The Ministry of Education also suggests some learning outcomes – for example, Years 9 and 10 students could be expected to demonstrate characteristics and understanding of their own qualities, skills, values, and career interests (and anything that can help or hinder those capabilities and interests), accept diverse cultures and interact positively with people from diverse backgrounds, and demonstrate skills and positive strategies to cope with change and growth in life.

Careers New Zealand (2012) also provides some support within its overall focus on career education¹⁴ host web pages on tools and activities for educators and practitioners interested in career management competencies, although it refers to four, rather than three, of them: *self-awareness*, *exploring opportunities*, *making choices and decisions*, and *taking action* – the third and fourth ones effectively being the Ministry of Education’s third career management competency, *deciding and acting*, split in two. It is notable that *taking action*, Careers New Zealand’s fourth career management competency, makes specific mention of students developing adaptability and resilience to manage change and to cope in the face of obstacles. This seems particularly pertinent in light of the current global financial crisis and resulting recessions in many countries, as well as the continuing trend of occupational diversification, technological change, and multiple careers across an individual’s lifetime.

Since schools vary in their understanding of career management competencies, their ability and commitment to integrating them into the curriculum also varies. There may also be some confusion or conflation of “integration” and taking a “school-wide” or “whole school” approach to a more conventional version of career education. School-wide and whole school approaches were encouraged through the CPaBL initiative led by Ministry of Education, with Careers New Zealand and School Support Services, and evaluated by the Education Review Office. CPaBL encouraged schools to undertake a “whole school” or “school-wide” approach to career education by inventing and tailoring activities:

- including strong statements about career education in school policy documents
- ensuring the board of trustees prioritise career education
- making certain careers activities compulsory for all students or students at certain year levels
- encouraging subject teachers taking a more active role by raising their awareness about what is available to students and what they can do in the classroom (e.g. refer students to the careers advisor; display “Where To?” posters and have career conversations with students, encourage students to follow up on aspirations, and research career interests)
- tracking short-term outcomes for students after they leave school.

In other words, the school-wide idea might encompass the idea of integrating career management competencies in the subject classroom, but equally it might not. Similarly, the idea of “integration” into the subject classroom might vary. The Education Review Office evaluation of CPaBL found that many of the subject teachers in the 100 participating schools included some career information in class and indicated the kind of jobs to which their subject would lead in order to motivate students (2009, p. 2).

¹⁴ Careers New Zealand support includes professional development for teachers and resources (print and online) such as job and interest inventories, guides, questionnaires, planning tools, and posters relating school subjects to occupations and required qualification levels (the “Where to?” series). Careers New Zealand also most recently led the development of career education benchmarks for secondary schools and is currently putting together a set for tertiary education.

Of course this is quite different from other forms of integration. On the one hand, subject teachers might use a form of *classroom integration* whereby students complete a unit of career education work (e.g. commonly this involves teaching a research unit in English or Social Science). On the other hand, subject teachers might use a form of *discipline integration* to work deeply with competencies (as attitudes, values, knowledge, and capability *to do*, as well as skills). Although referring to jobs related to a subject could help students see a subject's relevance at an information level (i.e. now I know that I need to take this subject in order to become a journalist), there are deeper levels at which students can be engaged with a subject or *discipline's* relevance. The following description of the relevance of science as a subject and discipline reveals this potential, arguing that students

...should understand that the increasing rate of the production and obsolescence of knowledge in every sphere of human endeavour and particularly in science and technology implies that school learning is unlikely to last them a lifetime. Furthermore, the same advancements in science and technology are creating changes in the society in which they live and in which, hopefully, they will work. Young people need to know that some individuals take pleasure in pursuing their interest in science, for personal enlightenment and enrichment...They need to know that some people...call on science as one source of information, among others, to assist them in decision-making in relation to personal and social, including, for example, lifestyle and environmental, dilemmas. They need to know that, in a rapidly changing technological society, periodic training and retraining will be necessary in almost all occupations. Crucially, it is important to promote...an *interest* in science and a sense of its significance in our society...It is also important to promote among pupils a *confidence* in their ability and in their authority to engage in science...Young people need to understand that, regardless of post-16 choices, science can still be called upon to inform their personal, social and vocational futures. (Jarman, McAleese, & McConnell, 1997, p. 150)

Chapter 3. Researching career management competencies: design, participants, activities

The newness of both career management competencies and the NZC key competencies meant that our research was exploratory in nature. The research scope was kept to exploring the *potential* of career management competencies. To do this we worked with several teachers and schools to consider what taking career management competencies seriously might entail, and to support them to begin exploring this within specialist subject classrooms. The next steps, beyond the scope of this project but possible in another project, would be to track competency development, sustained pedagogical change, or far-reaching school–community structural change.

In order to explore the potential of career management competencies, we developed the following research questions:

- What could career education look like if it was framed in terms of career management competencies?
- What kinds of learning opportunities, teaching opportunities, and leadership opportunities could emerge?
- How would the school be internally and externally networked (differently)?
- What would it take to make career management competencies work well?

We invited two schools to participate in the study. We initially held two workshops with teachers from each school to explore what career management competencies might mean, and what they might do in their own schools. We then invited two subject classroom teachers to try working with career management competencies in their classrooms.

Participating schools and teachers

Since career management competencies are ideally integrated throughout a school curriculum, we identified three key players in the school with whom we would work:

- the careers advisor
- the curriculum leader (or one of them) in the school
- a specialist subject teacher.

We invited two schools based on our prior knowledge of their school (e.g. direct or indirect research-related contact) and/or teachers and careers advisors. We also wanted two schools that were different from each other to provide points of comparison. So we chose two schools with principals and at least some teachers who had some familiarity with key competencies and that had careers advisors whom we knew were dedicated and interested in 21st century learning.

We asked for teacher volunteers who worked in ways that fitted with some pre-determined criteria. We adapted these criteria from David Perkins' work in *Making Learning Whole* (2009), which uses the metaphor of the baseball game to create a framework for teaching academic subjects as “junior versions of the whole game”. Perkins' framework has much in

common with our understanding of the NZC key competencies. Accordingly, we sought teachers who would routinely:

- use innovative learning strategies such as problem-finding (not just problem-solving), exercises in explaining and justifying, and experiences that encourage students to use curiosity, discovery, creativity, and camaraderie
- give students space for self-reflection and allow them to choose where to put their attention (i.e. give students a chance to learn about their learning)
- encourage students to learn from their peers
- get students to “work on the hard parts of their learning” (Perkins, 2009) by singling out those parts and practising them (resilience)
- give students opportunities to practise and transfer knowledge in different contexts, and encourage them to look for the conceptual connections
- teach underlying principles and strategies (i.e. so students felt excited and empowered) and let students participate rather than watch.

Initially we wanted teachers from two different subject areas because we thought everyone – researchers and participants – would learn more that way. In the event, circumstances meant that each school had an English teacher participating. However, their classes were sufficiently distinct to give us a good sense of how career management competencies could be differently interpreted and serve the needs of different groups of students.

Each school ran extensive career education programmes with a number of dimensions that included provision of up-to-date career information, guidance, advice, and opportunities for exploration, development, and supported transition from school. We provided each careers advisor with an annual calendar and they populated this with notes about various activities and student groups (e.g. target groups, year levels, specialist courses). Each is shown in the following tables along with a description.

Career education in Mosely College

Mosely College is a medium sized, provincial/rural, decile 6 school. The school’s careers department employs a Head of Department Pathways and one staff member in a support role. Career education is well supported by the senior management team and features in staff professional development. Teachers and the careers department work together to support any new initiatives for students to learn about career possibilities.

Usually, career education at Mosely College involves teachers in teaching careers as a separate topic within a subject time slot, for example, in Social Science at Year 10, and/or being explicit about which careers fit with which curriculum subject areas. However, innovations are encouraged and the teacher involved in the study was also integrating career education into her Year 10 English class.

Career education in Otawa High School

Otawa High School is a large urban, decile 4 school. The school is very supportive of career education and the careers department employs a Head of Department, two Gateway coordinators and one staff member in a support role. This emphasis on career education is evident in the school's curriculum where, apart from the traditional subject areas, there are also academies and specialist schools in business, construction, and the services.

