SUPPORTING CAREER DEVELOPMENT IN CHILDREN: A LITERATURE REVIEW

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Glossary of Acronyms

Acronym	Explanation
3CD	The Canadian Council for Career Development
APCDA	The Asia Pacific Career Development Association
CCDF	The Canadian Career Development Foundation
CDI	The Career Development Institute (United Kingdom)
CEC	Careers and Enterprise Company (England)
CERIC	Canadian Education and Research Institute for Counselling
DFE	Department for Education (England)
NCDA	The National Career Development Association (United States)
OECD	The Organisation for Economic Cooperation and Development (International)
UDACE	The Unit for the Development of Adult Continuing Education (England)

Overview

This document contains a review of literature which investigates the practices to support the development of career-related foundational skills in in children aged 9-11 (Grades 4-6) in Canadian elementary schools. The review explores the scholarly literature related to career development terminology, appropriate career development frameworks and theoretical understandings, and empirical work that examined the ways teachers introduce and develop foundational career skills (e.g., healthy habits of mind and being, social and emotional skills, self-confidence, self-efficacy). The purpose of this literature review was to explore any variances in career-related learning terminology, and in so doing, the review identifies any gaps in current theoretical frameworks in regard to the career-related learning needs of elementary school teachers and their students.

Although the review focusses on issues that are specific to the Canadian context, it explores practices from aligned westernized nations and those with marginalized populations, such as the United States of America, Australia, New Zealand, the United Kingdom, and The European Union. The review utilises materials and definitions from a range of professional organisations and associations from each of the countries. The review also takes account of the bilingual nature of the Canadian education system and took account of French language literature.

There were two aims of the literature review, and a summary of the findings are presented as research questions, with the main points set out under each.

Research question 1: What are the broad ways career development is theoretically and conceptually framed and defined?

This part of the review explored the definitions of many career-related terms. Although there is variation by country in the use of language associated with career, the main finding was to note the complexity of language and vocabulary around the terms. A career can be both a noun (to have a career) or a verb (to career through a succession of opportunities). Importantly, there is no consensus on where career begins or ends. For some it starts at birth and is a sequence of events through life, learning, and work (including paid and voluntary work), which ends at death. In others, career is limited to the paid work that adults undertake to earn money. The term career development describes the actions that an individual takes to improve their life journey through education and work. It can also refer to the activities designed and/or provided by educators and learning providers to support people of all ages to engage with the concept of career and the knowledge, skills, and attributes required to navigate a complex world successfully. The overarching message from this part of the review is that all stakeholders (academic staff, counsellors, parents, communities, and employers) need to agree at regional, local, and organizational levels the terms they are going to use and to form a consensus around their meaning which is shared with learners. The review provides examples of the terminology and vocabulary is used around career, which can be subsequently used to inform this dialogue.

A variety of frameworks exist, which guide educators to develop their programs. These variously set out the knowledge, skills, and attributes required by individuals so that they can successfully manage their careers. There are several frameworks which also set out the standards required to ensure that programs are delivered. One of the most established of

these frameworks is that set out by Law and Watts (1977). Commonly referred to as DOTS (Decisions, Opportunities, Transitions, Self), this framework is a high-level description of broad learning outcomes that offers a useful way of exploring the competencies that career-related activities aim to develop. The literature review uses this framework as a basis on which to explore other frameworks from around the world, which are commonly used to describe the outcomes of career development such as career readiness, career resilience, and career adaptability. The review also analyses national curricula because it is not always either evident or explicit where the outcomes of career learning intersect with the general learning outcomes described in national curriculum frameworks, even though such outcomes are seen as important contributors to the overall development of the child.

The review also explores national curriculum frameworks and the way they deliver career development outcomes. Whilst the DOTS framework is a useful starting point, it does not consider the context in which career development takes place. Unique contexts and connected learnings about culture, heritage, and community are prevalent in some nation's curriculum frameworks. This is an important omission from the DOTS framework and suggests its limited application for such a purpose.

Research question 2: What evidence is there in the literature of how career development is theoretically and conceptually defined in elementary schools?

There is much research about the provision and impact of career development activities in the secondary phase of education and less in the elementary or primary phase. Where research evidence exists, it confirms some theorists' views that career development is a process which can be educated, and such interventions can have a positive impact on the

early career development of children. The study explores the impact of certain indicators, such as gender, and finds that educational interventions are important in addressing social injustices and inequity. The review sets out concrete examples of the impact of good career guidance in the elementary stage of education.

Whilst it is clear from the literature that career development activities can have a positive impact on the learning and development of children, there is evidence which sets out the barriers to this practice. These include temporal and structural issues and priorities set out by schools' senior leaders. The review suggests that these issues, whilst understandable should be challenged, rather than improving young people's educational outcomes, as they can serve to limit aspiration, attainment, and progression in later life.

To complicate the job of elementary school educators, career development does not take place in isolation. The context in which career is enacted is changing constantly. Changes can be brought around due to local and national economic and social needs, but these are not the only influences on young people’s understanding of career. Increasingly, the global issue of environmental sustainability is one example of how young people’s career aspirations might be altered as we all grapple with issues around our own impact on environmental change. The review explores these issues and sets out some ideas of how career development can respond by incorporating opportunities to engage in values-based career thinking.

Who will Benefit from Reading this Review?

This review contains an extensive exploration of career-related literature, with a particular focus on elementary school-aged children, though many of the findings are relevant to all educators seeking to support students with career-related learning. In particular, this review will be important for:

Teachers – in both elementary and secondary schools who are supporting their students with career-related learning activities;

Guidance counselors – who are delivering and managing career-related knowledge, information, and services across their schools;

School leaders and district school board administrators – who are determining the scope of career-related learning across their schools and allocating associated budgets and strategic planning;

Curriculum developers – who are looking for worthwhile practices to incorporate into career-related programing and development;

Policymakers – who are directing courses of action across the policy life cycle, and are evaluating policy implementation of career-related policy in schools; and

Government – who are making decisions as to what career-related learning should look like in schools.

What Information can be Found in this Review?

Focus and attention are given to:

- An extensive exploration of career-related terminology that educators might encounter in the career-related work in schools;
- An exploration of how work is linked to career development;
- A detailed overview of typical expected outcomes of career development;
- An overview of empirical career-related learning and career development theoretical frameworks;
- An outline of typical career-related learning outcomes seen in Canada, Australia, New Zealand, and The United Kingdom;
- An examination of what career-related learning looks like in elementary schools; and
- A summary of contemporary issues related to career.

Introduction

Across Canada, provinces and territories have implemented a variety of educational strategies, initiatives, policies, and programs to help young people achieve productive and fulfilling lives, including social studies curricula. Ministries, school boards, and schools have a range of proactive frameworks and policies. However, several challenges impact the successful implementation of such policies, which in turn may affect young people as they try to successfully navigate through school and subsequent steps and life stages (Gallagher-Mackay, 2019). For instance, many elementary schools have limited resources beyond the classroom teacher to support students' career and life planning, and many teachers are not aware they are developing critical career skills in their students (e.g., Gallagher-Mackay, 2019; Kashefpakdel et al., 2018a, 2019).

This literature review determines the scope and impact of career-related learning for children in elementary schools, with a particular focus on grades 4-6. It explores the scholarly literature related to career development terminology, appropriate career development framework and theoretical understandings, and empirical work that examines the ways teachers introduce and develop foundational career skills (e.g., healthy habits of mind and being, social and emotional skills, self-confidence, self-efficacy).

Scholarly Review of the Literature

Context

Career vocabulary and terminology are the building blocks on which all career interventions are built. Thus, we begin this section of our literature review with an exploration

of commonly used terminology in Canada and from similarly aligned westernized nations including the United States of America (US), the United Kingdom (UK), Australia, New Zealand, and Europe (EU). We also include relevant terminology used in nations that have highlighted innovative career development practices that respond to issues faced by marginalized and minority populations including Black, Indigenous, and People of Colour (BIPOC) communities. Definitions are included from professional associations for each country, relevant policy, and localized practices. The following professional associations and organizations are included:

- CERIC
- Canadian Council for Career Development (3CD)
- Canadian Career Development Foundation
- Education and Employers (UK)
- The Asia Pacific Career Development Association
- The Australian Centre for Career Education
- The Career Development Association for Australia
- The Career Development Association of New Zealand
- The Career Development Institute (UK)
- The Careers and Enterprise Company (England)
- The National Career Development Association (US)

Method

One of the overarching goals of this study was to develop a greater understanding of what was happening in elementary education in Canada related to introducing/building career-related

foundational skills including current curriculum and how career development is incorporated into learning. In the first section of this review, we responded to the following research questions:

1. What are the broad ways career development is theoretically and conceptually framed and defined?
2. What evidence is there in the literature of how career development is theoretically and conceptually defined in elementary schools?
3. How do students in grades 4-6, their teachers, and administrators understand the concept of “career” and “career-related foundational skills”?
4. What are the practices and approaches for delivering career-related learning in grades 4-6 education across Canada as explained by teachers and administrators?

