

Creating teachers as scholars: Meeting the challenges of 21C globalized education

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Abstract

As the 21C globalized world becomes increasingly complex in terms of its interconnections and the need to engage in multiple contexts simultaneously, there is a welcome resurgence of interest in the notion of citizenship and in intercultural education. The basis of this research was to address the apparent disjuncture between current professional learning practice for educators and the form of practice that is necessary to produce purposeful and visible 'glocal' 21C learning in classrooms. It explored the nature and implications of the 21C global education paradigm for both teachers and schools and constructed a networked improvement community of practice across six high schools in Denmark. The research design was intended as potentially representing a model 21C professional learning theory-in-practice. It adopted a phenomenological approach to examine the perceptions of the teachers who were experiencing the phenomenon. It found that participating teachers saw the 21C education paradigm almost exclusively in the cognitive domain. They saw citizenship in terms of skills and knowledge rather than being in the affective domain and being characterized as a set of dispositions. As most teachers had adopted a script-based teaching identity rather than a learning design identity, their practice was based in knowledge transmission practices rather than dialogic ones. The result was that at the beginning of the research, the opportunities for professional learning based conversations in the schools were minimal. To address this and to seek a sustainable theory in practice, the research employed the Effective lifelong Learning Inventory (ELLI) learning dimensions as a language to bridge the divide between the teaching and citizenship paradigms. It presents qualitative data that illuminates the effect that the project had in helping teachers to understand their classrooms as living communities in which they could simultaneously teach and model citizenship and engage in professional dialogue across the network to better develop their practice. Importantly, it highlights the challenge of global citizenship education; it recommends a theory in practice for schools to adopt in order to create in classrooms and in staffrooms, communities that model - not preach - fluid forms of enquiry, collaboration, and sense making of the type that is desired and required of citizens on a global community level.

Student declaration

"I Adam Usher declare that the PhD thesis entitled Creating teachers as scholars: Meeting the challenges of 21C globalized education is no more than 100,000 words in length including quotes and exclusive of tables, figures, references and bibliography. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work."

Adam Sean Usher

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CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 Introduction

Facing many future challenges, humans the world over are increasingly viewing education as an indispensable asset for attaining the ideals of peace, freedom and social justice (Delors, 1996). The current context in which education is situated represents a nexus of globalization and citizenship (Hansen, 2011), such is the interdependence of international economic, social and political systems, fueled by the force of globalization. There are pressures upon education systems globally to improve their outcomes by adopting standards-based education reform. For example, Denmark has developed national targets for education, articulated in the National Reform Programme, 2011, which works in tandem with the Danish globalization strategy. Australian reforms include the Smarter Schools National Partnerships and the education imperatives set out in the *Australia in the Asian Century* white paper. The United States (US) has the No Child Left Behind reforms and a program of simultaneous pressure and support has been adopted in the United Kingdom (UK). To meet the challenges of these international directives, questions arise not about the significance of educational change and practice, or its importance in dealing with the emergent global social and political challenges, but around how teachers actually achieve this in practice and how schools and school systems support them through effective professional learning.

Growing demands are being placed on teachers and teacher educator practice. In addition, a heightened culture of accountability is evident through standardized testing and national and international high-level goals pertaining to twenty-first century (21C) skills, global citizenship and interdependence. This has meant that a greater emphasis is being placed on generating professional knowledge and learning, and teaching practices that can have a practical impact on student achievement. This poses significant challenges for educational institutions and educators to scaffold and model 21C skills and the behaviours of global citizens and educators. The emergence of 21C global demands highlight the importance of building the capacity of teachers

and teacher educators at both schools and universities. This is needed to achieve the high-level national and international goals pertaining to positive social equity and economic outcomes, developing people across all socio-economic and cultural backgrounds as *global* lifelong learners.

This study's dual premise is first, that teachers, as learners, need to consciously 'become' global citizens and global learners before they can develop students; and second, that all educators, irrespective of their teaching discipline, can and should contribute to students' development as global learners and citizens.

Typically, programs and organizations aimed at supporting schools to develop students as learners and global citizens do so most visibly through school exchange programs, as well as through curriculum innovation, pedagogical techniques and globally-focused teaching materials. In Denmark, the Global Schools Network, supported by a network of non-government organizations (NGOs), is a project that works to construct methodologies and strategies to support high schools in integrating a global perspective in everyday teaching and school life. In the development of learning programs, Global Schools Network schools work closely with international schools, universities and organizations to secure a challenging and involving education that encourages the formation of young global citizens. Similarly, in Australia, the Building Relationships through Intercultural Dialogue and Growing Engagement (BRIDGE) Program sponsored by the Asia Education Foundation (AEF), the Asia Society in the US, and the DFID North-South partnerships organization in the UK, adopt similar practices.

The extent to which global learning, knowledge exchange and student/teacher exchange programs in schools contribute to the achievement of these goals, however, remains difficult to determine or to quantify due to two major factors. First, it is difficult to define the characteristics of a global citizen and identify its *learning* characteristics. Existing practice in the field suggests that global education is a combination of school-school exchanges; discrete units in history or geography

curricula; and teacher professional learning to support these activities. The prevailing theory and practice accepts global citizenship and global education as *ideal types* rather than as characterizations of a specific learning element or elements.

The second factor, which stems directly from the first, is the associated difficulty of measuring and comparing the contribution of global education programs to student outcomes with that from non-global education contexts. That is, schools face difficulties in demonstrating the positive impact of global education as a learning outcome, rather than a service outcome, and how to promote the contribution of teachers and program leaders from across the curriculum against a single outcome set. Both factors have created difficulties for schools in building and implementing professional learning programs and quality assurance structures across school contexts and diverse disciplines.

Further, these characteristic practices have been associated, causally, with a familiar set of challenges in schools. That is, the view that a reliance on teachers of particular disciplines or teachers with an inclination to be involved with different forms of exchanges and/or global social action activities engender a feeling of exclusion from within schools and a division amongst teaching staff. There is a feeling, too, that the practices of schools that promote global learning have not fully capitalized on the potential opportunities that a multi-dimensional, whole-school approach would afford. Opportunities might include providing a vehicle to counter the perception of a narrowing curriculum, to break down the disciplinal silos and to promote collegiality and engaging professional learning dialogue across all disciplines. At universities, teacher education programs are among the least internationally-orientated activities and most prospective teachers do not take courses that focus on international subjects. This highlights the long-term difficulties in the field of global education.

The key to the realization of whole-school values is achieving a common recognition of global education as a learning form and support it through professional learning. This study aims to identify a common meta-language with which educators can

engage, sustainably, to create the types of collaborative professional learning forms that will ultimately better prepare teachers and students as 21C global learners and citizens.

1.2 Problem statement

Historically, education has been reactive to perceived contemporary economic, political and social imperatives. At key stages in history, education structures, curriculum and teaching practices have mirrored major economic, social or political change. For example, the space race led to significant investment in science curriculum and pedagogies, the civil rights movement in the US brought about curriculum and structural transformation of education policy and practice, and Australia's economic and diplomatic realignment with Asia led to the Asian languages priorities within the National Asian Languages and Studies in Schools Program (NALSSP). Consequently, to mirror the impact of rapid globalization, a shift in education policy and practice should be placed within this context. Zhao (2009, p. 159) argued that what he termed the 'death of distance', led us to "enter a new era of human history and one in which we cannot be certain of what specific talents, knowledge and skills will be of value [and] to meet these challenges we need to transform our thinking about education". The implication here is that we must think globally in terms of what knowledge and skills our children will need so that they can exercise their natural rights, regardless of whether they are in rural Shaanxi province or metropolitan Sydney.

Research, however, demonstrates that teaching practice has not kept pace with 21C technologies. A study of teachers in 23 countries in North America, Europe, Asia, Latin America, and Africa found that the three most common pedagogical practices were having students fill out worksheets, work at the same pace and sequence, and answer tests (Pelgrum, Plomp, and Law 2007). ICT was rarely used and when it was, the applications used most often were general office software, followed by tutorial or drill practice software. Therefore, the same level of learning was occurring but through different media. The creation of new learning through new forms of ICT is not yet prevalent. However, this is not to say that education has remained unchanged in

response to globalization. Indeed, as stated, education policy globally has experienced significant change through the 'death of distance' over the past 30 years. Yet, such policies have not succeeded globally in closing the achievement gap that exists across school contexts.

Globalization affords us both opportunities and challenges in terms of creating curricula that scaffolds educators and students to:

become more aware of the global nature of societal issues, to care about people in distant places, to understand the nature of economic integration, to appreciate the interconnectedness and interdependence of peoples, to respect and protect cultural diversity, to fight for social justice for all and to protect the planet for all human beings (Zhao 2009, p. 175).

In line with this, education policy-makers internationally have rightly responded with an increasing focus on education for global citizenship. In Denmark, a 2006 publication, *Progress, renewal and development: Strategy for Denmark in the global economy*, (Danish Government, 2006) outlined the country's aim to become a leading knowledge society with strong competitiveness and cohesion. Education, lifelong skills upgrading, and research and innovation at the highest international level were considered crucial to achieving this aim. In Australia, policy documents such as the Melbourne Declaration (2008), the Department of Education and Early Childhood Development (DEECD) Blueprint for Government Schools (2003), and the National Asian Languages and Studies in Schools Program (NALSSP) clearly enunciate the need for students to develop as 21C learners. There is, then, clear policy intent to address the imperatives of 21C globalization in Denmark and Australia, along with other nations around the world. At issue, though, is the form that practice should take in schools and the ability of teachers and teacher educators, schools and universities, to enact authentic global professional learning and teaching practices. Furthermore, can global education goals extend beyond the existing measurements of literacy, numeracy and knowledge of science in classrooms to demonstrate truly global learning practices in action?

1.3 Research questions

This study was guided by the following research questions:

1. How do educators understand the theory and practice of the 21C education paradigm?
2. How do educators communicate and engage in 21C professional learning and practice?
3. How is scholarly 21C teaching and learning practice created and supported?

1.4 Nature of the study

A mixed methods research approach was employed in this study, guided by the theoretical perspectives of globalization, citizenship, lifelong learning, and the scholarship of teaching and learning (SoTL). A multistage hermeneutic process was used to enquire about the participating teachers. This method, informed by the work of Tichen and colleagues (Edwards & Tichen, 2003; Tichen, 2000; Tichen & McIntyre, 1993) facilitated a systematic exploration of teachers' interpretations and constructs, relating to global teaching and learning practice, which were then layered with the researcher's own understandings, interpretations and constructs. Specifically, the first stage of this study consisted of eliciting the teachers' pre-understanding of the 21C global education paradigm through an online questionnaire; the second was to explore and validate that understanding through a focus group; and the third was to abstract and synthesize the emergent themes and develop these in a workshop format to illuminate future practice.

A critical element of this study is that it was stepped and based on transparent competences. Its aim was to first understand how teachers understood the 21C education paradigm and themselves as global citizens, then to work with teachers to develop their own 'consciousness' as global citizens and 21C learners and then, most importantly, as global educators. A foundational assumption was that unless teachers possess global citizenship and 21C learning as meta-competences, students will not be effectively scaffolded to acquire them. Current research on effective teacher practices for global education (Walker, 2006; Singh, 2011; Townsend, 1999) does not discuss the

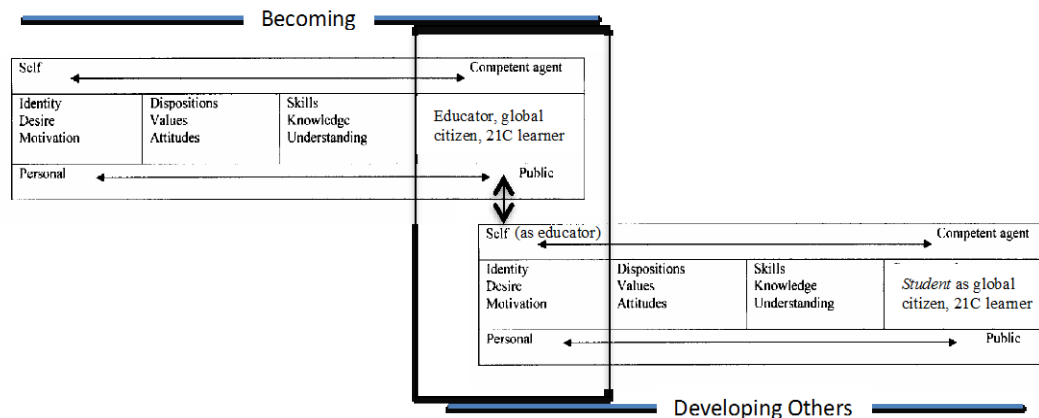
connection between 'becoming' a global citizen as a determining element to being able to act as a 'developing' agent. Nor does the research around collaborative learning (Vygotsky, 1997; Gokhale, 1995) encapsulate the global dimension in its scope.

Ruth Deakin Crick's work on meta-competence highlights the interface between the holistic conception of the person (student) and the demands of the real (professional) world. This is of critical importance to students developing attitudes, skills, and dispositions that will enable them to succeed in the 21C context (Deakin Crick, 2007). The challenge, as suggested by Deakin Crick, is not so much choosing which competencies, or whether particular learning should serve an economic or social goal, but in the design of experiences, assessment, and evaluation systems *for, as and of* learning, across all disciplines. These do justice to both the students' personal learning identity and dispositions (Deakin Crick, 2007).

The critical value of 21C global education is its facilitation of students' movement between reflection on themselves as people and learners and on their place in the interdependent 21C global community. It is this movement that develops students' meta-cognition and a conscious understanding of one's own learning process as critical for learning across multiple workplaces and in different fields, consistent with the 21C paradigm.

This study was guided by the notion of meta-competence but transferred the primary context from being concerned with student learning to being concerned with the professional learning of the teacher and the forms this can effectively take. It adds to the literature focused on teaching and learning for 21C global citizenship by exploring the link between the meta-competence of the teacher to create desirable outcomes and the professional learning that is required for themselves to *become* 21C global citizens. The '*becoming*' phase, then, is professional learning that scaffolds teachers to explore global citizenship and 21C learning. This study also adds to the existing literature by exploring how teachers create and transfer new knowledge, practices and understandings. The '*developing others*' phase scaffolds teacher collaboration for the

purpose of developing learning, curricula, and structures that will directly support student learning. Figure 1 is an adaptation of Deakin Crick’s metacompetence model. It indicates the importance of teachers ‘becoming’ global citizens and learners if they are to successfully develop students as global citizens.



Source: Adapted from Deakin Crick’s model, (2004)

Figure 1: The project meta-competency model

1.5 Purpose of the study

The core purpose of this study has been to address the disjuncture between current professional learning practice for educators and the form of practice that is necessary to produce ‘glocal’ (simultaneous global and local) 21C learning and skills acquisition outcomes across primary, secondary and tertiary sectors. It focused on exploring the nature and implications of the emergent 21C global education paradigm for both educators and educational institutions and identifying a set of working principles that represent an effective model for 21C professional learning theory-in-practice. That is, the notion of glocalization in the context of this research has been used to point to a strategy involving a reform of the different aspects of globalization as they relate to education theory and practice. The goal was both to establish a link between the benefits of the global dimension – in terms of education, technology and information – and local realities, while, at the same time, establishing a framework for professional experiential learning and scholarship.

Specifically, the purpose of the research was twofold: (a) to understand how educators understand their practice in terms of the 21C global education paradigm; and (b) to identify a theory in action to best achieve the high-level goals as articulated by the Danish and Australian national governments, as well as bodies such as the Organisation for Economic Co-Operation and Development (OECD) and United Nations Educational, Scientific and Cultural Organisation (UNESCO). The Danish Global Schools Network of 12 senior secondary schools provided a key source of participants for this study.

1.6 Theoretical framework

1.6.1 Globalization theory

The phenomenon of globalization, dating back to the age of discovery, has been rooted in technological advances that have impacted on the way that individuals and societies operate. Historically, new practices, literacies and technologies have emerged and have altered social and work practices both locally and globally, demanding new routines, learning forms and skills. What has also been constant is the differing extent to which groups within societies are able to successfully adapt to change. While globalization has been a constant phenomenon over centuries and the issues of social equity have existed for that long, the pace of this phenomenon has increased dramatically with the advancements in ICTs. Now we must talk about the emergence of new paradigms and the need to develop new forms of practices in response.

The structure of the 21C global economy today looks very different to that at the beginning of the 20th century, which means that social, political and educational priorities have also changed. The economies of developed and many developing countries are now based more on the manufacture and delivery of information products and services than on the manufacture of material goods. Furthermore, many aspects of the manufacturing of material goods are now strongly dependent on innovative uses of technologies. From the beginning of the 21st century we have witnessed significant social trends, with people accessing, using, and creating

information and knowledge in a very different way to those in previous decades, again largely due to advances in ICTs.

1.6.2 Lifelong learning theory or the theory of meta-competence

The concept of lifelong learning as defined by the OECD is to create a society of individuals who are motivated to continue learning throughout their lives – both formally and informally (OECD, 1996). People can be involved in lifelong learning in different ways. Lifelong learning encompasses both formal and informal types of education and training. A person who attends a parenting skills course run by a community provider is as much a lifelong learner as a full-time post-graduate student undertaking university research. Lifelong learning also includes work-based training that does not necessarily lead to formal qualifications. The key factor in defining a lifelong learner is not the type of education or training in which they are involved but the personal characteristics that lead to such involvement. Lifelong learners must have the motivation and capacity to learn in any type of setting (Watson, 2003).

1.6.3 Professional (global) learning identity

Much of the recent literature on teacher education highlights the importance of constructing a professional teacher identity through identity-in-discourse and identity-in-practice (see, for example Varghese et al., 2005). The importance of developing the self as a teacher has become central also to the development of a pre-service teacher's professional identity (Chong, Ling & Chuan, 2011; Danielewicz, 2001; Schempp et al., 1999), and has major implications for teacher educators and pre-service teacher practicum design (Trent, 2010).

What is apparent in this literature, however, is that the process of constructing pre-service teachers' identity as learners within the context of pre-service teacher education is widely assumed rather than being treated as a discrete area of a teacher's identity to be explicitly developed. Significantly, this is true also in the domain of practicing teachers. The teacher's identity as a learner represents an important area for investigation. The extent to which teachers are able to use pedagogical knowledge and

effectively develop their self as teacher in the classroom depends on the extent to which they have internalized learning as a set of positive values and dispositions; that is, the extent to which they have developed a learning identity of their own. As this study draws a strong connection between effective teaching and teachers' conscious learning identity, positive learning attitudes and dispositions (Deakin Crick, 2010) therefore are treated as being integral to global citizenship.

1.6.4 Citizenship as a civic competence

Active citizenship is defined within the context of the Centre for Research on Education and Lifelong Learning (CRELL) Active Citizenship for Democracy project (Hoskins et al, 2006) and its European network as: "Participation in civil society, community and/or political life, characterized by mutual respect and non-violence and in accordance with human rights and democracy".

Hoskins and Crick (2010, p.12) rightly state that active citizenship:

Must comprise not only the development of intercultural understanding [the affective level], but also the acquisition of operational competence [the cognitive level] – and both are best gained through practice and experience.

This is important as it articulates a real connection between the lifelong learning context and the citizenship context. This study focuses beyond the rights and responsibilities discourse on civics and citizenship to a discourse on affective elements (people's attitudes, values and behaviours) that determine their beliefs, understandings and actions as citizens, locally and globally.

1.6.5 Scholarship of teaching and learning

The practice of scholarship develops within a community. A community of scholars is viewed within this study as being the embodiment of the European Commission's definition of active citizenship. Communication is central to the idea of community and it is the medium for scrutiny, debate and learning to take place. Aligned with this is our belief that improving teaching practice to improve student learning is based on

reflective and collaborative processes. Effective scaffolding of scholarship amongst educators involves the provision of opportunities to focus, reflect and evaluate practice through communication. This occurs within a climate of challenge to old ways and support for new ways of providing learning opportunities for students.

Boyer, (1990) argues that we should let go of the tired old research versus teaching argument and focus on the idea that scholarship exists in all aspects of our academic work. He suggested there are four separate, but overlapping areas of scholarship. These are:

- (a) the scholarship of discovery, close to the old idea of research;
- (b) the scholarship of integration, which involves making connections across the disciplines and placing the specialties in larger context;
- (c) the scholarship of application, which goes beyond the application of research and develops a vital interaction and so informs the other; and
- (d) the scholarship of teaching, which both educates and entices future scholars by communicating the beauty and enlightenment at the heart of significant knowledge. (Boyer, 1990)

Underpinning the SoTL is the belief that what constitutes effective teaching needs to be better understood, more open to scrutiny and better communicated (Boyer, 1990, Ramsden, 1995). For this to happen, university teachers must learn how to adopt a scholarly approach to teaching and how to collect and present rigorous evidence of their effectiveness as teachers. This involves reflection, inquiry, evaluation, documentation and communication. Scholarship is based on research into teaching and learning, critical reflection on practice, and is open to investigation by colleagues.

1.7 Operational definitions

A survey of the stated definitions of global skills and their imperatives as they appear on the majority of global education program websites, reveals a common emphasis on the cognitive learning domain. This highlights a primary focus on programs that

involve elements such as knowing, explaining and being able to, rather than on 21C global *learning* outcomes in the affective domain. For example, the goals of the Danish Global Schools Network centred on students being able to place themselves in an interconnected world; enter in constructive dialogue; deal with cultural differences; connect knowledge and praxis; use innovative ways in dealing with global challenges; interact on local, national and global levels.

These goals, broadly representative of similar programs, are not sufficiently sharp in themselves to support common understanding or measures of effectiveness. Importantly, nor do they deal with the essence of global citizenship, which, for the purposes of this study, falls within the affective domain: curiosity, growth orientation, disposition towards making meaning, creativity. These dispositions are the elements of student learning that are critical to the development of a global meta-competency. To focus exclusively on cognitive outcomes limits the capacity and collective imaginations of curriculum designers to develop bespoke learning. Most important, though, is that cognitively-focused outcomes limit the capacity and collective imaginations of teachers as professional learners, and as professional learning leaders and scholars.

Rather than attempt a grand definition to address this issue, this study has attempted a characterization of global learning primarily in terms of positive learning axioms from which its characteristic style, structures, and negations follow. The proliferation of different types of global learning curricula and student experiences that are professed to constitute the phenomena of teaching for global citizenship, impede the understanding of core global learning. The structures and curricula that may form to constitute global learning are infinite. It is thus unhelpful to attempt to define the learning in terms of structures; they become a meaningless infinity. What is needed, rather, is the identification of a unique learning element that transcends disciplines, vocations and prescriptive pedagogical forms. Critically, this element would enable both development and measurement of global education and fill an untapped research area that exists around the achievement of student learning outcomes and the impact

of those outcomes on future dispositions and a citizenship 'worldview'.

Definitions that primarily view global teaching and learning in terms of curriculum and/or situated activities contribute to this conundrum. A recent description of global citizenship education as being a "a form of civic learning that involves students' active participation in projects that address global issues of a social, political, economic, or environmental nature" (Green, 2012, p. 247) perpetuates this conundrum. It reinforces the existence of an archetypal global curriculum design or essential pedagogy with relevant features without providing unique global learning outcomes. Such outcomes would be measurable across disciplinary contexts as much inside the classroom as situated globally. Instead, at least implicitly, Green encourages learning value to be viewed through a single disciplinary and/or activity lens. This has the effect of unnecessarily limiting the development and measurement of pedagogical creativity and broader 21C lifelong learning outcomes. Deakin Crick's meta-competence representation, as shown in Figure 1, only measures the cognitive quarter rather than the whole learning continuum.

As an *ideal type*, the attempt to define global learning, much less to measure it, is to perform a linguistic contortion. To define global learning is to attempt to account for the infinite number of skills and experiential contexts, which, ultimately, only render the definition itself meaningless for practical purposes. The term ideal type refers to the status acquired by any generic concept, which is made central to an investigation of processes and events concerning human beings (Weber, 1964). Global learning, in this case, is the generic concept. By using Burger's logic, accepting global learning as an ideal type is problematic as "before human consciousness acts upon the world to derive the meaning and values, which form the fabric of experimental reality, it consists of a 'meaningless infinity' of phenomena" (Weber as cited in Burger, 1976, p. 80). The argument follows that to perceive or know anything at all, the mind needs a filter capable of drastically editing this infinity, much in the same way as a camera needs a lens before it will photograph anything recognizable (Griffin, 1993). Global learning is in need of a camera lens to make it recognizable and thus measurable. The

contention of this study is that that lens in global learning contexts should be centred on Deakin Crick's notion of meta-competency in the form of a *test* rather than a *definition*.

1.8 Assumptions

This study has assumed that the teachers involved in this project have responded to the questions contained in the online questionnaire with honesty. It is further assumed that the subsequent opinions and experiences proffered face-to-face in the focus group and workshops were given honestly and without agenda.

1.9 Contribution to knowledge

Critically, this research contributes to the existing bodies of work of Hargreaves (2007, 2008), Townsend (1997), Townsend and Bates, 2007), Caldwell (2006), Gardner (2009) and Morrell and Noguera (2011), reflecting on contemporary practice globally and emphasizing historical and contemporary trends in education, as well as identifying future imperatives. By creating and evaluating the proposed 'glocal' practice (as opposed to existing global or local practices) by connecting teacher educators, teachers and pre-service teachers with each other and across three contexts, it builds upon the existing localized micro collaborative models that are prevalent in single districts and/or national contexts and the macro global education trends and practices and existing school-school partnership models. Significantly, then, this research contributes by making a connection between micro and the macro collaborative practice and evaluating a new glocal practice.

Research (Komives et al., 2006) suggests that the growth of the global knowledge-based economy and the swift advance of ICTs have led to significant change in terms of how people access and understand information and how students in very different contexts learn. However, at the same time, scholars argue, schools and education systems have not kept pace with these developments. This research contributes the perspectives of teachers and teacher educators across three national contexts about this assertion on their contemporary practice and their views on forward steps, both

locally and globally. It also contributes a theory of practice that fits with the development of new student leadership models, both at school and university levels.