At Otawa High School, apart from the non-specialist schools and academies, career education, as with Mosely College, is usually taught as a unit of work either during subject class time or in an allocated time slot such as form time. Teachers also make career education explicit when they talk about what careers fit their curriculum subject areas.

During 2011 the school hosted or assisted students to attend 66 seminars from providers of tertiary courses (including industry) and services for tertiary students.

The level 2 Careers and Personal Studies course overview shows modules (based around specific Unit Standards) which reference career management competencies and key competencies.

Table 3 Career education in Otatau High School

	Compulsory Curriculum	Optional Curriculum	Guidance		Other activities				Careers Advisory Professional Development					
Y9	Career and Learning Plan (Careers Advisor + Form teacher)		1:1 Interviews by referral from Deans, Snr Management or parents		Options week (August) CA + Deans + Parents (Work books reviewed in form time)	Careers seminars e.g. Agriculture, Engineering and others	CAREERS EXPO (Expo work books given in form class)		Kei a Tātou te ihi	University of Auckland Equity Office exploratory workshops: for Māori and Pasifika students (BEAMS) and for girls interested in science (Girls into Science)	Careers Advisor PD Board meetings Capable Auckland meetings NZ University Careers Advisor updates NZ University open days AUT evenings ITC Board meeting Careers NZ updates and workshops Polytechnics updates, scholarships ACATE – Meetings and AGM NZMA visit ESITO update Auckland Cake Expo Crown institute update Māori and Pasifika workshops			
Y10	Exploring options unit (English + Careers Advisor)			1:1 brief interviews									Staff PD, career visuals & information of upcoming events, career charts etc. in all classrooms	
Y11														
Y12	My Career Match online module	Careers + Personal studies					AUT Māori Expo	Prefects that Peak AUT	Workchoice day					
Y13		STAR courses	1:1/small group Interviews				AUT Finance and Education	Steam Ahead for Māori + Pacific Island students	Unitec tasters: Student For a Day; Try it For a Day					
		Gateway	<ul style="list-style-type: none"> Scholarship applications Enrolment advice for tertiary study 				Māori + Pacific Island students: AUT Engineering; Rangitahi Maia (health work experience)		MIT: Experience days in specific interest areas	Ingenuity Day – girls in physics and calculus				
		Services Academy						Media classes at AUT	Study Link + IRD Seminars					

While each school is clearly committed to career education for students, they did not necessarily have an explicit understanding of career management competencies. Career education, as currently structured, tends to be framed the conventional elements of helping students to:

- gather and understand information about occupations and tertiary-level learning options
- become information-literate
- learn in a combination of work-based and classroom-based modes
- have occupation experiences in short, introductory “taster” and more sustained forms
- do some learning at tertiary level
- listen to or interact with people from industry and tertiary education institutions

These are useful things for students. But we wanted to see what more could be done in terms of building long-term capabilities for management of work and learning throughout the life course.

The workshops

We held two workshops for teachers in May and September 2011. Participants who attended Workshop 2 were the same participants who had attended Workshop 1, except for one subject teacher from Otawa High School (see table below) who replaced colleagues who were unavailable for the second workshop.

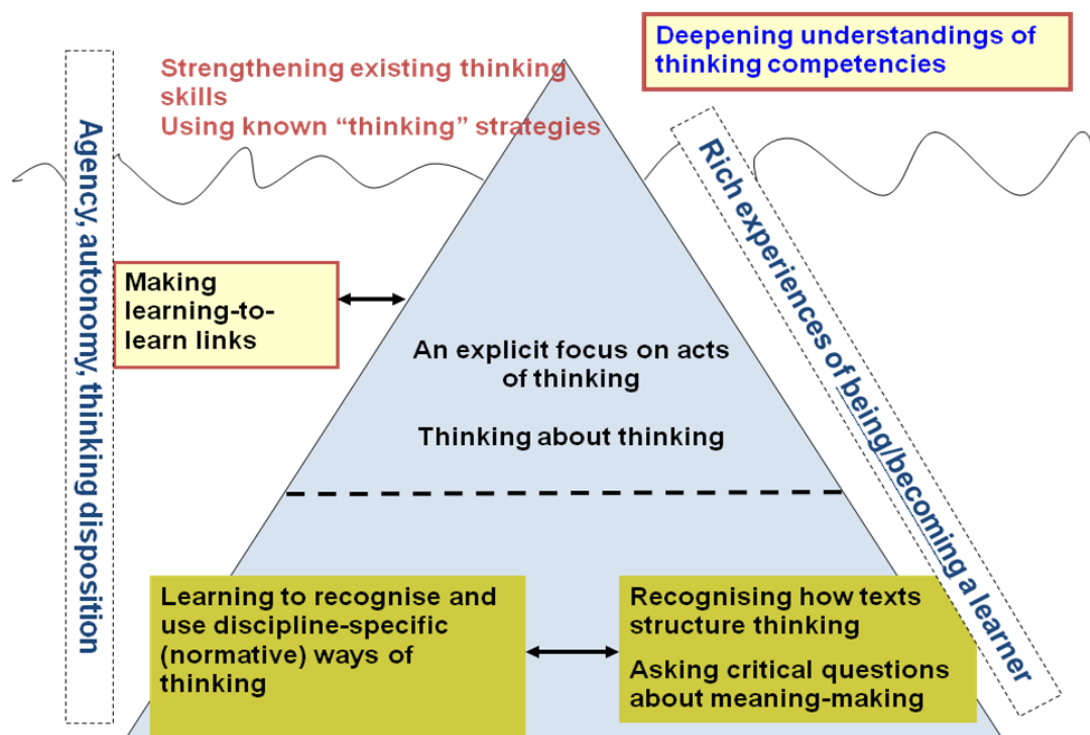
Table 4 Participants at workshops

	Workshop 1 May 2011	Workshop 2 September 2011
Mosely College	<ul style="list-style-type: none"> • Curriculum Leader, HOD Social Science • Careers Advisor • English teacher • Mathematics, Science & Chemistry teacher 	<ul style="list-style-type: none"> • Curriculum Leader, HOD Social Science • Careers Advisor • Assistant HOD English teacher
Otaua High School	<ul style="list-style-type: none"> • Curriculum Leader, Assistant Principal • Careers Advisor • Hospitality teacher • Art teacher, Y11 Dean, Careers • HOD Technology teacher • English teacher, Y9 Dean 	<ul style="list-style-type: none"> • Curriculum Leader, Assistant Principal • Careers Advisor • HOD English teacher (second workshop only)

The first workshop began by asking the participants to write down their understandings about key competencies and career management competencies. Participants responded by listing attributes and skills students need. They also asked questions such as: how the career management competencies linked to the key competencies and to learning to learn; and what they might look like in practise.

The next part of the workshop gave an overview of career management competencies, the key competencies, and examples of things that had created a change in thinking in the classroom. We used two resources about the key competency of *thinking* to stimulate teachers’ ideas. The first resource used the metaphor of an iceberg to represent the “hidden layers” of the key competencies, in order to stimulate deeper thinking about the complexity of the key competencies. We used a second resource, the NZCER resource on thinking and its application to the water cycle (Bull, MacIntyre, Joyce, & Hipkins, 2008), to help participants think about how a resource might help change teachers’ pedagogy to develop student competency. We reproduce the iceberg in the following diagram. It shows teaching and learning focused on strengthening existing thinking skills as the tip of the iceberg or the 10 percent seen above the waterline. It shows a deeper (below waterline) focus as involving strategic work (i.e. thinking about thinking, learning to learn) for learners and teachers.