Setting Search Strategies

We focused on literature published between 2000 and 2020, however we also included earlier publications where appropriate. This literature includes seminal publications, highly influential works, and research published in fields where other literature is scant. To explore the definitions and concepts of career development, we searched the main websites for professional career development associations in the nominated countries. Search terms included:

- Career
- Career development
- Career guidance
- Personal career guidance

- Career coaching
- Career Counselling
- Careers education
- Careers advice
- Career management skills
- Digital career management skills
- Transition
- Decision making
- Opportunity awareness
- Self-awareness
- Career readiness
- Career resilience
- Career adaptability
- Employability

We used the following terms for the learners/student population appropriate to this study:

- Children
- Young people
- Young person
- Elementary education
- Careers in elementary education

We used the following terms when exploring the influence of parents:

- Parents

- Grandparents

We have paid attention to the needs, interests and aspirations of children and young people from Indigenous groups using the following terms:

- Indigenous
- First nations
- Aboriginal
- Métis
- Inuit

We have also combined the Indigenous search terms with the following terms linked to the research goals and research questions:

- Career choice
- Career thinking
- Career management skills
- Informal education
- Work experience
- Progression
- Primary education
- Elementary education

These search terms were also translated into French to find relevant French language literature. The terms were applied in several ways. In the first instance undertook searches using appropriate software and databases (e.g., EBSCO; ERIC; Google Scholar; Library Plus). We determined inclusion criteria based on research questions, date of document, applicability

to the target population, and geographical location. The articles were reviewed by title, abstract, and finally content. We also employed a signposting technique from selected articles to identify any additional relevant materials (hand searching). Our research team's experience also led us to include any seminal works outside of our selected date range due to their continued importance to the field.

Incorporation of French Language Literature

Our search of relevant literature included both English and French language sources. We have opted not to report on French language sources separately, but rather to incorporate them into the relevant section of the literature review. This decision was made for three reasons. First, our search resulted in a paucity of French language literature related to career education. As an example, a Google Scholar search using the term "éducation à la carrière" (the direct translation of "career education" in English) and restricted to the last five years yielded only 15 hits. Only one of those was published in a peer-reviewed journal, and none of them were related to career education in elementary schools. Expanding the search to all articles from the year 2000 yielded 86 hits. One of these was related to career education in elementary school but was published in English.

Second, the small number of studies published in French relied heavily on English sources for their theoretical frameworks. The most compelling example of this is Dupont's (2001) claim that career education in Quebec has been most strongly influenced by the work of Donald Super, an American career education researcher. We also see Dupont cite Hoyt (another American) often. The reference sections of other articles published in French are dominated by English language research (e.g., Dupont & Bédard, 1991; Marceau, 1988; Samson & Gazzola, 2007). Other published works are French translations of research

conducted in English (e.g., McIlveen & Creed, 2018). Related to this is the fact that many francophone researchers also publish in English (e.g., Bujold, 2004; Savard et al., 2002).

Finally, we observed only minor differences between English and French language versions of Canadian curriculum and policy documents. This is perhaps to be expected, as one would expect that the goals, methods, and content of provincial education systems should be largely independent of language. What differences did exist tended to relate to culture or language. For instance, Ontario students are assessed on a set of six learning skills and work habits in English, but this list expands to seven in francophone schools. The additional learning skill and work habit assessed in francophone schools is “utilisation du français oral” (use of oral French). The assessment and reporting on the use of oral French is designed to encourage students’ use of French in francophone schools.

Together, these three reasons provide a strong indication that French language research literature and policy documents are not substantively different from their English language counterparts. Consequently, we felt that reporting the French language literature separately would not provide additional or important insights.

Understanding terminology

In this section, key career-related terminology is identified and explored. Definitions, descriptions, and understandings of career and career-related terminology (including career, career development, career guidance, career management, digital career literacy, career coaching, career counselling, and careers advice) is presented.

Career

Career vocabulary and terminology are the building blocks on which all career interventions must be built. Therefore, this section of the literature review explores the terms, concepts, and vocabulary used to define and describe “career” and its associated interventions. The review finds that this exploration is far from straightforward and that there are significant differences in the way words are defined and applied. Even the term *career* is fraught with contradictions as it can have a wide range of understandings and applications for educators working with young people and subsequent implications for how young people understand career. We examine both the scholarly and grey literature to find aligned and conflicting meanings to foundational terms such as “career,” “career development,” “career guidance,” “career education,” and “career development.”

How Career is Defined in Scholarly Literature

While the idea of having a career is not particularly contentious, there are global differences in how organizations and individuals define the term. The Oxford English Dictionary defines the term *career* as “an occupation undertaken for a significant period of a person's life and with opportunities for progress” and notes the derivation from the Latin word *carrus,*

meaning *wheeled vehicle* (Lexico, n.d.). The Latin root word *carrus* clearly links the concept of career to a sense of *journey* rather than a final destination.

Although the life-long nature of career is acknowledged here, the inter-relationship between life and work is not recognized. The complexity in understanding career was highlighted by Post et al. (2002) with career being defined as the interaction of work and life roles over a person's lifespan. Watts (1998) supported the notion that career should be seen as an individual's lifelong progression in learning and work, noting the importance of recognizing all formal and informal learning and valuing all types of paid and unpaid work regardless of where it takes place (e.g., in an office or from home).

Seibert et al. (2001) developed the concept of career capital by applying the concept of social capital (Bordieu, 1977) to an individual's career success. Importantly, the concept of career capital highlighted the role that networks play in an individual's career progression. Career networks could be seen in terms of an individual's associations within the organization in which they work, through such activities as mentoring, or through contacts and associations outside their current place of learning or work. Seibert et al. (2001) noted a direct link between social capital and career capital including career networks. The greater the number of career related contacts in an individual's network, the more likely they were to have career success as denoted through higher salaries and their position within an organization.

The way in which an individual conceptualizes career often depends on factors such as age, gender, culture, and ability or disability, amongst other aspects of their life. For some, notably those from disaffected, low ability, or socially disadvantaged groups of individuals, career relates very specifically to those in employment These views of career can be constraining and cause some individuals to have limited expectations of themselves and

others. For those with learning difficulties or disabilities, the idea that a persons' career is represented by opportunities which generate financial income can be inhibiting, as voluntary activity and specialist learning provides valuable sources of life satisfaction contributing to overall community and society well-being (McGillen et al. 2020).

One important understanding of career is through metaphor (Inkson & Amundson, 2002; McIlveen & Creed, 2018). Because of the abstract nature of career, metaphors can provide a way to make the concept of career more tangible and meaningful to the individual. Inkson and Amundson (2002) identified 10 archetypal metaphors:

- Career as journey
- Career as inheritance
- Career as (good or bad) fit
- Career as a sequence of seasons
- Career as growth
- Career as a creative work
- Career as a network
- Career as a resource
- Career as a story
- Career as a cultural artefact

Similar metaphors appear in French language literature (e.g., Cohen-Scali et al., 2018). Moore and Hooley (2012) noted that each metaphor both names and conceptualizes career in a different way. Law (2008) also examined how different metaphors of career (e.g., the race vs. the journey) determined how individuals viewed their own careers and how they related to others while they were undertaking their careers. Law argued that when career is

conceptualized as a race it implies a competitive process. However, when the notion of journey is applied (turning points, horizon, travel, and map), a different set of concepts and values are conveyed.

The way young people understand the term career was explored in research carried out by Moore and Hooley (2012). Through interviews with 82 participant young people (aged 12-19), Moore and Hooley found different conceptualizations of career and that learners' understanding of career develops through a number of stages. In earlier years, learners see the concept in simplistic ways, for example having a job or as a way of earning money. As they move developmental stages, understandings deepen, become personalized, and are increasingly influenced by peers, media, families, teachers, and other adults. Career was not a word used regularly to describe progression. Study participants saw career as a formal concept that had negative messages associated with pressure to think, plan, and take action. In addition, adult participants equally found the term problematic and complex to define. Moore and Hooley concluded there was a need for professionals and adults to find ways to engage young people in thinking about "career" to better facilitate broad exploration of what career can mean.

How Professional Associations Define Career

Most career development professional associations across Canada concentrate on defining career development rather than career (e.g., Canadian Career Development Foundation; British Columbia Career Development Association; New Brunswick Career Development Association; Nova Scotia Career Development Association). However, the Asia Pacific Career Development Association (APCDA) offers two useful definitions. The first emphasizes the life-long nature of career and the broad scope of decisions required to

undertake productive, goal-centred activities to move along a path through life. The second definition is unique in that it relates career to an individual developing their career capital through activities and experiences that occur throughout their lives (Banyasz et al., 2018).

Similar to the ideas shared by Inkson and Amundson (2002), CERIC (n.d.) utilizes the metaphor of a canoe to represent "our careers – we use it one our journey, we stock it with the tools we need, and we proactively steer it to our destination." CERIC defines career as coming from:

> …the Latin for cart or chariot (Carrus), a means to carry you from one point to another. A career is about the life you want to lead-not just a job, occupation or profession. It involves deciding among possible and preferred futures. It answers: "who do I want to be in the world?" "what kind of lifestyle am I seeking?" and "how can I make an impact?" (CERIC, n.d.)

The Canadian Council for Career Development (3CD; 2014) outlined how career is "about who you are and what you do with who you are." Building on this short definition, the 3CD explained that "as you go through life, you want to better understand yourself, what relationships you want to build and keep, what you want to learn, what work you want to do and what contributions you want to make." Both CERIC and 3CD emphasize a process of inward thinking about oneself and posing a series of questions that suggest the need for reflection, decision-making, and forward planning. As we saw in the broader literature, the UK's Career Development Institute (CDI) (2017) also recognized the relationship between life and work in its definition of career:

> A career refers primarily to the sequence and variety of work roles, paid or unpaid, that individuals undertake throughout their lives; but it is also the construct which enables individuals to make sense of valued work opportunities and how their work roles relate to their wider life roles. (p. 1)

This definition of career combines both the “story” that describes how individuals make progress through their lives and how they make sense of that progress and relate it to their other life roles. The story telling nature of the term career was further explored by Post et al. (2002) who also noted the journeying nature of career. Thus, an individual’s career is made up of a series of transitions, some of which are planned (e.g., taking up a university place) or unplanned (e.g., unexpected job loss).

In summary, the way individuals and organizations define career varies and it is, therefore, crucial that teachers embarking on career-related programing and activities are able to reach a common understanding of the appropriate definition of career for their given context, especially in regard to how it is defined (or not) in curriculum documents and how it is typically understood by the wider stakeholders of their students and schools.