The theory in practice proposed in this research represents a unique collaborative form in terms of it being both local and global in nature. Collaborative learning models exist within local, state, national and international contexts, as do models that connect teachers with teacher educators. However this model connects teachers, teacher educators and pre-service students across both local and global contexts, thus being able to contribute truly global understanding. By connecting teacher educators, teachers and pre-service teachers globally, this research connects the existing research on micro collaborative models prevalent in single country contexts with the global model employed in this research.

This research also contributes to the body of scholarship that deals with the existence of 21C education in terms of the skills and forms of learning and practice that school leavers and university graduates will need to operate successfully in a significantly changed and changing global society. For example, in the US, the Partnership for 21st Century Skills (P21) developed the P21 Framework for Learning (Trilling & Fadel, 2009) to help educators understand the outcomes that students need to become effective citizens and workers in the 21st century but it does so without a holistic narrative which outlines teaching and learning approaches needed to reach those outcomes.

This research also contributes to the body of scholarship on the nature and practice of global education. Through significant changes in information technology and social networking, people have become global citizens without having to physically travel the globe. This research contributes to the contemporary understanding of the importance of teaching students about global interdependence and evaluates a theory in practice designed to support experiential global learning.

1.10 Significance of the study

Research in Australia and the US (Maloney & Konza, 2011) suggests that schools are vulnerable to isolation in practice and struggle to access the type of professional learning forms (research, theory and/or practice) that support schools to develop customized approaches to meet the needs of their own unique student populations. School leaders and teachers, unlike the elements that underpin globalization, do not have ready access to structures and personnel that support the dissemination of new ideas and practices that can be coopted to produce appropriate localized practices. Schools, rather, appear to be reliant on standardized, one-size-fits-all state or district whole school improvement models and/or resources. The extent to which they are realistically able to achieve any significant level of design and implementation of bespoke experiential learning practices, then, is low. This engenders little sustainable change, innovation or success in meeting the contemporary challenges, let alone the significant 21C challenges. The significance of this research, then, is in terms of contributing to models that have failed to change outcomes over the past 30 years (Morrell & Noguera, 2011).

It is significant that this research will serve to crystallize pedagogical implications and imperatives for teacher educators, teachers and pre-service teachers. It will add to the growing body of evidence that points to a need to create more effective support structures to help schools implement bespoke approaches to learning and teaching. As Morrell and Noguera (2011) suggest, deans, professors, researchers and teacher educators must recognize that while there has been a significant body of work done that increases the knowledge base around what effective teaching and learning looks like, they have fallen short in their efforts to translate this knowledge into policy and practice. That is, they have not armed schools with the necessary social and institutional support required to translate this into effective localized practice to fit unique school populations. The approach of this research has been to draw upon a tertiary model and create a mechanism for more scholarly exchange at a teacher, pre-service teacher and academic level. This will facilitate faster circulation and dissemination of research results and thus provides significant impetus for innovation that does not occur in isolation.

This research argues that the collaborative, democratic and glocal nature of the proposed theory in practice represents the *sine qua non* of the 21C paradigm. Its significance is that it will, at once, enact the principles of the new paradigm in its operation, as well as facilitate and promote effective teaching and learning of measurable 21C skills, such as collaborative critical thinking, problem solving, ICT literacy and decision-making. It is significant, also, that this research directly responds to national and international imperatives surrounding the need for 21C global collaboration in compulsory education, as articulated in: UNESCO EFA Goal 6 (UNESCO, 2000); the Australian National Statement for Engaging Young Australians with Asia in Australian Schools (2006); the DEECD Education for Global and Multicultural Citizenship: A Strategy for Victorian Government Schools (2009-2013); and the Melbourne Declaration (2008).

1.11 Summary

In this chapter, I have introduced the educational challenges that individual societies and the larger global community currently face. I have identified and described education responses from different parts of the globe and highlighted their similarity. Further to this, I have outlined the difficulties associated with measuring the impact of such approaches with any certainty or sense of purpose. Thus, I have presented the central problem of global citizenship education, which is its overwhelming characterization as a cognitive notion solely in the domain of developing knowledge and skills, rather than focused on the generative affective dimensions, attitudes, values and dispositions that frame a person's worldview. This chapter has also identified a theoretical framework and its key elements, and articulated three research questions. These questions were designed to elicit qualitative data to determine how educators understand their global education practice. This could be used to develop a theory-in-action to best achieve the long-stated goals associated with global citizenship education.

In the following chapter, I review the existing literature that deals with this challenge. In particular, I identify and explain four key elements: globalization; citizenship; the concept of social and economic success; and the notion of glocalization. I locate the challenges in teacher practice and global citizenship education initiatives and place these within the broader notion of 21C holistic education. This calls for a greater emphasis on developing and measuring teacher learner identities as a means of dealing with the challenges. Lastly, I review the literature that deals with the importance of teaching and learning competences, developing teachers' global meta-competence and creating a shared language for the glocal educator.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review provides an understanding of the nature and implications of globalization and explores the notion of glocalization: as the simultaneous and conscious view of life through local and global lenses. It examines interpretations of the nature of globalization and of citizenship through cognitive and affective lenses. This review also locates and identifies the challenges and responses of educators and policy-makers, globally, to the forces of globalization. It presents an understanding of responses to the emergent education challenge to identify effective projects and practices and explore their theoretical foundation. Lastly, the review analyses research that appears to represent the logical way forward for educators in beginning to address the challenges presented by globalization.

2.2 Challenge and importance of global citizenship and 21C globally-competent citizens

The study is founded on the notion that, while the world over time has developed a complex interdependence, it has yet to fully develop effective and sustainable leadership organizations, forms and fora (as opposed to the leadership of individuals) that can effectively and sustainably overcome the equally complex matrix of challenge and dispute, which manifest as threats to global security. This significant challenge needs to be addressed and involves the building of critical capacity, globally, for the development of global citizens who have the necessary global dispositions, as well as the requisite skills, to identify need and address it sustainably. For this to happen effectively, such capacity will need to be built over generations and will hinge on the effectiveness of education and educators.

The challenge that all inhabitants of the globe confront daily, consciously and/or unconsciously, is the reality of global *interdependence*. The world has developed over millennia as a complex matrix of cultural, national, economic and legal jurisdictions,

all inextricably linked and all fundamentally grappling with the implications of finite resources, distinct identities and conflicting ideologies.

Global security threats arise from the needs of people, national and/or cultural or ethnic groups, which involve finite resources or relationships that often conflict with counter claims or interests. These threats include eco / enviro; economics and trade; and socio-cultural recognition, and all fall under the umbrella of questioning leadership and global security. A significant question, then, is how educators and education institutions and systems are to harness the benefits of the global dimension - in terms of technology, information, economics and local realities - to achieve sustainability in the distribution of the planet's resources and an authentic social and cultural rebirth of disadvantaged populations.

It is important at this point to identify and understand the challenge of global interdependence and the imperatives of citizenship so as to begin to formulate an education response. Four key elements are discussed: globalization; citizenship; conception of social and economic success; and the notion of glocalization.

2.2.1 Globalization

Understanding globalization or the process from which global interdependence emerged, is key to understanding teaching and learning for global citizenship. What is clear from the literature is that definitions vary significantly and are often expressed through a contextual lens. To understand globalization, then, is to construct a vivid picture made up of multiple definitions as pixels. Globalization, akin to the process of globalization itself, is a synthesis of ideas and contexts. Of interest to this research is that definitions of globalization can be categorized as per Deakin Crick's meta-competency model, as either cognitive or affective understandings.

Definitions that characterize globalization as a dispassionate process or set of actions align with a cognitive interpretation. This sees globalization primarily as skills or knowledge or actions. UNESCO (2001) suggest that globalization should be defined

as a combination of structures, economic, social, technological, political and cultural and processes that emerge from the changing character of the political economy. Similarly, the OECD understood globalization as being the “phenomenon by which markets and production in different countries are becoming increasingly interdependent due to the dynamics of trade in goods and services and the flows of capital and technology” (OECD, 1993, p.7).

In a speech, Eduardo Aninat, Deputy Managing Director of the International Monetary Fund (IMF), (2001), suggested that “Globalization can be defined as the increasing interaction among and integration of diverse human societies in all important dimensions of their activities--economic, social, political, cultural, and religious.”

Distinct from commentators with a cognitive understanding of globalization are those who characterize it as being a phenomenon that deals with changing beliefs, attitudes and dispositions. Featherstone (1995) stated that:

the process of globalization suggests simultaneously two images of culture. The first image entails the extension outwards of a particular culture to its limit, the globe. Heterogeneous cultures become incorporated and integrated into a dominant culture, which eventually covers the whole world. The second image points to the compression of cultures. Things formerly held apart are now brought into contact and juxtaposition (Featherstone, 1995, p.6).

Similarly, Scholte (2001, p. 14) linked globalization to a more holistic notion, writing that “globalization refers to processes whereby many social relations become relatively delinked from territorial geography, so that human lives are increasingly played out in the world as a single place.”

Albrow, (1996, p.88) defined globalization as “the historical transformation constituted by the sum of particular forms and instances of... [m]aking or being made global (i) by the active dissemination of practices, values, technology and other human products throughout the globe”.

Definitions, then, vary significantly and there is no apparent hierarchy of value. Important, though, for this research is that definitions of globalization can be categorized as either cognitive or affective understandings and that this is important to how we approach teaching and learning about and for globalisation.

2.2.2 Citizenship

What does globalization mean in terms of citizenship? The nature of citizenship is a significant area of discussion in both scholarship and the broader public consciousness. Broadly, discussion has largely centred on a rights and responsibilities dichotomy, or a passive citizen idea, with description versus an active citizenship understanding. Such discussion is also largely seen through a national rather than a global lens. The primacy of the nation in terms of citizenship is consistent with the primacy of the legal status of citizenship and with a primary socio-cultural national identity. Global citizenship is at best founded in a quasi-legal sphere with only the most basic of human identity to form a truly global identity.

The experience of globalization, however, means that people and nations are increasingly living, working and acting globally, unlike 30 years ago, when they acted locally or nationally. The growth of real interdependence has created, for the first time, a global consciousness that resembles the starting point for national consciousness and citizenship, a shared identity and purpose, shared prospects and an interdependent outlook on economic prosperity. This has real implications on how we view the notion of citizenship, its nature and how societies, local, national, and global set about developing 'good' citizens. An exploration, then, of the core elements of citizenship is valuable if we are to transfer an understanding of citizenship from a local and national context into a global one.

The most influential exposition of the post-war understanding of citizenship was articulated by T. H. Marshall in "Citizenship and Social Class", written in 1949. In it, Marshall argued that citizenship is a matter of ensuring that every person is treated as

a full and equal member of society. He further argued that the most effective way of achieving this is by the state affording each person citizenship *rights*. Citizenship rights, according to Marshall (as cited in Kymlicka & Norman, 1994) could be categorized into three types, each contributing equally to a holistic set of citizenship rights. These rights further developed sequentially over a period of three centuries: civil rights in the eighteenth century; political rights in the nineteenth century; and social rights in the twentieth century. Marshall argued that by guaranteeing civil, political, and social rights to all, the state ensures that every member of society feels like a full member of society, able to participate in and enjoy the common life of society.

This conception of full citizenship accords with the perceptions of citizens themselves. When asked what citizenship means to them, people are much more likely to talk about rights than about notions of responsibility towards the state or to others (Kymlicka & Norman, 1994). This is certainly true in Britain and in the US, although expressed in different terms. That is, in Britain, citizens speak in terms of social rights, particularly public amenities such as health and education. American citizens, however, as Palumbo suggests, articulate their understanding of citizenship in terms of civil rights, especially freedom of speech and religion. “For most people, citizenship is, as the U.S. Supreme Court once put it, ‘the right to have rights’” (Palumbo, 2017, p.34.).

Marshall’s conception of full citizenship from within a rights framework however, has come under attack in recent decades for representing a passive understanding of citizenship. According to social / political theories that emerged across the Western hemisphere from the 1980 that became known as the ‘New Right’, their aim was “to ensure the social and cultural integration of the poor, we must ‘go beyond entitlement’ and focus instead on the responsibility to earn a living” (Palumbo, 2017, p.156). Since the welfare state discourages people from becoming self-reliant, the safety net should be cut back and any remaining welfare benefits should have obligations tied to them. In a Western context, the ‘workfare’ programs that emerged in the 1980s, which required recipients to work for their benefits, reinforced the idea that citizens should

be self-supporting; indeed, that citizens should feel the responsibility to be self-supporting.

The notion of responsibilities, however, is not dismissed by the political Left. The Left, though, question the access of all people to the benefits of citizenship, jobs, education and training. So, while the Left accepts the general principle that citizenship involves both rights and responsibilities, it feels that rights to participate must precede the responsibilities. That is, “it is only appropriate to demand fulfillment of the responsibilities after the rights to participate are secured”. (Palumbo, 2017, p. 358). This is important in terms of global education. Teachers and students need to be given the opportunity to access global citizenship and all that this affords them before talking about teachers and students fulfilling any sort of responsibilities. It is possible to classify international standardization tests as being obligations, as they are seen as being developmental for global ‘skills’. However, without having access to the appropriate teaching and learning experiences and gaining the requisite competences, one should not talk about them having been provided with their due *rights*.

Irrespective of one’s orientation on citizenship, it appears true to say that public policy relies on citizens acting responsibly [much clearer in a national sense than a global sense].

The state will be unable to provide adequate healthcare if citizens do not act responsibly with respect to their own health, in terms of a healthy diet, exercise, and the consumption of alcohol and tobacco; the state will be unable to meet the needs of children, the elderly, or the disabled if citizens do not agree to share this responsibility by providing some care for their relatives; the state cannot protect the environment if citizens are unwilling to reduce, reuse, and recycle in their own homes. The ability of the government to regulate the economy can be undermined if citizens borrow immoderate amounts or demand excessive wage increases (Palumbo, 2017, p.360).

Without cooperation and self-restraint in these areas, the ability of liberal societies to function successfully diminishes progressively, yet at the same time, these things

cannot sustainably be secured by the state through coercion. Oppressive regimes in the imperial age and throughout the 20th century are testament to this.

That there are civic societies and/or groups within civic societies that can reasonably be described as insular raises an issue of critical importance to the notions of citizenships and civic education. That is, those societies and groups that “rely heavily on uncritical acceptance of tradition and authority, while not strictly ruled out, are bound to be discouraged by the free, open, pluralistic, progressive” (Kimlicka, 2002, p.308) attitudes which liberal education encourages and which free societies demand as responsibilities. North Korea and sub-societal groups such as the Amish in the US are clear examples here. In each case, leaders of these societies have moved to separate their children from national and international education streams and groupings.

Despite disagreement on the balance between active and passive citizenship, or between the weighting of rights and responsibilities, there is an increasing consensus from all points of the political spectrum. Citizenship must play an independent normative role in any plausible political theory and the promotion of responsible citizenship is an urgent aim of public policy.

2.2.3 Glocalization

The convergence of globalization and citizenship is forming an understanding of a relevant form of citizenship for individuals as well as societies large or small. That is, people throughout the globe have a growing sense of a shared destiny and are recognizing that the sense of responsibility that they feel in a national context needs to be transferred into a global context if their rights are to be protected and if all people are to achieve and/or preserve the same rights. In this way, if viewed through a glocal lens, it would be apparent that the local context of recognizing and accessing the benefits of rights afforded by the local and/or national jurisdiction is threatened or limited if responsibilities are not expanded into a global sphere.

The American concepts of frontier theory and Pacific Rim theory provide analogies that explain the notion of local to global contextual transfer. The idea being that, in order to protect the American way of life and the rights and rewards enjoyed as a part of that life, a very real engagement needed to be made with neighbouring regions and societies that had the potential to threaten that way of life. Responsibility for action outside the nation state was taken so as to preserve (as well as to spread) what it saw as fundamental rights. The American desire to protect the society it had built in the east led to the desire to create a continental empire, through purchase and conquest, guarding against foreign influence. Once the nation spanned the breadth of the North American continent, the glocal sphere of engagement spread through the Pacific. While this analogy ignores the 'conquest' aspects of this engagement, the core recognition that one's domestic rights, prosperity and destiny are indeed intertwined with the destinies of others in a global context is at the heart of globalization.

The reality of globalization and what it is to be and/or act globally has been the topic of significant discussion and debate. The term is used in different ways in a variety of contexts. At its simplest, the notion of glocal or globalization can be characterized by a greater balance between the global and local dimensions of any given context or contexts. The notion of glocal practice can refer to social processes, to a project or policies, as well as to systems of thought or ideas.

As a member of the Economic and Social Council of the United Nations, with consultative status, the CERFE¹ has been involved in conceptual elaborations and in-depth examinations of themes within its research program. In terms of addressing the reality of global and local convergence, the CERFE, in association with the World Bank and The Glocal Forum,² characterized globalization as a word that:

¹ CERFE's stated aims are to make a creative contribution to policy-making and to establishing new visions of reality, with a view to problem-solving.

² The Glocal Forum was created in 2001 to emphasize the role of local authorities in the world governance system. The Glocal Forum focuses on empowering local communities by linking them to one another and to global resources, in order to achieve social improvement, democratic growth, peace and a balance between global opportunities and local realities.

is meant to point to a strategy involving a substantial reform of the different aspects of globalization, with the goal being both to establish a link between the benefits of the global dimension – in terms of technology, information and economics – and local realities, while at the same time, establishing a bottom-up system for the governance of globalization, based on greater equality (CERFE, 2003, p. 13).

Further, the CERFE makes the critical distinction between localism (and multi-localism) and glocalization, the former representing a national perspective of citizenship and the latter the perspective of global citizenship:

Glocalisation in the proper sense of the word, cannot refer to a simple appeal for power and independence on the part of local communities (localism) or to the creation of partnerships or horizontal networks that link up exclusively local subjects (multi-localism). Without a doubt, glocalisation is based on the actions of a number of different local actors ... that are interconnected in networks – at times of planetary dimensions – or connected in clusters or in pairs, often with the objective of creating bridges between north and south, or between countries that find themselves in opposing sides of a conflict. In any event, one fundamental element of the approach in question is the ability to link and interact with global actors, be they international organizations or, under certain conditions, the global private sector. It is this ability which makes it possible, in the interests of implementing concrete projects, to draw on resources which local communities, especially if they have already been impoverished or have suffered the consequences of war, would be hard pressed to procure on their own, even if they were to join forces (CERFE, 2003, p. 15).

The clear link emerges between glocalization and multi-lateralism, connecting back to the perspective of citizenship. One is a tool for the furtherance of national goals, the other is a furtherance of national and global goals simultaneously. One is focused on actions that preserve rights in a local context, the other is enhancing what those rights might be through global responsibility.

Through its research, the CERFE has developed a 'glocalization ideal map', which outlines a set of principles that appear to govern the form and prevalence of glocalization. The World Bank President, James Wolfensohn, stated that

“Glocalisation is of enormous importance because it brings us from the global question down to issues at a human scale, and to issues of humanity and people.” (Wolfensohn in CERFE, 2003, p.1) The First Annual Glocalization Conference, held in Rome in 2002, resulted in the creation of a diverse network of global and local actors committed to developing and implementing a new strategy of international collaboration. This new model was based on enhancing local situations, globally, focusing on decentralized international cooperation, and scaling locally derived innovative projects. The World Bank and CERFE (CERFE, p. 16) proposed a set of interconnected glocalization elements. The elements highlight interdependency that is at the heart of glocalization and suggest important dynamics that occur. These elements are important as knowledge for teachers and learners to understand about glocalization but the underlying dynamics are also of great importance as a lens to view classroom and learning dynamics through. In Chapter 6, the elements are viewed through an education lens, illuminating a map for glocal teaching and learning practice.

- **The importance of local actors:** The first element making up the glocalization vision is the full recognition that the actors and social relations at a local level have acquired crucial importance for development and peace. With their assessment of local problems and needs, their knowledge, and their attitudes to exercising governance over issues that affect them directly, often it is the agency of local actors that makes the difference in terms of success or failure in development programs. The same is true for the effects that the quality of social relations at the local level have on peace-building and pacification strategies. But the relevance of these kinds of actors is no longer limited to the locality. They are, in fact, increasingly showing an unexpected capacity to interact with, and influence, actors at higher levels in the global arena, be they states, international agencies or even global corporations. It is the attitude of local actors that makes the glocalization approach realistic and allows for unprecedented concreteness to peace and development strategies. Among the

new actors, one should not underestimate the role of youth, whose imagination and orientation to the future are essential to the glocal vision.

- **The war/poverty nexus:** At the core of the glocal approach is the assumption that the most destabilizing factor of the current world is the vicious circle of poverty/endemic war, with the proliferation of conflicts and the spread of violence. Situations of war and conflict, and the culture that derives from and fosters them, tend to go beyond their place of origin and to attain global dimensions while threatening the overall stability of the international community. Therefore, to tackle this issue, the entry point of globalization is not so much conflict resolution (which is under state responsibility) but rather peace-building in connection with development.
- **Mainstreaming peace-building:** In the globalization perspective, peace-building is no longer regarded as a sectorial policy, but is seen as a central axis of any development strategy. This entails the drive to give concreteness and content to peace. Peace dividends need to take root at the local level, encouraging local actors to take the new opportunities offered and build a social, economic and cultural regime that will be as consistent and self-sustaining as that of war.
- **The link between stability, poverty-reduction, and development:** It is now generally recognized that poverty reduction is not so much an outcome of, but a prerequisite for, development. Glocal assumptions, however, bring us one step further in pointing out that no serious effort in fighting poverty and achieving sustainable development can ultimately succeed if an adequate degree of stability is not attained at all levels, from local to global. It is the virtuous circle of stability, poverty reduction and development that will, in the long-run, counteract the vicious circle of poverty, war and conflict.
- **The role of the city:** Cities are where civil societies are emerging with more strength and where relations with governing and administrative bodies are more direct. They are also engines of economic growth, centres of cultural and intellectual innovation, and privileged arenas for social empathy and change as well as institutional reform. They can, thus, be considered the most relevant

social units for glocalization strategies – including people-to-people cooperation, preventive diplomacy and cross-border relationships – in the fight against poverty and to promote sustainable development and peace.

- **Governance:** The glocalization effect could ultimately contribute to a more pluralistic and integrated governance of globalization, striving to correct the shortcomings of market dynamics vis-à-vis social and economic inequalities. This entails a double movement: on the one hand, bringing the benefits of globalization to local levels; on the other, supporting and empowering local realities so they can contribute to the global decision-making process.
- **The use of global knowledge:** The movement towards glocalization is strengthened by the characteristics of the knowledge society. These include increased circulation of knowledge, communication and peer-to-peer learning, and the possibility to insert local actors and organizations into global communication circuits. This can enhance the practice of real multi-culturalism, in which local players and their cultures, far from being depressed and nullified, gain access to the global arena and find ways of cross-fertilizing ideas with different groups.

These CERFE glocal elements focus on decentralized innovation being synthesized and scaled for the benefit of all. They align with the work of Tony Bryk and the Carnegie Foundation, on the creation of networked improvement communities. This work involved a more problem-centered approach that joined academic research, clinical practice and commercial expertise in sustained programs of Design-Educational Engineering and Development (DEED). In the model, individual schools focused locally on identifying their own challenges and applying a plan-do-study-act form of action research. Schools involved in the Carnegie project sketched out three overlapping phases of effective DEED, beginning with a set of alpha trials in which a promising idea is attempted in a small number of places (Bryk & Gomez 2008; Bryk 2009). Extending this activity are beta investigations, in which DEED efforts deliberately focus on adapting the innovation so that it might be implemented with

efficacy in more diverse settings. This, in turn, leads to gamma-level activity that exploits evidence from large-scale use to continue to improve the innovation.

Importantly, I will return to these glocalization elements in Chapter 5, following an analysis of the research activities and data. These elements are very useful to understand achievements and future challenges. The analysis in Chapter 4 will provide a critical context from which to understand the inextricable link between interdependence and citizenship in a societal sense, as well as classroom interdependence and citizenship.

2.2.4 Necessities for social and economic success

Employers and students have very different expectations of education now than they did 20 years ago, both in terms of outcomes and delivery. The pervasiveness of ICT has changed the way people access information, as well as the way they use information to create new knowledge and learning. Business has undergone a significant transformation due to a growing emphasis on teams and collaborative practice (Pearce & Conger, 2003). The structure of companies and the nature of work has also changed. Organizational structures have become flatter, decision-making has become decentralized, information is widely shared, workers form project teams even across organizations and work arrangements are flexible. To operate effectively in a global knowledge-based society and economy, then, it is suggested that a new set of knowledge transfer skills and practices are needed to enable effective performance (Trigwell et al., 2000). It follows then, that it is incumbent on national governments and education policy-makers to strive for social and economic equity. Citizens must be equipped with the requisite skills, literacies and understandings to succeed, simultaneously, in this new global society (macro) by being equipped to operate effectively in very different and ever-changing local contexts (micro).

Zhao (2009) has argued that cross-cultural competency means the ability to live in and move across different cultures easily. In the globalized world, we interact with many cultures but it is impossible to be competent in all the cultures of the world. Thus,

cross-cultural competency can be viewed as a general psychological ability that includes attitudes, perspectives and approaches to new and different cultures. Education for global understanding must be supported by the notion of unity in diversity, a common link between people that is enabled only through interaction between different perspectives (Dewey, 1916/1997).

This argument is instructive. Drucker asserted that:

every few hundred years in western history, there occurs a sharp transformation ... within a few short decades society rearranges itself, its world view; its basic values; its social and political structure; its arts; its key institutions. Fifty years later, there appears a new world ... we are currently living through such a transformation. (Drucker, 1992, p. 1.)

Townsend (2004) characterized 2000 years of history in five clear periods: 2000BC-1890s, thinking and acting individually; 1870s-1990s, thinking and acting locally; 1970s-2000s, thinking nationally and acting locally; 1980s-2010, thinking globally and acting nationally and locally; and the next logical transformation of thinking and acting both locally and globally, or glocally.

Townsend's logic aligns with the broader recognition of a 21C glocal reality. Delors, in the *The Treasure Within* (2001), described worldwide interdependence and globalization as being the most important 21C forces in life: "They require that overall consideration, extending well beyond the fields of education and culture, be given, as of now, to the roles and structures of international organizations" (Delors, 2001, p.51). He suggested, however, that acquisition of the competences required to thrive in the 21C context is not uniform across and within communities, thus leading to inequality. To address this, Delors suggested that:

We must be guided by the Utopian aim of steering the world towards greater mutual understanding, a greater sense of responsibility and greater solidarity, through acceptance of our spiritual and cultural differences. Education, by providing access to knowledge for all, has precisely this universal task of helping people to understand the world and to understand others (Delors, 2001, p. 51).