Figure 3 Key Competencies Iceberg¹⁵



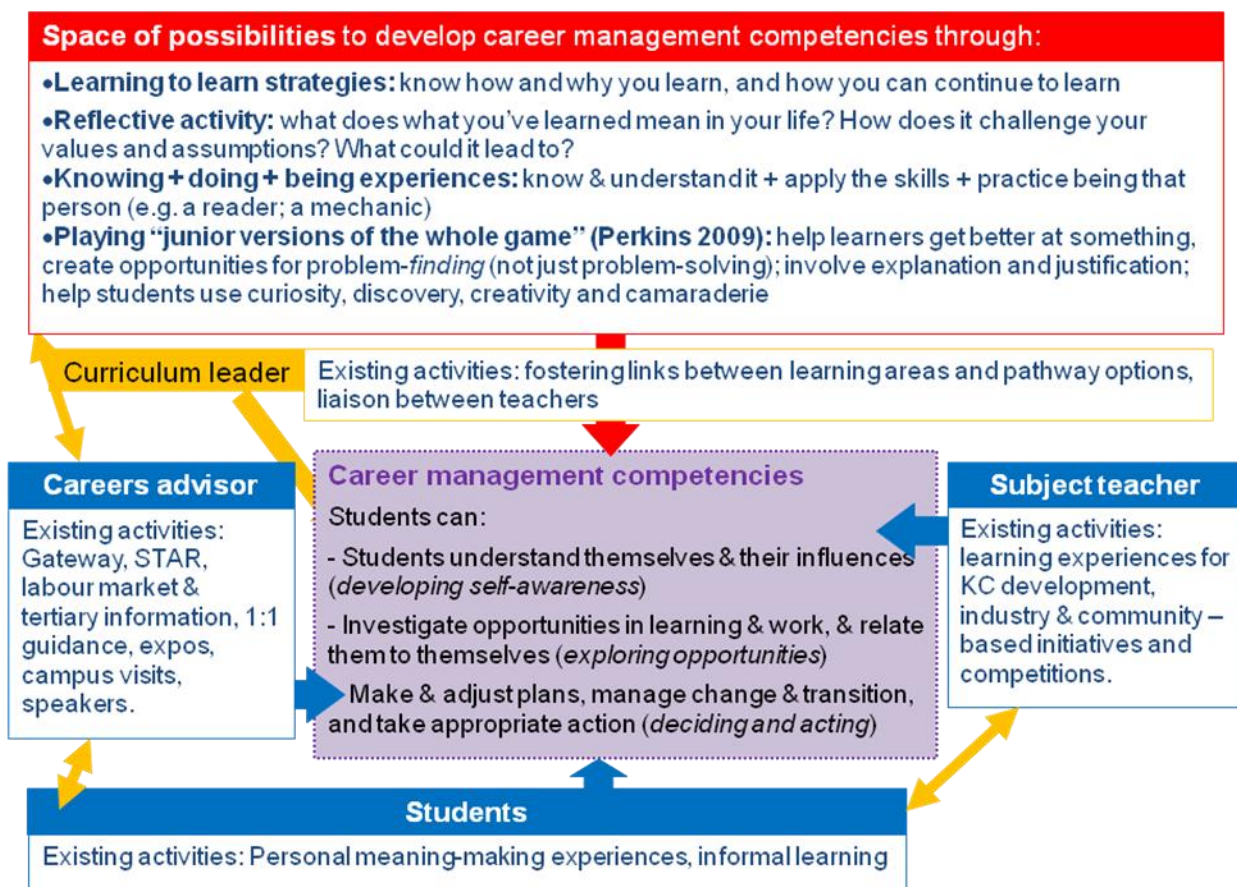
Source: Rosemary Hipkins

The final session of the workshop asked participants how they might support a change in thinking at their schools. However, it was evident that the participants were still struggling to understand career management competencies as they focused mainly on school-wide changes and activities related to the broad idea of career education – e.g. referring to career education in policy documents, getting all teachers at the school “on board”, moving away from the careers advisor having sole responsibility for all career education. This led us to change our approach to the second workshop.

In the second workshop we asked participants to work with a planning chart that we had designed. The first version of the diagram attempted to model the content, the pedagogy, and different supporting or advisory roles people could play in helping students develop career management competencies. We included some of the activities that each person – the student, the careers advisor, the curriculum leader, and the subject teacher – already does. We were not trying to suggest that people necessarily abandon what they already do but that they build on it or perhaps do them to different ends. We also constructed an “empty” version of this diagram and asked teachers to work with it, thinking of their current activities and how they could build on those, and where they might work together or provide support for each other.

¹⁵ Hipkins originally developed the iceberg as a stimulus for teacher professional learning conversations. The iceberg has been reworked on multiple occasions and continues to be a valuable entry point for discussions about interpreting and giving life to the key competencies.

Figure 4 Exploring the space of possibilities for career management competencies



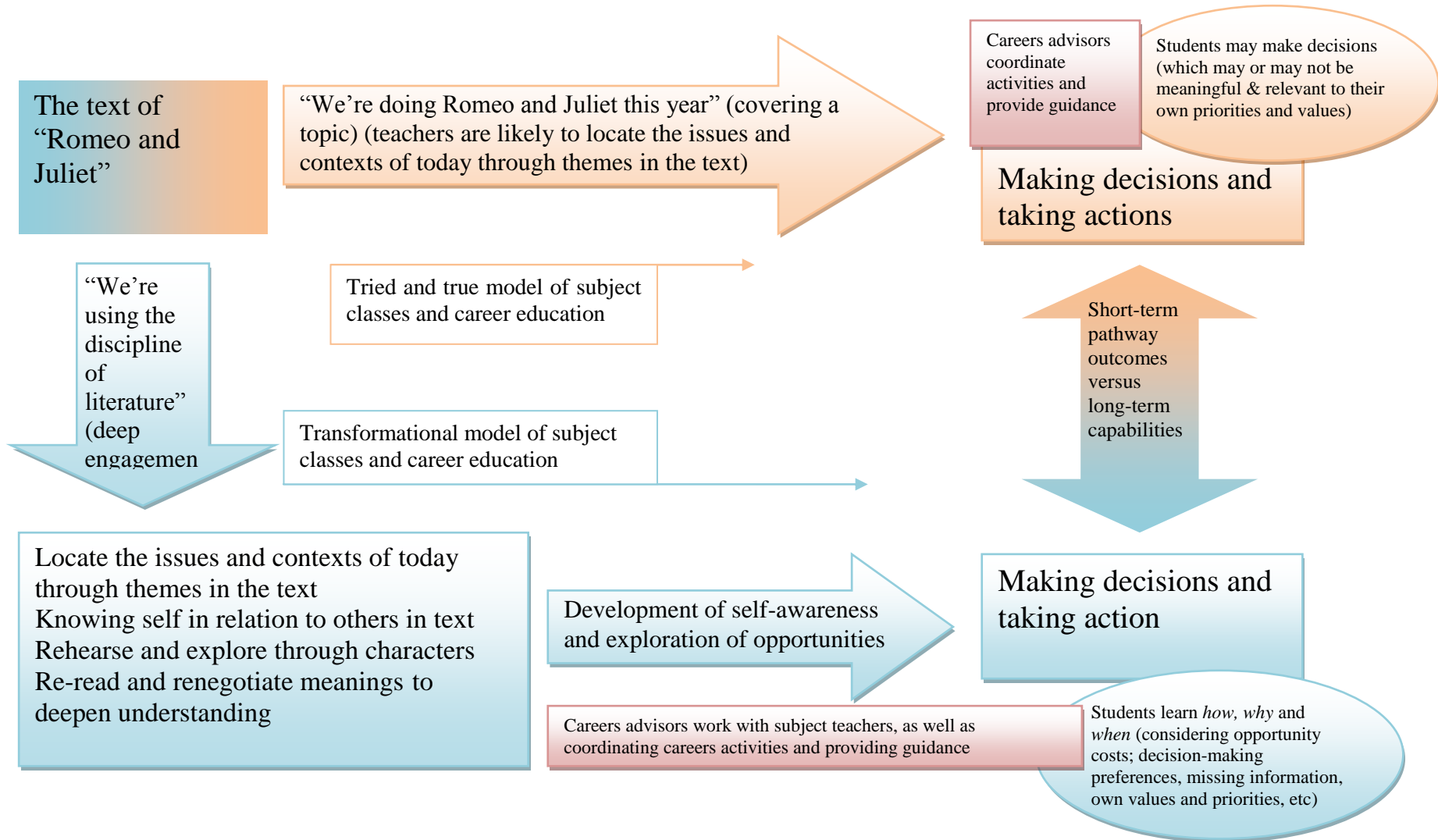
By the end of the second workshop, teachers seemed more comfortable with the idea of career management competencies as a (major) component of career education. Two of the subject teachers, both experienced and innovative teachers of English, committed to the idea of designing and trialling career management competencies in at least one of their lessons. We planned to interview them about their experience afterwards.