Our review highlights the following commonalities within definitions of the term career:

- levels of progression or forward movement;
- the need to transition through several life experiences; and
- career is a life-long process.

Our review also highlighted the following variations:

- differentiation between a singular all-encompassing career journey or having several careers (and in this case career is a synonym for job or work role);

- differentiation between the journeying nature of career and career capital;
- describing the relationship between life and work;
- the emphasis of the life-long journey of career in comparison to a career spanning typical employment periods; and
- work as both a voluntary endeavor or paid employment.

Career Development

In Canada, there are competing definitions of *career development*. The Canadian Standards and Guidelines for Career Development Practitioners described it as “the lifelong process of managing learning, work, leisure, and transitions in order to move toward a personally determined and evolving preferred future” (Canadian Standards and Guidelines for Career Development Practitioners, 2012, p. 3). The 3CD (2014) defined career development as “the lifelong process of managing your learning and work in order to move towards your preferred future.” The Canadian Career Development Foundation acknowledged the role of career development as a leverage to “build better careers, happier lives, more productive workplaces, and healthier communities” (CCDF, n.d.). The Council of Atlantic Ministers of Education define career development as “the lifelong process of managing learning (formal and informal), work (paid and unpaid), and the transitions in between in order to move toward one’s preferred future (Council of Atlantic Ministers of Education and Training, 2015).

One important difference in terminology was that practitioners in Europe, the UK, and Ireland prefer the term “career guidance” to describe the interventions designed to help people make and implement career decisions, while those in Canada and the US prefer “career development” (McMahon, 2004), with the term career guidance being far more commonly

applied to the compulsory school system. This variation is likely because in Canada and the US, the people who give career advice in schools are typically called “guidance” counsellors.

The UK Career Development Institute (2017) defines career development as a unique and lifelong process for each individual of managing learning, work, transitions, and participating effectively in work and society. Successful career development contributes to social justice by enhancing an individual’s personal and economic well-being, social mobility, and productivity. Subsequently, to undertake a lifelong career development process, individuals need to acquire skills that support employability, career management, and resilience in the face of career change. In New Zealand, CDANZ note that *career development* is used synonymously with *career advice* and *career guidance* to describe the field and its practices (CDANZ n.d) .

Career Guidance

From time to time, throughout their lives, individuals require support to talk through their ideas and plans for the future. This in depth and personal support is variously referred to as personal guidance, educational guidance, vocational guidance, career guidance, or personal career guidance. This variety of terms reflects the many views of what constitutes the complex and difficult interventions needed to guide individuals along productive, suitable career paths. Some organizations and individuals define this function in the broadest possible terms. Whereas, for others, the term describes a narrow range of personal interventions. The Organisation for Economic Cooperation and Development (OECD; 2019) defined career guidance as:

> Services intended to assist people, of any age and at any point through their lives to make educational, training and occupational choices and to manage their careers. Career guidance helps people to reflect on their ambitions, interests, qualifications and abilities. It helps them to understand the labour market and education systems, and to relate this to what they know about themselves. Comprehensive career guidance tried to teach people to plan and make decisions about work and learning. Career guidance makes information about the labour market and about educational opportunities more accessible by organizing it, systematizing it, and making it available when and where people need it.

This definition described the intentions and benefits of career guidance to the individual. This definition was similar to that set out by the Asia Pacific Career Development Association (Banyasz et al., 2018), which referred to services and activities intended to assist individuals to make educational, training, and occupational choices and to manage their career. Missing from this definition, however, was the life-long aspect of career with the focus being on the more traditional education and employment outcomes.

The Unit for the Development of Adult Continuing Education (UDACE) has differentiated guidance into several functions, including personal, vocational, and educational. With such an encompassing approach, where personal, vocational, and educational decision-making all fall within *career,* guidance is seen as helping:

> …the client both to make the most appropriate decision in the immediate situation and to develop the skills to make such decisions wisely in future. The client may need information, advice, counselling or assessment, and in some cases may need more

direct support with enabling or advocacy. (Unit for the Development of Adult Continuing Education, 1986, p. 2)

A further way of defining career guidance is by describing the range of interventions or purposeful interactions that take place to support individuals to make and implement their career and progression decisions. UDACE (1986) produced a list of seven activities to help define guidance including: informing; advising; counseling; assessing; enabling; advocating; and feeding back. Brown (2003) revisited and expanded this list to include: teaching; networking; managing; and innovating/systems change. While many in the career development sector have adopted this definition as helpful in describing what they do as guidance practitioners, the definition is dated and needs to be expanded to include recent technological developments, such as the internet and social networking.

More recently, Hooley et al. (2017; 2019) sought to resolve the difficulties in defining career guidance and developed a refined definition, which embraced both the role of career guidance practitioners and purpose of career guidance, highlighting the process as being for both individuals and groups. The community nature of career requires individuals to explore and understand power relationships and their impact on career decision-making. In Hooley et al.'s work (2017:2019) , career guidance was seen as empowering and as having a role in promoting social justice. Subsequently, Hooley et al. defined career guidance as, "a purposeful learning opportunity which supports individuals and groups to consider and reconsider work, leisure and learning in the light of new information and experiences and to take both individual and collective action as a result of this" (Hooley et al 2017 p. 20).

Measuring the impact of career guidance is difficult and is linked to the often-contested view of quality (Sultana, 2016). Sultana noted that quality was a construct whose meaning

depends on who is defining the term. Thus, the notion of a quality service varies depending on whether this is viewed from a beneficiary's perspective (Has this helped me to make and implement a career-related decision?) or an organization (Did the students make sustained transitions?).

In 2014, the UK based organization, The Gatsby Charitable Foundation (2014) undertook international research to determine what constituted good career guidance. Researchers visited state and private schools in the United Kingdom, Germany, Hong Kong, Netherlands, Canada, Finland, and Ireland. The research resulted in the development of eight benchmarks of good practice. These benchmarks denote the curriculum inputs that a school or college should have in place to support young people in their career development. These were:

- a stable careers program;
- learning from career and labour market information;
- addressing the needs of each pupil;
- linking curriculum learning to careers;
- encounters with employers and employees;
- experiences of workplaces;
- encounters with further and higher education; and
- personal guidance.

The Gatsby Benchmarks have become government policy and appear in statutory guidance for schools and colleges in England (DFE, 2018). Since their endorsement by the UK government, the Careers and Enterprise Company (CEC) has used the Benchmarks as a basis for several toolkits, including one for those working in primary schools (Kashefpakdel, et al., 2018).

Kashefpakdel et al. noted that career-related learning in primary schools was about helping children to developing an understanding of themselves and their potential. In addition, careers education in elementary schools could bring long-term benefits to children's development and understanding of different future opportunities.

Career guidance can improve the economic outcomes for individuals and societies by supporting smooth and rapid transitions to further learning and work (Kileen et al., 1999), and support individuals to develop skills and enjoy personal growth (Hooley & Dodd, 2015). Further benefits of career guidance were identified as increased self-confidence, self-efficacy, goal setting, and active job searching, which all contributed to effective and rewarding career transitions. More recently, links to social justice were made by Hooley et al. (2017; 2019) acknowledging that career guidance can be used in socially transformative and emancipatory ways.

Unfortunately, where people distinguish educational, vocational, and personal guidance as different interventions, this lack of consistency can cause confusion amongst those who are implementing career related activities in schools. To mitigate this challenge, the Careers and Enterprise Company (a UK government funded organization tasked with driving forward the quality of career guidance in schools and colleges) has set out explicit definitions to reinforce how personal, vocational, and educational guidance activity contribute to career guidance as a "full range of interventions that support young people to make choices and develop their careers" (Careers & Enterprise Company & Gatsby Charitable Foundation, 2018).

For the purposes of this review, we understand the term career guidance as aligned with the term career development. This understanding is important to capture all careers related activity that is being undertaken within elementary schools in different provinces and

territories across Canada. Consequently, throughout this study, the terms *career education* and *career guidance* are understood to represent all career services, information, education, and guidance that is being provided for young people attending compulsory elementary education institutions across Canada.

Career Management

CERIC (n.d.) defines career management as “a lifelong, self-monitored process of career planning that focuses on choosing and setting personal goals and formulating strategies for achieving them.” While the definition itself is not contested, the term is still abstract and one that can be approached from different perspectives (Scivique, 2010). Career management is often seen as a life-long educational process in which individuals develop the skills to manage their careers (Super et al., 1996). Definitions of career management overlap with many of the typical features seen within career development definitions. Subsequently, terminology has evolved and the phrase *career management skills* has become the more common application. Career management skills have been defined as “competencies which help individuals to identify their existing skills, develop career learning goals and take action to enhance their careers” (Neary et al., 2015 p5). The European funded Erasmus Plus project, LEADER (The LEarning And Decision making Resources) produced a framework of career management skills competences under the following four headings:

- personal effectiveness;
- managing relationships;
- finding and accessing work;
- managing life and career; and

- understanding the world.

Neary et al. stated these areas of competence should be at the core of all career guidance services. Career management is about determining goals and managing outcomes. However, it also encompasses needing a range of skills to achieve said planned outcomes.

Digital Career Literacy

The concept of digital career literacy was introduced by Hooley (2012) who suggested the internet was shifting the context within which individuals pursue and develop their careers. Effective use of digital technology can arguably be seen as a career management skill. Hooley argued that to take advantage of the opportunities for career development that the internet offered, individuals needed to develop their digital career literacy skills. Examples of such skills include the ability to use online environments, to conduct research online, leverage technology and social media to make contacts, and build positive professional reputations. Hooley set out a framework of seven competences illustrated in Table 1.