2.3 21 Century skills

Having discussed the imperatives and key elements of global interdependence, the critical question to be asked is where we as citizens learn the virtues of civic responsibilities? “As people do not automatically learn to engage in public discourse or to question austerity or to exercise their civic rights, the answer lies in the sphere of education systems”(Kymlicka & Norman, 1994, p.366). It is schools that must teach children how to engage in the kind of 21C critical reasoning and moral perspectives that define the requisite public reasonableness. Children at school “must learn not just to behave in accordance with authority but to think critically about authority if they are to live up to the democratic ideal of sharing political sovereignty as citizens” (Gutmann, cited in Kymlicka & Norman, 1994, p.368). Gutmann also suggested:

equipping children with the intellectual skills necessary to evaluate ways of life different from that of their parents because many if not all of the capacities necessary for choice among good lives are also necessary for the [‘right’] of choice among good societies (Gutmann, cited in Kymlicka & Norman, 1994, p.368).

These trends and associated skill outcomes, pose significant challenges for educational institutions and educators, as most educational systems operate much as they did during the mid 20th century. The challenge for all educational institutions, teachers and teacher educators, is to prepare students through curriculum, pedagogy and organizational learning practice to acquire these skills through scaffolding and modeling 21C skills. This would achieve connectivity and authenticity in terms of both practice and outcomes.

The recognition that the 21C world presents new and different challenges has very real implications for education in terms of how students and citizens are prepared to succeed in the 21C global world. According to Townsend (1999) and Drucker (1992), this represents the need for a sharp transformation in the field of education, with the identification of specific skills and competences necessary for success in the 21C world. School systems, universities and not-for-profit organizations have grappled with this

and have published numerous sets of competences for schools and systems to enact in classrooms.

One significant project that aimed to bridge the gulf between identifying skills and competences on a theoretical level and practical classroom methodologies is the Assessment and Teaching of 21C Skills (ACT21S) project (2009-2012). The project sought to transform education through a multi-stakeholder partnership to make a scalable and sustainable difference in classrooms around the world. It was led by the University of Melbourne but involved broad public and private collaboration across governments, intergovernmental organizations (IGOs), academia and industry. The mission was to empower children to succeed by transforming the goals and practices of educators to meet the challenges of the 21st Century.

Those challenges centred on reforming curricula that did not fully prepare students to live and work in an information-age. As a result, project leaders argued, that employers today

are often challenged with entry-level workers who lack the practical skills it takes to create, build and help sustain an information-rich business. Although reading, writing, mathematics and science are cornerstones of today's education, curricula must go further to include skills such as collaboration and digital literacy that will prepare students for 21st-century employment (Price, Griffin, and Roth, 2011, p.5).

The ATC21S project, then, was focused on changing how teachers and education systems approach education worldwide, by developing new ways for teachers to assess students against outcomes that reflect 21C global skills and competences.

Assessment of outcomes is challenging for educators and especially difficult in the context of global citizenship when the very definition of citizenship is contested. However, to make changes at the classroom level, policy-makers and school leaders need accurate information about the skills and dispositions of the students. And gathering that data through assessment is a critical component. The ATC21S project

focused on developing methods to assess skills that will form the basis for 21st-century curricula, with an emphasis on communication and collaboration, problem-solving, citizenship, and digital fluency. It aimed to identify and support a new form of integrated curriculum and assessment framework, with teaching and learning resources to help students develop 21st-century skills. Importantly, the project included affective learning attitudes and dispositions in its framework, along with cognitive sets of skills and knowledge. It outlined 'ways of thinking' that included creativity, critical thinking, learning to learn or growth mentality, as well as collaboration. These are all key affective dispositions, well-suited to a curriculum that supports global citizenship. However, the ATC21S project did not include any measurement instrument of these dispositions; the assumption being that teachers are able to identify and rank as a part of the curriculum.

Like the ATC21S project, the American P21 was developed to address the disjuncture between 21C imperatives and the capacity of schools and education systems to prepare students. This national organization advocates for local, state and federal policies that support 21st century readiness for every student in every school. P21 identifies a group of core subjects and 21st century themes considered essential for all students. These are:

- English, reading or language arts
- World languages
- Arts
- Mathematics
- Economics
- Science
- Geography
- History
- Government and civics

(Partnership for 21st Century Skills, 2008)

In addition to these subjects, P21 leaders suggest that schools should move beyond competence in the disciplinal sphere, to promoting holistic 21st century thinking by integrating interdisciplinary themes into core subjects. In terms of the cognitive domain, P21 identifies core subjects and links them to key interdisciplinary themes,

such as: global awareness; using 21st century skills to understand and address global issues; learning from and working collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect; and understanding other nations and cultures, including the use of non-English languages.

In the affective domain, P21 rightly identifies learning and innovation skills as being what separates students who are prepared for increasingly complex life and work environments in today's world from those who are not. These skills include creativity and innovation, critical thinking and problem-solving and communication and collaboration. A key link is made to life skills, which fits with learning in the affective domain. P21 suggests that today's life and work environments require far more than thinking skills and content knowledge. The ability to navigate complex life and work environments in the globally-competitive information age requires students to pay rigorous attention to developing adequate life and career competences, such as adaptability, initiative, self-direction and cross cultural skills.

To this point, discussion of both ATC21S and P21 has focused on identified outcomes for students in terms of 21C global citizenship success criteria. What is important to highlight is the type of teacher and teacher competences that would be necessary to achieve these outcomes. Like the work of Boix Mansilla (2014), the existence of the requisite teacher competences are often assumed. The P21 project, (Partnership for 21st Century Skills, p. 8) however, outlines an ideal of teacher practice. It describes professional practice for teachers who can:

- Seize opportunities for integrating 21st century skills, tools and teaching strategies into their classroom practice and help identify what activities they can replace/de-emphasize.
- Balance direct instruction with project-oriented teaching methods.
- Illustrate how a deeper understanding of subject matter can actually enhance problem-solving, critical thinking, and other 21st century skills.
- Identify students' particular learning styles, intelligence, strengths and

weaknesses.

- Develop their abilities to use various strategies (such as formative assessments) to reach diverse students and create environments that support differentiated teaching and learning.
- Critically reflect on students' 21st century skills development.
- Encourage knowledge sharing among communities of practitioners, using face-to-face, virtual and blended communications.

The context in which teachers of this kind work has been recognized by P21 as being critical to the sustainability and scalability of effective professional learning. The key elements of effective 21C learning environments were identified as those that:

- Create learning practices, human support and physical environments that will support the teaching and learning of 21st century skill outcomes.
- Support professional learning communities that enable educators to collaborate, share best practices and integrate 21st century skills into classroom practice.
- Allow equitable access to quality learning tools, technologies and resources.
- Provide 21st century architectural and interior design for group, team and individual professional learning.
- Support expanded community and international involvement in learning, both face-to-face and online.

The ATC21S and P21 projects have outlined the skills and dispositions that are critical in quality teaching and learning and to meet the 21C global challenge. However, doubts remain about the ability of systems and schools to create, sustain or scale the type of collective mindset or context necessary.

In the *Learning Futures* project, Deakin Crick et al. (2011) presented evidence from teachers about the ways in which they see and talk about themselves as educators and from students about the ways in which they narrate themselves as learners. In the research, the authors indicated that a powerful mindset dichotomy exists in schools

and directly affects teaching and learning practice. This dichotomy is labeled as learning as script or learning as design.

To characterize what it is to be a 21C global citizen and to identify teaching and learning mindsets or narratives that align with that, the research reviewed thus far suggests that it would best align with a learning as design narrative. The results of Deakin Crick et al.'s *Telling Identities* research (2013), however, suggests that the script-based mindset is clearly more prevalent in schools than the design-based, as are classroom practices that reinforce script-based mindsets or narratives. It suggested that

the script based approach to teaching is inconsistent with an approach to professional practice which will result in deep engagement in learners and the development of learners who have a strong sense of their own ability, and a sense of agency – important skills for the 21st century (Deakin Crick et al., 2013, p.18).

The *Telling Identities* research recommends that leaders support teachers to find their own space between their actual and designated identities as educators. They must also support teachers in developing their own agency, associated with a responsive and dynamic, design-based pedagogy. In turn, systems must support the development of these identities.

In line with the reality of the teacher and student script-based narratives presented in the *Learning Futures* research (Deakin Crick et al., 2012), Delors' *Learning: The Treasure Within* (Delors, 1996) outlines the critical importance of developing attitudes and dispositions that are consistent with a learning or epistemic mindset. Commenting on Delors' message, Zhou Nan-Zhao (2005) suggested that if education is to succeed in its tasks, curriculum as its core should be restructured or repacked around the four pillars of learning: learning to know, learning to do, learning to live together, and learning to be.

Delors' four pillars highlight the importance of learning to live; that happiness in life comes from being able to see beauty in its different forms. The four pillars outline the key learning relationships that underpin this ability and the role that educators play in developing people's learning mindset for life, not just in the classroom. Importantly, Delors recognized that:

formal education systems tend to emphasize the acquisition of knowledge to the detriment of other types of learning; but it is vital now to conceive education in a more encompassing fashion. Such a vision should inform and guide future educational reforms and policy, in relation both to contents and to methods. (Delors, 1996, p. 25)

Far from simply listing desired outcomes, *The Treasure Within* outlined crucial structures that need to be in place for these to be achieved. Teacher professional learning was identified as critical. Delors argued for provision and accountability with regard to teacher professional learning, saying: "Teachers' professional lives should be so arranged as to accommodate the opportunity, or even the obligation, for them to become more proficient in their art" (Delors, 1996, p. 28). These opportunities, too, should not merely be formal learning; professional learning should include participatory action research with teachers actively seeking to learn with and from those around them. This fits with the broader concept of learning throughout life and, said Delors:

leads straight on to that of a learning society, a society that offers many and varied opportunities of learning, both at school and in economic, social and cultural life, whence the need for more collaboration and partnerships with families, industry and business, voluntary associations, people active in cultural life (Delors, 1996, p. 32).

Lastly, Delors stressed the importance of teacher and partnership exchanges between institutions in different countries. The existing practice of exchanges, as will be discussed later in this chapter, revolves primarily, and in most cases solely, around student experience and learning, missing the opportunity for teacher professional learning. *The Treasure Within* rightly outlined the opportunities for and benefits of teacher professional learning with regard to exchanges and partnerships. It suggests

that such opportunities “provide an essential added value not only for the quality of education but also for a greater receptivity to other cultures, civilizations and experiences” (Delors, 1996, p. 33). There is responsibility, then, at each level from classroom to national policy, not only to articulate these as outcomes but implement structures that directly support the practices.

In Australia, approaches such as the Australia–Asia BRIDGE School Partnerships provide examples of valuable exchange programs aimed at connecting learning globally. This program, managed by the AEF and supported by the Australian Government, is significant, involving over 250 schools and more than 400 teachers across Australia, China, Indonesia and South Korea. The BRIDGE partnerships are designed to develop students’ intercultural capabilities through a mix of language and cultural studies based on people-to-people exchanges and online collaboration. Critically, the programs do not contain learning roles, responsibilities, support or accountabilities for teachers.

One example provided by the AEF is Leongatha Primary School’s partnership with a school in Indonesia. The principal of Leongatha Primary said that “the BRIDGE project was an ideal opportunity to involve the school with Indonesia. We wanted to go beyond the walls of the school, beyond our area, and indeed beyond Australia.” (Australian Government, 2012, p.168) Of the partnership, the AEF said:

Irene Beasley is the only teacher of Indonesian at Leongatha Primary School in Gippsland, in the heart of Victorian dairying country. Leongatha Primary is partnered with SD Pondok Labu 11, a school in the bustling 10 million-strong metropolis of Jakarta. The two schools connect classes through Skype. This enables the children to have authentic, real-time, face-to-face conversations. ‘We try to speak Indonesian at our end and they speak English,’ Irene said. The students investigate and use a range of Web 2.0 technologies to exchange their ideas, interests and information about their country and culture. These exchanges have led to regular teacher exchanges, and in 2012, to the first student exchanges.

She reflected on the genuine engagement fostered between her students and their counterparts in Jakarta. ‘We’ve moved from being an isolated

school to being part of the wider global community, and that's really important for the 21st century.'

The BRIDGE program demonstrates the potential of technology to enable innovative learning strategies that overcome barriers and borders, creating a truly global classroom (Australian Government, 2012, p.169).

2.4 Systemic responses to the notion of globalization: Australia

National strategic statements and goals recognize changing national and global contexts and provide clear statements of intent. Central to Australia's 21C global vision is the importance of its integration into the Asian region, both culturally and economically. As an enabler, the notion of 'Asia literacy' has been identified as critical to achieving the desired integration and economic and wellbeing outcomes. The importance of education to achieving these outcomes is articulated in the Australia and the Asian Century white paper, as follows:

- Central to Australia's future prosperity is lifting our productivity and participation by investing in our most important resource, our people.
- Improving the capabilities of all Australians will raise our productivity and enable all Australians to participate successfully, helping Australia seize the opportunities on offer in the Asian century.
- Australia's education and training systems play a fundamental role in ensuring that all Australians have the right capabilities to take advantage of the Asian century.
- Making sure we have world-class education is a central part of our strategy for economic success.
- Australians need an evolving set of Asia-relevant capabilities that are both broad and specialized.
- Governments, businesses, institutions and individuals all have a role in building these capabilities.
- Developing Australia's capabilities will require us, as Australians, to consider and in some instances to change the way that we do things, such as the way we educate ourselves, the way we do business and the way we operate our institutions.

- These changes will continue to be based in Australia's strong foundations—our robust national institutions, our culturally diverse and outward-looking society and our strong economy—which are crucial to building these capabilities (Australian Government, 2012, p.162).

The white paper also states that in the new vision of Australia, teachers will be of the highest calibre, and will have received the best training and support. They will be continuously honing their skills and receiving structured feedback and support to help measure their skills and highlight areas on which to focus their efforts. Every school will have a school improvement plan outlining the steps they will take to improve student results. These plans will be developed in consultation with parents and the community. Every school will look at its results each year and plan where and how it will do better.

The Australian Business/Higher Education Roundtable (B-HERT) has recognized a need for a greater emphasis on lifelong learning. The B-HERT policy statement (2001) was aimed at highlighting the significance of lifelong learning in the Australian context by drawing on analyses of lifelong learning policies and practices in Australia and other OECD countries. It suggested priorities for government, particularly in the areas of lifelong learning, business, and higher education, and called for the development of learning infrastructure in response to developments in the understanding of learning processes. These conditions are needed for successful learning and advances in the technologies of learning create the potential for a new kind of learner and new kinds of learning more appropriate to 21C society (B-HERT, 2001).

Specifically, the B-HERT statement argued for the adoption of a multi-faceted approach to education policy. This would be needed to address the complex interplay of the three major aims of lifelong learning: for a more highly skilled workforce, for a stronger democracy and more inclusive society, and for a more personally rewarding life. This call was consistent with the international context, as articulated in Delors'

four pillars of learning (1996). Australian universities were challenged to respond to these goals through the development of quality, relevant, and measurable learning. With a suite of learning dimensions, work integrated learning (WIL) represents an appropriate and necessary vehicle to develop students as holistic lifelong learners, able to build a satisfying working life across multiple career contexts. To meet this challenge, the notion of meta-competence is critical.

The Australian government's goal of developing citizens with clear lifelong learning dispositions recognizes that the development of competencies are pre-requisites to a successful life and well-functioning society. The Bradley review of higher education in Australia, commissioned by the Department of Education, Employment and Workplace Relations (DEEWR), highlighted how "it will be crucial for Australia to have enough highly skilled people able to adapt to the uncertainties of a rapidly changing future" (DEEWR, 2008, p. xi). Critically, the report also highlighted the Australian government's commitment to addressing the citizens' right to share in the benefits of the new global age and knowledge-based economy (DEEWR, 2008). The review, along with other government education imperatives as outlined in the Melbourne Declaration, articulated the call for all young Australians to become successful learners, confident and creative individuals, and active and informed citizens.

2.5 Systemic responses to the notion of globalization: Denmark

In Denmark, as in Australia, there are clear national and systemic responses to the need to deal more effectively with the reality of globalization. In the report, *Improving School Leadership: Background report, Denmark*, it was reported that:

Demands on schools vary according to the context in which they work. Back in the 1960s, there was no need to make major efforts because the schools belonged – in accordance with tradition – to the public sector, and people had confidence in that. They lived well on a kind of 'automatic legitimacy' because there was consensus in society that people wanted these schools and that they did the things they were meant to do. Since then, there have been an increasing demand for schools to be able to report on why they do the things they do, how they do them, what the

results will be and who is responsible for making sure it all happens (OECD, 2007, p. 60).

One primary conclusion in this globalization report is that Danes are no longer among the most highly educated people in the world. The population as a whole is doing well, but young people are lagging behind. After leaving municipal primary and lower secondary schools, the report suggests, young people – and particularly immigrants and their offspring – still cannot read very well, with many unable to meet the requirements of post-compulsory education. In a comparison with 30 OECD countries included in the Programme for International Student Assessment (PISA) survey in 2003, Danish 15 year olds sat in 12th place in mathematics, 16th in reading and fourth from last in science. At the same time, it has been established that Danish municipal primary and lower secondary schools are some of the most expensive in the world, based on fees per student per annum (OECD, 2007, p. 61).

The OECD report also provided a vision of a competent, cohesive society in which the population has a high level of education and competence to meet the needs of the individual and society. It is also argued that knowledge, cultural understanding and cross-cultural competencies will prepare Denmark for the global competition. These competencies are described as follows:

1. Education, learning and competence development: The aim is to strengthen the quality of education and increase the competence level of the Danish population.
2. Cultural understanding and cross-cultural competences: The aim is to strengthen cultural understanding and cross-cultural competences so that businesses and society in general will be prepared to make proactive use of globalization (OECD, 2007, p. 63).

2.6 School and classroom level practice

The nature of citizenship and global citizenship in the contemporary interdependent global age needs to be explored if it is to be useful in terms of education policy and practice, as well as how it is translated into school and classroom level practices.

In terms of pedagogy, to date, international organizations, such as the OECD, and national governments and school systems have largely responded to the implications of 21C globalization with a narrow outcomes-based focus on international standardized testing in literacy, numeracy and scientific understanding rather than a more holistic one that aims to scaffold 21C-appropriate teaching and learning practices. While the assumption that literacy and numeracy proficiency is essential for children to be properly equipped for 21C society is valid, experience shows that the narrow testing focus has led to narrow and ineffective teaching and learning practices. Also of critical importance is the equity challenges that these tests pose, particularly in terms of their ability to cater for diverse school and community contexts and cultural literacies. This research recognizes the fundamental importance of ensuring real equity. Currently, schools alone, whether well-resourced or under-resourced, do not have the capacity to develop the necessary bespoke programs to scaffold the level of 21C teaching and learning practice needed. This study was thus committed to exploring a theory in practice that is better equipped to support and sustain 21C practice.

The relationships and roles of education authorities and schools in the context of teacher professional learning are at the core of any discussion on school effectiveness and student learning outcomes. Hargreaves (2008) argued that the balance between centralization and decentralization, and regulation and deregulation, in terms of teacher practice, is one that has not been achieved. In *The Fourth Way of Change* (2008), Hargreaves studied long-term change spanning more than 30 years in eight innovative and traditional high schools in the US and Canada. He characterized four clear stages of change (discussed below). While Hargreaves did not overtly link the development of the different phases to increased globalization, it is acknowledged as a clear factor that has driven the forces of standardization and marketization as defined in each emergent phase.

Hargreaves (2008) characterized his 'first way' as the 'Golden Age' of education, as teachers had curriculum and teaching practice freedoms or professional autonomy. Good collaborative practice and teaching and learning innovation did exist during this period, but with little or no attached data. The issue for this age was that it could also be characterized as having no meaningful measures of student achievement, having no standardized testing and government intervention in terms of curriculum.

The 'second way' was characterized as a knee-jerk response in the form of imposed prescriptive standardization of curriculum and practice, market competition, and punitive measures, particularly in the UK. The paradox was that while parent consumers experienced freedom, professionals were subjected to greater controls at the cost to quality, breadth and depth of learning. In a 21C context, the second way can be seen as the antithesis of glocal practice.

The 'third way', in which contemporary education practice is located, can be characterized as a softening of the second way methodology but more incrementalist in nature than progressive or reformist. There was a clear recognition that there had been too much coercion of teachers and prescription of curriculum. However, as Hargreaves (2008, p. 58) stated:

hyperactive [coaches rushing] around, energetically and enthusiastically delivering the government's narrowly defined targets and purposes, rather than also developing and realizing inspiring purposes of their own.

The third way, he argued, remained top-down in its conception, despite being delivered by more lateral coaching structures. Anecdotally, this phase has stymied approaches that attempt to reform teaching and learning culture and practice to meet unique school circumstances, fostering a production line culture in schools.

In Australia, the Smarter Schools National Partnership (SSNP) program design and implementation provides evidence of the same issue and further highlights practices that are consistent with Hargreaves' third way characterization. The SSNP Victorian

Progress report (DEEWR, 2010) presented outputs, totaling \$326 million, in terms of quantity not quality, with no guiding theories or practices. That is, programs appeared not to facilitate reflective practice; the form of leadership and teacher capacity outputs were more didactic than experiential; and the success criteria were narrow and consistent with third way goals. Further, a significant proportion of outputs provided for coaches and mentors to assist schools in implementing literacy and numeracy programs (e.g. Teaching Handwriting, Reading and Spelling Skills (THRASS), Elementary Maths Mastery (EMM), and Accelerated Literacy) had not been evaluated but, anecdotally, seemed to have little impact³. In the words of Hargreaves (2008, p. 65):

despite the 'collective effervescence' most of the energy is directed towards hurriedly and excitedly adopting short-term strategies and programs to deliver forms of achievement rather than towards longer term attempts to transform teaching and learning.

Similarly, in the US, it is suggested that too often reforms are conceived and implemented in a top-down manner and on a scale that, consciously or not, denies the existence of very different localized contexts, thus negatively impacting on the reforms' success (Tyack & Cuban, 1995). That is, large-scale reforms tend to be based on popular ideas, such as phonics versus whole language or opposition to bilingual education, without consulting with teachers and teacher educators and without having a clear sense of the impact across very different student and school contexts. It is the contention of this research, then, that teachers should be supported as educators and as scholars to better provide for appropriate localized approaches and effective teaching and learning strategies. Ultimately, this will lead to higher levels of student achievement.

Despite what has been termed a generation of failed reforms (Morrell & Noguera, 2011) that have stymied progress, this research holds the premise that widely criticized

³ The anecdotal evidence is in the form of conversations between the researcher and school leaders and teachers pertaining to the implementation the SSNP programs.

practices such as standardized testing do not *necessitate* ‘standardized teaching’ or ‘teaching to the test’ (acknowledging, however, that this practice is regrettably the rule rather than the exception). Instead, this study views such testing as the articulation of *enabling* learning benchmarks that are essential to the foundation of key cognitive strategies (Conley, 2010); that is, the strategies that enable students to learn, understand, retain, use, and apply content from a range of disciplines. Literacy and numeracy is both scaffolded by these core cognitive strategies and become essential enabling skills for the acquisition of these strategies. Critical to this is the challenge of harnessing the learning and culturally-appropriate teaching practices and perspectives of educators globally – in line with the glocal ideal. This would help identify a more democratic, inclusive method to support teachers, teacher educators and students to acquire Conley’s key cognitive strategies, for filling the gap between policy and classroom practice.

2.7 PISA – missed opportunity or still an opportunity for glocal practice?

The OECD developed the PISA tests for future citizen competencies, as a means of generating data. However, the information gathered through PISA provides no glocal practice and no indication of what the affective competences are and how important they are for teacher development. Instead, there is a reliance on the data to ‘speak for itself’ in terms of instructing or developing teacher practice.

The central questions that PISA outlines as critical are: How well are young adults prepared to meet the challenges of the future? Are they able to analyze, reason and communicate their ideas effectively? Do they have the capacity to continue learning throughout life? Parents, students, the public and those who run education systems need to know.

Comparative international analyses can extend and enrich the national picture by establishing the levels of performance being achieved by students in other countries. Thus, they provide a larger context within which to interpret national results. International analyses can provide direction for schools’ instructional efforts and for

students' learning, as well as insights into curriculum strengths and weaknesses. Coupled with appropriate incentives, this can motivate students to learn better, teachers to teach better and schools to be more effective.

The results of the OECD assessments are published every three years, along with other education indicators. This allows national policy-makers to compare the performance of their education systems with those of other countries. Results also help focus and motivate educational reform and school improvement, especially when schools or education systems with similar inputs achieve markedly different results. Further, they provide a basis for better assessment and monitoring of the effectiveness of education systems at the national level.

This emphasis on testing in terms of the mastery of broad concepts is particularly significant in light of the concern among nations to develop human capital. This is defined by the OECD as: "The knowledge, skills, competencies and other attributes embodied in individuals that are relevant to personal, social and economic well-being" (OECD, 1999, p.11).

Estimates of the stock of human capital or the human skill base have tended, at best, to be derived using proxies, such as level of education completed. When the interest in human capital is extended to include attributes that permit full social and democratic participation in adult life and that equip people to become lifelong learners, the inadequacy of these proxies becomes even clearer.

By directly testing for knowledge and skills close to the end of basic schooling, OECD/PISA examines the degree of preparedness of young people for adult life and, to some extent, the effectiveness of education systems. Its ambition is to assess achievement in relation to the underlying objectives (as defined by society) of education systems, not in relation to the teaching and learning of a body of knowledge. Such authentic outcome measures are needed if schools and education systems are to be encouraged to focus on modern challenges.

While the data is very useful, it needs to be explored by teachers (as opposed to policy makers alone). There is an opportunity for this to be achieved through glocal networks using a SoTL method to meet the 21C challenges. The indicators and the assessment focus on 15-year-olds are designed to contribute to an understanding of the extent to which education systems in participating countries are preparing their students to become lifelong learners and to play constructive roles as citizens in society.