In the meantime, we designed another diagram (see Figure 4) to further advance our understanding of what career management competencies might look like in the English classroom. Since the teachers from our schools who had volunteered to explore career management competencies were teachers of English, we decided to try modelling two possible interpretations for career management competencies in the English context. Our initial aim was to create a practical example of an English class that would help us clarify our own thinking. We based our model around the teaching of “Romeo and Juliet” because the works of Shakespeare are commonly used in English classrooms. We wanted to map out both a conventional approach to “Romeo and Juliet” and its possible links to career education (as currently and commonly structured) and a more transformational approach with its possible links to career management competencies. The model we produced was so useful for us that we later decided to use it as a stimulus for our interviews with the English teachers.

In Figure 4, the top edge shows the “tried and true” approach that uses a text as a topic, through which students can explore issues that might be related to their own experiences. What students “see” in the text may influence them to make decisions and take action in the sense of actually choosing an option or refining the possibilities.

On the left-hand side we show a “transformational” approach that uses the same text to explore issues that learners can relate to themselves and the current conditions of their lives in the world. In this approach the exploration of issues is done in a way that develops *self-awareness* alongside opportunities to *explore options* (e.g. by identifying with characters and understanding motivations) which leads to *making decisions and taking action* in the sense of having developed an understanding about how decisions can be made now and in the future. The careers advisor role (shown as a red box along the top edge and as a red rectangle along the bottom edge) is more demanding in the transformational model (bottom edge) because it includes a coordination role with subject teachers, in addition to role as it is often currently structured.

Figure 5 How studying Shakespeare could help build the career management competency of “making decisions and taking action”



In the following section we look at what happened when English teachers explored career management competencies in their classrooms, based on our interviews with them two months after the second workshop.

Chapter 4. Exploring career management competencies in the subject classroom

Two teachers, two approaches

In this section we discuss the ways in which two English teachers from our participating schools differently interpreted career management competencies. We base this section on discussions with them about their experiences in designing, and carrying out, career management competency-related lessons in their classrooms. We used the Romeo and Juliet diagram (previous section) as a prompting artefact for the interviews. We asked the teachers about their thinking on career management competencies since the workshops, what they had tried in the classroom, what they noticed during or as a result of this, and what they thought of our diagram in terms of modelling different approaches. From our interview and discussions, we found that each teacher underwent a different journey. Their perspectives on this “journey” are highly pertinent, given that we earlier argued for career management competencies and key competencies being logically “co-implicated”, while not having any blueprint for how students’ career management competencies could actually be developed in schools and in classrooms.

The experience of Tanya, the Otawa High School English teacher, seemed most closely aligned with the “transformational approach” we described in the Romeo and Juliet diagram in the previous section. Tanya already had experience of teaching a careers unit of work as a research unit at Year 10 and Year 11. Because of this, she was fairly used to making explicit links to occupations when she talked to students, for example, about their likes or dislikes of particular forms of writing. She decided to build on her growing understanding of key competencies to change her teaching in the classroom in ways that could also be used for building career management competencies. Her main focus was on identifying and further developing capabilities that students already had.

The experience of Anna, the Mosely College English teacher, seemed most closely aligned with the “tried and true” approach we described in the Romeo and Juliet diagram in the previous section. Anna used an existing unit of work on research in English to focus students on careers (e.g. students researched various careers). She worked with the careers advisor to develop the unit and they also co-taught some of it. Neither Anna nor the careers advisor, Lauren, were specifically focused on competencies in the sense that these might shift what was taught and how, and both acknowledged that they were still getting to grips with what competency development might mean in the school and classroom. Anna and Lauren focused mainly on the idea of career education and the specific skills around career information (gathering information, information literacy) and option exploration (in relation to the consideration of students’ own abilities and interests). Anna directed students’ attention to capabilities they might be lacking (i.e. strong literacy skills) that impacted upon their opportunities, and steered them towards more appropriate (achievable) pathways.

Otaua High School: using key competencies to create space for career management competencies

During and after our workshops, Tanya dramatically changed her understandings about career management competencies and key competencies, seeing them as connected and best developed by putting students' personalised learning right at the centre of the lesson. She thought that when the key competencies were foregrounded, students would come to know themselves better and be more involved in their learning. Such experiences would align with development of the career management competency of self-awareness. This understanding led Tanya to make structural and pedagogical changes which focused on student choice and opinion, and on students learning about their capabilities – both in her curriculum area (i.e. for her school's department) and her own English lessons.

Taking a new approach across the English department

Tanya felt she had a clear understanding of the “transformative” intent of the new curriculum and, as Assistant Head of English, Teacher in Charge of Level 2 and Level 3, and Literacy Co-ordinator across the school, could see where many teachers seemed to get stuck in their understanding. She recognised a familiar pattern from other research on the new curriculum (Hipkins et al., 2011): rather than radically transforming what they do, teachers incorporate the new ideas (usually as more subject content) “on top” of what they already do. She saw teachers in her department doing something similar in that they simply adapted their tried-and-true lessons in ways that would meet a surface interpretation of the new guiding curriculum principles, without actually making any substantive changes to what they had always done. For example, the most common way for teachers in Tanya's department to plan lessons involved first choosing a film or text that they wanted to teach, and then fitting a theme to be taught around this text (a common strategy for many teachers in schools). Implicit in this approach is the assumption that there is one meaning of the text for students to pick up. An alternative understanding is that the meaning taken from the text depends on the experiences and perspectives that students bring to their reading of it. As Tanya introduced new ideas to the department, teachers' approaches to planning changed.

Tanya considered their familiar teacher-centric approach problematic for several reasons. Firstly it meant that some students would encounter the same texts across different year levels. A student who studied the text “Lord of the Flies” in Year 9 might find themselves studying it again at Year 10 with a different teacher who had different expectations. This was confusing for students. Secondly, it meant teachers were “talking at” their classes about texts. In choosing a text on the basis of their own preferences, they made the teaching easy for them, and then “taught” this text from the front of the class. This could produce student boredom and disengagement. Tanya felt that many of the current student learning problems in classrooms were because teachers directed the learning too much. She was interested in taking a more student-led approach. This might not only increase student engagement but would allow the reader/learner to draw on their individual and cultural understandings to interpret the text. Tanya described her hope that students would not only find knowledge *in* the

text, but would also “bring themselves to class” and bring who they are (their own experiences and understandings) *to* the text.

Following our workshops, Tanya led the English department in restructuring and coordinating the department’s overall plan for English teaching across all year levels to be implemented in 2012. Tanya set up a framework that allowed the students and teachers to bring their questions to a space where they could make the learning their own. Taking this approach, students would choose the texts from a set range of possibilities and develop a direction in which they would explore them. Teachers agreed on the themes and texts that would be used by all the classes at each year level. Tanya designed a scaffolded inquiry approach to create an enabling but manageably contained structure for the scheme. She created a set of overarching inquiry questions, designating one for each year level to guide the units of work for the year. Each of the overarching inquiry questions also led to a further set of questions through which students would explore texts.

Tanya designed the English department approach so that each overarching inquiry question framed one of the key competencies. For example, aspects of the overarching inquiry question “Where do I fit in?” were designed to develop the key competency of *relating to others*. Tanya acknowledged that all the key competencies flow through every level and they are not intended to be linked in a developmental way. However, she felt that foregrounding one key competency in particular at each year level was a useful way to embed the competency with students *and* with teachers, and would help students develop that one, foregrounded competency to a deeper level. This plan also prevented teachers jumping to higher-level analysis of the text’s themes in lower year levels when it was less likely that students would understand these ideas.