Table 1. *The Seven C's of Digital Literacy*

Changing	the ability to understand and adapt to changing career contexts
Collecting	the ability to find, manage and retrieve career information
Critiquing	the ability to evaluate, analyze the provenance of and assess the usefulness of career information
Connecting	the ability to make contacts, build relationships and establish networks online that support career development

Communicating	the ability to interact effectively across a range of different platforms and to understand the 'netiquette' of different interactions and to use them in the context of career
Creating	the ability to create online content that represents their interests, skills and career history
Curating	the ability to develop, review and edit their online presence

Career Coaching

Definitions of career coaching focus on a solution-focused approach to resolving career development issues, problems, or barriers preventing an individual from progressing in their career. In Canada, career coaching is defined as a process that helps people to "assess their skills and make critical and informed career development decisions, as well as helping them to use various tools—résumés, cover letters, LinkedIn profiles—to accomplish their career goals" (Canadian Council for Career Development, n.d; CERIC, n.d.). This definition emphasizes the individual nature of this process is emphasized.

The Career Development Institute (UK) does not differentiate between personal career guidance and careers coaching, but stresses the individualized nature of both interventions. Their explanation described processes which:

> enable individuals to consider their circumstances, values and aspirations; confront any challenges; resolve any conflicts; build resilience and confidence; develop new perspectives; justify their thinking and reach a decision in the light of relevant career and labour market information. (The Career Development Institute, 2017)

It is interesting to note the similarities to the definition of career coaching provided by The Asian Pacific Career Development Association who define career coaching as “the process of working with clients in a thought-provoking and insightful process that inspires them to maximize their personal and professional potential by providing information and asking questions that are life/career oriented” (Banyasz et al., 2018 P4).

Career Counselling

Career counselling notes the verbal nature of the process of the relationship between practitioner and client, with attention given to a client’s goals and competences needed to achieve these goals (McIlveen & Creed, 2018). Singular and plural terms for those in receipt of career counselling suggest that this is both an individual and group activity (Post et al., 2002). This definition is similar to the one provided by CERIC (n.d.), where counselling can take place as either an individual or group process with intended outcomes defined as satisfying and meaningful life/work direction for clients though “helping them [clients] make career, educational and life decisions.” Herr and Cranmer (1996) note the dynamic and collaborative nature of the relationship between a client and the counsellor who employs techniques and processes to help a client generate self-awareness and informed and autonomous decision making.

Careers Advice

Careers advice is one of the pillars of practice which fall under the umbrella term *career guidance.* CERIC (n.d.) highlighted that the process of advising was an interactive process, which helped students to understand how their personal interests, abilities, skills, and values might influence their decision making and involved recommending options that were

considered best suited to the individual's needs. The distinction between career information and career advice has been described as "careers advice is more in-depth explanation of information and how to access and use information" (Business Innovation and Skills and Education Committees Sub-Committee on Education Skills and the Economy, 2016 P5).

The Asian Pacific Career Development Association (APCDA) focused on *advising*. They note that *advising* was a process of identifying the needs of an individual, then providing advice or referral to information sources to answer the questions of the individual. They stress that advising requires a certain level of training and knowledge of the subject area, but acknowledged the training required to provide advice was fairly low level and did not require a college or university degree (Banyasz et al., 2018).

Public Policy Goals and the Contribution of Career Development

A contemporary issue for career development practitioners relates to the role that career development plays in helping nations to meet their public policy goals. Robertson (2021) summarizes the historical public policy context for career development noting that previously, there were three goals for which career development could be seen to contribute to. These were labour market goals, educational goals and social equity goals. Robertson reimagines the original public policy goals in the light of the United Nations Sustainable Development Goals (UNSDGs) (United Nations, 2015) and categories six new public policy areas. These are

- Labour market goals
- Educational goals
- Social equity goals
- Health and wellbeing goals

- Environmental goals
- Peace and justice goals.

There are seventeen UNSDG's which build on the Millennium development goals. The goals and the targets associated with them aim to help all nations to plot a path to a sustainable future. The seventeen goals are

- **Goal 1.** End poverty in all its forms everywhere
- **Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- **Goal 3.** Ensure healthy lives and promote wellbeing for all at all ages
- **Goal 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- **Goal 5.** Achieve gender equality and empower all women and girls
- **Goal 6.** Ensure availability and sustainable management of water and sanitation for all
- **Goal 7**. Ensure access to affordable, reliable, sustainable and modern energy for all
- **Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- **Goal 10.** Reduce inequality within and among countries
- **Goal 11.** Make cities and human settlements inclusive, safe, resilient and sustainable
- **Goal 12.** Ensure sustainable consumption and production patterns
- **Goal 13.** Take urgent action to combat climate change and its impacts

- **Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt Biodiversity loss
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- **Goal 17.** Strengthen the means of implementation and revitalize the Global Partnership for sustainable development

Several authors have explored the links between the USDG's and career development (Robertson, 2021; Ianelli, 2022; Barnes & Wright, 2022). When reviewing the UNSDG's Robertson (2021) notes that career development has the potential to specifically contribute to a number of these goals for example goals 3, 4, 5, 8, 13, and 16. He notes that some of these goals have not previously been linked to career development such as those relating to peace and justice. Robertson draws on the work of early career theorists to highlight the role that social equity has in promoting peace and justice and the valuable role that career development has in promoting equality of opportunity.

Further to this Ianelli (2022), discusses the persistence of social inequalities in education and the labour market and highlights the link between the ability to convert human potential into an economic advantage for governments through high quality career development activities. Barnes and Wright (2022) map the contribution of the career learning outcomes set out by the UK's Career Development Institute and see a significant alignment between the intended

outcomes of careers education and the majority of the UNSDG's (with the exception of goals 6 and 7).

Linking Work to Career Development

The National Career Development Association (NCDA 2011) cited O'Brien (1986) in defining work as "the expenditure of effort in the performance of a task" (p. 1). According to the NCDA work is central to career development activities. Other authors share this sentiment. Blustein (2006) explained that when optimized, work provides means for survival, social connections, and self-determination. The NCDA (2011) recognized the potential for career development to happen in the home setting, as for children of pre-school age, the role of family should be to reinforce non-biased views of work and the strong relationship between education and career success (Derman-Sparks, LeeKeenan, & Nimmo, 2015). They also noted the importance of positioning the home as a place of work. To provide concrete support for their views, the NCDA described approaches likely to support career development in K-6. They suggested that educators and parents/caregivers should work in partnership to develop a contiguous approach to career development, emphasizing the role of the classroom where positive, work-related habits are reinforced. Parents and teachers can work together to develop skills such as timeliness, effort and application, teamwork and collaboration, problem solving, creative thinking, and following directions as these are useful both at school and at home. The importance of supporting parents to understand the relationship between school subjects and future career choice was recognized, as was the need to promote a broad understanding of the role of work and its contribution to communities and society. The NCDA encouraged educators, beginning at the Kindergarten to Grade 6 level, to help students

increase their awareness of a diverse range of potential occupations open to them without restrictions or biases based on sex, race, ethnic heritage, age, sexual orientation, creed, or disability (National Career Development Association, 2011).

Outcomes of Career Development

In this section of the review, we explore different outcomes of career development. Defining intended outcomes is seen as a crucial component of effective career development policy and programing (Howlett et al., 2009).

Careers Education

Careers education is often used to describe two different fields, pedagogical activity and educational outcomes. Shepard and Mani (2014) described the necessity of career education being aimed at a student's stage of development and that a comprehensive career education program would typically include:

- self-awareness to help students identify personal attributes;
- opportunity awareness to involve students in investigating, exploring, and experiencing the world of work and various pathways within it;
- decision learning to enhance informed decision-making and planning; and
- transition planning to develop skills for students to effectively move into new situations.

Much earlier work published by Pelletier and Bujold (1984) also offered a developmental model of students' thinking surrounding career. In this model, students move through different phases described as exploration, crystallization, specification, and realization. Students begin by thinking about different career possibilities (exploration) and then learn more about their

own interests, goals, and abilities (crystallization) before narrowing their thinking about career choices (specification). Finally, students take concrete action to achieve those career ambitions (e.g., course choices, summer jobs). While there are clear weaknesses to the model (it implies a linear process rather than one that allows for iterations or different phases to proceed in parallel), the notion that career education must match the developmental stage of the student is one we find common to other models of career education, such as Shepard and Mani (2014), Stanbury (2005), and Law (1996).Careers education is often related to work experience and other forms of work-related learning (Business Innovation and Skills and Education Committees Sub-Committee on Education Skills and the Economy, 2016; Demontès, 2016). How people learn is also part of the overarching concept of careers education. Community interaction theory proposed that individuals career choices were determined by a series of interactions in the context of their local communities (Law, 1981). These transactions amounted to the relationships between the individual and their family, neighbourhood, peer group, ethnic group, and teachers at school. Community influences could be summarized under the following headings:

- expectations of family and community group;
- feedback from a variety of sources specifically about their suitability for various roles;
- support in reinforcing individuals;
- modeling or influence by example; and
- information about other people's work habits and patterns.

This theory was extended to become career learning theory (Law, 1996). This theory described how people's careers developed through time as a result of their experiences. This process of learning can be taught. The theory proposed that individuals develop a set of

competencies that can be drawn upon when appropriate, with the assumption that most people have the capacity to learn and develop such competencies and apply them when making career-related decisions and managing transitions. The competencies are categorized under four headings:

1. Sensing: Begins at a very early age and helps to establish a map through which future information can be interpreted. Thus, career education should commence in elementary school. Sensing is seen in terms of an informing and enabling process that helps individuals to form a sound basis on which to make all future career decisions.
2. Sifting: Involves using concepts to test one's construct of the world and can include a number of career education processes (e.g., work experience). The career education processes that underpin are ones of informing, advising, assessing, and feeding back, with interventions being more meaningful when students are able to personalize their learning.
3. Focusing: Can involve a number of career education processes including advising. For example, signposting to sources of information and experience which exposes the student to a range of other viewpoints and different options.
4. Understanding: Involves the essential need to review and reflect on an individuals own situation within an ever-changing society and economy. The guidance processes which facilitate this understanding are those of counseling and feedback. In school this may be through tutorial interventions or through in-depth guidance from trained practitioners. These processes would allow an individual to be challenged in a way which requires them to think through the implications of their view within a range of situations. This can then be translated into a decision and subsequent action. The guidance processes

which translate a decision into action are advising and, on occasion advocating. In a school setting this might take the form of career action planning or individual learning planning.