2.8 Responses to new competences – teacher collaborative practice

Despite the top-down systemic approaches prevalent globally, there are projects that have taken up the idea of collaborative support within a lateral bottom-up partnership context. For example, in a single context or micro setting, the peer-driven Raising Achievement/Transforming Learning (RATL) project initiated by Hargreaves in the UK was based on lateral (teacher-teacher) support rather than system-driven interventions. The project resulted in two-thirds of the participating schools improving at double the rate of the national average over two years (Hargreaves et al., 2007, 2008). There has been demonstrated success, too, in professional partnership relationships, such as the Annenberg Challenge program in the US that encourages participating schools to link with other schools and learn from and support one another (Wohlstetter et al., 2003). Such programs demonstrate the success of school-school partnerships and teachers supporting each other's practice. Further, on a national scale, the US National Writing Project is a successful example of scholarly collaboration of educators, teachers and teacher educators (Leiberman and Wood, 2002; Leiberman and Grolnick, 2005).

At a local level, in the Australian context, the Victoria University Site Based Teacher Education (SBTE) model is a further example of an effective collaborative learning model that spans educational institutions. The model involves pre-service teachers being placed at one school for their partnership experience, including classroom teaching and a requirement to undertake an applied curriculum project negotiated as being important for the school. The model is premised on the notion that genuine

collaboration between teacher, pre-service teacher and teacher educator facilitates quality learning for all parties. Anecdotal evidence, however, suggests that the learning was mostly directed by teachers and teacher educators *at* the pre-service teachers, rather than the learning being genuinely shared around the triangular partnership. An evaluation of the model (Hooley & Moore, 2005) emphasized this point, as it surveyed pre-service teachers' learning experience but then surveyed teacher and teacher educators' perceptions of the pre-service teachers' learning, rather than perceptions of their own learning in the project. Critically, the opportunities for teacher educator SoTL and collaborative experiential learning across all stakeholders were missed.

Examples of successful approaches in the international or macro context also exist. The Global School Partnerships program funded by the UK Department for International Development (DFID) established school-school partnerships between British, African, Sri Lankan, Indian and Pakistani schools. The empirical research conducted by the Institute of Education, University of London (Edge, 2010) indicated success across all key indicators in the program, including both teacher and student performance and engagement. In the Australian context, similar school-school international partnerships have been fostered by the AEF through its BRIDGE Program, although empirical research into its effectiveness is yet to be undertaken.

These examples are important in that they demonstrate that there is both an understanding of the need to act globally in terms of school partnerships and that research exists that demonstrates key achievements in both teaching and learning. Educators, then, at every level, are rightly seen as the primary agents of sustainable reform. Education institutions, universities and schools, are critical to supporting that reform through collaborative, democratic and scholarly cross-sectoral professional learning.

2.9 Supporting theory for collaborative practice: Scholarship of teaching and learning

It is important at this point to highlight the critical link between schools and universities at a global level. This represents the key difference between this research and previous collaborative models. This link fosters SoTL and student achievement outcomes, consistent with Boyer's theory (1990) of overlapping scholarships: discovery; integration; application and, teaching. Further, as the model involves educators across the education sectors, it engenders a vital sustainability element. This is critical to any successful professional learning model.

Accordingly, this research sought to (re)create an autonomous creative space not enjoyed by teachers since the period of Hargreaves' first way, but critically to create it with the support of academic research methodology through a partnership with tertiary institutions. The collaborative design adopted by this research aims to support an active role for the teacher as scholar rather than the passive teacher as presenter. Simultaneously, it provides excellent SoTL outcomes for teacher educators and cultivates the development of scholarly, reflective pre-service teachers. Also of critical importance is that this research sought to validate educators as scholars equally across education sectors, understanding that each practitioner has valuable experiences and understandings to share, avoiding the top-down hierarchical model of professional development in the traditional mode.

This research embodies Boyer's (2010) principles of scholarship to create a scalable and sustainable lateral scholarly community of educators to foster more sophisticated teaching and learning outcomes, consistent with 21C imperatives. Gardner (2009) outlined specific cognitive abilities^[1] that would be sought and cultivated by community and industry leaders^[2] in the years ahead. He suggested that abilities such as creativity, initiative, entrepreneurship and problem-solving would be marketable attributes for the 21st century. Further, both Boyer and Gardner rightly emphasize the need to synthesize knowledge across disciplinary boundaries and collaborate across networks. This research recognizes, then, that educators will need not only to teach but also to enact these attributes through authentic practices.

Critical to supporting 21C attributes is the element of scholarship. The scholarship of teaching is about improving student learning within the broad education community generally, by collecting and communicating results of one's own work on teaching and learning from within the discipline and context. The intention of the scholarly teacher and teacher educator in this model would be to improve student learning across the whole community, not just the learning of their own students. The aim is to foster a community of educators who go beyond the disciplinary subject matter and beyond the institutional and national contexts (the third way approach). Educators will communicate the results of their own work on teaching and learning to a larger GELC audience, allowing these to be developmentally critiqued; this is at the heart of scholarship.

Shulman (1993) rightly suggested that scholarship entails artifact, a product, or some form of community property that can be shared, discussed, critiqued, exchanged, and built upon. So, if teaching and learning, or pedagogy in a school and university context is to become an important part of scholarship, we have to provide it with the same kind of documentation and transformation. Trigwell et al. (2000) argued that scholarship is about reflective practice and active local and global dissemination of that practice for the benefit of learning and teaching. It was the aim of this research, then, to establish such a community and measure the impact on teaching and learning across sectors and national contexts for the benefit of all educators and, ultimately, students.

The notion of scholarship aligns with the research on teacher empowerment and change of Friere, (1970) and Kosnik (2016). The research rightly suggests that teachers are routinely challenged by the unknown and the unexpected in both classroom and whole school contexts. The challenge is empowering teachers to approach with agency issues relating to whole school stakeholders (students, peers, parents and administrative personnel) who have often different, and sometimes conflicting, interests, values and perceptions. That is, in order to make decisions valid for the whole group, teachers need to deepen their questioning and their understanding - or

their scholarly practice - in trying to make visible often hidden aspects of the issue they are facing. This kind of thinking is committed to constant teacher development and change produces new answers to overcome their problems.

The work of Freire (2000) highlights the importance of empowering the teacher to develop and create positive change. It highlights also, the magnitude of that change as teachers were traditionally viewed as being unimportant in the process of decision making due to their less chances to be involved in crucial school matters. Freire characterized teachers as having always been seen, incorrectly, as being voiceless. He argued that it was not true that teachers had no voices but it was the oppression of the hierarchal administrative school system that kept all of teachers who were important members of school voiceless (Freire, 2000). His research highlights how schools can become more democratic organizations by empowering teachers' participation in decision making through scholarly practice.

From the review of relevant literature across different fields of scholarship, what emerges as the challenge for 21C education is to create a culture of scholarly reflective practice within each school and university that enables it to identify and address its own set of unique challenges. Only a prevalent scholarly culture such as this, adopted across all schools, has the potential to scaffold appropriate and scalable practices to fit the unique issues that schools face. All government schools in Victoria are challenged by the DET to plan and achieve continuous improvement. Schools are required to analyze their performance and use the results of this analysis to generate priorities for improved student performance.

Of fundamental importance to the creation of a scalable and sustainable model in this research is the notion that strategic learning partnerships created across education sectors are a genuine vehicle for both schools and universities to become more effective learning organizations. This research concept is consistent with the primacy of problem-setting over problem-solving as adopted by Schön (1983), Wenger et al., (2002) and Engström (2001). They argue that organizations generally establish self-

reinforcing systems in which either role and problems are framed to suit a theory of action, or a theory of action is evolved to suit the role and problems that are framed. Valuable learning outcomes are lost in both scenarios.

Institutional partnerships, as described by this research, should be designed to scaffold effective problem-setting through research-based dialogic reflection-in-action. That is, the action extends thinking and the reflection feeds on the action and the results. Each feeds and sets boundaries for the other. Critically, this approach supports practitioners at education institutions at all levels, individually and collectively, to develop key enabling (Barrie, 2006) cognitive strategies that foster a reflective and academic approach to solving the contextual issues faced.

Through the lens of leadership and global security, the aim of this study was to understand the theory and approaches taken by schools and education systems and organizations in developing students as 21C global citizens. Specifically, the focus of this study is in two key domains: *cognitive* - knowledge, skills and understanding; and *affective* - learning dispositions, values and attitudes, ultimately for students to be able to demonstrate meta-competences that constitute a broader understanding of 21C global citizenship. The design of the stream is consistent with the work of Deakin Crick, which explores the notion of meta-competence through the development of students' affective and cognitive characteristics. The meta-competence in the case of this stream would be 21C global learner and citizen.

Recent literature (Deakin Crick, 2010) on teacher professional learning and practice highlights the importance of the construction of a professional identity through identity-in-discourse and identity-in-practice. In line with the conception of meta-competence, the importance of developing the self as teacher but also as learner has become central to the development of a teacher's professional identity. This conception has major implications for schools, school systems and universities in terms of providing effective professional learning programs to create sustainable outcomes. In terms of teaching and learning for global competences, the same is true. It is the

teacher's identity as a global learner and as a global citizen that is of critical importance to the achievement of student learning outcomes and the development of specific global competences.

As already discussed, schools and school systems internationally are faced with meeting the challenge of preparing students with competences to succeed in the global, knowledge-based economy and the increasingly interdependent global society. To be prepared to operate effectively in a 21C global knowledge-based society and economy, then, it is suggested that a new set of knowledge transfer skills and practices – or global meta-competence - is needed to enable effective performance (Trigwell et al., 2000). However, both the identification and assessment of global competences are under-researched areas. As a meta-competence, "There are very limited instruments for assessing international mindedness" (Singh & Qi, 2013, p.xii).

Global competences in education contexts (schools, universities and school systems) are often articulated as sets of skills and/or knowledges and their development created by classroom practices in schools and assessed as cognitive outcomes. These definitions or sets are not in limited supply. The stated definitions of global skills and their imperatives as they appear on the websites of major global and/or 21C learning organizations, such as the 21C Society and Asia Society, reveal a common emphasis on the cognitive learning domain; primarily on knowledge and skills. This is also true in the stated mission of the International Baccalaureate (IB), which is "to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect" (IBO, 2015, p.3). Critically, however, these goals and similar global goals pertaining to national and global civic competences necessarily and equally contain affective or learning to learn competences that do not currently receive the same focus.

The implication of emphasizing the cognitive learning domain is that there is an issue with how to develop teachers with the requisite meta-competence and to sustain this through professional learning. Singh and Qi (2013, p.61) have argued:

Because the success in developing the [global] learner profile is dependent on so many factors, and because it cannot be measured through examinations and tests as would an understanding of world or global issues, it makes teaching of international mindedness difficult to understand.

The reality is that it is difficult for educational institutions, schools and universities to integrate international mindedness or global education throughout the curriculum and, most importantly, to support teachers to develop and measure these outcomes.

While holistic (combined affective and cognitive) descriptions of global student outcomes do exist (Boix Mansilla & Jackson, 2011), equivalent outcomes for teachers are not apparent. Across observed national contexts (Denmark and Australia) there is an absence of clear professional standards and professional learning approaches that support the development of teachers with conscious identities as learners and global citizens, as well as teachers; that is, their own global meta-competence. The prevailing approaches focus first on student outcomes that should be achieved by teachers as providers of learning rather than as first exemplars, as global learners and citizens. At issue, then, is the adequacy of systematic learning support for all teachers to consciously and demonstrably achieve a holistic understanding of themselves as learners as well as teachers in local and global contexts, so as to achieve student-focused global competence outcomes more effectively.

As such, there appears to be a need to investigate and discuss the role of the teacher and the nature of professional learning in terms of their professional identity – or their meta-competence. Systemic support for teachers towards global competence outcomes, by identifying current teacher practice and attitudes from within an action research professional learning structure, also need to be created. The research activities undertaken and the data elicited, which are presented in subsequent chapters, present the thinking and practices of teachers who have self-identified as global teachers. A theory-in-practice is proposed to increase the effectiveness and sustainability of systemic support in this area.

Corcoran and Tormey (2010) suggested that while there is a general agreement on the broad challenges that face teachers and schools in attempting to develop global competences, the understanding of global citizenship and of the type of teaching and learning needed was diverse. Emotion “has now been granted a more prominent position in areas such as the study of moral or pro-social behavior” (Hoffman, in Corcoran and Tormey, P. 1) and its importance is also increasingly being recognized in development education (Tormey, 2005). Corcoran and Tormey suggested that teachers’ understanding of global citizenship and its necessary competences differed considerably, as did their own conception of themselves as learners.

Deakin Crick, Goldspink and Foster (2013) argued that teacher identity and practice are critical to how challenges are dealt with in a practical classroom context. They suggested that a teacher’s teaching identity can be broadly characterized as either script-based or design-based and could be traced to the teacher’s attitudes, dispositions and values with regard to learning. The affective or learning dimensions as described in the Effective Lifelong Learning Inventory (ELLI) (Deakin Crick, Broadfoot & Claxton, 2004) are seen in this research as critical to creating and sustaining global teaching and learning identities and point to clear implications for practice.

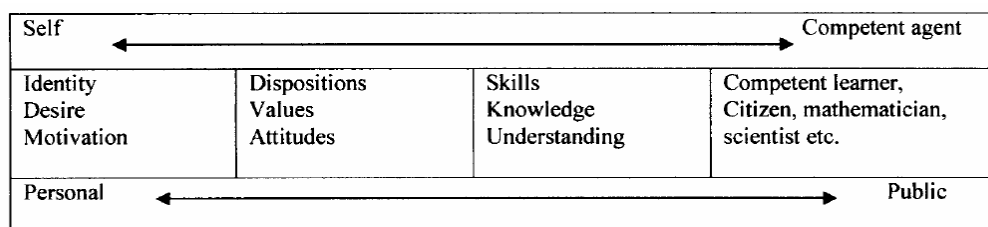
2.10 21C holistic education

A significant 21C global challenge is to reconcile the seemingly contradictory forces that are occurring between societal or vocational need and educational direction (Zhao, 2009; Hargreaves, 2008). Fitting with the holistic nature of the 21C challenges, a holistic conception of how a person should ‘operate’ is important. To this end, the OECD definition of competency is a useful one as it enables global teaching and learning to be characterized as more than merely a vehicle for students to acquire particular knowledge and skills but one that is critical in creating social and economic equity through life-long learning. For the OECD (2013, p.48), competencies “involve the

ability to meet complex demands by drawing on and mobilizing psychological resources (including skills and attributes) across different contexts”.

With the demand for high-level skills continuing to grow substantially, the task in many countries is to transform traditional models of schooling into customized learning systems that identify and develop the talents of all students, rather than simply distinguishing those who are more academically talented from those who are less so. To meet the challenges of an increasingly fluid 21C paradigm, it is the ability of the teacher and student to meta-learn across different contexts and using different skills, knowledge, and values that will arm them with the capacity to develop and contribute to multiple knowledge communities. This is of primary importance in the 21C context.

Competences are the interface between the holistic conception of the person (student) and the demands of the real (professional) world. This is of fundamental importance to students developing attitudes, skills, and dispositions that will enable them to succeed in the 21C context (Deakin Crick et al., 2004). Critical to the achievement of student competences is the facilitation of teachers’ own movement between the reflection on themselves as people and as learners and as developers of discrete skill sets, knowledge, understandings. This constitutes their professional role or their meta-competence, as illustrated in Figure 2.



Source: Deakin Crick et al.(2004)

Figure 2: Competence as a movement between personal and public

However, the common and sustained focus of international education organizations, national and local systems and schools on students’ scores through standardized

achievement tests, mitigates against the achievement of high-level global competence goals or holistic meta-competences.

2.11 Developing teachers' meta-competence

Despite the prevailing focus on standardized achievement tests, useful descriptions of desired student outcomes in terms of global meta-competence do exist. Harwood and Bailey (2012) rightly suggest that international-mindedness (global consciousness) is a person's capacity to transcend the limits of a worldview informed by a single experience of nationality, creed, culture or philosophy and recognize the richness of diversity and a multiplicity of ways of engaging with the world developed a useful working definition of international mindedness. This goes some way to guiding teacher practice.

Further to this, Boix Mansilla and Jackson (2011) have provided a comprehensive discussion and set of resources for 21C Century global learning. The importance of this work lies in the clear examples of what global learning looks like from examples of assessments and student work. The work presents inspiring student focused outcomes and exemplar curricula and pedagogies and, importantly, it identifies a continuum of four global competences that students should demonstrate as global citizens. These areas are presented in the table below.

Table 1: Globally competent student characteristics

Globally competent students investigate the world	Globally competent students recognize perspectives	Globally competent students communicate ideas	Globally competent students take action
Students investigate the world beyond their immediate environment	Students recognize their own and others' perspectives	Students communicate their ideas effectively with diverse audiences	Students translate their ideas and findings into appropriate actions to improve conditions

Source: Boix Mansilla and Jackson (2011, p.12)

However, while the continuum envisions an expansive outlook and practical role for students in their learning, its vision for the role of the teacher is comparatively narrow. It makes assumptions of the global orientation of teachers, their identities as learners and their capacity to develop global learning experiences for students and then assess this. This can be problematic, as the conscious conception of a global competence or the teacher competences needed to achieve global learning outcomes can be fluid, as can the context of their practice. That is, as collective identifications do not determine what individuals will say or do in any given circumstance or in any given context, sets of routines or pedagogies that assume a particular context cannot themselves provide for effective practice on the scale that is called for.

What makes units and courses of study that align with Boix Mansilla and Jackson's (2011) continuum valuable and sustainable are their potential to advance not only the student's learning or particular content – or even their development as global citizens – but also the teacher's insight into student learning and global citizenship. Singer-Gabella (2012) rightly highlighted the critical distinction between rote application of routine and using routines to reason. Highlighted then is the need to develop and support teachers, who in diverse classrooms, schools and school systems must be prepared to imagine and reimagine, through scholarly practice, precisely what effective teaching and learning should look like in their own particular context. What is needed are pedagogies and practices that are consciously developed for teachers to *think with* rather than for sets of teaching behaviours and practices to be automated.

The literature around teachers' professional teaching identities (for example, Trent, 2010 and Vargessse et al., 2005) suggests that the process of constructing teachers' global teacher meta-competence or identity, in the context of teacher professional learning and pre-service teacher education, is widely assumed rather than being treated as a discrete area of a teacher's identity to be explicitly developed. This represents an important area for investigation, as the extent to which teachers are able to use pedagogical [cognitive] knowledge and effectively develop themselves as teachers in the classroom depends on the extent to which they have internalized

[affective] learning as a set of values and dispositions; that is, the extent to which they have developed a learning identity of their own.

For teacher professional learning, there is a need for schools and systems to develop teachers' meta-ability to develop and adapt learning, be curious about learning, make meaning from experiences, be creative, act interdependently, be able to strategically manage their learning process and be resilient (Deakin Crick, et al. 2004). Teachers, like students, need to be developed as learners themselves so they can develop their students as learners. Teachers need to be meta-competent global educators. The model below adapts Boix Mansilla and Jackson's (2011) student model for a teacher context.

Table 2: Globally competent teacher characteristics

Globally competent teachers investigate the world	Globally competent teachers recognize perspectives	Globally competent teachers communicate ideas	Globally competent teachers take action
Teachers investigate their practice as a discrete discipline beyond their immediate environment (curriculum/systemic imperatives)	Teachers recognize their own practice and pedagogical theory and the perspectives of others' practice and understanding	Teachers communicate their ideas and practices with diverse audiences	Teachers translate their ideas, practices and findings into appropriate actions to improve the teaching and learning of their students and, importantly, other teachers

Source: Adapted from the Boix Mansilla and Jackson model (2011)

This teacher-focused model suggests the importance of teachers consciously and continuously building on the pedagogies, theories and competence sets that underpin student goals. The model is designed to fit within an action-research-based teaching and learning framework to achieve the stated goals of 21C education. This design fits with the SoTL literature (see for example, Trigwell, 2000, Boyer, 1997 and Marsick et al., 2009) and is important here as it highlights the critical dimensions or meta-competence that educators need to possess. This need is magnified if we begin to

consider the notion of a glocal educator, or an educator with a glocal identity who engages in professional teaching and learning practice locally and globally simultaneously. This represents the meta-competence of a teacher/educator living and working as global citizen through the field of education.

The following is this researcher's adaptation of Harwood and Bailey's (2012) description of international-mindedness, designed to more clearly express effective glocal teaching:

Effective teaching and assessment of international-mindedness (global consciousness) is a teacher's capacity to transcend the limits of a learning worldview informed through a solely cognitive lens and recognize the richness of diversity and a multiplicity of motivations and dispositions towards learning in an affective domain.

The key to the adapted teacher-orientated definition is for the teacher to be able to simultaneously teach their curriculum in a manner consistent with the original definition, but then to develop and assess the students' affective consciousness as a discrete area. The glocal meta-competence emerges as the combination of two discrete domains.

The danger of assessing global meta-competence solely through a cognitive lens or even on the basis of a merged affective-cognitive domain (such as in Harwood and Bailey's (2012) *A two-dimensional framework for assessing international mindedness* or Morais and Ogden's (2011) *Global Citizen Scale*) is that the cognitive will obscure the affective. For example, a piece of student work can, in itself, demonstrate global consciousness in the cognitive domain without it necessarily reflecting the same in the student who produced it (affective). A student can demonstrate their knowledge and their learning in two ways: *static* (meaning that the student has rote learned the teacher's views and/or methodology or simply followed detailed guidelines); or *dynamic* (meaning that the student embarked on their learning as authentic discovery). The static learner will have comparatively low levels of critical curiosity, creativity and strategic awareness. They will likely accept what they are told uncritically and accept

the teacher's viewpoints as single truths. They will be happiest when the teacher offers them clear routines and desired outcomes for them to learn 'robotically'. The static learner does not fit the criteria of a global citizen.

2.12 Creating a shared language for the glocal educator to support meta-competence

This research builds on the importance of an epistemic mindset (Deakin Crick et al., 2010), as a global teacher depends on clear standards, including a shared language, that scaffolds their own 'critical becoming' as learners as well as teachers. This is central to developing the capacity of teachers to negotiate the contextual influences in and across schools and to reach a common understanding of the desired outcomes. Teachers' 'critical becoming' as learners is also important in developing their classroom practice, as a conscious learning identity is central to a reflective practitioner approach (Schön, 1983) and to developing effective practices collaboratively. That is, the above-mentioned practice of teaching, student learning and assessment *for, as and of* learning (DEECD, 2009) are all key parts of teacher discourse and what teachers 'do' as professionals beyond classroom routines and curriculum outcomes. In order to support teachers to recognize and develop their global meta-competence, however, there is a need to articulate a conceptual vocabulary. As Singer-Gabella (2012, p. 1)) argued: "Absent a shared language, we can neither articulate common questions nor establish common tools".

The challenge then is for schools to adopt a global teaching and learning framework with a clear set of affective outcomes for teachers, to allow them to share a common understanding of themselves, their practice and their goals. Common outcomes also enable a shared understanding of global citizenship as a meta-competence, so that teachers and schools can redress the lack of clarity that exists around the type of learning to be created, its measurement, the type of teaching and learning considered effective in creating global competences, how teachers are supported and how their work outcomes are measured and/or recognized.

Recognizing, then, the need for a common learning language, this research identified

the ELLI dimensions (Deakin Crick et al., 2004, p.254) as a useful set of affective attitudes, values and dispositions with which to establish a baseline understanding. These seven lifelong domains are:

- **Changing and learning:** A healthy perspective of oneself as a learner is present when an individual believes that through effort, their minds will grow, and that learning is a lifelong process. There is a sense of getting better over time. A less effective learner perceives learning capacity as fixed and experiences difficulty in learning as something that reveals inadequacies and limitations.
- **Critical curiosity:** Effective learners with critical curiosity have energy and drive for learning. They value finding the truth, thinking deeply and asking questions. They are critical in their approach to learning and are undaunted by public exposure. They are in charge of their learning and are motivated by challenge. Less effective learners are passive in their learning and are more likely to accept what they are told. They are less likely to engage in speculation and exploratory discussions.
- **Meaning making:** Effective learners who make meaning search for ways to connect what they are learning to what they already know. They tend to make sense of new things by using their own experiences and are interested in the 'bigger' picture. Less effective learners approach learning experiences as isolated and fragmented events. These learners are more interested in identifying the criteria for success than in constructing meaning.
- **Resilience:** Effective learners are resilient and robust in their learning. They like a challenge and are more willing to try things and to take risks. They exert good mental effort and accept that sometimes learning is hard. They are not easily frustrated. Less effective learners present evidence of dependence and fragility. They are easily frustrated when they are challenged or when they make a mistake. They rely on others for their learning and self-esteem.
- **Creativity:** This allows the learner to look at things in different ways. Creative learners are imaginative and believe in new possibilities. They enjoy exploring new ideas and looking at things from different perspectives. They are more

playful in their learning, as well as more purposeful. Less effective learners are characterized by literalness and are rule-bound. They tend to be unimaginative and prefer clear-cut and traditional ways of looking at things. They prefer having preset rules or directions to follow.

- **Collaboration:** Effective learners are well-balanced and can be both private learners and social learners. They know the value of watching others learn, and make use of others' knowledge to expand upon their own. They understand that their peers and educators provide resources, as well as support. Yet, at the same time, they also know that effective learning may require time alone to study and ponder. Less effective learners are more likely to depend on others for reassurance and guidance, and are more likely to isolate themselves.
- **Strategic awareness:** More effective learners are interested in learning about themselves as learners. They will try different strategies in order to learn more about how they learn. They handle frustration and disappointment and are more reflective and self-evaluative. They like to plan and organize their own learning. In contrast, less effective learners are more 'robotic' in their learning. They are less self-aware and more self-conscious.

The ELLI dimensions are important to this research as they represent a common language with which to understand both discrete learning and teaching and citizenship. In this way, the dimensions are akin to the Demotic language that provided the critical translations in the Rosetta Stone. The dimensions are critical to the research as the participants were encouraged to articulate their understandings and practices with this language.