The teachers in the department felt that each key competency fell nicely into each year level. For example, the key competency *managing self* is highlighted at Year 9. They felt this was appropriate for students who had just entered college because they were meeting the challenges of a new environment, and coping with all the new rules and requirements. Similarly, at Year 10 students were now more aware of others around them and what they needed to do to fit in: hence the key competency *relating to others*. At Year 11 the key competency chosen was *thinking*. When higher-level analysis is needed at Year 12 and Year 13 the foregrounded key competencies are *participating and contributing* and *using language, symbols and text*, respectively.

To support the development of the key competencies, themes and texts and resources were also allocated appropriately to each year level. Students were now able to make choices about the texts from a selected list and would read and write about questions this text raised for them. For example, at Year 10, where the overarching inquiry question is “Where do I fit in?” students could focus on a further inquiry question, such as “How can one person make a difference?”

Table 5 Otawa High School English department 2012 year level plan

	Year 9	Year 10	Year 11	Year 12	Year 13
Focus KC	Managing self	Relating to others	Thinking	Participating & contributing	Using language, symbols & text
Inquiry question	Who am I? Personal identities	Where do I fit in? How we relate to others	What choice do I have? Place in the world	How can I contribute? How society functions	Why does it matter? Relevance of the literature
Themes	Survival Courage Identity Social responsibility	Prejudice Environment Family Coming of age	Conflict & resolution Choice & consequences Loyalty	Power & oppression Gender Other worlds Violence	Function of family Dreams & disillusion Social inequality
Typical texts	Shrek Myths Remember the Titans	Lord of the Flies Boy in Striped Pajamas Bend it Like Beckham	War poetry Moulin Rouge Romeo & Juliet	Macbeth V for Vendetta Gattaca Curious Incident	Othello Purple Hibiscus Great Gatsby American Beauty

Linking inquiry and key competencies to career management competencies

Tanya believed that many teachers did, or could, understand career management competencies at the most basic level of making a text relevant to a particular job through an obvious job link (e.g. understanding physics texts is necessary to become an engineer, or if the main character in a particular text is a journalist students will get some insight into what the job involves). She suspected that some teachers also helped students make career choices by being explicit about how their curriculum subject could lead students into careers. For example, Tanya said she herself worked with students who found some aspect of the class work interesting and explored with them where this might lead.

I look at how I can make English explicit – about what we are doing, why we are doing it and why they should care. (Tanya, 2011)

Tanya’s growing understanding of the key competencies helped her understand how to develop the career management competencies. She believed that putting in place lessons to develop key competencies meant that development of “career management competencies would follow” (Tanya, 2011). Tanya’s approach used the key competencies of *managing self* at Year 9 and *participating and contributing* at Year 10 as a means to engage students in learning about “self” and therefore the career management competency of *self-awareness*. As students “put themselves into the class and into their learning” (Tanya, 2011), they would better know themselves for the purposes of making career and pathway choices. Thus Tanya saw key competencies as a necessary first step in learning about self which could be followed by a second step of developing career management competencies – i.e. first “knowing self” and then “making decisions”.

The new English department scheme was not due to roll out until the next year but Tanya trialled aspects of it with two different classes. She chose junior classes because senior students were heading towards exams. One class was a low ability Year 9 class (22 students) that required literacy support and the other was an ability extension Year 10 class (34 students). She carefully adapted the inquiry approach to the students and their needs. She used just one aspect of the approach – students choosing their own text – with her Year 9 class to minimise the disruption that would likely be caused by a change in routine. She tried the inquiry approach more fully with the Year 10 class (students chose their own text and explored the text from their own personal viewpoint).

Tanya offered students in the Year 9 low ability class a choice of three texts from either “The Karate Kid”, “Remember the Titans”, or a text of their choice approved by the teacher. The focus for the students was to look at determination and perseverance as portrayed in their chosen texts. She noted an immediate positive response. While usually only approximately a quarter of the class were really engaged in their learning, now approximately three-quarters of the class were engaged.

Students in the Year 10 extension class had just finished a unit on visual text and a static image and were moving on to an oral speech assessment. Tanya considered the overall theme of discrimination (which related to the texts the class was using) and tried to establish its relevance with students by asking them how discrimination made them feel. She thought this had potential for building the career management competency of *self-awareness*. She wanted the students to explore what they liked, what they thought they were like, and how they saw themselves. English provided students with the opportunity to “look into” other worlds and other people’s lives, and how they were located in relation to that life or situation.

Students chose from the provided 2011 Year 10 texts of “The Blind Side”, “The Power of One”, “Percy Jackson”, or made a personal choice. Students could then choose to answer one of the following questions, designed to help students develop their own ideas and thinking: How could one person make a difference?, How does one person in your life make a difference?, How I would change the world?, or a topic of their own choosing.

In previous lessons students had followed a linear pattern of instructions (e.g. responding to the literature by analysing the text and writing to a specific point such as plot or character). Their work was designed to meet the criteria for achievement, merit, or excellence. This meant that students learned in bits or parts that only sometimes later formed coherent knowledge and capability (e.g. following instructions for the experiment does not necessarily lead to an understanding of the scientific principle and its other applications). The change now was that teachers allowed students to drive the inquiry themselves, starting from something students found meaningful and about which they were curious.

Although Tanya knew these students were already confident and secure in their ability to “bring themselves to the work”, she noticed that she needed to really push them to actively think for themselves. With this new approach, however, students actually produced much stronger essays in their exams. They also produced vastly more creative speeches in class and covered a wider range of topics than usual. Not

only were students more engaged in their own work, but each student's work helped engage others.

Benefits and challenges in an inquiry approach for competency development

Tanya noted that the new lesson planning approach produced a number of benefits and challenges for students and teachers. Firstly having different texts with which students could work meant that teachers had to change their teaching style. They could no longer teach from the front of the classroom (which typically happened when all the students were working with just one text), shifting the teacher's role towards being a "guide on the side" rather than a "sage on the stage". This led to positive outcomes for the students. Choosing their own texts from a specified selection (Year 9 and Year 10 classes) and choosing one of the three set questions or choosing their own (Year 10 class), had them more engaged and enthusiastic from the get-go. Tanya acknowledged a downside in a potential loss of breadth that comes from deeply exploring just one text (chosen by the teacher).

Tanya observed a second benefit in that assessments had to change to be coherent with the new approach. Questions were now added which asked for students' opinions. For example, in the Year 10 end-of-year English exam, part of the response to a literature essay question asked students to link the message or idea that they had discussed in the first part of the question to their own life and the world around them. Tanya reported that other teachers in the English department felt that this new style of assessment was better at helping scaffold students towards their NCEA Level 1 assessments, where they are now required to give their own opinions. The teachers also anticipated an improvement to scaffolding through the year levels, as the new planning approach could deliver continuity and consistency across the department. They were looking forward to students being more engaged, actively thinking, and taking ownership of their learning through their entire secondary school English experience. Tanya hoped that, as students learned more about their own identity and values in a positive way, they would be ready for the next step of exploring what they have learned about themselves and how those insights might relate to any career opportunities they could see for themselves.

Mosely College: bringing a school-wide approach into the subject classroom

Prior to our project, Anna, the teacher from Mosely College, was already trialling a unit of work focused on careers with a junior English class. This unit of work combined career education with oral, visual, and written research – all aspects of the English curriculum. Anna's understanding of career management competencies did not change this approach; she felt that she already had a clear direction for helping students develop career management competencies through her careers unit of work. Anna's approach was still project-based but with some changes to teaching and learning strategies within the classroom. The students in this class learned about the ways in which low levels of literacy would restrict their post-school pathway and career options. This led Anna to find new ways to keep students positive and help them think about other pathways and career options in a related field.

Joint work unit and joint teaching

Anna's understanding of the key competencies was similar to those of many other teachers. For example, she felt students would learn about the key competency *managing self* by being aware of their time management skills and perseverance (e.g. finding someone to interview and completing their assignment). This way of thinking about competency is essentially skill-based and quite individualistic, and how most of us typically think about the nature of learning. A more challenging and unfamiliar view of learning is that it is enabled or constrained by more complex relationships between self and the social contexts of learning and action, including the behaviours and attitudes of others in those contexts. This might be a next step in Anna's thinking about the nature of competency.