Law's sensing and sifting competencies, along with the exploration, crystallization, and specification phases of Pelletier and Bujold's (1984) model, suggest that young people have uncertainty surrounding their early thinking about career. Forner (2007) notes that this uncertainty is not necessarily bad and that, as young people develop and change, it is natural for their thinking about careers to change as well. Schools can play a vital role in guiding children's career thinking not only by advising and advocating, but also by determining if changes in career thinking are related to natural development changes or an inability to make decisions. This information should inform career action planning and individual learning planning.

Developing Career Competencies

The DOTS (Decisions, Opportunities, Transitions, Self) framework of career learning domains (Law & Watts, 1977) is a high-level description of broad learning outcomes that offers a useful way of exploring the competencies that career-related activities aim to develop. This section of our review explores how these areas of competence are discussed in the literature. Taking the DOTS framework as a starting point, this section of the literature review explores career concepts commonly used to describe the outcomes of career development, such as career readiness, career resilience, and career adaptability.

Law and Watts (1977) described *decision making* as a crucial element of a curriculum that helps young people to both understand the variety of ways in which decisions are made

and understand some of the influences and pressures they may experience when making decisions. Law and Watts stressed the importance for young people to learn to take responsibility toward personal factors, make a plan, and become increasingly independent. *Opportunity awareness* included learning about two broad areas. The first was to understand the world of work and how they might fit into it. For example through understanding:

- the general structure of the working world they are going to enter;
- the range of opportunities which exist within it;
- the demands that different parts of it may make upon them; and
- the rewards and satisfactions that these different parts can offer.

In the second broad area, opportunity awareness was also used to describe developing knowledge of realistic opportunities and "the combination of demands, offers and strategies which match (or at least do not mismatch) a particular individual's characteristics" (Law & Watts 1977, p. 1).

Transition was the process of making and managing changes. This definition is not, however, without contention. For some this is a process of making changes in work roles and for others it is a much broader concept, which involves making change related to life, learning, and work. Reis (1980) argued that "the term transition suggests both a change and a period during which the change is taking place" (p. 330). There are different types of transitions, which can be anticipated or unanticipated, welcome or unwelcome. Transitions can also take place within an organization or between organizations. Each type of transition affects individuals differently and requires different skills and attributes to manage. Voluntary or planned transitions occur when people's interests or opportunities change or when their skills develop and they may seek progression. The ability to manage career transitions relates to a

person's ability to make psychological adjustment. Schlossberg (1981) defined adaptation as a process during which an individual transitions from being totally preoccupied with the change to successfully integrating the transition into their life.

For some groups (e.g., those with special educational needs), adaptation can be particularly difficult. Families often face additional difficulties in making adjustments in their relationships with young people as they go through transitions to a more independent life. This move is also accompanied by difficulties for the young people themselves in disclosing and managing their special educational needs identity within a new context. Examples of other groups who experience specific issues with transition include members of minority and Indigenous groups and students in rural and isolated geographical settings (Robinson et al., 2018). Research in Canada that explored the experience of young, Indigenous people found that their ambitions were sometimes constrained by oppression, multiple mental and physical health issues, and poverty (Britten & Borgen, 2010). Britten and Borgen noted the importance of family, society, community, environment, and beliefs, and how career development was inseparable from these contextual connections. For young First Nations people, there were a number of enablers and inhibitors which impacted youths' ability to make and implement career aspirations. Notably, school was seen as both enabler and inhibitor. Most youth felt school was helpful in that it provided opportunities such as sport and being a team member, which helped with social networking. However, the research also revealed that school could be an inhibitor in that it was sometimes a place where both staff and the organization had low expectations and ambitions for the learners. Work experience (either paid or voluntary) was another important element in both developing occupational understanding and developing feelings of self-worth. However, work experience could also undermine confidence if adequate

training and support was not provided. Britten and Borgen outlined the importance of sensitivity toward the cultural and heritage context of Indigenous populations.

Self-awareness is a process where young people develop an understanding of themselves as individuals (self-concept) and their unique characteristics (Sutton et al., 2015). This self-awareness includes an understanding of personal strengths and limitations, needs, interests, motivators, and detractors. Sebastian et al. (2008) described the development of adolescents' self-concept, underlining two main sources of information that are used to build up a self-concept. An understanding of *what we are like* comes from *direct appraisal* due to the reactions that an individual has to experiences and reflections of how they see themselves seen by others. By early adolescence young people are beginning to compare themselves to others. Educating for self-awareness will naturally, therefore, require young people to develop a level of self-reflection and resilience.

Parental Involvement in Career Development

There are a number of theorists who we can draw on to understand parental engagement in children's career development. Bourdieu (1977) developed the concept of habitus that sets out the process by which our behaviours are determined by the underlying structures in society. Personal action is guided by our subconscious recognition of possibilities and is based on an unconscious calculation of the risks and probabilities associated with the outcomes of certain actions. Young people's aspirations will be shaped by their contexts. In terms of career development, this context could be that a young person is entering into the next stage of his career (education or employment) using knowledge and behaviours which are predetermined by their contexts. These could be geographically, economically or socially determined.

Roberts (1968) argued through his opportunity structure theory that sociological factors pre-determined occupational choices. Where we live, the qualifications we have, the state of the economy, our family background, our gender, and social factors determine what opportunities are open to us. Law (1981) proposed through his community interaction theory that individuals career choices were determined by a series of interactions in the context of their local communities. Community influences were, therefore, summarized under the following headings:

- expectations of family and community group;
- feedback from a variety of sources specifically about their suitability for various roles;
- support in reinforcing individuals;
- modelling or influence by example; and
- information about other people's work habits and patterns.

Social learning theory was first proposed by Bandura (1977), and offered that individuals learned from each other through a series of interactions, such as observation, imitation, and modeling. Bandura's theory showcases the relationship between individuals' innate abilities and their experiences. Krumboltz (1994) applied this theory to the context of career decision making and described three categories of influence on an individual's career decisions:

- genetic endowment and special abilities including race, gender, and physical attributes;
- environmental conditions and events such as an individuals' social, cultural and political context, economic factors, natural forces, and resources; and
- an individual's learning experiences.

Research in the UK found that many parents feel underconfident in supporting their children with career decision making (Barnes et al., 2020). This is especially concerning given that parents are the biggest influence on children's career decision-making (Let's Talk Science, 2014). The UK report (Barnes et al 2020) suggests that there are two ways of thinking about how parents are involved:

- through activities at home and in an institution, which provide psychological, financial, well-being or educational support, and structure; and
- through institutional based activities, such as communicating with teachers or career development practitioners or by attending events and activities.

In addition, some parents were seen as providing support for career development through providing practical support (e.g., writing applications or CV's), career-related modelling, and informational support based on their own experiences, verbal encouragement, and emotional support. Parental engagement and support were important in helping students develop:

- information seeking and research behaviours;
- self-efficacy, career decision making and efficacy;
- planning, goal setting and creating a sense of direction; and
- career adaptability, flexibility and employability skills.

Moore et al. (2021) noted that more research was needed to determine the types of activities that are most successful in engaging parents in their children's career decision-making and how such activities could be evaluated. The study found that parents often lack the confidence needed to have meaningful career conversations with their children, and the authors concluded that a framework of competencies for parents would support schools in developing

their parental engagement approaches. The team produced a framework of competencies for parents, but recommended that this be piloted and evaluated throughout their partner countries before using more widely.

Career Readiness

CERIC defined career readiness (also termed employment readiness) as a point in a person's development when they are ready to make a career decision and implement the outcomes of that decision in terms of their level of exploration, awareness of implications, and maturity. Their level of readiness will determine how ready they are to find, acquire, and keep an appropriate job, with little or no outside help, as well as to be able to manage transitions to new jobs (Canadian Council for Career Development, n.d.; CERIC, n.d.). CERIC highlighted that this process was accomplished when a person is able to move through the career readiness process independently, and a level of developmental maturity is reached.

Career readiness can be described as an outcome of career guidance interventions. Gysbers (2013) stated that individuals who were career ready have the competences required to plan for their futures. Gysbers understanding of career readiness is important as it recognized all possible transitions from post-secondary school and an understanding of how life roles and experience were interrelated with career. Career readiness is summarized as the point in an individual's development when they have: (a) developed career management skills (capability); and (b) are able to apply these repeatedly in a range of career related decisions and transitions (competence).

The concept of career readiness is well developed in the United States and has been enshrined in policy with the creation of the *Elementary and Secondary Education Act (ESEA).*

This legislation requires states to develop benchmark standards in English and Math. Many states have then gone on to develop career readiness assessments as part of the public examination system. McMurrer et al. (2013) have analyzed these career readiness assessments across 46 states and conclude that they typically comprise academic skills, employability skills, and technical skills. Likewise, Dupont's (1984) list of 10 career skills included academic (e.g., literacy and numeracy) and employability (e.g., finding, obtaining, and keeping jobs. Conley (2012) identified career readiness as when young people are able to succeed in their next steps without an additional or remedial input. Acknowledging that developing a measure of career readiness was difficult due to its individualized concept, Conley stressed how the readiness required to transition successfully was dependent on age, stage of development, and ability. Conley described four domains of career readiness:

- **key cognitive strategies:** These strategies were competences required to function in new environments such as developing hypotheses, problem solving, critical thinking and evaluation, organization and creating outputs in different formats;
- **key content knowledge:** This knowledge was the technical and content knowledge required to progress **into the next step;**
- **key learning skills and techniques:** These skills and techniques related to two areas of competence. The first was ownership of learning such as motivation, persistence, self-awareness and goal setting. The second was specific learning techniques such as time management and study skills; and
- **key transition knowledge and skills:** This area includes knowledge of options, financial capability, understanding the expectations of employers or education providers, and self-advocacy.