2.13 Summary

In this chapter, I have reviewed the existing literature that deals with the challenge of global interdependence and the notion of citizenship. I have located the challenges in teacher practice and global citizenship education initiatives within the broader notion of 21C holistic education. This calls for a greater emphasis on developing and measuring teacher learner identities as a means of dealing with the challenges. Lastly,

I have reviewed the literature that deals with the importance of teaching and learning competences, developing teachers' global meta-competence and creating a shared language for the glocal educator.

Critical to this chapter is that I have also identified the link between broader global challenges and education for global citizenship. I have identified the challenge in terms of teacher practice and global citizenship education. I have identified existing goals and initiatives and placed this within the broader notion of 21C holistic education. Lastly and most importantly, I have located research-based approaches that call for a greater emphasis on developing and measuring of teacher learner identities as a means of dealing with the challenges.

In the following chapter, I outline the research methodology developed to investigate these notions more specifically in an educational context. This methodology was designed to examine current practitioner awareness and preparedness for the future imperatives of 21C glocal education paradigm – in line with the overarching research questions that were outlined in Chapter 1.

CHAPTER 3: METHODOLOGY

3.1 Introduction

Having introduced the need for the study and placed it within the existing literature, I will now present and explain the research methodology. The methodology centres on contextualizing glocal teaching and learning with reference to the activity and educational environs in which it is situated. Ultimately, this contextualization is aimed at understanding the theory and practice of the 21C education paradigm; how educators communicate and engage in 21C professional learning and practice; and how scholarly 21C teaching and learning practice is supported.

This chapter presents all aspects of the research, including the research questions, the research design, theoretical paradigms, ethical considerations, details about the participants, the development of the Glocal Educators Project, and the creation of a networked improvement community. The chapter then presents the specific research activities and stages of data analysis across three research cycles.

3.2 Research questions

The core aim of the research was to explore notions of global citizenship and if and how this was being consciously developed at schools beyond the cognitive domains of knowledge and skills. The research questions involve the cognitive elements of knowledge, understanding, practice, and systemic support, but also include questions of purpose and mindset; the intended importance of the research was to explore these elements as being interrelated. As stated in Chapter 1, the research was guided by the following questions:

1. How do educators understand the theory and practice of the 21C education paradigm?
2. How do educators communicate and engage in 21C professional learning and practice?
3. How is scholarly 21C teaching and learning practice created and supported?

3.3 Overview of the research methodology

The goal of this research was to understand the nature of current practitioner awareness and the future imperatives of the 21C glocal education paradigm. The methodology borrows from the theory and practice of SoTL (Trigwell, 2013) and the broad goals that fit within the philosophy, strategies and intentions of Weber's interpretive research paradigm (Weber, 1985), as it is based in socially constructed knowledge (Lee, 1991). The core goal was to access the meanings of the participants' situated understanding and experiences with the theory and practice of 21C global education, as opposed to explaining or predicting their behavior, externally. According to the interpretive paradigm, and consistent with activity theory (Engström, 2001), meanings are constructed by the respondents, as Crotty (1998) suggests, in unique ways. These ways, he suggests, will depend on their context and personal frames of reference as they engage with the local and / or global community.

Built on the practices and traditions of Trigwell, Weber, and Engström, the research used a hermeneutic phenomenological approach. This approach is centred on the creation of a rich reflective dialogic experience for educator participants, designed to obtain comprehensive perspectives on the nature and implications of globalized practice at the secondary school level and the value of the dialogic experience itself. The research in Cycle 1 traced participants' perspectives in an initial focus group and a subsequent online survey on the topic of 21C global education. Gathering what was learnt through this process, workshops were held at schools for 100 teachers, proposing the adoption of Deakin Crick's ELLI learning domains to link global thinking and action to the classroom.

Cycles 2 and 3 evolved from Cycle 1, as the participants (including those drawn from the Global Schools Network, discussed later in this chapter) saw value in exploring their practice so as to establish a clear global theory-in-practice for their network. Cycles 2 and 3 then, involved the design of a Participatory Action Research (PAR) model, planned over two years with the researcher as both participant and researcher.

Cycles 2 and 3 included semi-structured interviews, classroom observations, an online discussion forum and formal professional learning sessions. The design included transcripts of structured dialogic experience, across multi-modes. Its aim was to portray the essence of the experience and the potential to develop a professional learning model, consistent with Billet's (1996) situated learning theory. Ongoing data collection, analysis and synthesis followed a hermeneutic approach, using immersion, understanding, abstraction, illumination and integration, ultimately to respond to the research questions and to develop a theory-in-practice. The research design is, in essence, a model of its intended goal, which is a sustainable theory-in-practice.

Figure 3 presents the research approaches and the various decision points and actions taken in conducting this research.

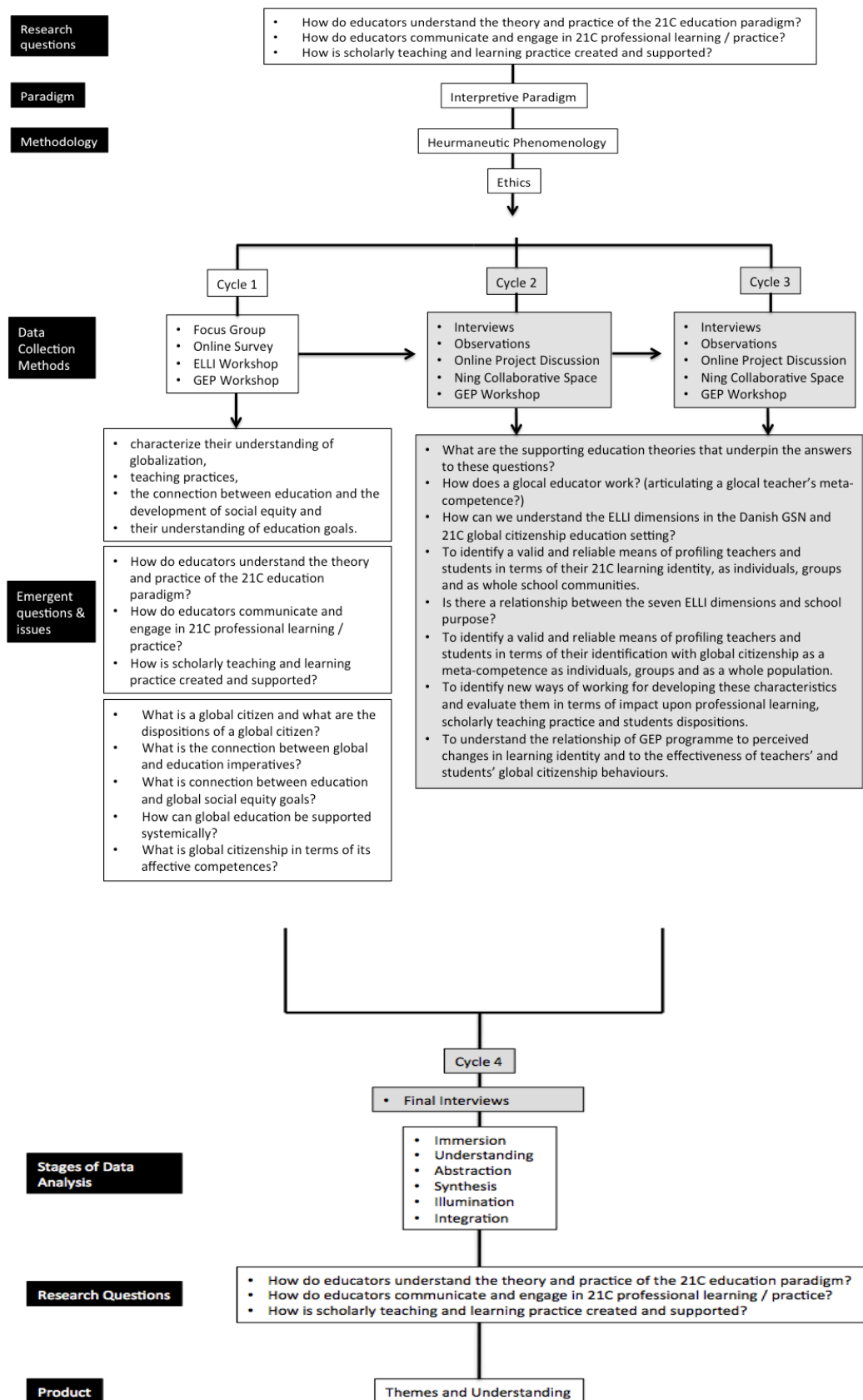


Figure 3: Research approaches for this study

As will be explained in detail in the research paradigm, methodology and data collection sections of this chapter, the initial research questions were explored and emergent questions articulated and analyzed during the course of the research. In the overall data analysis, however, the emergent questions and meanings were linked back to the initial research questions.

3.4 Theoretical paradigm: Interpretive

The goal of this research was to understand how teachers and schools understood and practiced local and global citizenship in a teaching and learning context. It sought the practitioners' authentic experiences of this phenomenon and fits best with the intent and strategies of the interpretive research paradigm. This is based on social constructivism and encompasses a number of research approaches, which have a central goal of seeking to interpret the world (Higgs, 2001).

According to the interpretive paradigm, meanings are constructed by practitioners in unique ways, depending on their context and personal frames of reference as they engage with the world they are interpreting (Crotty, 1998). This is particularly true of the education context, where teachers frame meaning in multiple contexts: class, cross-class and school-wide. In the interpretive research framework, meanings were elicited from the interactions between the researcher and participants as the research progressed, with the subjectivity across multiple contexts valued. In this research, the interpretive paradigm was intended as a means to elicit a large number of pixels from which a clear picture of the complex problem would emerge.

In addition, Billet (1996) rightly suggested that learning journeys in the work environment are situated and implicit. This is especially true for a pursuit such as education and particularly global citizenship education, for which there is an explicit cognitive element but an equally important implicit affective element. Both of these elements need to be understood and mastered by teachers. The interpretive paradigm

was viewed as the most suitable for this research as the central goal was to generate new and very practical understandings of the complex multidimensional phenomena encompassing the notions of teaching and learning practice and citizenship and identification.

Having adopted a purely interpretive approach in Phase I, participants expressed a desire to engage in a paradigm that included them as participants and as research partners. This, as indicated earlier, led to the adoption of a Participatory Action Research (PAR) approach (Kemmis & McTaggart, 2005). The aim of this was two-fold: firstly to understand and secondly to change social reality on the basis of the hermeneutic insights into everyday practices that are obtained by means of participatory research—that is, collaborative research on the part of teachers.

3.5 Participant selection

Initial contact was made with the Global Schools Network about engaging in the online survey and focus groups. This network consists of 12 Danish senior secondary schools and aims at constructing methodologies and strategies to support schools in integrating a global perspective in everyday teaching and school life. Contact was made with the Global Coordinator at the Capital High School, Copenhagen, who sought expressions of interest from among the school teaching staff.

Permission was sought from those who expressed interest. Specifically, teaching staff were asked for their consent to participate in the following:

- An online survey of their expectations and opinions relating to 21C global education.
- A focus group in which they would share their experiences and opinions relating to 21C global education.

3.6 Theoretical paradigm: Participatory Action Research (PAR)

The scope and specific design of the research was at this point tailored to encompass

the contextual circumstances and priorities of the Danish school network. The research was originally conceived as an observational model but, following Cycle I activities and the design of a Global Educators Project (GEP – discussed later in the chapter), the research developed a clear PAR approach. The GEP involved the researcher as facilitator and change agent, as well as observer and measurer. The research model became more about understanding the world and the schools' contexts by trying to enact positive change, collaboratively and following reflection. The design emphasized collective inquiry and classroom experimentation grounded in experience. Within the PAR research process, "communities of inquiry and action evolve and address questions and issues that are significant for those who participate as co-researchers" (Senge and Scharmer, 2001, p. 198).

Characteristically, PAR practitioners make a concerted effort to integrate three basic aspects of their work: participation (life in society and democracy), action (engagement with experience and history), and research (soundness in thought and the growth of knowledge). As Rahman (2008, p.51) stated: "Action unites, organically, with research" and collective processes of self-investigation. Nonetheless, the way each component is actually understood and the relative emphasis it receives, varies from one PAR theory and practice to another. This means that PAR is not a monolithic body of ideas and methods but rather a pluralistic orientation to knowledge-making and social change.

3.7 Methodology: Hermeneutic phenomenology

As already discussed, this research primarily employed an interpretive paradigm and a hermeneutic phenomenological methodology. This provided for the dual purpose of this research, which was to investigate and understand the level of teachers' perceptions and practices concerning glocal education, while simultaneously supporting practitioners to chart their own course in terms of developing new practices to meet their needs. The goal of hermeneutic phenomenological research is to facilitate and empower participants to consciously create a complex understanding of a phenomenon being investigated (van Manen, 1997). Put simply, it is providing

participants with the agency to recognize the varied contexts in which they experience their practice, the tools with which to make sense of them and the fora in which to contribute and collaborate on its meaning.

The two key elements of the research methodology, hermeneutics and phenomenology, encompass the essence of the elements of teaching and learning practice. Hermeneutics is the process of interpreting an experience. According to Wilson and Hutchinson (1991, p. 263), it uses:

thick description, paradigm cases, exemplars, and thematic analysis to discover meanings and ways of being [practices] in lived experiences ... [and reveals] the uniqueness of shared meanings and common practices that can inform the way we think about our practice.

It rightly pays attention to practitioners' written, verbal, and non-verbal communication of their understanding of their purpose and practice, contemporary and future. Critically, hermeneutics has been added to the interpretive element as a way of making visible assumptions and meanings from a range of different communication forms, most importantly those that have remained tacit on account of being difficult to articulate.

Phenomenology, or the study of the lived experience, pays attention to 'real world' events and happenings that occur both inside the classroom and outside of the school altogether. In this research, the phenomenological lens focused on facilitating an understanding of the teacher participants as 'whole people' who bring their life experiences to the classroom, rather than being simple conduits of curriculum or set practices. It is a "research methodology aimed at producing rich textual descriptions of the experiencing of phenomena in the 'lifeworld' of individuals that are able to connect with the experience of us all collectively" (Smith, 1997, p. 80.).

The recognition of phenomenology in this research was also critical as it enabled the exploration of the participants' experiences (both prior to the commencement of the research and during) with interpretation and abstraction from the researcher based on

existing literature and experience. The use of a hermeneutic phenomenological methodology enabled the exploration as it was understood and expressed initially to evolve over the course of the research and to be reinterpreted and understood in ever-increasing depth and clarity as iterative understandings were tested through action.

The research approach was designed to ensure quality in interpretive research, as well as rigour (Lincoln & Guba, 2000) and credibility (Denzin & Lincoln, 2000; Koch & Harrington, 1998). The iterative research findings were used to construct and reconstruct enquiry questions to facilitate opportunities for participants to best contextualize the research approach and to understand the tri-polar connection between research design, participatory action and outcome.

3.8 Ethical considerations

Ethics approval was granted by Victoria University (see Appendix 1), as well as by each of the six participating Global Schools Network schools. These ethics applications addressed, in intent and in action, the potential issues of disruption to learning, risks to the well-being of participants, benefits to participants, and ensuring informed consent for all participants.

Participants were recruited voluntarily and with informed consent outlining: the form and purpose of the research and its clear procedural outline and anticipated benefits. Each participant was offered the opportunity to participate in specified activities and to answer any questions or withdraw at any time from activities. Participants understood how the results of the study would be used with strict levels of confidentiality, anonymity and privacy. The research does not identify the Danish school network, the schools, nor any individuals directly, instead, pseudonyms have been used. There was no intention in the research to judge individuals personally, or to intrude into any issues relating to personal values or beliefs. Comments and conclusions about mindset and practice were intended to contribute positively, as benefits of participating in the study.

Classroom observations were conducted in a largely ad hoc manner throughout the project. These, numbering ten across the phases of the study, were focused only on identifying values issues as they arose in relation to the research under discussion. Notes were taken by the researcher during the classroom observation, which were later analysed using the general inductive analysis method. Observations were not intended to disrupt or disturb normal classroom teaching.

The observations involved the researcher viewing the class from the back of the classroom. The aim of the researcher was to look at how the teachers acted to achieve their stated purpose. Importantly, the researcher looked for indicators of the teachers' practice that aligned with the ELLI dimensions; the extent to which the teachers *modeled* them. For example, teachers engaging in critical questioning of students responses to higher order questions could be explained as aligning with critical curiosity and also collaboration. The teacher acting to make meaning from unscripted student responses with such methods as mind mapping indicated comfort in the liminal zone and an alignment with strategic awareness.

It was intended that material benefit would be offered throughout the study, with the creation of new resources and facilitation of professional learning. The research offered participants the possibility of critical evaluation of their own practice. In the case of students, it provided an opportunity to clarify their own understandings of the values dimension in the global context, which might contribute to their own learning in their subject areas. For both, it was an opportunity to contribute to the ongoing development of teaching and learning, both in individual subject areas, and in relation to global education more broadly.

3.9 The participants

The original intent of this research was to create a networked improvement community across three national contexts (Australia, Denmark and the US) so as to capture national and cultural variants and how they might be reflected in practice and pedagogical beliefs. However, schools and teachers could only be recruited in

Denmark. The Global Schools Network had been operating in this country for five years and was looking for a project to facilitate reflection on its practice and a method of strategic design for future practice. By contrast, those schools contacted in Australia and the US indicated that they had other priorities.

Nonetheless, the Danish context provided fertile ground, with the participation of an existing network of globally-focused senior secondary schools. The invitation to participate in the study came at an opportune time for the network, as they were undertaking a strategic review of their future direction. Participating teachers and their schools were each members of the Global Schools Network. In the development of learning programs, the Global Schools Network works closely with schools internationally, and local universities and non-government organizations to secure a challenging and involving education that encourages the formation of young global citizens.

All participants self-selected on the basis of their interest in the project and their positive experience in the focus groups. At each school, a single class was selected to work in the project with the teachers. Each class consisted of approximately 27 students and each was chosen on the basis of their pre-existing focus on global issues and practices. The schools and teachers became part of the GEP created for this study. It is important to note that the students were only indirectly involved in this research, although, their contributions via discussions with teachers were of great interest and importance. Quotes from students in their discussions with teachers were reported to the researcher by the teachers as a part of their interviews and are included in Chapter 5. A summary of participant details is provided in the table below.

Table 3: Global Schools Network participant details

School	Name	Teaching Method Area	Years Experience	Role
Capital High School	Mia	Humanities	5-10	Teacher
	Cecile	Danish	5-10	Teacher

	Frederik	Humanities, English	5-10	Teacher
Odense Gymnasium	Amanda	Humanities, English	10-20	Teacher (fmr D/Prin)
	Ralf	Philosophy, Danish	10-20	Teacher
Silkeborg Gymnasium	Carl	English	5-10	Teacher and Global Coordinator
	Yytte	Mathematics, Danish	1-5	Teacher
	Lasse	Humanities	1-5	Teacher
	Ulf		10-20	D/Principal
Lundborg Gymnasium	Marius		10-20	D/Principal
	Hilda	Humanities	5-10	Teacher
	Mikkel	English	10-20	Teacher and Global Coordinator
	Elliot	Politics	10-20	Teacher
	Majken	Mathematics, Danish	5-10	Teacher
University High School	Mona	Design	10-20	Teacher and Global Coordinator
	Mathilde	Humanities, English	5-10	Teacher
Vestamager Gymnasium	Andreas		10-20	D/Principal
	Carina	Humanities	10-20	Teacher
	Kirsten	Art	10-20	Teacher

Note: Pseudonyms are used for all Global Schools Network participant schools and teachers

Although the specific goals and strategies employed at each school varied, as a network the schools actively work together to support and implement strategies that strengthen the global dimension. This covers all areas of senior secondary school life, including pedagogy, teaching materials, exchange programs, projects, and social activities. Each school appoints a Global Coordinator to devise and action the different activities and approaches at their school. Key to the Global Schools Network (GSN) practice is their focus on the dialogue with students, teachers and organizations in

other parts of the world, both through exchange programs and the web. The GSN aims (GSN, 2015), as articulated by teachers at the time of the project formation, was that schools contribute to the formation of young global citizens who are able to:

1. place themselves in an interconnected world
2. enter into constructive dialogue
3. deal with cultural differences
4. connect knowledge and praxis
5. use innovative ways to deal with global challenges
6. interact on local, national and global levels

The research involved the capturing and understanding of glocal teaching and learning practices and the development and trial of new practices.

3.10 The development of the Glocal Educators Project (GEP)

Demonstrating the essence of the hermeneutic phenomenological research principles and practices, the research was personalized to reflect the specific GSN aims and practices. The initial focus group and workshops articulated clearly the realities of participant practice and specific challenges that they saw as important to being addressed. The challenges related to balancing systemic imperatives, curriculum and attainment goals, with the global aims of the school, the Danish system and international high-level goals, such as those published by UNESCO. Further, intra-school realities were seen as challenges, as teachers felt that global goals were often at odds with curricular goals.

As a result of the focus groups, the GEP was designed and adopted by the schools. Through the GEP, the schools made a commitment to the theoretical framework concerning glocal teaching and learning, wanting to adopt the research methodology to create lasting and scalable practices that would better achieve their stated goals. In essence, the intent and design of the GEP was aligned with Bryk's (Bryk et al, 2010) networked improvement community.

The GEP was designed to explore issues and to develop teaching and learning pedagogies and practices that could meet the growing demands on teachers in relation to high-level national and international goals pertaining to global citizenship and 21C skills. There was, and still is, a significant and growing emphasis on the need for schools in Denmark and globally, to develop the capacity to generate knowledge, learning, and sustainable practices, and to graduate students armed with 21C skills and the behaviours of global citizens.

The GEP aimed to address a set of challenges that were associated with similar projects globally, such as those coordinated by the AEF in Australia. These challenges included the view that a reliance on teachers of particular disciplines, or teachers with an inclination to be involved with different forms of exchanges and/or global social action activities, can engender a feeling of exclusion from within schools and a division amongst teaching staff. From the literature review and the data elicited from the initial focus group, it was determined that a result of this perceived exclusion was a sense that the practices of schools promoting global learning have not fully capitalized on the potential opportunities that a multi-dimensional, whole-school approach would afford. This GEP was developed to facilitate the building of teacher and institutional capacity in schools and to fully realize these opportunities. Its aim was to both provide professional learning and sustainable change modeling solutions to overcome the common challenges, as well as to measure the impact of the changed practice in terms of teacher and student outcomes.

The GEP was designed to bring both a cutting edge and a unifying, mutually reinforcing, common framework to the Global Schools Network. It employed a model of evidence-informed global professional learning, which was designed to empower and require practitioners and leaders to design, test and refine locally-inspired innovations. The process was given rigour and relevance by a research-led evaluation framework, shared by the network of schools. The project design utilized problem-solving approaches to whole-school practice development, as pioneered by the

Carnegie Foundation for the Advancement of Teaching in the US (Bryk and Gomez, 2011). Echoing Hargreave's notion of 'Joint Practice Development' (Hargreaves, 2012), the relationship between research and practice was designed to become engaged, iterative and rigorously self-evaluative. It would represent a dynamic and concerted program of professional learning through a process of designing, testing, evaluating and refining solutions to shared, previously intractable, complex problems.

3.11 Networked Improvement Community

The GEP was designed as a glocal microcosm; a network of teachers and schools who self-identified as being committed to operating locally and globally simultaneously. The network design borrowed from the work of Bryk, Gomez and Grunow (2011), who reported on the importance of networks to scalable improvement. Their work pointed to two critical aspects in the work of networks: as design communities and as learning communities. The creation of a network of practitioners was seen as critical to the research in terms of facilitating an opportunity for teachers to act interdependently and for the improvement design at each school to be sufficiently different, so as to create a richer and more valuable overall picture.

Despite the entire network being situated in one national context, it was felt that there was significant contextual difference between the schools to be able to simulate an international or glocal dynamic; acting and reflecting on actions through local and global lenses simultaneously. The six participating schools were located across Denmark and represented very different ethnic populations and mixes. Three of the schools were located in urban centres, two in Copenhagen, and one located in Aarhus, the second major city in Denmark. Of these schools, the Capital High School was located in the outer Copenhagen suburbs and consisted of a majority migrant population. Vestermager Gymnasium was a new school, built in a new city development and was purpose-built architecturally and pedagogically to encourage collaborative learning. The third school, located in Aarhus, was a dual curriculum school with a large vocational emphasis. One of the schools, Silkeborg Gymnasium was an IB school, located in a predominantly industrial area in the south of Jutland.

Two schools, Odense Gymnasium and Lundborg Gymnasium, were rurally located with student populations of lengthy Danish descent. Both schools reported on the challenge of raising student aspirations, seeing the need for a global focus.

A networked approach was chosen as networks enable individuals from many different contexts to participate according to their interests and expertise, while sustaining collective attention on progress toward common goals. The interactions and information exchanges occurring within such networks make them particularly suitable for innovation and knowledge intensive product design (Podolny & Page, 1998; Powell, 1990). That is, a network organizational approach “can surface and test new insights and enable more fluid exchanges across contexts and traditional institutional boundaries—thus holding potential to enhance designing for scale” (Bryk & Gomez, 2011, p.6).

In terms of networks as learning communities, Englebart (2003) pointed to the work of organizations and organizational fields as characterized in terms of three broad domains of activity. In Englebart’s terminology, A-level activity is said to be the on-the-ground work of carrying out the organization’s primary business. In the case of schools, A-level work can be viewed as the core teaching and learning work of classrooms. Secondary or B-level activity can be viewed as intra-organization efforts designed to improve core teaching work. In schools, personnel responsible for student achievement-based research collect data about student success rates, and share that information with teachers and the community to inform subsequent improvements. C-level activity is inter-institutional, representing the capacity for learning to occur across organizations. Here institutions engage in concurrent development, working on problems and proposed solutions that have a strong resemblance across localized contexts. Concurrent activity across contexts puts relevant aspects of the context in sharp relief and can help each local setting see its efforts from new vantage points. The network, thus, is critical in enabling C-level activity, which tests the validity of local knowledge, adjusting local understanding of the true nature of a problem, and advancing local support structures for improvement. In terms of this research, C-level

activities would ideally be tested in an international context, however, while this was not possible, significant conclusions could still be drawn.