Anna explained that she usually planned her lessons by beginning with the English skills she wanted to teach (e.g. literary techniques, literary extension) and the learning outcomes she expects for students. She then factored in the ability level of the students, the year level, the particular students involved, and finally what might be needed to progress the class further. Anna wrote a research unit on career education for her Year 10 class where she included the English skills of research and interviewing. Her aim was to get students to research career opportunities as a means by which they could learn, not only about research and interview skills, but also how to look for job opportunities more generally. In essence, this was a form of curriculum integration.

Anna understood the bedrock of career management competencies to be a student's own understanding about their abilities and how these could be matched to occupations and the kind of tertiary learning options and qualifications needed for those occupations. She saw her role as helping students become aware of both these qualifications (for occupational entry and/or tertiary-level learning) and the fit with their own aspirations and capabilities.

The English unit in visual and oral research skills involved students in a range of careers information-gathering and exploration activities. Anna had an overall aim for the research unit to lead the students into writing an autobiography, allowing them to formally identify their strengths now and then how these strengths related to what they wanted for their future.

The careers advisor joined the class to help students explore the Careers New Zealand website, especially the "Jobs Galore" section, and to view and discuss episodes from the "Just the Job" television series. This helped students to become familiar with the careers advisor, as well as with careers resources. Students then interviewed someone they knew about their job. Anna hoped the work unit would teach the students "not to get *that* particular job but how to find *any* job" (Anna, 2011) through the research skills they had developed.

Anna then linked the specific key competency of *managing self* to the career management competencies of: *self-awareness* by looking at whether the students were capable of achieving academically; *exploring opportunities* by looking at alternative pathways if the students didn't succeed in the present one; and *deciding and acting* by the students making informed choices about what to do next. She encouraged students to be aware of their time management and their own

perseverance for the completion of their career interview assignments. The next part of the research/careers unit involved students researching careers based on their own dreams and aspirations. Anna's intent was to further develop students' knowledge about how to source career information, get them exploring a range of careers and the qualifications required, and for students to examine their present skills and strengths and look at what career they wanted as their future employment.

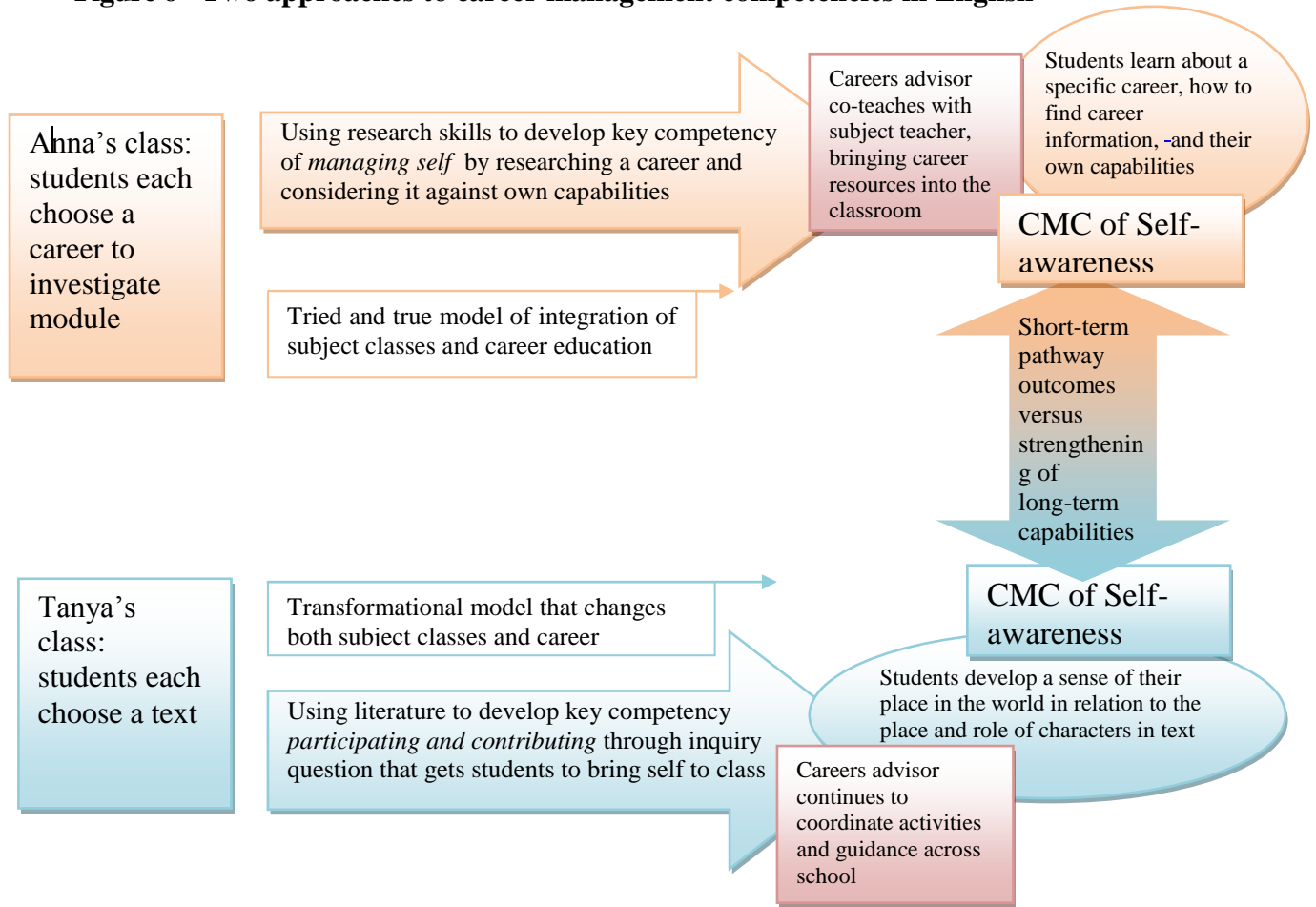
Students were initially asked to make a list of possible jobs. Although one student listed 130 different jobs, most students had only one or two different jobs in which they were interested. From there, students chose to investigate one job, including the qualifications needed, in more detail. At this point the realities of any required tertiary-level study and qualifications hit home. Students found that their low literacy skills would be a barrier to them entering this job or tertiary study towards a qualification for that job.

Anna encouraged them to go back and consider what they were realistically capable of achieving academically (given their low levels of literacy) and to explore other opportunities that might be more appropriate to their achievement or likely achievements. For example, Anna suggested they consider both a first choice career and pathways to it, as well as alternatives to each of these in case they were unsuccessful in reaching entry criteria for career entry or tertiary education requirements. She reported a sort of "awakening" among students that "some goals were simply unreachable" for them. Anna saw this as being helpful to students: they would be better able to make an *informed* choice about what to do next towards their transition from school – a choice informed by a kind of "reality check" about their likely capabilities in relation to the world of career possibilities.

Considering the two approaches

In Figure 5 we have modified our earlier "Romeo and Juliet" diagram which showed two different ways to develop two different ideas about the career management competency of *making decisions and taking action*. In this version of the diagram we show Tanya's and Anna's different approaches to developing their ideas about the career management competency of *self-awareness*.

Figure 6 Two approaches to career management competencies in English



Anna's lesson planning followed the model of subject classes and career education outlined on the chart that we have called "tried and true". The content of career education was selected by the teacher and the direction of exploration was career qualification requirements. Career education was involved throughout the lessons. Career education and career management competencies were seen as much the same thing: skills to gain the job. Career education was understood as being the responsibility of both the teacher and the careers advisor.

Anna's approach leads to students building self-awareness to guide and refine their *exploration of opportunities* (refined by an awareness of what they are not likely to be capable of due to low literacy ability) and to lead them to *decisions and actions* which are realistic considering their current limitations. Her approach makes the careers direction explicit. Anna's interpretation allows students to decide if they have particular capabilities required for a certain job. When students know their capabilities we would expect them to make considered decisions that are good for them. However, when students have an unsure knowledge of their capabilities we might expect them to make decisions that may not be meaningful or relevant to their own priorities and values.