Career Resilience and Adaptability

Career resilience has been conceptualized as an individual's resistance to career disruptions in a less than optimal environment (London, 1993). The notion of career resilience came to prominence during the period of the post-industrial economy when the nature of work was rapidly changing, and individual's employment was precarious. The concept is based on psychology, which noted that stress was generated through internal characteristics and external forces. A more generic definition was proposed by Gordon (1995) who defined resilience as the "ability to thrive, mature and increase competence in the face of adverse circumstances" (p. 41). These definitions recognize career resilience as a complex phenomenon, which develops as a result of internal and external threats and responses (Fourie & Vanvuuren, 1998). There are a number of components to resilience including:

- the ability to adapt to changing circumstances;
- the ability to welcome change;
- the ability to embrace working with new people;
- self-confidence and a willingness to take risks (London, 1993)

Career adaptability has its basis within career construction theory, where by being adaptable to one's career circumstances an individual can achieve a high level of well-being. Savikas (2013) noted that career construction relied on an interplay between internal and external factors and results of people making sense of themselves in their own context. Individuals must construct a career which fits with their lives. Career adaptability assumes five valuable behaviours including orientation, exploration, establishment, management, and disengagement.

Career Development Frameworks

The previous section outlined the types of competences that young people need to be able to make and manage changes in their lives. This section explores the frameworks for career development. Not all of these frameworks provide explicit guidance on what children of elementary age should be able to do or know. The DOTS framework has some applicability, such as helping schools think about transition to secondary school, developing self-awareness, or general decision-making skills.

The Canadian Blueprint for Life/Work design (National Life/Work Centre, n.d.) was the outcome of a series of interlinked policy initiatives in the USA, Canada, and Australia. The document, commonly referred to as *the Blueprint* is a resource to support career development programing and provides a framework of career management skills that students and adults in Canada or the United States should develop. The framework spans from Kindergarten to adulthood and provides a common language to describe desirable career-related outcomes for all citizens. The Blueprint includes 11 competencies in three areas:

- *personal management*: includes building and maintaining a positive self-image; interacting positively and effectively with others; and changing and growing throughout one's life;
- *learning and work exploration:* involves being able to participate in life-long learning which is supportive of life and work goals and includes developing the ability to locate and effectively use career information; and understanding the relationship between work and society, and the economy; and

- *life and work building*: includes the ability to secure or create and maintain work; making career enhancing decisions; maintaining balanced life and work roles; understand the changing nature of life and work roles; and understand, engage in, and manage one's own career building process.

Other frameworks deemed useful to apply to elementary school-based career development include:

- The CDI Framework for Careers, Employability and Enterprise Education (Career Development Institute, 2020) has learning outcomes for 7 to 11-year-old's (Key Stage 2). These stem from three domains of learning: developing yourself through careers and employability and enterprise education; learning about careers and the world or work; and developing your career management, employability and enterprise skills.
- The European Career Management Skills Framework makes no specific reference to the age of individuals for whom the framework is applicable. The framework is organized into five areas of competence: Personal effectiveness; managing relationships; finding work and accessing learning; managing life and career; and understanding the world. Within each of these domains are criteria that enable the framework to be suitable for application to elementary school children.

It is possible to map these frameworks to the DOTS framework. Table 2 takes the outcomes from the Blueprint and maps them to the DOTS framework, illustrating the overlap between frameworks.

Table 2.

Mapping of Blueprint into DOTS Framework

DOTS element Decision-Making	DOTS element Opportunity Awareness	DOTS element Transition Learning	DOTS element Self-Awareness
Knowledge of different approaches to decision making Knowledge of influences on decision making Information handling skills The capacity to embrace change Ownership of learning such as motivation, persistence, self-awareness and goal setting Digital career literacy (7C's)	Knowledge of available options Numeracy and financial capability Understanding the expectations of employers or education providers The rewards associated with different options Understanding the relationship between work and society, and the economy	Organisational skills including time management and study skills. It can include the ability to work under pressure and to deadlines Critical thinking, evaluation and problem solving Creating outputs in different formats The ability to learn and adapt to changing circumstances The ability to embrace working with new people Self-confidence and a willingness to take risks Communication and interpersonal skills including the skills of negotiation Team working skills Valuing diversity and difference	Self-advocacy skills and maintaining a positive self-image Knowledge of personal strengths Knowledge of personal limitations Understanding of one's own needs Understanding personal motivators Understanding personal detractors Understanding personal detractors Self-reflection Understanding of the need to maintain balanced life and work roles

Career-Related Learning Outcomes

In this section of the literature review, we explore the broader career-related learning outcomes which educators are expected to develop. We review sets of learning outcomes

outlined in policy and curriculum documents across Canada, Australia, New Zealand, and England and map them to the competencies both implicit and explicit in the DOTS framework.

Canada

In Canada, the Council of Ministers for Education (CMEC) have produced an overarching framework for *early learning* and development to inform the development of educational provision in each province and territory. Early learning applies to programs intended for children from birth to age eight and includes:

- programs for children before they enter formal environments—such as schools, childcare, nursery schools and programs for children and families;
- Kindergarten programs within the school system (which may or may not be mandatory across jurisdictions) that serve as a bridge to formal schooling; and
- early primary school classrooms.

The framework sets out six principles that should underpin the development of educational interventions. These principles are an important lens through which programs of career learning should be developed. First, the child is integral to policy and program development, which highlights the importance of recognising the inherent characteristics of early learners as intelligent, capable, and curious. Children are unique, active learners, creative, curious, natural explorers, playful, competent, expressive, knowledgeable, joyful, and capable of complex thinking and rich in potential as contributors to society. Second, the family is central to a child's development, and parents play and important role in cultivating a love of learning and inspiring positive values and behaviours for life. Third, honouring the diversity of children and families is integral to equity and inclusion, and recognises that children from First Nation, Métis, and Inuit

(FNMI) families and Francophile children are more likely to succeed in education when their cultural, family, and community experiences and their first language is used to improve the quality of their learning. Fourth, the framework draws attention to the Convention on the Rights of the Child, which determines that children should experience conditions that ensure dignity, promote self-reliance, and facilitate active participation in the community. Inclusive programs ensure every child is able to participate and recognize his or her physical, intellectual, spiritual, and creative abilities and potential. Fifth, safe, healthy and engaging environments shape lifelong learning, development, behaviour, health, and wellbeing. This principle describes the importance of learning environments that recognise both the physical, sensory, and emotional needs of early years learners.

Learning through play capitalizes on children's natural curiosity and exuberance. This sixth principle recognises the importance of play in developing a range of core competencies, such as the joy of learning, social and cultural understandings, emotional maturity, self-advocacy, respect and responsiveness to other people's perspectives, flexible and divergent thinking, problem solving, and develop self-regulation skills. Children's play also provides the foundation for literacy and numeracy. Finally, the educator, or the extended family as educator, is central to supporting learning and development through responsive and caring relationships. This principle recognises the importance of the family as educators and creates an expectation that educators are mindful of the role of families and particularly those of First Nations, Métis, and Inuit extended families who are recognised as important early learning and development teachers. The principle requires educators to work closely with families to ensure that the curriculum addresses the specific cultural and linguistic needs of each child.

Australia

In Australia, the national curriculum makes clear the purpose of education to equip young Australians to live and work successfully in the twenty-first century. It also defines capability and says nothing about competence:

> Capability encompasses knowledge, skills, behaviours and dispositions. Students develop capability when they apply knowledge and skills confidently, effectively and appropriately in complex and changing circumstances, in their learning at school and in their lives outside school. (Australian Curriculum, n.d.)

The Australian national curriculum is set out as a set of general capabilities:

- Numeracy: encompasses the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations. It involves students recognising and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully.
- Literacy: includes the knowledge and skills students need to access, understand, analyse and evaluate information, make meaning, express thoughts and emotions, present ideas and opinions, interact with others and participate in activities at school and in their lives beyond school. Success in any learning area depends on being able to use the significant, identifiable, and distinctive literacy that is important for learning and is representative of the content of that learning area.
- Information and computer technology capability: the ability to use ICT for tasks associated with information access and management, information creation and presentation, problem-solving, decision-making, communication, creative expression, and empirical reasoning. This includes conducting research, creating multimedia

information products, analysing data, designing solutions to problems, controlling processes and devices, and supporting computation, while working independently and in collaboration with others.

- Critical and creative thinking: is productive, purposeful and intentional and is at the centre of effective learning. By applying a sequence of thinking skills, students develop an increasingly sophisticated understanding of the processes they can use whenever they encounter problems, unfamiliar information and new ideas. In addition, the progressive development of knowledge about thinking and the practice of using thinking strategies can increase students' motivation for, and management of, their own learning. They become more confident and autonomous problem-solvers and thinkers. Examples of critical thinking skills are interpreting, analysing, evaluating, explaining, sequencing, reasoning, comparing, questioning, inferring, hypothesising, appraising, testing and generalising. This includes combining parts to form something original, sifting and refining ideas to discover possibilities, constructing theories and objects, and acting on intuition. The products of creative endeavour can involve complex representations and images, investigations and performances, digital and computer-generated output, or occur as virtual reality.
- Personal and social capability: supports students in becoming creative and confident individuals. Young people who have personal and social capability will demonstrate a sense of self-worth, self-awareness and personal identity that enables them to manage their emotional, mental, spiritual and physical wellbeing. It helps students to "form and maintain healthy relationships" and prepares them "for their potential life roles as family, community and workforce members." Students with well-developed social and

emotional skills find it easier to manage themselves, relate to others, develop resilience and a sense of self-worth, resolve conflict, engage in teamwork and feel positive about themselves and the world around them. The development of personal and social capability is a foundation for learning and for citizenship.