Importantly, the research design is, in essence, a model of its intended goal, which is to explore and practice C-level activities in order to understand and develop the practice of 21C glocal education. Existing globally-focused school network programs are primarily focused on students, building student-student relationships and cultural understanding with reference to higher level learning outcomes. The literature review and the early data suggested that there is a need for teachers to model glocal practice rather than merely coordinate student activities. This research, then, sought to explore the potential value of the intended practice by facilitating the practice itself.

3.12 Data collection methods

The research design was structured around clearly defined iterative cycles. Each successive phase of data collection and analysis informed the action, leading to the goals of the research. Data was collected and analyzed concurrently to preserve authenticity and promote responsiveness. Research embedded the Socratic method (Krishnamurthy et al., 2011), with narrative interviews and semi-structured interviews administered within a hermeneutic phenomenological research methodology. The Socratic method was adopted as it was felt that it would best elicit authentic data and support the development of a genuine collaboration across schools. The original data was generated by the participants of a focus group comprising four participants from the Capital High School. The data from this group informed the foci for the online survey and the workshops held for participants across the Global Schools Network schools. This ultimately formed the basis for the GEP. The research methodology is important in that it both scaffolded the participants' understanding and practice in terms of 21C global teaching and learning, while also generating rich and varied data to inform the research.

Measuring the impact of the collaborative practices that this research facilitated involved the collection of qualitative data from participating teachers. Importantly

also, student voice was captured by teachers through classroom discussions and reported back to the researcher. For the GEP, data was gathered following the core research hermeneutic phenomenological approach, centred on the creation of rich reflective dialogic experiences for educator participants. The project first obtained perspectives on the nature and implications of globalized teaching and learning via structured dialogic experiences at a May 2013 workshop, consistent with Billet's situated learning theory (Billet, 1996). The workshop was facilitated by the researcher and explored the notion of global citizenship through the lens of Deakin Crick's meta-competency construct and the ELLI dimensions. Conclusions and recommendations were then understood in terms of the central thesis research questions.

3.13 Research activities

Table 4 below presents the research methodology as actions. Six research steps were conducted within each of these action phases. In Cycles 2 and 3, teacher participants were supported to follow the same research stages in an intra-school context, contributing their insights to enable collaboration. A GEP Ning (a web-based social network platform) was created to facilitate and record discussion, artifacts and learnings. The Ning was built to facilitate blogs, real-time chat and create a central data repository as a hub, similar to that used in the work of Bryk (2011).

Table 4: Activities undertaken for each research phase

Research Cycle	Research Activity	Participants	Date	Data Interpretation Stages
Cycle 1	Initial focus group	4 teachers at Capital High School	Dec 2012	Understanding
	Online survey	19 participants, refer to pp. 80-81	Dec 2012	Understanding
	Workshop	3 workshops involving 6 GSN schools There were 55 GSN teachers in total who attended the 3 workshops (numbers at each workshop was between 15-20). The number of teachers at workshops varied across schools due to participant availability and interest level.	Dec 2012	Abstraction Synthesis
	GEP designed			Illumination
	ELLI workshop	School-based GEP leaders	May 2013	Illumination
	GEP workshop	All project participants	May 2013	Integration
Cycle 2	Interviews	All project participants across project schools	May 2014	Understanding
	Classroom observations	All project participants across project schools	May 2014	Understanding
	Project meetings via	Open invitation to all project teachers		Immersion / Understanding

	Skype			
	Project Ning	Open invitation to all project teachers	Ongoing	Synthesis and theme development
	Research analysis	Researcher		Illumination
	GEP workshop	All project participants	Dec 2013	Integration
Cycle 3	Interviews	All project participants across project schools	May 2014	Understanding
	Classroom observations	All project participants across project schools	May 2014	Understanding
	Project meetings via Skype	Open invitation to all project teachers		Immersion / Understanding
	Project Ning	Open invitation to all project teachers	Ongoing	Synthesis and theme development
	Research analysis	Researcher		Illumination
	GEP workshop	All project participants	Dec 2014	Integration
Cycle 4	Final interviews	All project participants	May 2015	Understanding
	Research completion	Researcher	June 2016	

3.14 Cycle 1 data collection activities

3.14.1 Focus group

It was felt that the use of a focus group was particularly suited to the study, given that the objective was to better understand how participants viewed their experiences in pursuit of a shared goal. It was important to not only elicit qualitative data from the participants but also to facilitate genuine collaboration leading to a higher collective understanding of the elements of the study and of the experience. To that end, the initial focus group of four teachers from the Capital High School was used to test the veracity of the researcher's initial research design.

As indicated earlier, the format of the discussion followed a broad Socratic method of scaffolding participants' higher order enquiry questions and supporting their examination of these questions with formative questioning. The aim of the focus group was to elicit current understandings and imperatives as a means of identifying steps for future action. Specifically, the intent was to:

- Understand how the schools currently developed teaching and learning practices that prepare students to meet the identified Global Schools Network goals.
- Understand how the teachers defined key concepts of global teaching and learning and understood the broad goals.
- Understand how teachers integrated global goals into their practice.
- Understand how teachers and students consciously measured success towards these goals.

3.14.2 Online survey

The online survey was chosen as a data elicitation method primarily as a way of both capturing participant starting views, beliefs and experiences and also as a means of introducing them to the main tenets of the study. The low cost of the format was also a positive factor. The elicited survey responses, were used by the researcher for reference and to guide discussion in group interviews and semi-structured interviews.

The purpose of the online survey was to explore, more specifically, the understanding of global citizenship and teaching and learning for global citizenship across a wider range of Danish teachers. The survey, created from the major themes that emerged during the literature review, asked participants to respond to questions within the following domains:

- The nature of globalization.
- The nature and definition of global citizenship.
- The importance of 21C technologies to that definition.
- The role of education in creating global social equity goals.
- The role of teaching practice.
- Education goals.

3.14.3 Workshops

A workshop designed to theorize the data and participant contexts, as well as point to effective future practices, was held across the Global Schools Network with interested teachers and school leaders from across the six schools. The theoretical framework for the workshops was adapted from Deakin Crick's meta-competence model (see Figure 1 in Chapter 1). The intent of the workshop was to facilitate teacher responses to the researcher's constructs, discussion, and identification of key challenges and priorities for increasing their effectiveness as global teachers and learners. Following the focus group, the workshop was effective in eliciting the meanings that participants read into their reflections in a practical context and developing a sense of purpose for their Global Schools Network objectives. The focus groups were critical in the design process of the GEP.

The workshops were designed to

- Explore the notion of competence (i.e. affective + cognitive).
- Understand the affective dispositions that might be characteristic of a global educator.
- Discuss whether *every* teacher can contribute to the development of students as global learners – irrespective of the discipline area / curriculum?

- Socratic seminar: what are the implications of reconceptualizing globalized education in terms of Deakin Crick's meta-competence for professional learning at your school? Does a professional global educator disposition equal professional learning?
- As outlined in Chapter 2, the ELLI was presented as potentially important for creating a bridge between broader global goals and classroom teaching and learning. The ELLI contains competences and characteristics of learners with high agency. The intent of the workshop design was to consider the extent to which global citizenship could be explained as a learning mindset and how teachers could use the ELLI dimensions as a reflective tool for their classroom practice.

3.15 Cycle 2 data collection activities

3.15.1 Interviews

Interviews were conducted during December 2013, May 2014 and May 2015. In each cycle, the researcher conducted 19 individual interviews (typically of 20 minute duration) and 6 group interviews (typically of 60 minute duration), totalling 75 interviews across the project. They were conducted with teachers employing a semi-structured approach. Each interview contained the following set of prompts:

- What project activities have you undertaken since the previous workshop?
- How, if at all, has your teaching practice changed?
- What, if any, impact on student learning has been identified? What evidence of student voice have you collected?
- How useful, if at all, have the ELLI dimensions been in understanding yourself as teacher and as scholar?
- What plans do you have for the next phase of the project?

The interviews were conducted, recorded and transcribed by the researcher.

It was felt that interviews offered critical advantages as the method for data collection. Barribal and While (1993, p.328) highlight that interviews are “well suited to the exploration of attitudes, values, beliefs and motives” and “provide the opportunity to evaluate the validity

of the respondent's answers by observing non-verbal indicators" in addition to facilitating "comparability by ensuring that all questions are answered by each respondent".

The interviews were open-ended, inviting stories of teaching and learning experiences, as well as stories that characterized their ideas and experiences of global citizenship. The interviews, though, were focused on drawing on the themes the researcher and the participants had identified for analysis during the focus groups. Importantly, they enabled new ideas to be introduced by participants. The interviews, held in dedicated rooms across the six participating schools, were digitally recorded and transcribed. They were then coded to ensure dependability, credibility, transferability and confirmability of the qualitative data (Guba, 1981; Schwandt, Lincoln & Guba, 2007). First, themes that emerged from the initial data, which had not been previously recognized, were identified and coded; second, the data was interrogated for the presence of relevant secondary themes, already identified by the project and research teams.

The emergence of themes was facilitated by adopting a general inductive approach (Bryman & Burgess, 1994; Dey, 1993). The primary purpose of the inductive approach was to allow important messages to emerge without the restraints imposed by more structured methodologies. It was felt that key themes could often be obscured, because of the preconceptions in the data collection and data analysis procedures imposed by deductive data analysis. The general inductive approach consisted of an iterative process beginning with groups of separate responses and characterizing them firstly in terms of a construct, then in terms of a concept. The emergent theme is a characterisation of what is common in each of the identified concepts.

The decision to interview was based on the view that the use of personal language as data is valuable. Given that participants were not native English speakers, dialogue would provide an opportunity to ensure that participants fully understand what was being asked. However, much more importantly, face-to-face interviewing was considered appropriate to achieve a greater depth of meaning as it allows the interviewer to unpack with the interviewee their use of 'ideal types' (Gillham 2000; Ritchie & Lewis 2003). Team interviews were used across the schools. The number of teachers present at the interviews varied across the schools as did the

length of interview.

Lastly, in terms of the decision to employ semi-structured interviews, it was felt that the participatory nature of the research naturally fit with a more collaborative construction of meaning through a semi-structured interview. It was felt that the collaborative qualities of research data would be maintained while at the same time reveal knowledge 'beyond itself' (Banfield, 2004).

3.15.2 Classroom observations

Some of the major strengths of using classroom observation are: (1) permits researchers to study the processes of education in naturalistic settings; (2) provides more detailed and precise evidence than other data sources; and (3) stimulates change and verifies that the change occurred (Cohen et al., 2000). The descriptions of instructional events provided by this method have also been found to lead to improved understanding and better models for improving teaching.

3.15.3 Ning online collaborative space

The platform was chosen as one that was inexpensive but that offered the necessary features to support authentic collaboration. The Ning platform was designed to facilitate network engagement, creating an inclusive hub for research participants.

3.15.4 Online project discussion

Given the geographical realities of the GEP, it was important to create a strong online 'hub' to support the action research. A Ning functioned as an initiator of activity and a platform to bring together actions and perceptions from across the school contexts. In line with Bryk's networked improvement communities, the Ning aimed to build field consensus on the importance of the problem and promising pathways to solutions (Bryk & Gomez, 2011). The GEP Ning was designed to provide real-time collaboration through a chat function. It provided spaces designed as repositories of evidence of practice, as well as resources for participants to use in their practice. The design was cyclical, consistent with the design of the research as a whole. Participants would plan their actions, undertake the action, record their

results and share their analysis. The role of the researcher in the Ning was to analyze the collective data and report that back through the Ning to all participants.

3.15.5 GEP conference

Before beginning Cycles 2 and 3, GEP two face to face conferences were conducted by the researcher in Denmark. The conferences brought all participants together for two-day professional learning sessions. The conferences were designed to present relevant research and facilitate discussion to inform participants' actions. They also provided the space for strategic planning, both in school groups and as a whole GEP group. At the second conference, data elicited to that point was analyzed and presented to the participants.

3.16 Stages of data elicitation and analysis

This research adopted an interpretive data analysis methodology (Lincoln & Guba, 2000 cited in Ajjawi & Higgs, 2007, p. 621) to generate and preserve authenticity. The research was analyzed in six steps, across four cycles. This facilitated the gathering of authentic participant views and practices and the testing of theoretical constructs across the wider scholarly community. That is, at each stage, the data was tested against the pre-research assumptions about both 21C education and the notion of global elements in teaching at schools. Consistent with the conceptual framework, each research cycle was designed to inform and direct the next. This is illustrated in the figure below.

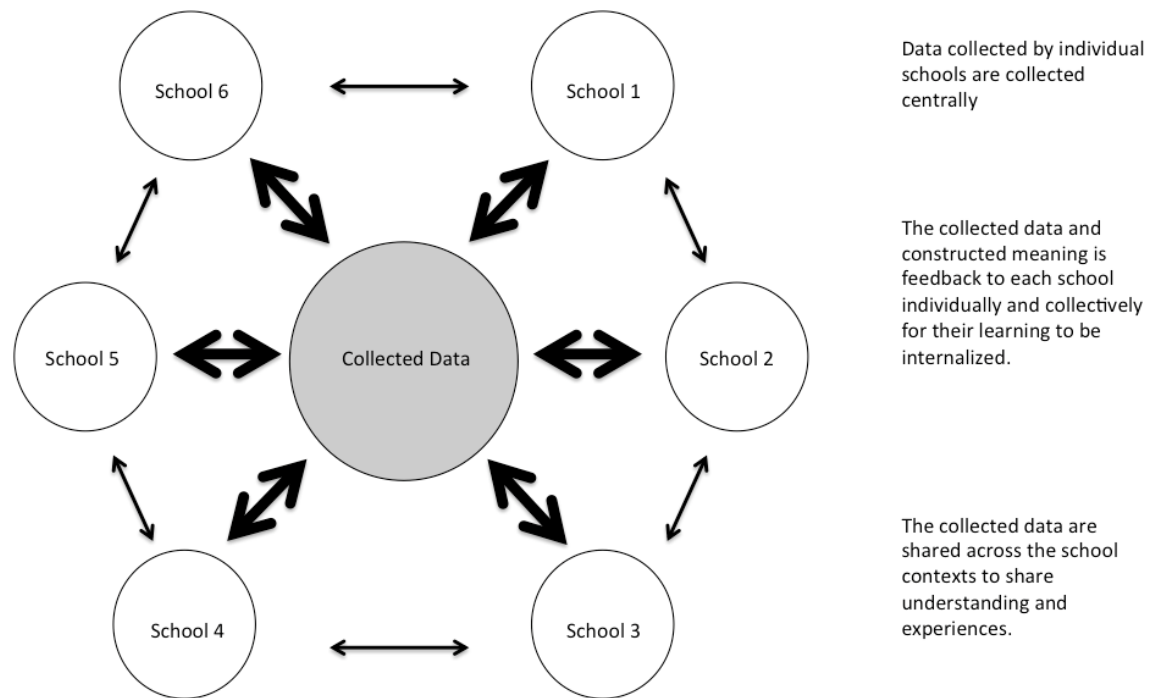


Figure 4: Data elicitation and analysis framework

3.16.1 Cycle 1

The Cycle 1 analysis consisted of *immersion* (collecting authentic data) and *understanding* (coding and deriving meaning). The first step, immersion, involved texts being constructed for each participant from the focus group, online survey data and the workshops. These texts were collated into emergent subgroups. The field notes were important to recreate the context in which the participant reasoning occurred, and constituted an important part of text interpretation. The second step, understanding, involved identifying first order constructs and using them as baseline ideas, which were tracked to measure change. First order constructs represent the researcher's understanding of the participants' ideas as expressed in their own way, capturing the precise detail of what the person was saying (Titchen & McIntyre, 1993).

3.16.2 Cycle 2

The Cycle 2 analysis consisted of *abstraction* (creation of second order constructs) and *synthesis* (grouping into thematic subgroups). The first step, abstraction, involved abstracting the first

order constructs and identifying second order constructs by using the researcher's theoretical and personal knowledge. The second step, synthesis, involved an in-depth triangulation of the data, the literature and the researcher's constructs. This helped identify meanings that the participants either could not or did not clearly articulate, on account of the emergent nature of 21C teaching and learning.

3.16.3 Cycle 3

Cycle 3 consisted of the *illumination* of the implications of 21C global teaching and learning practice and the *integration* of tested themes. The first step examined the literature for links to the themes and sub-themes identified from the entire data set. This research sought links between the main themes to support further theoretical development. The second step then integrated the themes and interpreted the learnings to communicate clinical reasoning. Findings were then presented at three scholarly conferences for critique. This aided the examination of the themes with an audience other than the research participants, to test the clarity and meaningfulness of the findings.

3.16.4 Cycle 4

Cycle 4 consisted of final interviews with the participants across the GSN and analysis by the researcher. The Cycle 4 Data Interpretation Stage was *understanding*, which completed the research and its communication.

3.17 Summary

In this chapter I have outlined the methodological design adopted in this study, providing a rationale for each element of that design. In the next chapter, I will outline and analyze the collected data. Chapter 4 examines the generative data collected in Cycle 1, with Chapter 5 presenting an analysis of data collected in Cycles 2 and 3.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

Adopting global learning outcomes has proved difficult for schools in terms of building and implementing professional learning and approaches, as well as quality assurance structures across diverse disciplines. Outcomes remain difficult to create and to quantify, for two major factors. The first is the difficulty associated with defining the characteristics of a global citizen and in identifying its *learning* value and form. The prevailing literature, as outlined in Chapter 2, and practice in the global education field highlights this. Practice is characterized as cognitive outputs or as sets of skills and knowledge. Global citizenship and global education as portrayed as *ideal types* rather than as a genuine fusion between these cognitive outcomes and critical affective outcomes of positive learning values, attitudes and dispositions. The second factor, which stems directly from the first, is the associated difficulty with measuring and comparing the contribution of global education to the development of generic graduate capabilities with that from non-global education contexts. That is, how can we promote the impact of global education as a learning outcome rather than as a service outcome and the contribution of teachers and program leaders from across the curriculum against a single outcome set? This chapter describes the methodology used to investigate contemporary thinking and practice and presents an analysis, including an outline of an iterative intervention.

4.2 Data collection activities

As already outlined, data for this research was gathered following a hermeneutic phenomenological research approach, centred on the creation of a rich reflective dialogic experience for educator participants. The project obtained perspectives on the nature and implications of globalized teaching and learning via structured dialogic experiences, consistent with Billet's situated learning theory (Billet, 1996). Specifically, data was gathered in three ways:

1. An initial focus group was held with four teachers and the Global Coordinator at Capital High School, Copenhagen. This school was chosen as the location for the focus group as this was where the initial research contact taught. The focus group consisted

of teachers who were active in global activities and programs and those who were not. This was intended to be more broadly representative of the teaching staff and to more authentically identify beliefs, practices and issues in response to four questions (see 4.2.1, below) derived from the core research questions.

2. Teachers from across the network of schools took part in an online survey that asked participants to characterize their understanding of globalization, teaching practices, the connection between education and the development of social equity, and their understanding of education goals. These questions were designed to sharpen understanding of key concepts and ideas that were important to the responses elicited in the focus group.
3. A workshop for teachers of six Global Schools Network schools was held. The workshop, repeated across the schools, was based on data elicited in the focus group and online survey. It presented the initial data and facilitated discussion from these initial forms, then placed them within a paradigm that articulated global citizenship as learning dispositions.

Across the three sets of data, questions emerged in relation to the participating teachers' practice, as well as the ability to effectively meet the stated aims the GHS. These questions are discussed below within each data collection step.

4.2.1 Initial focus group Capital High School, Copenhagen data analysis

The initial focus group at Capital High School sought to understand:

- How the schools currently developed teaching and learning practices that prepare students to meet the identified Global Schools Network goals.
- How the teachers defined key concepts of global teaching and learning and understood the broad goals.
- How teachers integrated global goals into their practice.
- How teachers measured success towards the goals.

From the discussion, the group felt that the following were issues that needed to be explored but broadly under the heading of honouring and valuing global education (students and teachers). How can the education system and the school honour and value these?

Teachers articulated a dichotomy of 'new and old assessment forms' that didn't get to the core of what they understood global outcomes to be. Assessment needs to be more holistic to match the global paradigm and that it was desirable to create a system based on measuring learning dispositions. However, they suggested that global outcomes were difficult to measure

Teachers saw a disconnect between learning and disciplinary focus. They suggested a need to break down the primacy of the disciplinary identity as global education was seen primarily through disciplinary lenses. Instead the teachers saw value in understanding the approach to global education through a leaning lens. They saw a lack of conscious interpretation of skills and learning into curriculum and that the contemporary practice was not to measure discrete learning across disciplines.

More broadly, the teachers identified the notion of value as being important to the reality of global teaching and learning. They asked what makes teachers feel valued as they saw a gap between the gap associated with global activities and curriculum based classroom practice. They questioned the primary motivator for teachers, discipline or learning. It served to highlight a need for a consensus on this question. They identified a sharp identity dichotomy as being those who embraced global practice and those who did not but saw that a critical mass of those orientated to global practice was needed.

Questions too, were raised about the ability of schools to implement structures and cultures that would support global teaching and learning. Beyond the high level goals espoused by Capital High School, the teachers wondered whether the school had a strategic plan to support the global education, complete with a change management strategy.

Central to what the teachers felt was needed at the school was a culture of learning. They saw a need for the school to consciously develop teachers as lifelong learners. They saw this as

being critical for teachers to both explore what global practice was about and also model good learning to students. Currently, they suggested, teachers didn't speak about their generic approaches or education philosophy to each other. What was needed was for teachers to be allowed to meet, to be given a structured chance to reflect and self-reflect on core pedagogies as, at present, there was no current culture of discussing or reflecting on pedagogies.

4.2.2 Online survey and workshop data analysis

Following the focus group, an online survey was created to reach a wider group of teachers across the Global Schools Network and to enquire further into the main themes that emerged from the focus group. The core questions used in the survey and the workshops that followed are listed below. In addition to the questions, the emergent themes are also indicated. The responses received to the five questions ranged in understanding and focus but could be characterized as either being cognitively or affectively focused. Cognitive responses broadly saw global citizenship and global teaching and learning as being skills or a knowledge set to be acquired. Others saw global citizenship and education through an affective lens as learning values and dispositions.

1. What is a global citizen and what are the dispositions of a global citizen?
2. What is the connection between global and education imperatives?
3. What is the connection between education and global social equity goals?
- 4 How can global education be supported systemically?
5. What is global citizenship in terms of its affective competences?

The next section will present an analysis of the responses to each of these questions within the context of affective and cognitive lens.

4.2.2.1 What is a global citizen and what are the dispositions of a global citizen?

While the data that was collected at workshops and from the online survey involved only teachers who self-identified with global teaching, the prevailing understanding of the notion of global citizenship nonetheless revealed a mixture of attitudes and practices. Teachers were asked to characterize a global citizen as a word or phrase. The responses were categorized in

terms of the focus of the characterization, as well as the learning dimension. The characterizations fell into two main groups: one characterizing in affective terms (their learning dispositions and values); and one in terms of their skills and knowledge. From within the affective group, there appeared to be a difference between those who had a desire to adopt deep learning strategies to 'get to the truth' about the world, to inquire deeply and come to their own conclusions; and those who felt more of a responsibility or a greater personal interdependence. The first group can be broadly categorized as demonstrating elements of critical curiosity, strategic awareness, meaning making and creativity. The second appeared to enter into clear learning relationships and collaboratively, discovering a deeper meaning.

Affective – curiosity

This group of responses suggested an understanding of a global citizen as one who possessed a critical curiosity; they take ownership of their own learning and understandings. For example, respondents saw a global citizen as:

a person who feels that what happens in the world concerns them ... curious, one who is orientated towards a global world; a curious person who respects and lives by human rights; anyone with an (active) interest in things that are foreign (geographically).

They saw a global citizen as one who:

is interested in what goes on in Sudan; Wants to interact with others. Someone who is curious; is interested in global challenges; who is interested in issues that concern the whole world; looks across borders; culturally curious; is open minded, curious, knows his own culture.

One respondent suggested that:

a global citizen has an awareness and an interest in what goes on in the world; a global consciousness and awareness.

Consistent with the global citizen as critically curious is the citizen who is interested in strategically discovering and using different approaches to global practices and issues and is intent on finding links between practices and outcomes to make a deeper meaning. For example, respondents stated:

a global citizen is someone who is aware of the issues facing us as inhabitants of the same globe; a person who understands his own culture in relation to other cultures. Awareness of global inequality and different opportunities of people around the globe; and one who respects people from other cultures and; can put local dilemmas into a global perspective; is not limited by one's own culture; and who is curious/willing to accept changes in his/her daily life.

Further, respondents in this category saw a global citizen as:

a person with the ability to see the challenges and opportunities of being connected across borders; curiosity of other world - respect and interest of people - acts with a view of the issues that challenge the world - critical thinking; as being interested in: global themes, awareness of global problems, open-minded about other people and who believes in a holistic way of thinking.

Other respondents focused on those people who could look at things in different ways and with an open mind. One response was simply *open-minded*. Similar comments were:

Glocalyte multi-linguist. Open minded, cultural awareness. Interculturally competent; an openminded person who is able to fit into any community or culture; a person who meets you as a human person and knows that there is many different ways of being human; and a well-informed and open-minded (curious) citizen, who has an interest in cultures, people and is aware of the language barriers and other barriers.

Affective – responsibility

A second distinct group from within those who characterized global citizenship in affective learning terms were those who emphasized the responsibility or purpose with which a citizen is encumbered. Comments included:

what is your purpose in life? A person who knows about and represents other cultures. Responsible; someone who is aware of global contexts and the individual's role in them and wants to play an active role; and someone who is a part of and feels responsible towards multiple communities across borders and is actively engaged in creating a sustainable world.

These respondents articulated an additional element to being curious, strategically aware and desirous of making meaning. Their disposition was to develop relationships as a means of taking responsibility. One commented:

a global citizen is one who is conscious about the fact that all the globe is connected. He is characterized by thinking in his daily life and taking responsibility in global problems.

Cognitive – skills

The second significant group of respondents were those who characterized a global citizen in terms of their skills and/or knowledge, rather than on their values and/or dispositions. While the responses all characterized global citizenship in cognitive terms, they emphasized the need for global citizens to possess the requisite affective learning dimension to ‘activate’ their cognitive skills and/or knowledge. That is to say, the respondents did not necessarily have these dispositions when answering, but identified these characteristics, contextually, as being essential to global citizenship.