Anna's approach highlights a common tension for teachers. On the one hand, teachers want to encourage students to have great expectations of themselves, their future, and the world. On the other hand, teachers may try to protect students from disappointments, situations, and consequences that might damage or limit their futures (e.g. losing heart from repeated failure, accruing student debt for qualifications towards a career with very limited opportunities). Responses from careers staff¹⁶ in NZCER's career education survey suggest that determining what is "realistic" for student aspirations is a very delicate matter and involves balancing the needs of different groups as well as changing work trends and possibilities (Vaughan & Gardiner, 2007).¹⁷ Teachers do have to walk a fine line here because career management competencies cannot simply become a way for teachers to meet students "where they're at" in ways that end up "leaving them exactly there" (Green, 1986, p. 115, cited in Avis, 1991, p. 117).

Tanya's approach, on the other hand, encourages students to *explore opportunities* through the characters and situations of a text, relate these to themselves and consider how they are in the world (where they do and can participate and contribute). While career information and advice is not explicit in this approach, the hope is that greater self-awareness will lead students to *make decisions and take actions* in ways that are well informed by a sense of themselves and their capabilities. Tanya scaffolded the questions the students would answer which allowed them to draw on their individual and cultural interpretations. She asked students to imagine different ways of being in the world. Tanya's interpretation allows students to know the capabilities they have and to develop them.

Tanya's approach highlights the issue of how schools can change practice. Tanya's main focus was to allow teachers and students to identify and further develop students' capabilities and then have students apply these to careers. Her approach developed teachers' understanding of the key competencies. By focusing on one key competency at each year level, teachers could embed each key competency into their teaching practice and into their students' learning. Tanya had reached a space of deeper insights into the key competencies that she was then able to translate into a specific type of pedagogical approach that also made sense to her colleagues. In a sense their professional learning took a short-cut via the pathway that she opened up. Like any short-cuts this pathway can seem obvious once it exists but pioneering it is really hard work (in this case deep intellectual inquiry into the purposes for reading literary texts in subject English).

¹⁶ "Careers staff" includes school staff known as careers teachers, careers advisors, transition educators, work experience co-ordinators, Designing Careers co-ordinators, Gateway co-ordinators, and STAR (Secondary Tertiary Alignment Resource) co-ordinators.

¹⁷ Almost three-quarters of careers staff reported that students have increasingly unrealistic expectations about sports/celebrity/highly paid careers and over three-quarters (78 percent) thought that parents' and students' expectations frequently differ. Two-thirds thought that in the past few years it has become harder for students to deal with all the information about possible careers, tertiary learning, and industry options.

Chapter 5. Conclusion: how school systems could reorganise to help students build long-term career capabilities

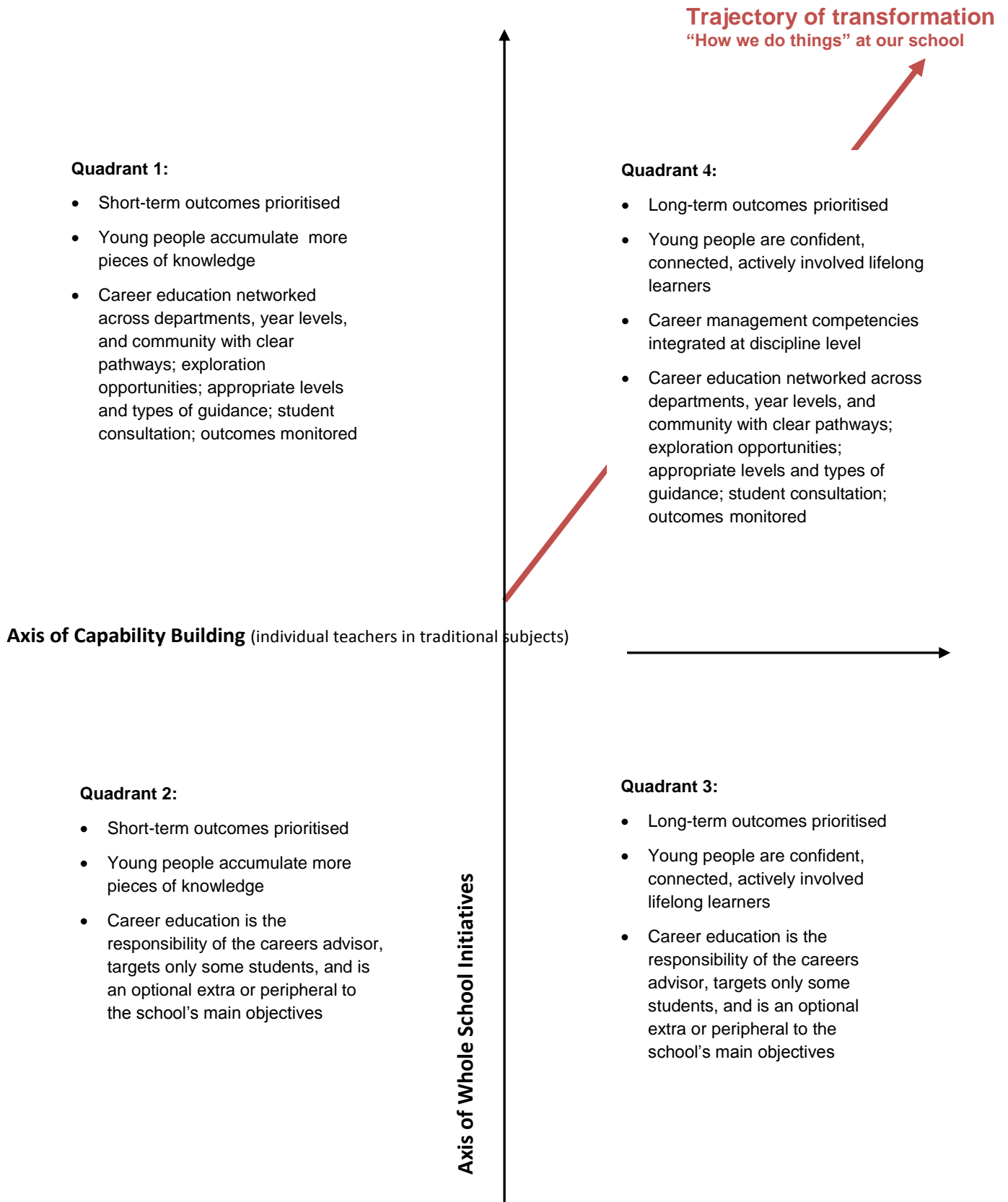
Modelling whole school and capability approaches

So far we have discussed the origins and rationale for a career education approach that makes career management competencies its cornerstone. We have compared two approaches and attempted to model them in order to surface the thinking behind them and the likely outcomes of using them. There are likely to be many more possible approaches to addressing career management competencies creatively in subject classes. This is both the strength and potential weakness of a curriculum that does not prescribe what teachers should actually do. Competency development requires creative, carefully designed, and rich environments in which students can develop *for themselves* the competencies they need to flourish both at school and beyond school, into work and further learning. So where does this leave career education?

We have seen an approach (Anna at Mosely College) that makes career information and advice explicit in the subject classroom. It uses the “texts” of career information on websites and perspectives from oral interviews as the means through which students can consider a career *and* learn how to find out (in the future) about other careers. We have seen another approach (Tanya at Otua High School) which fosters deep thinking for students but has only an implicit link to career information and advice. Nevertheless, in our view, this second approach has greater potential to be linked explicitly to careers in ways that will help students develop long-term capabilities. But what about all those other career education activities? Some of those seem really useful for students and many of them feature as good practice in the recent *Career Education Benchmarks for Secondary Schools* (Careers New Zealand, 2011).