- Ethical understanding: is demonstrated through the understanding of the nature of ethical concepts, values and character traits, and how reasoning can assist ethical judgement. Ethical understanding involves students building a strong personal and socially oriented ethical outlook that helps them to manage context, conflict and uncertainty, and to develop an awareness of the influence that their values and behaviour have on others. It does this through fostering the development of 'personal values and attributes such as honesty, resilience, empathy and respect for others', and the capacity to act with ethical integrity.
- Intercultural understanding: is an essential part of living with others and to become responsible local and global citizens, equipped through their education for living and working together in an interconnected world. It combines personal, interpersonal and social knowledge and skills the ability to value and view critically their own cultural perspectives and practices and those of others through their interactions with people, texts and contexts across the curriculum. (Australian Curriculum, n.d.)

New Zealand

In New Zealand, the national curriculum (Ministry of Education, 2007) recognises five areas of core competences required to live, learn, work, and contribute as active members of communities. These include:

- Thinking: described as “using creative, critical, and metacognitive processes to make sense of information, experiences, and ideas” (p. 12) and to make decisions, shape actions and demonstrate intellectual curiosity.
- Using language, symbols, and texts: which acknowledges that information is conveyed and understood in a range of formats and that young people need to be able to use words, symbols and numbers to communicate, in a range of contexts and using a variety of technologies.
- Managing self: is associated with self-motivation, and with students seeing themselves as capable learners. It is integral to self-assessment. The core competence recognises that students who are able to manage themselves are “enterprising, resourceful, reliable, and resilient” (p. 12). Self-managers establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently
- Relating to others: is about “interacting effectively with a diverse range of people in a variety of contexts” (p. 12). Someone who can relate effectively with others is able to listen actively, recognise different points of view, negotiate, and share ideas.

  > Students who relate well to others are open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to co-operate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking. (p. 12)

- Participating and contributing in communities: including family, cultural groups and school. This competency includes a capacity to contribute appropriately as a group

member, to make connections with others, and to create opportunities for others in the group. Students who exhibit this competence have a sense of belonging and the confidence to participate within new contexts. “They understand the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments” (p. 12). The curriculum in New Zealand sets out the countries vision for learners emerging from the education system as confident, connected, actively involved, life-long learners.

The United Kingdom

In England, every state-funded school must offer a curriculum that is balanced and broadly based, which:

- “promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society; and
- prepares pupils at the school for the opportunities, responsibilities and experiences of later life” (p. 5).

For primary (elementary) school aged children (5-11 years) schools are all required to provide personal, social, health, and economic education (PSHE).

Our review of national curriculum frameworks has demonstrated that there are two overarching approaches to determining the competences educators are required to teach children. In New Zealand and Australia, these are described as intended learning outcomes, whereas in Canada, though outcome-based, they are also described in visionary and aspirational terms and include both the characteristics of a child moving through education and the importance of recognising the contexts in which learning is taking place. Importantly, in

Canada all curriculum and educational policymaking is devolved to provincial and territorial level, which results in some variance in how educators are prepared for teaching in each of the provinces and territories (e.g., Kutsyuruba et al., 2014).

This section explored links between generic learning outcomes and how these intersected with career development domains of learning. To visualize this intersection, a summary of the identified domains of learning of the DOTs framework that make up career competencies are mapped to the national curriculum for our sample nations (Canada, New Zealand, Australia, and the UK) and is shown in Table 3.

Table 3: The DOTS Framework of Domains of Career Learning Mapped to Generic Learning Outcomes

Domain of career learning e	Canada (CMEC Framework for early learning and development)	United Kingdom (England)	Australia	New Zealand
Decision making. This includes developing:				
Knowledge of different approaches to decision making				Informed decision makers
Knowledge of influences on decision making				
Information handling skills		Acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language	Literacy, ICT	Active seekers, users, and creators of knowledge
The capacity to embrace change	Natural explorers		Personal and social capability	Resilient
Ownership of learning such as motivation, persistence, self-awareness and goal setting	Active learners, the joy of learning			Motivated and reliable, Life long learners
Digital career literacy (7C's)		Are responsible, competent, confident and creative users of information and communication technology.		
Opportunity awareness. This includes developing:				
Knowledge of available options	Knowledgeable			Participants in a range of life contexts

Numeracy and financial capability		The functions and uses of money, the importance and practice of budgeting, and managing risk		
Understanding the expectations of employers or education providers				
The rewards associated with different options				Enterprising and entrepreneurial
Understanding the relationship between work and society, and the economy				
Transition learning. This includes developing:				
Organisational skills including time management and study skills. It can include the ability to work under pressure and to deadlines				Resourceful
Critical thinking, evaluation and problem solving	Creative, curious, flexible and divergent thinking, problem solving	Critique, evaluate and test their ideas and products and the work of others	Critical and creative thinkers	Critical and creative thinkers
Creating outputs in different formats	Expressive,	Language and literacy		
The ability to learn and adapt to changing circumstances	Capable of complex thinking			Connected
The ability to embrace working with new people				Able to relate well to others
Self-confidence and a willingness to take risks				
Communication and interpersonal skills including the skills of negotiation		Competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.	Personal and social capability	Effective users of communication tools

Team working skills			Personal and social capability	Members of communities
Valuing diversity and difference	Social and cultural understandings	Religious education	Intercultural understanding	
Self-awareness. This includes developing:				
Self-advocacy skills and maintaining a positive self-image	Emotional maturity, self-advocacy			Actively involved
Knowledge of personal strengths				
Knowledge of personal limitations				
Understanding of one's own needs				
Understanding personal motivators				Confident
Understanding personal detractors				
Self-reflection	Self-regulation skills			
Understanding of the need to maintain balanced life and work roles				
Outcomes not linked to the DOTS framework				
	Respect and responsiveness to other people's perspectives	The roles played by public institutions and voluntary groups in society, and the ways in which citizens work together to improve their communities, including opportunities to participate in school-based activities		Contributors to the well-being of New Zealand – social, cultural, economic, and environmental
	Children who are playful, competent, joyful,			International citizens

	The important role that parents play in cultivating a love of learning and to inspire the values and behaviours for life			Connected to the land and environment
	Honouring the family, cultural, and community context in which career is enacted.			
	Recognise both the physical, sensory and emotional needs of early years learners.			
	Recognise the importance of the family as educators and creates an expectation that educators are mindful of the role of families			

Our analysis of the national curricula is important for two main reasons. First, it is not always either evident or explicit where the outcomes of career learning intersect with the general learning outcomes described in national curriculum frameworks, even though such outcomes are seen as important contributors to the overall development of the child. Second, the DOTS framework whilst useful, does not take in to account the context in which career development takes place. Unique contexts and connected learnings about culture, heritage, and community are prevalent in some nation's curriculum frameworks. This is an important omission from the DOTS framework and suggests its limited application for such a purpose.

Examining Career Development in Elementary Education

Gysbers et al. (1973) explored the processes and practices of career development in elementary schools and concluded that career development was an important component of a child's education. Proposing nine reasons for the inclusion of career development as part of the curriculum, they noted that exploring careers with elementary children:

- Helps them to develop a personal sense of present and future worth;
- Helps them to develop a feeling of place in their society;
- Helps them to see how adults achieve the place they have;
- Injects the elementary school into a meaningful and ongoing process
- Helps them to see the value and significance of all honest work;
- Helps them to develop enthusiasm about the whole prospect of work as a way of life;
- Helps counteract the physical and/ or psychological absence of male working role models upon attitudes towards work;

- Helps them to develop a concept of life as a reality extending through several inter-related and interdependent phases; and
- Is consistent with good learning theory.

Super et al. (1996) in discussing their developmental theory of career studied the childhood phase and noted that this was an important time in a person's career development. During this phase, children begin to think about the future, develop personal autonomy, a commitment to learning, and the competencies which will make them successful in the workplace. This process of growth reinforces their confidence and their ability to work collaboratively with others whilst developing a healthy competitive nature. Towards the end of this stage, they become more engaged in thinking about their long-term futures. Super et al. set out nine concepts within the childhood years of their career development model: curiosity; exploration; information; key figures; self-concept; interests; locus of control; time perspective; self-concept; and planning.

Investigating the role of career-related learning and career development in elementary schools has previously aimed to facilitate the development of appropriate theory, research, and practice of career development for young children (e.g., Porfeli et al., 2008; Watson & McMahon, 2004, 2008). Schools provide a rich context for promoting both academic and vocational learning. However, most research has concentrated on the secondary school (Shepard & Mani, 2014). We know that career development is a lifelong process, and students need time to benefit from career development instruction to fully prepare them for transitions in and out of high school (Gray, 2009).

Research has also explored the importance of the early years' experiences of children and the impact of these experiences on future career planning (e.g., Flouri & Panougia, 2012;

Magnuson & Starr, 2000). Magnuson and Starr (2000) described life-career development as a spiraling process, which begins in infancy, and noted that specific skills were necessary for effective career development and the development of such skills commences in the early phases of education. Adults were seen as being responsible for providing varied and frequent opportunities for students to access learning that nurtures career awareness, career exploration, and the development of life-career planning skills. Magnuson and Starr concluded that it was never too early to begin the process of career development as the early years were crucial in the formation of ideas and perceptions about self and the world.