The following outlines a cognitive understanding of global citizenship in terms of skills but each is placed within an affective context. That is, respondents described skills or actions in an affective context, the clearest of these was learning relationships but also included meaning making and strategic awareness. Respondents wrote that global citizens were those who

interact, exchange knowledge etc across borders, physically, mentally, electronically; communicates and interacts with people from other cultures and use his/her own cultural strengths/weaknesses in the interaction; one who is a part of multiple communities across borders; interact[s]; knowledgeable about the world; acting and grabs the opportunities in front of one self ; [able] to travel and delve into a larger city with things that are foreign (geographically); communicat[e] on website platforms to connect to different people; and able to interact/cooperate in many aspects with people from other cultures.

Further, they are:

someone who is able to interact and communicate without prejudice in a non-homogenous group to solve a problem and one who, simply, is able.

Affective - knowledge

Responses also referred more specifically to knowledge and understanding rather than to skills. Some referred to language knowledge:

The person is capable of speaking English; Having language skills and cultural understanding; and knows about other cultures religions and languages.

In other responses, the affective values and dispositions needed to create these knowledges and understandings are clear. For example, the following responses were framed as cognitive understandings. Implicit in them is the strategic awareness, meaning making and critical curiosity dimensions needed to develop them. That is:

understands one's own culture and can incorporate other cultural understandings of life and identity; someone who understands that the world consists of networks; a global citizen is conscious about himself being a member of global society; a person who can communicate interculturally, knows about global issues and can get on with his/her knowledge; a global citizen is a person who can affect the world and who understand the global problems and can communicate interculturally; and lastly one who understands that others can also be right.

4.2.2.2 What is the connection between global and education imperatives?

The gap between the articulation of the student meta-competence and the need for a teacher's meta-competence to be articulated is clear in the research conducted as a part of the GEP. In the focus group and online questionnaire, targeted at teachers both directly involved in global teaching and learning and from those not involved, participants were asked questions relating to the connection between global education and broader education imperatives. The responses indicated that only a minority of teachers acknowledged a holistic global teacher meta-competence. Critically also, a gap exists between the teachers' understanding of key elements of globalization and the challenge of global education and the practice of schools.

Cognitive interpretation

When asked to characterize the key priorities of their role as educators, teachers were evenly split into two categories. The first group was identified as those who viewed their role as teacher primarily through a cognitive lens. These teachers saw their role as providers of knowledge and skills (albeit broad and wide-ranging), in a behaviourist tradition. One comments was:

The key priority is to teach the language and the culture that go along with it, so the students become aware of the fact that learning a language is to learn culture and often also another/different mindset.

Another wrote:

My role is to obviously teach the curriculum, but to do so in such a way so that the students are interested and learn as much as possible.

Another said:

My role is also to broaden their horizons to learn them (sic) about cultures and differences in different countries and to teach intercultural understanding.

One small group of respondents, while fitting into the behaviourist mould, did offer an additional element. One wrote that her priority was:

Giving the students the knowledge and competencies within the given subject but also to develop their persona and social skills, suggesting an appreciation of an affective domain.

Another comment was similar:

First of all to give the students the academic input and tools they need. Then, following that, let them understand the world, not just as they see it, but according to how other people see it.

Affective interpretation

The second group viewed their role as teachers far more in terms of learning-based outcomes / affective lens. It was their role to:

Make students curious and responsible about the world. Making global citizens. And to widen the optic of my students, to help them to be able to find out who they are, to help them to develop a critical sense of judgement.

Others spoke in terms of competences:

Competences that can be used in order to go on in the educational system: critical thinking, being able to analyze and interpret any kind of media/text/speech/thing; and Competences that can be used in order to be an active and responsible democratic citizen: self-awareness and responsibility, critical thinking, sense of group.

One saw their role as:

To motivate and to make the student think about their own world and compare it with the world just outside their door.

4.2.2.3 What is the connection between education and global social equity goals?

In terms of the role of education in building social equity, teachers were asked to characterize their understanding of this by responding to the following proposition first articulated in the Bradley Review of Australian higher education: “As never before, we must address the rights of all citizens to share the benefits of the new global age and knowledge-based economy” (Bradley et al. 2008). Teacher responses fell largely into two categories: cognitive or affective interpretation. In the first group, the link between education and society, between learning to learn and civic competences, was highlighted and in the second, knowledge-based outcomes were emphasized.

Cognitive interpretation

In the first group, respondents focused on developing learning to learn competences. Comments included:

In both Denmark and in the world in general education (the ability to learn something new) becomes the most important criteria for social stratification.

Also, another said:

Education is very important since it opens our minds and gives us the learning tools to investigate the global world; and education must not only be thought as years in school but also learning to think innovatively.

Others focused on the element of technology:

As technology becomes the primary solution to global problems, education becomes more and more important. Reality is becoming more and more fluent, and development and change is accelerating. Therefore it becomes more and more essential to learn to learn and to be critical.

Affective interpretation

The second group of responses came through a clear cognitive lens. One wrote:

I think it is very important. At our gymnasium [High School] we strive at overcoming socio-economic barriers in order to help our students get as high an educational level as possible. I think education and knowledge is essential!

Another suggested that:

Knowledge is necessary to make changes.

Knowledge was also a key element for another respondent, who said:

The more you know, the easier you can look at a specific problem from more than one angle. Therefore it is important to educate and in the education process discuss matters of both local, national and global context.

Another said:

To learn skills and being able to use it in the global way is very important to reach the goal of equity.

Other responses referred simply to 'educating' or 'education' as a means of responding to the issue of social equity but are taken here to come through a cognitive lens, given the absence of any other distinguishing feature. For example, the following response refers to imparting a

particular perspective to the students, which implied a cognitive or behaviourist understanding:

Educating the Danish youth is an important task, but I feel it is important to educate them in an unselfish manner. Let them understand that they are privileged and that by giving a little you can make a big difference to others.

Similarly, the notion of 'enlightenment' should be read as equating to a pre-determined set of ideas to be imparted to the students:

Education and enlightenment is absolutely necessary in order to inform all citizens of the world of their human rights.

The same is true with reference to awareness:

Education also means becoming aware of your role in a global society.

4.2.2.4 How can global education be supported systemically?

The third data collection form was a focus group held with four teachers from the Capital High School, Copenhagen, in December 2012. The focus group was important to test the veracity of the original research design. The teachers were those actively involved in globally-orientated programs and those who were not. The teachers were asked to discuss their practice and what was needed for teachers to be supported, systemically, to achieve the stated GHS goals. In response, the teachers identified issues that mitigated against a consistent approach to, and achievement of, the high-level global goals. These issues largely fell into two categories: those that centred on a lack of clarity around the type of learning that was to be created and its measurement; and those that centred themselves as teachers, the necessary type of teaching and learning, how they are supported and how their work outcomes are measured and/or recognized.

Connection between global goals and established practices

In the first category, teachers felt that there was a disconnect between the global goals of the school network and the established teaching practices and systemic learning expectations; that:

There is a disconnect between learning and disciplinal focus. Global outcomes are difficult to measure in this system. I guess you could say that there is a lack of conscious interpretation of skills/learning into curriculum. The current practice is not to measure discrete learning across disciplines. Curriculum is not mapped through a learning lens.

One referred to a *new and old assessment form dichotomy and the need to break down the primacy of the disciplinal identity*. Further, it was felt that there was a conscious competition between the cognitive and the affective or *Disciplinal pedagogical understanding versus learning focus*. It was felt that teachers and school leaders needed to ask *How to make a system based on measuring learning dispositions and create assessment [that is] more holistic*.

The second category stemmed directly from the first, causally; what should the priorities of the teachers be? It was felt that the value of teachers and how they were recognized was skewed in favour of those working largely within the cognitive domain or on curriculum outcomes. The question of *When do teachers feel valued?* was raised as to *Honouring / valuing global skills (students and teachers)*. *How can the education system and the school honour and value these?* There were questions as to whether global competence outcomes were in fact the domain of all teachers. *Which is the primary motivator? Discipline or learning? There is a need for a consensus on this question. All teachers? First adopters versus laggards dichotomy – critical mass needed to sustain.*

Despite the lack of clarity in terms of the structural goals, it was widely understood that *Learning foc[i] creates richer disciplinal understanding* but teachers were unsure as to whether the schools understood the disconnections or had a plan for how to reconcile them. *Does the school have a strategic plan to support the global education paradigm? And do schools have change management stages?*

Global teacher identity

The success of schools in terms of global outcomes depends on the creation of teachers with clear global identities. However, as Jenkins (2012, p. 18) argued, “although identity is in principle, and regularly in practice, negotiable and changeable – identities that are firmly

established and reinforced in early life may be highly resistant to change”. This view was consistent with those of the teachers in the focus group. That is, while attachment to a global teaching and learning identity figures prominently in the rhetoric of GSN, to quote from Jenkins (2012 p. 18) again: “the calculation and pursuit of ... defined individual or shared strategies may not sit easily with that rhetoric. People often say one thing – and may perhaps even mean it – while doing another”. Each GSN, by definition, has clear identities and descriptions of behaviours and practices. However, the reality is that there appears to be a real difference in what that means to individuals in a practical sense and what it looks like in practice.

The intersection of global competences and teaching and learning as meta-competence, highlights a need to focus on the identity that teachers consciously hold. Importantly, the data presented in this research sheds light on the identity-in-discourse and identity-in-practice of the GSN participating teachers in terms of this intersection. This has implications for how teachers recognize and contextualize the factors that are critical to shaping their own professional identity as global teachers, namely the social and professional discourses that are encountered in schools and between schools globally.

Evident in the data that emerged from the focus group, teachers felt that there was an absence of systemic structures to adequately support them in developing as learners. This mitigated against a genuine identity-in-practice. Teachers felt that they needed to be better empowered as learners:

Give teachers a chance to reflect/self-reflect on core pedagogies and [teachers and] Students are able to reflect on their learning in disciplinary contexts but not overall.

In terms of identity-in-discourse, an identity that is felt in rhetoric but not in practice is evident:

Teachers don't speak about their generic approaches or education philosophy to each other and that there was no current culture of discussing or reflecting on pedagogies.

This manifested as teaching and learning dialogue that was ‘siloed’, fractured and unclear. One participant reflected this by asking:

What are teachers' expectations and do they differ across disciplines? What are the schools' expectations?

Teacher professional learning

A critical factor to emerge from the focus group was a desire for a clear structure to support the development of teacher identity as learner; to re-engage the teachers as learners and validate curiosity as important. Curiosity:

is very important to GHS, which has highly sophisticated learning expectations; it is crucial – training of the brain and a validation of that curiosity.

How this curiosity was to be created, though, was something that also needed to be explored.

One suggested that there was a:

need to unpack what learning is. Another asked, in reference to teachers, how is the curiosity created? and can every student develop as a learner?

One suggested that, in order to create and sustain teachers as learners, there was a need for schools to:

foster communities of practice and knowledge transfer; another suggesting that it was more than schools and that Systems – change the assessment – concept of value. Schools support in developing the Confidence and skills to succeed are important to developing curiosity.

National systemic challenges

In the context of the strengths and challenges in the Danish system, there are significant pre-conditions and dispositions for quality learning and teaching. However, the emergent data from the focus group suggests that a key challenge for schools and systems centres on clearly articulating learning and teaching practices for an interdependent 21C global environment, as well as the type of teaching standards that are requisite to achieving these goals. For Denmark to achieve quality educational outcomes that address its national socio-economic goals, 21C-appropriate global teaching and learning standards need to be both articulated and impact measured.

This challenge accords with the OECD Reviews of Evaluation and Assessment in Education: Denmark (Shewbridge et al., 2011). The review highlighted that, in Denmark, teachers are trusted professionals; that there is a high degree of autonomy; there is readiness of teachers and schools for peer learning and to receive professional feedback⁴. Further, teachers are given considerable scope to exercise their professionalism and benefit from high levels of trust among students, parents, and the community. Schools increasingly structure their work around teaching teams and engage special support advisors. All are the ‘enablers’ of the type of professional practice that is necessary to develop students with the requisite competences but also to develop the teachers themselves as learners, global citizens and glocal educators.

However, the missing piece of the puzzle is having a clear and shared learning-focused understanding of both their own professional teaching ‘standards’ and of student affective learning outcomes. This is consistent with the responses of the focus group. It is important that teacher appraisal is not systematic and there is no single shared understanding of what counts as accomplished teaching in Denmark (Shrewbridge et al., 2011). The review indicated that developing a framework of teaching standards to provide the common basis to organize a career structure for teachers is a top priority. Teacher appraisal for certification would determine both teachers’ career advancement and professional development plans. Danish teachers are positively disposed to professional development, but while some school principals hold a formal dialogue with teachers on an annual basis, it is not widespread practice for school principals to observe teaching. Developmental teacher appraisal should be strengthened and linked with teacher professional development and school improvement.

The importance, then, of developing quality professional learning practices in schools is critical to the development of effective teachers and is central to the development of teachers who can critically distinguish between contextual professional discourse and themselves as learners. The design and practice of the professional learning, however, have largely remained

⁴ While the OECD Review reported on the basic school education level in Denmark, its evaluation is true of the upper secondary education sector. Like in the basic school sector, there is no formal and shared understanding of what counts as accomplished teaching in the upper secondary education sector.

static and can be characterized as following a behaviourist model. There is a need to understand teacher education through a meta-competence lens. This would take account of the affective elements that are essential to quality learning and teaching. Without any professional standards or clear articulation of effective professional practice, professional learning and practice development and enhancement is impossible. The overarching implication that the OECD Review highlights is the missing links between teacher appraisal, professional development and school development.

4.2.2.5 What is global citizenship in terms of its affective competences?

ELLI dimensions

Emergent in the data collection was the need for a shared language that would enable a shared understanding of global meta-competence, the development of teacher practices and the measurement of impact. For the GEP, the ELLI dimensions were identified as providing a necessary affective understanding so as to complete a holistic view of global outcomes. The ELLI identifies seven affective dimensions, which have been interpreted for the purposes of this project as a defining set of affective characteristics of global citizens. The dimensions are changing and learning; meaning making; critical curiosity; creativity; learning relationships; strategic awareness and resilience (Deakin Crick, et al., 2004).

At a workshop with teachers from the GHS, the ELLI dimensions were discussed and participants were presented with the proposition that these dimensions provided a holistic framework with which to understand global competences. The results of this enquiry, as with the online survey and focus group, were mixed. This serves to emphasize the need for teachers to continue to reflect on their existing practice and explore for themselves what is effective in developing global competences. The notion of a 'silver bullet' should be avoided; there is no one technique, practice and/or curriculum that can be rote-learned and successfully applied in every context. What the responses suggest is that the teachers involved in the GEP broadly see the affective dimensions as characterizing a global citizen and an appropriate shared language with which to collaboratively explore.

Responses to the proposition generally fell into two categories. The first group agreed with the proposition, suggesting that:

in theory, global citizens might be able to do without the ELLI dimensions but my imagination and experience suggests that the reality is not so.

Another wrote:

yes, it is a question of attitude.

Others offered qualified support by agreeing broadly but with a belief that some dimensions were excess to need. For example, one wrote:

yes, perhaps not meaning making, another suggesting that you don't have to encompass all of the dimensions. They project the ideal global citizen.

Further, one asked:

can you be a global citizen without curiosity / relationships etc?.

The second group of responses were less sure. Some enquired about the teaching and learning implications or aspects:

how do we see these dimensions? Is it only for some people to be a global citizen?

Importantly, one asked about the capacity of the teacher to scaffold these dimensions with students and made the link between teaching practice and professional learning:

how do you, the educator, acquire these learning skills and how do you transfer these skills to your students? What teaching methodology works in favour of the ELLI dimensions?

The last comments go to the heart of the GEP, which was developed to find the answer to that very question. Another teacher was concerned about the place of the dimensions in the context of the curriculum:

How does (sic) these dimensions fit with the current assessment culture in high schools?

4.3 Initial Conclusions

Overall, the data suggested that there was strong recognition from within the GHS that contemporary global society had undergone significant change as a result of global forces and this represented a significant challenge for teachers and schools. As globally engaged individuals, teachers recognized that students at their schools needed to be armed with a global worldview and a glocal meta-competence to succeed. Professionally, though, teachers were unsure how this meta-competence translates into everyday classroom practice and how to recognize impact. This represents the critical missing link between the high-level goals espoused by national and international bodies and practice. Indeed, what the data suggested was that there was little systemic support for teachers to help close this gap in terms of resources.

The implications then emerge clearly from the data. In terms of exploring the global context, there is a need to clarify the nature of the 21C globalized world in a more holistic way, with civic competences and learning competences being recognized as two sides of the same coin (Hoskins and Deakin Crick 2008). This is pertinent for organizations that are committed to supporting practices to address global education. The phase of raising awareness of the need has reached its end and the phase that seeks to identify and address the gap between goals and practice through a scholarly approach to teacher professional learning needs to begin. Critical to this phase is the need to understand teachers' affective learning capacity as central to creating a positive identity as a global learner and meta-competence as a globally literate teacher, and for these to be supported systemically. Equally important is making explicit these competences and the positive potential impact on teacher effectiveness and student achievement.

The need demonstrated by the early data underpinned the purpose and design of the GEP. In it, Global Schools Network teachers would be supported by their schools to adopt a rapid prototyping methodology (Bryk et al., 2010), to investigate an effective glocal theory-in-practice. This approach reframes teachers as co-investigators, who followed a plan-do-study-act protocol suited to complex problems. The teachers address the shared problem through a range of strategies, which they will implement, evaluate and improve for themselves, with support. The GEP sought to deliver multiple outcomes across the different stages of the project.

It provided:

- a) a model to support school systems and schools implement bespoke professional learning forms;
- b) a nexus for teachers to exchange knowledge, ideas and evidence based on their reflective practice;
- c) new tools (pedagogical theories and classroom practices) to promote teacher learning reflection, particularly via the application of the ELLI dimensions; and
- d) an evaluation of this model using both quantitative and qualitative methods would then facilitate the development of a framework for using professional learning communities that could be applied to education settings globally.

4.2.1 Interventions

On the basis of the online survey, focus group and workshops, the GHS network agreed to develop a project to further explore and address the issues and questions to emerge from the initial enquiries.

The project was designed to develop the practice of Global Schools Network teachers, through sustainable professional learning that was initially informed by research, into learning power and authentic enquiry. Significantly, the project was made rigorous and robust by employing the dimensions contained in the ELLI to recognize and communicate the value and impact made by teachers, schools and GSN programs, pursuant to stated Global Schools Network goals.

Further, the key to the realization of whole-school outcomes was centred on achieving a common recognition of global education as a learning form and its ability to be defined, created and transferred. To this end, knowledge transfer and exchange (KTE) emerged as a result of growing evidence that the successful uptake of knowledge and the development of learning power requires more than one-way communication. Instead, it requires genuine interaction among educators, decision-makers, and other stakeholders. This project sought to establish the ELLI dimensions as the common meta-language with which educators can engage, sustainably,

to create the types of learning forms that will better prepare teachers and, ultimately, students as 21 Century global learners and citizens. In the following chapter, the GEP is described in more detail and the elicited data analyzed.

CHAPTER 5: CYCLE 2 AND 3 DATA ANALYSIS

5.1 Introduction to the Glocal Educator Project (GEP) data

In the last chapter, data collected during the Cycle 1 activities was presented and analyzed. The data on teacher understanding of global citizenship goals, professional learning and practice highlighted the importance of the construction of a professional identity through identity-in-discourse and identity-in-practice. In line with Deakin Crick's conception of meta-competence, the importance of developing the self as teacher but also as learner was identified as having become necessary for the effective development of a teacher's professional identity. This conception has major implications for schools, school systems and universities in terms of providing effective professional learning programs and creating sustainable outcomes. In terms of teaching and learning for global competences, the same was thought to be true. It was the teacher's identity as a global learner and as a global citizen that was of critical importance to the achievement of student learning outcomes and the development of specific global competences.

This chapter presents an analysis of Cycles 2 and 3 of the research. These phases are concerned with the GEP, which emerged as a separate but integrated element of the overall research, aimed at a deeper investigation of ideas and constructs that were identified in Cycle I. This chapter outlines the elicited qualitative data on the teachers' perceptions of themselves as global citizens and as teachers, and reports on the impact of their adopted practice on student understanding and practice. The intention was to use the data to highlight the implications for future professional learning and systemic imperatives in the field of global education.

On the basis of the focus group, online survey and the workshops in Cycle I of the research, the Global Schools Network was interested in using a PAR approach to further explore and address the issues and questions that emerged from the initial enquiries. The project was designed to develop the practice of Global Schools Network teachers through sustainable and experiential professional learning. Significantly, the project was made rigorous and robust by employing the dimensions contained in the ELLI to recognize and communicate the value and

impact made by teachers, schools and GSN programs, pursuant to stated Global Schools Network goals.

5.2 Glocal Educators Project

The GEP was created in partnership with six schools in the Global Schools Network in Denmark; schools that committed to constructing methodologies and strategies to support the integration of a global perspective in everyday teaching and school life. The project was designed as a professional network of teachers working within an experiential learning framework that supported them to innovate, reflect on and disseminate new globally-literate learning and teaching pedagogies and practices. Critical to the project was the need to understand teachers' affective learning capacity as central to creating a positive identity as a global learner and meta-competence as a globally-literate teacher. Equally important is the effect that making explicit these competences can have on teacher effectiveness and student achievement.

The research, conducted as the GEP, viewed the Global Schools Network as a complex living system with a core purpose: to ensure that all its teacher and student members develop as global citizens and learners who consciously and effectively engage in the 21C global society with skills, knowledge and positive global attitudes and positive learning dispositions. The Global Schools Network was therefore seeking to address and resolve a complex problem: how to strengthen teacher and student 21C global identity, engagement and learning capacity through scholarly collaborative teaching and learning practices. The GEP used the ELLI dimensions to support the PAR with teachers and leaders acting as co-investigators, following a reflective practice professional learning model. Teachers were invited to address the shared problem through a range of possible strategies, which they would have the opportunity to implement, evaluate and improve for themselves with the support of the project leader. Importantly, teachers were encouraged to share their approaches, transparently, in order to include their students in their journey. The whole project was framed by a disciplined evaluation framework, which used learning power, progress, attainment and student engagement in learning as a measurement model. The project was characterized by the use of qualitative data as evidence to inform and improve practice.

The GEP aim was to provide high quality research and development support to the Global Schools Network in pursuing their goal of creating sustainable professional learning and teaching practices that develop teachers and students as 21C global citizens.

5.3 Cycle 2 and 3 GEP research questions

The key research questions of the project were identified as follows. Outlined below each are the emergent themes from the project, identified following a general inductive approach (Bryman & Burgess, 1994; Dey, 1993). The themes are discussed in more detail throughout this chapter.

1. How can we understand ELLI in the Danish Global Schools Network and the 21C global citizenship education setting?

Emergent themes:

- Dannelse

2. Are the ELLI dimensions a useful means of understanding teachers and students in terms of their 21C global learning power, as individuals, groups and as whole school communities?

Emergent themes:

- Teacher reflections on ELLI dimensions
 - Resilience
 - Strategic awareness
 - Critical curiosity
- Real versus ideal selves
- Teacher reflections on student ELLI dimensions
 - Resilience
- Reflections on the relationship between teacher and student ELLI dimension identification

3. How can we clarify the relationships between the seven ELLI dimensions and school purpose?

Emergent themes:

- Teacher perceptions of student purpose
- Student explanation of their purpose
- Teacher understanding of their purpose – Ideal versus real
- Teacher identification of factors that limit their ‘ideal’ practice
- Student reflections on teacher practice
- Students characterization of the degree of teacher effectiveness
- Student understanding and attitudes towards using ELLI

4. How are global purpose and practice connected?

Emergent themes:

- Student expression of their global purpose
- Teacher perceptions of student global purpose
- Teacher global teaching practices
- Student understanding of global citizenship

5. Is there a connection between teacher ELLI dimensions and them as action researchers / learners in action?

6. What new feelings, understandings and/or practices were developed or realized during the project?

Emergent themes:

- Increased professional satisfaction (enjoyment)
- Re-orientation of purpose from teachers to teacher-learners
- Student impact

Following planning, preparation and training, the work with teachers was undertaken over three semesters, focusing on teachers and their students who are a part of the global stream. This provided a baseline against which to measure improvement.

Feedback was collected systematically via each of the research activities (see research activities outlined in Table 4) and evaluated in six-month cycles, ensuring that there would be four cycles of rapid prototyping. The intent of this research was ultimately to make available for dissemination and implementation the recorded learning and change enabled by this process.

The ‘launch pad’ of the project comprised two professional learning elements. The first was an ELLI champions’ workshop to equip project leaders with an understanding of the ELLI dimensions, devise interventions, collect and interpret qualitative data and brief their colleagues and students to optimize impact. As discussed in Chapter 2, the ELLI dimensions were a key part of the research as it provided a common learning language. The second element comprised two global education workshops and one conference, which were aimed at equipping project leaders and teachers with global teaching and learning theory and practices with which to create strong global learning outcomes in schools. The conferences were designed to scaffold scholarly teaching and learning practices and place them within a bespoke Global Schools Network professional learning model.

The workshops included briefings on the use of tools, which included the online collaborative learning platform (Ning), to reinforce and improve the social dimension of enquiry-based learning and provide a means of harvesting the collective intelligence generated across the Global Schools Network.

5.3.1 How can we understand ELLI in the Danish Global Schools Network and 21C global citizenship education setting?

5.3.1a Dannelsen

An important element to emerge from interviews with the teachers when discussing the Danish education context from practical and cultural points of view was the notion of Dannelsen. It was raised individually at different schools in different interviews without any prompting and it was agreed that the learning dimensions that are made visible in the ELLI correlate with the learning attitudes and dispositions at the heart of Dannelsen. Importantly also, teachers reported that they recognized that Dannelsen was a potentially rich area of discussion with their students. Key messages from the discussions between the teachers and the students that were reported back to the researcher are included in this chapter.