We need a framework to guide our thinking about all this. We have attempted to build one using the dimensions of whole school initiatives and capability-building. Figure 6 shows whole school initiatives as valuable (Quadrant 1) but only one part of the picture because they are less likely to develop students’ long-term competencies. The diagram also shows that capability-building approaches by individual teachers (Quadrant 3) are also only one part of the picture because they rely too much on standout individuals and may not translate across the school. Ideally, whole school initiatives and capability-building come together through a “trajectory of transformation”, indicated as Quadrant 2. Work in this quadrant is most likely to maximise students’ long-term interests as citizens managing their work and learning throughout life.

Figure 7 A framework for thinking about career management competencies in the whole school context



Changing relationships

Careers advisors and subject teachers working and learning together

There are relationship and learning implications for schools moving into Quadrant 4. Current in-school relationships would need to change. For example, instead of the sole possibility of sending students to the careers advisor for one-to-one guidance, teachers might work alongside careers advisors to think about the needs of particular students and how they could be addressed through class activities. Teachers might also work together across learning areas to create rich learning contexts for students. Careers advisors might take on a coordinating role with teachers across the school, working with them to create specific points of engagement with careers and drawing on careers resources and tools already used or accessed by the school (e.g. tertiary education and labour market information, interactive careers games, subject-career matching tools).

In our previous study on *Career Education Networks* (Vaughan & O’Neil, 2010), we argued that career education needed to be reconceptualised in terms of capability development rather than information delivery and, as such, required new sets of relationships that were more broad-ranging and different in nature. We explored some of the emergent decentralised networks already operating, which careers advisors (and others) had created in order to manage the complex and numerous relationships and information sources that existing organisational structures or hierarchies did not directly support. We found that their networking behaviour was actually a professional activity, serving as a source of shared learning and community of practice. We suggested that these kinds of decentralised networks offered better prospects for a career education system that would meet young people’s needs.

However, these sorts of new relationships and networks within the school are likely to pose huge challenges. First, subject teachers may resist involvement in career education. The suggestion that “all teachers are career teachers” (Ministry of Education, 2009, p. 25) is asking subject teachers to take responsibility for something that is commonly regarded as the responsibility of one designated person. The CPaBL evaluation (Education Review Office, 2009) found this to be one of the biggest challenges – getting teachers to recognise the importance of career education and to recognise their own role in providing relevant information and guidance.

A second challenge is that careers advisors may struggle to gain any traction with other staff because of their general lack of status and influence in the school. Change might also feel threatening to them if they have become attached to an older model of career guidance – one that is organised around things that were scarce, such as labour market information, tertiary institution information, and vocational testing. With these things now readily available through websites, marketing material, private companies, and online self-testing resources, resources no longer reside in the sole domain of the careers advisor, and it is not so clear what careers advisors should be doing, whether they can do it, or how they can be supported to do it (Vaughan & O’Neil, 2010). However, it is clear that, as the demands of career education change, things are moving “beyond the capacity of the one career advisor. It requires significant knowledge of curriculum design and development (Hodgetts, 2009, p. 41). As qualified teachers, careers advisors are well placed in this regard to work with

subject teachers. The questions are whether subject teachers are ready, willing, and able to engage with careers advisors in this way, and whether careers advisors are able to critically question and rethink some of the activities that are difficult to sustain from a position at the centre of “the hub” of the careers office (e.g. career guidance can only be one-to-one, in-person, and with the careers advisor; career education can only be delivered by the careers advisor through formally-designated careers activities).

Reciprocal responsibilities and benefits for schools, community, and employers

Once we start thinking about career education in terms of competencies and capabilities, it changes the way we can think about work-based learning options for school students. We have seen that a capabilities approach to career education suggests the involvement of all teachers (not just the careers advisor as an information distribution approach suggests). Such an approach also suggests that school–community relationships can be more than information sharing ones. They can be about reciprocal responsibilities for the benefit of students, school, community, and industry.

Many schools already have relationships with employers and community groups. Some are fostered informally through teachers’ and parents’ connections. Others occur formally through the Gateway programme, STAR courses, national competitions and initiatives (e.g. the Smokefree Stage Challenge, and Education for Sustainability), and schemes run by industry training organisations and tertiary education providers (e.g. the Bright Sparks electronics club, and the Build-Ability Challenge competition). There are many benefits from these relationships. School and student benefits include chances for Gateway students and school leavers to be “placed” with employers; up-to-date information for career advisors to give students about learning and work opportunities with employers; opportunities for students to have one-off or regular, medium-term experiences in workplaces; student engagement with a community of practice in specific industry areas; and more opportunity for the school to serve its community (including closer ties with parents). Benefits for employers include employee recruitment opportunities, taking an active role in growing and renewing the industry, publicity and increased goodwill, and “giving back” to the community.

In terms of learning, reframing school–community relationships in terms of competency or capability development is likely to involve explicit agreements about the point of school–workplace learning (e.g. Gateway) and of learning itself. It makes sense for teachers to lead and maintain overall responsibility for the learning context and opportunities for students. Although learning is increasingly recognised by businesses as a key indicator and driver for productivity, rather than the front-loaded and school-based opposite of it, the imperatives of learning and production can frequently conflict. Teachers may need to balance the different interests (and sometimes self-interests) involved in school–work partnerships: employers looking for employees; industry representatives looking to grow and sustain the industry; industry training organisations securing trainees and Standard Training Measure grants; and tertiary education providers recruiting students and gaining Equivalent

Full-Time Student funding (Tertiary Education Commission, 2003; Vaughan & Kenneally, 2003).

Teachers, workplace coordinators, and employers may also need to cooperate with explicit strategies for working with the students in these programmes. Although there is some acknowledgement of the workplace in providing valuable learning opportunities, processes, and outcomes, they are still generally seen as places where practice can be experienced, rather than essential learning experiences in their own right (Billett, 2008). The close association between learning and the classroom means that students who are attracted to workplace contexts often lack confidence in their learning ability and see a community or workplace context as a way to avoid learning (Vaughan, 2010). One recent study shows that, in addition to the interests of non-school partners, students commonly think they are learning-by-doing and that reflection is not part of the learning process unless teachers *and* workplace training supervisors challenge and support them to do it and teachers take overall responsibility for students' competence development (Wesselink, de Jong, & Biemans, 2010).

Figure 8 Possible model of school staff domains



It is clear from other research that changes of this order require a significant commitment by the government and by teaching staff to professional development. Many of the 100 schools involved in the CPaBL initiative used their funding on professional development and this was usually related to attempts to integrate careers information into subject teaching, pastoral care/tutor roles, and ways to access careers information (Education Review Office, 2009). Recent research on key competencies in New Zealand primary and secondary schools also found that “iterative cycles of learning” (Hipkins et al., 2011, p. 36) are necessary for schools to connect explorations of key competencies to earlier professional learning. It would seem to be

too soon to see discipline-specific changes to teaching and learning, although teachers are beginning to recognise what might be involved in competency development, including that lifelong learning might apply to them as well as to students (Cowie, Hipkins, Keown, & Boyd, 2011).

The Curriculum Implementation Exploratory Studies (CIES) project contains some useful lessons for how the integration of career management competencies might be encouraged and supported. Cowie et al. use the idea of “horizontal learning” which “typically involves consolidating on ways ideas might translate to practice, filling in gaps, reworking areas where new horizons have opened up and the school now considers they have not yet explored the full potential...and looking back to align new practices with changes made during earlier explorations”. Cowie et al. (2011, p. 7) cite James Paul Gee’s likening of horizontal learning to a time of “mucking around” and “getting used to the water” before people eventually jump in and swim¹⁸ as essential preparation for challenging developments.

Just as the NZC is a non-prescriptive framework and teachers need to learn how to give effect to it, career management competencies demand horizontal learning so that everyone – careers advisors, subject teachers, curriculum leaders, students, the principal, the Board of Trustees, local employers and industry representatives, and local tertiary education provider representatives – is up to speed and working together. Thanks to our schools and teachers, we have been able to “test the water” on career management competencies in subject classroom settings. We hope you find this a useful start to further conversations about the creative possibilities, and valuable outcomes, for students.

¹⁸ See Gee (2004, p.60).

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