A study conducted in Turkish primary schools (Nazli, 2007) with young people aged 9-12 years found that children exhibited Super et al.'s (1996) concepts (curiosity, exploration, information, key figures, self-concept, interests, locus of control, time perspective, self-concept, and planning) within the childhood phase of career development, and reported no significant differences between genders. However, the study sample group were not homogenous in their behaviours and, within this age group, the older children were more aware of sources of information, were more productive at research tasks, and were more influenced by key figures. This finding reinforces Super et al.'s theory that career development is a gradual and shifting process. Nazli's (2007) study concluded that its participants demonstrated self-awareness, associated themselves with professions, and were influenced by the views of their parents and other adults.

In contrast to Nazli, Bobo et al. (1998) found that there were differences in the way that boys and girls from Anglo, African American, or Hispanic groups viewed their career options, with boys tending to choose non-stereotypical roles. Wood and Kaszubowski's (2008) research agreed that differences towards career aspirations based on gender were present but they

also identified other differences. For example, boys demonstrated less curiosity than girls and boys required significant support to increase their levels of curiosity. Wood and Kaszubowski reported concerns about gender discrepancy and its potential impact on career development as they found a possible relationship between levels of academic motivation and progression and achievement.

Hutchinson et al. (2013) also examined the impact of gender on children's career development and found that children as young as three can name occupations that interest them. This is an important finding as De Botton and Colacci (2009) proposed that people spend the majority of their lives in occupations often chosen by their unthinking younger selves and research has suggested that young people are aware of work at a very young age and also start to gender stereotype work that is suitable for men and for women (Chambers et al., 2018; Trice & Rush, 1995). In Hutchinson et al.'s (2013) study, there was an observable tendency among girls to express aspirations aligned with nurturing, while boys often aspired to jobs linked to sports or hobbies and interests. The authors concluded that elementary schools should provide learning experiences that help children to think about what work is, where their own skills and interests lie, and how it was possible to imagine their working futures based on their own individual aptitudes and talents. They also note the importance of role models and the positive impact that exposing children to key people during their early education can have in challenging gender stereotypical career decision-making.

From a developmental perspective, there has been a realization that children must be exposed to and accrue a range of experiences that promote positive attitudes, beliefs, ability to envisage a future, decision-making, exploration, and ability to think about future careers (Hartung et al., 2008). These attitudes, beliefs, and competencies represent the core

dimensions of career adaptability (Savickas, 2013). Savickas' career adaptability model offers a blueprint for investigating, comprehending, and intervening to promote career adaptability through early childhood and throughout life, and includes four dimensions or developmental lines: career concern; career control; career curiosity; and career confidence.

Many developmental and contextual theorists have underscored childhood development as important within childhood career development highlighting awareness and understanding of self, knowing about the world of work, and engaging in problem-solving and decision-making (Cahill & Furey, 2017). In addition, there has been widespread and historical agreement on the importance of childhood in life-span development (e.g., Darling-Hammond et al., 2020; Ginzberg et al., 1951; Super, 1980). Career related learning in the early years has focussed on developing learning and social skills, understanding the concepts of lifelong learning, and applying this learning to life and work in the school and community (Kashefpakdel et al., 2018a). In addition, the role of parents as a potential influencer in the career development of young children has been explored (e.g., Keller & Whiston, 2008). However, it is only more recently that the role of educators as the earliest facilitators of career development have been examined more deeply (e.g., Kashefpakdel et al., 2018a, 2018b).

Research commissioned by the Careers and Enterprise Company in the UK (Kashefpakdel et al., 2018a) concluded that starting career education early was important as it could help young people overcome the lack of aspirations, which are associated by narrow horizons and a paucity of experiences and roles models relating to the world or work. Kashefpakdel et al. (2018b) defined career-related learning in primary schools as about helping "children to understand who they could become and helping them to develop a healthy sense of self that will enable them to reach their full potential." (P4) An important

recommendation emerging from this research was that career-related learning in elementary schools should not be targeted at particular group or groups (e.g., girls, disengaged learners, or high achievers), but should be offered to all students in elementary schools. The research findings also suggested that career-related learning should be integrated into all areas of the school and delivered as age-appropriate activities.

In 2018, one of the largest research projects ever undertaken to understand elementary school children's career aspirations took place in the UK (Chambers et al., 2018), with data collected from over 20,000 seven-year-old children. The research findings highlighted that, from an early age, children often have developed sophisticated ideas of what they want to be as an adult and that children often stereotype jobs according to gender, with subsequent career choices based on these stereotypical assumptions. In addition, children's career aspirations were significantly influenced by who they knew, such as their parents, friends of parents, and television and other media. Worryingly, less than 1% of children had heard about the jobs from people who have first-hand work experience, such as employers, having implications for those tasked with developing careers education in elementary schools. This message was reinforced by Moore and Hooley (2012) who noted the importance of finding opportunities to help young people develop their career related vocabulary to facilitate more advanced career conversations in later life stages. There was some evidence school systems are responding to these findings. A careers program in France called "Parcours Avenir" that starts in Grade 6 requires students to have visited a place of business and met with a professional in that business to discuss what it is like to work in that industry (Ministère de l'Education Nationale de la Jeunesse et des Sports, n.d.).

Career development work with early years and young grades of children has been undertaken by some Canadian researchers, most notably in the Canadian context through the work of Cahill and Furey (2017) who sought to identify gaps in developmental theory and practice for career development for pre-school to grade 3 students, their parents, educators, and the wider community. We know from Cahill and Furey's (2017) work that young children are interested in the chores and tasks of the work undertaken by their family members and children can express hopes and aspirations. Parents have the greatest influence on their children's self-confidence and self-esteem and educators have some understanding of career development as an age-appropriate, fluid, and organic process for young children and their role in facilitating this process. We also know that teachers engage in a variety of learning and playing activities that introduce and develop foundational concepts and skills, such as healthy habits, social and emotional skills development, and helping children to build their self-confidence, empathy, and team-work skills. Such concepts and skills are crucial for successful career development in later life-stages, but they are not usually undertaken through a *career development* lens by grade 4-6 teachers.

Despite the work that has been completed to date, key barriers to better career education in schools remain. These include: time, prioritization, and buy-in from school leaders; division of labour throughout schools; embedding career-related learning throughout the curriculum; working effectively with parents and caregivers; geography challenges; teachers' knowledge; networks and brokerage; and the tension between expanding horizons and whittling down options (Millard et al., 2019). Amidst this milieu, a growing body of research is examining what makes young children thrive in their early years at school (e.g., through their development of self-regulation, self-efficacy, confidence). However, we still know limited

information about teacher practices in this field and the necessity of addressing this knowledge gap has been identified in the literature (Cahill & Furey, 2017; Porfeli et al., 2008; Watson & McMahon, 2008). Schleicher (2018) emphasized that we need more elementary school teachers who help children imagine their future, understand the value of learning beyond knowledge acquisition, are designers of imaginative problem-based environments, scaffold problem inquiry, and nurture critical evaluation. Career-related learning is about helping children to understand who they could become and helping them to develop a healthy sense of self that will enable them to reach their full potential (Niles & Harris-Bowlsbey, 2016).

There is some older evidence from the French language literature that elementary school teachers are amenable to including career education in their practice (Dupont & Bédard, 1991). In their empirical study, they surveyed 114 primary teachers in Quebec and reported 88% of the respondents agreeing that elementary teachers should develop students' knowledge of the world of work. About half (53%) agreed they should help students develop positive attitudes towards work, but only 10% reported helping students understand the links between the world of school and the world of work. Later work by Pépin (2017) suggested that teachers may not fully engage in career or entrepreneurship education because it goes against the "school form" or traditional and common ways that classroom teaching occurs. There is also evidence that teachers engage in citizenship education in a manner that is unplanned and informal (Fillion et al., 2016) and it may be that career education is approached in the same way. If so, this may explain why elementary teachers in Dupont and Bédard's (1991) study reported valuing career education, but not explicitly engaging in it.

Contemporary Issues Regarding Career

The nature of work and life changes over time and impacts on how we conceptualize career. This change may be particularly important as the nature of work evolves, for example from the potential increased use of technology and home working in a post-COVID-19 world (e.g., Kelly, 2020; Shearmur, 2020), and the longer-term impact on careers (Abedin, 2020). Subsequently, it is important to consider contemporary issues that are influencing our understanding of career and how these might impact young children (Maggi, 2019).

One emerging issue is young people's attitudes to and awareness of environmental issues (Maggi, 2019). The rise in the visibility of individuals such as Greta Thunberg, the Swedish environmental activist, and organizations such as Extinction Rebellion (Extinction Rebellion, n.d.), an international movement which is attempting to halt mass extinction and minimize the risk of social collapse, have inspired young people to become proactive lobbyists. As yet, there is little empirical evidence that these social movements are affecting the way young people are thinking about career. However, Plant (2015) noted that whilst career guidance is traditionally seen as a vehicle of economic growth, there has been some focus on the long-term environmental impacts of solely thinking about career in economic terms. Plant proposed thinking about career through exploring issues of environmental sustainability and climate change and how career transects with these issues. Plant distinguished the influence of non-western cultures in this stance, citing work produced by Arulmani and Nag-Arulmani (2004) who explored career in the Indian sub-continent. As teachers respond to current issues in their classrooms, a focus on environmental sustainability seems inevitable in career-related practices (Maggi, 2019).

A further interesting phenomenon in which young people are potentially acting out through their career is the notion of “Woke." Woke or Woke Culture relates to a growing awareness of issues of social and racial justice. Whilst originating in the United States it has recently become a recognized internationally as a colloquial term for individuals who are awake to issues of social injustice, for example the Black Lives Matter movement. Research by Henley Business School (Walker & Fontinha, 2019) found that younger generations increasingly see their careers as an expression of their values and what matters most to them. When job hunting, 84% of study participants favour working for an employer which cares about its impact on society.

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