The notion of Dannelsen calls on people to continuously expand on their experiences and comprehension of the world – local and global – and become more sophisticated and open to other and novel experiences. This aligns well with Dewey’s (1916) notion of continual growth

through making sense of experience with the aim of a flourishing human citizenry. A person's learning attitudes, values and dispositions and how they make meaning, are critically curious and are strategically aware. The basis on which they are these is on account of their own sense of resilient agency and belief in the power of learning growth, is critical to their desire to both share and co-create insight for the betterment of themselves and those around them.

The initial question that teachers were asked was how they thought the ELLI dimensions fit with the Danish education system and traditions. The concept of Dannelsen emerged at this point as being indigenous to Denmark and consistent with the ELLI dimensions. Jytte from Silkeborg Gymnasium said "I think the ELLI dimensions are very much in keeping with the Danish school system already. This concept of Dannelsen formation, I looked it up and it comes closest to ELLI. It's a very Danish concept". She explained the broader notion as linking an epistemic mindset with citizenship, as follows:

Dannelsen is about forming students to become aware that they are citizens in a society, not necessarily a global society. They have rights and they live in a democracy. So students as citizens. So I think that a lot of the things that we do already is in keeping with the dimensions. I became very much aware that the things that I am making and my strategies are very similar with these dimensions. So when I was looking at my course plans, I could see them.

Lasse agreed with the link between Dannelsen and Citizenship. He said:

it's about citizenship, sort of. There are different concepts of Dannelsen. But the new one, the newer understanding is that you have knowledge but also competences. And the old concept of Dannelsen was that you only had knowledge. So you need competences, which are in line with ELLI, so they are linked.

At Odense Gymnasium, Amanda and Ralf also recognized the link between the ELLI competences and Dannelsen but said that it wasn't something that they had used. Dannelsen Ralf said "is something that is a part of what it is to be Danish but we don't use it here at school". Amanda elaborated: "it's not something that we feel the students would respond to, it's traditional but passé. I don't think it is really in the mind of the students or teachers for that matter. I can see the link, though".

As the concept of Dannelse had emerged from interviews with teachers, students were asked by their teachers about whether they saw any connection between the ELLI dimensions and Dannelse. The responses indicated that, like the teachers, they felt that there was a connection but that that connection had become less relevant in the school system than it might have once been. This was seen as something of a loss as the core understanding of Dannelse and Grundtvig's philosophy of enlightenment could align particularly well with the aims and practices of schools and the Global Schools Network in particular.

Asked to talk about Dannelse, simple responses such as "We don't really use it" were common. "It's about Grundtvig and learning" and "we did that in History when we were learning about Grundtvig". One student at Odense Gymnasium saw it in terms of citizenship in the Grundtvig tradition, explaining that "in Denmark if you are not good at things at school you don't just like take them out. You still want them to be there, that's why we have this wide range of different people". The comment referred to the value placed on each member of society, intellectual or otherwise, which was at the heart of the new national community that Grundtvig helped to establish after Denmark gave up pretensions of empire. It appeared that there was some recognition of the potential value of Dannelse and of the lens of learning communities, but only in a cognitive or static sense.

A small group of three students at Lundborg Gymnasium talked about their understanding and experience with Dannelse and ELLI. It was put to them that there was a deep culture of learning in Denmark, of which they were all aware, going back to Grundtvig. There appears to be a rich cultural tradition of valuing learning in Denmark and yet it doesn't seem to be a conscious part of the school system. Initial responses to this point included: "Yes, well we use it more in our own lives, how we connect socially but not in the same way at school. We learn it as a part of our studies at school". One student said that "I think it's derived from this individuality. Grundtvig was all about community and being together. We have lost this identity as one group of people and instead we are a group of self-centred individuals. I think coming back to that, I think you can achieve more together".

There was agreement that Dannelse was best recognized in a community context rather than in a school context. One participant commented:

A lot of youngsters go to boarding school before high school and we have been taught of old Grundtvig and life learning and stuff. My experience is that we implement this in high school when we volunteer and we do something for the community and give our resource for each other. This is something that I remember.

Another student alluded to some cultural assumptions about Dannelse as inaccurate and in need of revision. Dannelse, she said, was “implementing all in a group. We do that but we think as a society that we are better at it than we actually are. That is our history but our present, I’m not so sure”. At this point she made a critical link between conscious social learning and learning to learn in a classroom context; the learning toolkit: “I don’t think that we have the tools to include everybody in learning that they might in Shanghai. We use a lot of money but how efficient and good it is, that’s the question”.

One new element that students raised was *Janteloven*, or the law of Jante. At its simplest, this describes the way that all Danes should behave; putting society ahead of the individual, not boasting about individual accomplishments or being jealous of others. In the context of the Grundtvigian reformation of Denmark during the 19th Century, the Jante law was essentially a law or a stated norm that emphasized inclusion. That is, just as Dannelse emphasized the importance of every citizen, academic or otherwise, to contribute their own wisdom for the betterment of the whole society, the Jante law guarded against exclusion or elitism by emphasizing that one citizen’s wisdom was not empirically more valuable than another’s.

Students at Silkeborg Gymnasium said:

the Jante law belongs to the past but the ghost is still in the school system. Our generation was brought up with the Jante law; you should be something but you can’t brag about it. At school, that means that we don’t brag about our knowledge or things that we do, we have to accept everything as being normal and good.

Another student agreed and added “Yes, we are taught that we can be something and we should be something but we shouldn’t brag about it. It’s a thin line. But I think it holds us back”. This indicated that the positive reinforcement of constructivist learning, while being consistent with the Dannnelse-Janteloven dynamic, was not operating in that way in contemporary Danish schools.

In a global context, Dannelse appears to be close to the heart of Danes and Danish culture and has the potential to represent the value of learning and intellectualism in the same way that Confucianism does in other cultures. It has the potential to represent why learning is important to a person as a member of a society – or a citizen – rather than merely about getting a job. This statement was put to Amanda at Odense Gymnasium. Her analogous response linked Dannelse and the Jante Law neatly as the spirit of learning as championed by Grundtvig. This is combined with the notion of equality across people and contexts; one’s context being as valuable to the whole community as the next person’s.

I asked Amanda about whether the analogy painted an instructive picture of a potential glocal community; that is, people striving to find meaning and create insight in their local and the global context to share with other contexts and strengthen the value of the insight, ultimately for the benefit of both local and global contexts. Her response was:

Yes, there has to be something at the very core, a moral compass. Something that tells you that learning is important and that could be learning.

Grundtvig, the nation’s father had a religious and educational point of departure. In our system, people after they retire continue to take courses and do further education, so we are a nation of learners. It stems from his ideals, that learning is for life and everybody can learn not only the academic but also the farmer and the bricklayer.

I then asked Amanda about the apparent difference between learning when it’s important but not when in the classroom. She said:

yes, that’s his point, learning is when you can use it for something within your community or job. The farmer should learn something that is important for him. So here students learn what they feel is useful for them. And then they switch off

when it is not. There is a community responsibility for each person to learn and to contribute that learning to the wider community. To do that, they need to be able to explain not only what they think and why but also how they reached their conclusions. This is where I think ELLI is very useful; it gives us that language. It's hard to put into place, though.

The notion of Dannels and Jante law are important in the Danish context, but their meaning and potential to facilitate positive and sustainable learning outcomes appear to have diminished over time. Grundtvig's understanding of a truly collaborative national learning community is either no longer consciously present or present only as a historical fact to remember. The Jante law is more consciously present but its original purpose was to guard against learning elitism and promote inclusion. From the elicited data, its contemporary understanding is much more aligned with a negative 'tall poppy syndrome', which acts to stymie real collaboration. However, both notions have great potential to represent an indigenous set of guidelines to reignite a conscious national learning community. To achieve that, the challenge will be to deconstruct both notions and to make their elements visible. The ELLI learning dimensions appear to be purpose-built for this to occur.

5.3.2 Are the ELLI dimensions a useful means of understanding teachers and students in terms of their 21C global learning power, as individuals, groups and as whole school communities?

5.3.2a Teacher reflections on ELLI dimensions

Following the first ELLI champion's workshop and global educators conference, teachers were asked to reflect on the ELLI dimensions and place themselves within the context of those dimensions, individually, as teacher groups, with students individually, at class levels, as school groups and as a whole project cohort. The teachers saw the reflective practice and discussions as useful in explaining elements of their practice and the intended purpose of their practice. Teachers and students discussed their practice by using the ELLI dimensions; the dimensions themselves were useful in enabling both reflection and communication of their teaching and learning practice. The discussions presented below are suggestive of the teachers' 21C global learning power.

When asked to reflect through the lens of the ELLI dimensions, resilience was identified as a prominent element, as were learning relationships and strategic awareness. These are strong

drivers of a sense of agency and enablers of the type of epistemic teaching identity that is consistent with the fluid nature of 21C reality. However, there was a general feeling amongst the teachers that they did not identify strongly with these dimensions, largely because of rigid systems and structures at both the school and system level. There was a sense that the system or school structures denied them the ability to explore, reflect, act on their own hunches, to try something new, or go their own way (either as individuals or teams). This feeling aligns with new research (Deakin Crick, Goldspink & Foster, 2013) which identifies teaching and learning mindsets as having two poles: either based on an [external] learning and teaching as script or internal learning and teaching as design. The notion of agency, as a key part of resilience, was seen to have been negatively impacted by the realities of school routines and structures.

Resilience and learning relationships

In terms of resilience, Mona, at Vestmager High School indicated that she and teachers generally were not given the opportunity to articulate their own priorities. She said,

in a working context, in many cases what actually happens right now is that we are told 'we would like you to work more now in teams and in a particular way'. To be resilient is to say, ok, I will find a way to cope with that. It actually happens very often that somebody tells us what is important. What that shows maybe is that we are not resilient.

Similarly, Amanda at Odense Gymnasium felt that there was a critical gap between the school or system goals and teachers' own goals, which negatively affects resilience. She said "Our reflections show that teachers need to know where we are heading, what is the real reason, where are we going and why are we doing this. They are willing to change and learn and to make meaning but why is not clear to the great amount of teachers, I don't think". Jytte at Sileborg Gymnasium also saw the connection between internal and external purpose. She said "So for resilience teachers should be less controlled so they feel more responsible. It's similar to our students if they think it's important they will probably do it. I think my subject is important, so I will do it".

The sense of agency for others, though, was understood more in terms of school structural issues such as scheduling, workload and financial constraints. Mikkel felt that he and others were capable of a sense of agency but lacked time. He said that

I don't think that we have enough time in our schedules to ask critical questions of our own teaching or structure things in a new way. I think we get locked into certain ways or boxes because of the amount of work that we have to do. What this project focuses on which is reflecting more on our practice is not implemented enough in our schools today.

The implication for Mikkel is that agency and critical reflection are not realistic without dedicated time. Related to time is money and Ralf expressed a similar sentiment:

The question about being told about what's important is also about money. If you want to do something for / by yourself you have to apply for money for courses or education and you have to get the money from a leader. It's much easier to join existing approaches / projects.

The extra connection that Ralf makes is the tension between school agency and system agency; that is the freedom of schools and systems to prioritize approaches and outcomes. Important to note is that all teachers' thoughts on resilience were associated with it being externally facilitated or allowed, rather than something that each teacher possessed and could demonstrate on their own terms, with their own agency.

One teacher saw a tension between resilience and collaboration. She suggested that resilience might lead a person to work individually rather than collaboratively. Carina at Vestamager Gymnasium said that "the definition of resilience is to be able to act without help or networks. Maybe then for teachers it is a positive thing to be low. The government wants us to work more together all the time. In the old days maybe teachers are more resilient because they just plan their own teaching. Now we are forced to work more together". Carina's comment contrasts with the intent of the ELLI authors, who understand resilience more reflexively. That is, resilience was identified as being agency that empowers people to work either individually or as collaborative teams but, critically, on the basis of their own, internal motivation rather

than an externally-based motivation. Key to this research, however, is that there was a general feeling of enforced passivity or at least stymied resilience because of existing school structures.

Carina's comments highlight the importance of the tension between individual agency and collective agency. There was a feeling among the teachers that the relationship between resilience and learning relationships was important but this was characterized as something that could be of greater value. The feeling was that teachers cooperate more than they collaborate, mostly on account of the realities of school routines and workload, undermining the participants' resilience and, as a result, undermining the effectiveness of the collaboration itself. Jytte said:

I work on my own a lot. Go home at night. It's the way we work really. I sit in a room with others and we will discuss and exchange work and some of the other teachers will have good ideas and we will exchange ideas but we don't work together. In the sense that the students do – we don't do that very much.

Collaboration or learning relationships, for Carina and others, represented collegial pursuits rather than essential parts of their own teaching and learning. This suggested an absence of a scholarly mindset or purpose, consistent with the work of Shulman (1993). As discussed in Chapter 2, Shulman rightly suggested that scholarship entails sharing, discussion and critique of artifacts. Carina's comments suggested that she would have been satisfied without collaborating.

Carina's comment was echoed broadly and raised the tension between modeling and advocating: to advocate is to explain the virtues of something, modeling is to explain the virtues of something through one's own action. Teachers said that they had not been modeled effective collaboration or real learning relationships in their own formal education and, as a result, didn't work that way themselves. Amanda commented on how they were "products of a school system that at the time of our progression, did not integrate much collaborative work into their teaching schedules". Similarly, Carl said "and we didn't do that at high school either – we are not a product of that type of teaching. Informal learning – if you need some sort of theory you can get it from colleagues but it's not the way we work." Jytte further added that "it's interesting that learning relationships mean more to the students than they do to the

teachers". Teachers at this point, appeared to believe that learning relationships would happen naturally between students, while consciously highlighting how they hadn't happened either for them as students nor as teachers. It is not surprising, then, that student commentary, presented later in this chapter, closely echoed the teacher sentiments in practice.

Strategic Awareness

The third dimension most strongly referred to by teachers, when reflecting on teaching and learning for 21C outcomes, was strategic awareness. Teachers saw two elements in this dimension: equating the notion of 'strategic' with being organized or planned; understanding strategic as closely related to being networked. Both are important to the ELLI authors' understanding but neither capture the learning element of the dimension. Deakin Crick et al. (2004) defined strategic awareness as being confident and comfortable in the liminal zone, or state of uncertainty, and able to chart a course forward, without being sure of the outcome. The charting of the course aligns clearly with the notion of organization and network planning but is more than just these two elements. It involves being comfortable enough to design pathways forward on the basis of emergent and sometimes challenging hurdles. A strategically aware teacher or student is able to navigate their way forward in their learning even when there is no clear pathway. Such a teacher or student has agency and is not dependent on external people or systems to provide the pathway.

In the teachers' eyes, being strategically aware meant following a set curriculum or plans that had been provided for them. Jytte commented, "strategic awareness, I'm surprised we don't seem to fit with the official definition because we have a purpose, we know what we're supposed to do" While acting strategically as a teacher certainly involved careful planning to ensure outcomes are met, the major element of strategic awareness focuses on a person's known strategies for learning and understanding. Equally, as indicated, the ELLI domain of strategic awareness can be discussed in terms of how comfortable a person is when they find themselves in the zone of uncertainty; their comfort in this understanding would depend not on their preparedness to follow a set curriculum or to make strategic connections, necessarily, but rather to be comfortable and confident that they can navigate the unknown. That it, a

teacher can be organized and networked but without being comfortable with their ability to strategize in situations of doubt.

Mathilde, teaching a vocationally-focused course, recognized the need for authentic industry connections. She said that “my practice has always been strategic. I make connections with people and companies to help with my teaching all the time”. Another teacher at Mathilde’s school, similarly, suggested that “Strategic awareness is something that you can have an awareness but is not always necessary”. Both comments highlight the potential to confuse strategic awareness in a learning sense with strategic practice. Forging links with industry and creating authentic learning scenarios are examples of good teaching practice, good strategic practice. However, allowing new learning relationships to follow their own path and feeling confident that they are able to follow with no pre-determined destination, in order to derive learning meaning, is being a strategically aware learner and teacher.

As a teacher, not controlling the learning ‘finish line’ or ultimate destination can be challenging. Mainstream practice is largely centred on system driven curricula and learning objectives, which allows teachers to drive the learning. This practice leaves little room for emergent learning or for following authentic enquiry leads. Importantly, though, it allows teachers to plan ahead for their learning by being ‘strategic’. Mathilde explained that “You go to different workshops to get wise. I work very well with connections ... if I need to know something about Egyptian architecture I find somebody”. Mathilde’s example highlights a purposeful practice and a strategic approach. However, it is clear that, through this approach, she intends to eliminate or at least minimize the instances of the unknown so as to be able to control the outcome. The archetypal strategically-aware teacher in this situation would be comfortable or even relish the opportunity to explore new enquiry avenues in real time or at the same time as the students, being comfortable that they have the learning power to be able to derive meaning and support the learning direction as the enquiry goes, whichever direction it goes.

Cecile from Odense Gymnasium identified the necessity for teachers in Denmark to adapt to the significant systemic changes in terms of strategic awareness. She said:

one explanation is that there are huge changes in our field right now and that makes of course changing and learning strong because that is the basic part of teaching but the strategic awareness is quite different because it is about how you will do it and that is different because that is the law and the changes that we are facing.

In this case, Cecile described the need for her and all teachers to be comfortable in constantly adapting to systemic change; to be a learner and to be an agile learner and practitioner.

Critical curiosity

Teachers felt that they did not have a strong identification with critical curiosity, at least not in practice. Teachers saw a correlation between their comparatively weak identification with this dimension and the realities of their busy lives, in both a broad sense and in their teaching practice. In what emerged as a clear pattern, teachers felt that school-level factors, such as time constraints and rigid curricula, negatively affected their scope to be critically curious in their roles.

The following exchange with Carl, at Silkeborg Gymnasium, highlights a feeling that the school systems in place did not support some teachers' ideal practice:

[Carl] low critical curiosity is like life, for instance, I can see that some of the elements of critical curiosity I reflected on knowing that I have small kids and if I need to do a task, I need to do it quickly and that's it. My need to find things out and go deeper is not there right now.

[Interviewer] how do you find out about students learning if you are not critically curious?

[Carl] yeah, I can see the discrepancy. We have to teach our students knowledge and maybe critical curiosity is the opposite in some ways. I think that high school teachers are not critically curious but very critical. If we have to learn something from others, we have a very high level of criticism because we teach everyday and then if somebody from outside is going to tell us about something we are very critical. It's very funny. We are in general not as open to receive knowledge from others as we know a lot and we have this immediate opponent and I don't know why because we can learn as well as anybody else.

Lasse, also at Silkeborg gymnasium, echoed Carl's sentiments and recognized the irony in the links between his feelings as a participant in the GEP as learner, to oft-expressed student sentiments around learning. He said:

It's quite funny because everyday we complain about the students because they are not noticing what is important and that they should really pay attention. And then you go some place where you are the student and the roles just switch maybe it's a psychological response because we do so much teaching that we get fed up with the receiving. It's a pattern.

Essentially, the sentiment here was that learning can or could take place if the school timetable supported it; if learning could be made visible and valued and have appropriate time allocated to it.

5.3.2b Real versus ideal selves

The notion that under the surface of the teachers in the GEP there was a teacher with a stronger and more immediate identification as a learner was expressed throughout the project. Teachers made reference to their 'ideal' and 'real' selves, with their ideal selves being more positive in their eyes and having existed at one time, perhaps before the realities of schools took over. In a semi-structured group interview, teachers were asked whether there was, in fact, an ideal self and a real self when it came to teaching and learning. The responses strongly affirmed this notion:

[Carl] yes, exactly.

[Marie] I agree. if you have anything else left you can explore. Surplus.

[Carl] there is the ideal and the reality of everyday life. If we had much more space, we would go and investigate and experiment but we can only do so much because of work life balance, so this is not something I prioritize.

Teachers knew that there were questions to be posed and answered about the connection between teaching and learning, but most often, they said, these were not explored. A rigid curriculum, strict routines and a lack of learning and planning 'space' were given as explanations for the gap between the ideal and the real.

The difference between the ideal and the real was discussed in terms of teachers as learners and teachers; their ideal and the real, personally and professionally. They were then asked to recontextualize this in terms of student learning and practice; the premise being that if teachers are not practicing their learning to the level that they feel they are capable of, could they be effectively modeling learning for students? The following provides an example:

[Interviewer] Like you, students have said that they don't strongly identify with critical curiosity, which logically would make it hard for them to make authentic meaning. How do they get to the meaning?

[Elliot] Nobody knows (Lundborg Gymnasium group laughs)

The laughter that followed this comment indicated a sense of resignation; teachers realized their limitations and the limitations of the outcomes but at the same time felt that they were doing all that they could. The resignation was a recognition that learning and achievement did happen but as if in a machine, the inner workings of which the teachers were not totally cognizant.

5.3.2c Teacher reflections on Student ELLI reflections

Resilience

When teachers were asked to give their overall impressions of students, resilience was a key dimension in their characterization. Resilience was recognized by all teacher participants as being constantly present in desired high-level outcomes but without a clear set of pedagogies or practices with which to achieve it. Teachers saw that students did not identify with the resilience dimension and this correlated with their views of Danish youth more broadly. The characterization was largely based on an understanding of resilience, which measures 'stickability' or a person's willingness to work hard and see a job through.

I asked teachers about their perception of resilience. I asked "how do you see the students in terms of resilience?" The responses highlighted feelings that contemporary society had mollycoddled its youth to a point where they had no resilience. Ralf suggested that research in this field by Gardner, and different learning strategies have given students a rationale for

saying 'I don't learn that way'. So they have an excuse and that's a problem. Mia also understood student resilience has having been 'allowed' to reduce by an over-caring society:

I think also that it is society that constantly asks the question about 'how do you feel about this and that'. This is not always a good idea to all the time reflect on how you feel because a lot of stuff is not fun at the start, you have to do it and then it will be fun.

Carl said, "I'm not surprised about their low resilience I think that this reflects the everyday".

There was also a particular view that there was something specific to Danish youth about the perceived low resilience. Amanda said that:

Danish students think they've 'got it', I'm 15 years old and 'I've got it'. We have a generation of people that only want to do what's fun, pleasure, so math / language is a good example of when you have to do hard things over and over, which they don't like.

And Mia suggested that "it looks pretty much the same. It kind of symbolizes the young Danish people. It's resilience that's the problem. There is something that needs to be worked with there." Marius took it one stage further, suggesting what the lack of resilience meant in Denmark as compared to other countries, where social security was not as prevalent. He said: "If you don't succeed in Denmark it's ok but if you don't succeed in Shanghai, it's fatal".

Teachers from one school saw their students' lack of identification with the resilience dimension as being anomalous. They saw them as hard working and diligent, which, although essential to resilience, ignores the element of agency. Carl said that,

I think that this is a unique class. I've never really taught a class like this before they are eager to learn but want a lot from us. Especially the girls in the class. I think that that is something to do with resilience.

The eagerness to learn and the willingness to follow through, but with 'a lot' being asked of teachers, highlights the lack of agency that the students feel in their studies; they can't progress in their learning without the teachers. The lack of student agency was not recognized by the

teachers, however, who focused only on the students' ability to complete tasks. Jytte said: "But this class is resilient, they always follow through with tasks. They are much more resilient than they think they are". Mia rejoined, "Yes, they do their homework well, they are very ambitious like this". So too Carl, "I can give them more difficult tasks and they will stick to the task but maybe the need for very clear instructions is shown in the low score maybe their need for very clear instruction."

The following exchange focuses on this perceived conundrum about the difference between diligence or discipline and resilience. Ulf highlighted that one class, who were seen to be more diligent than another, were more ambitious, making them more diligent – but not more resilient. In fact, both classes appear to have the same amount of resilience.

[Lasse] yes, they are quite low in resilience, this class, which they shouldn't be. They should be really high in resilience compared to other classes.

[Interviewer] why?

[Lasse] because they keep working even though it's hard. Most times they have an amazing discipline.

[Interviewer] What is unique about this class?

[Lasse] there are many students that are focused on having these grades for future education. There is a good discipline in the class that was there right from the beginning. It's just a culture that's kept on going.

[Ulf] they're more ambitious.

Another element in understanding student resilience highlighted a correlation with routines and structures. Similar to their reflections on their own interrelationships within a routinized environment, some teachers could see resilience as being lower for students who did not naturally fit into the structure. Kirsten said:

our experience is that they learn routines and have different stages and they need to learn those routines. At 16 they begin at high school and then the middle year is often the year that all the theory is dumped on them and they just feel that they are drowning in routines. And then in the final phase we expect them to be able

to use their understanding and be creative. Some of them succeed but some of them don't.

Amanda, too, said "it is difficult for the students to keep on doing stuff in that way. That's hard. Very quickly they throw it and don't do it, 'I can't do that math' 'I'm not the person that does math'. It becomes very personal". One teacher recognized a link between how the students felt as learners and the extent to which their development as conscious learners was dictated by the teachers. This is a key connection and one that was explored subsequently in the project as important to ongoing teacher and learner development. This goes to the heart of seeing resilience in terms of agency; the better able and supported a person is to explore and create in an elastic set of parameters, the higher the sense of agency and identification with resilience. This is evidence in the following exchange:

[Mikkel] We have a large group of students who don't feel resilient in class and feel insecure about how to learn and that reflects the resilience data and also the other data. And the idea that the students really want to make meaning and they want structures and for things to fit into boxes make sense. And that they like to learning together in learning relationships also fits with the perception that I have of the typical student from here.

[interviewer] what are the implications do you think?

[Mikkel] I think that if this type of learning is not supported by all teachers, it makes the student confused. They need to switch learner identity but depending on the teacher not depending on themselves. This is a problem. What does the teacher want me to do? I need to get a good mark so I need to act accordingly.

5.3.2d Reflections on the relationship between teacher and student ELLI dimension identification

Evidence suggests that there was a correlation across identification with ELLI dimensions between the teachers and students as learners. The teachers' responses suggest that they were more sure of their beliefs about themselves as learners. However, across the seven ELLI dimensions, there was a very similar pattern of attitudes and beliefs. These strongly identified with dimensions such as meaning making and changing and learning (growth orientation), but less strongly with critical curiosity and strategic awareness. Teachers and students were asked about this pattern and the reasons behind it and it was clear that each group understood the correlation to be due to external factors. For the teachers, it was the system and the school realities. For the students, it was their own smaller-scale classroom routines and realities, as

dictated by the teacher. For both, there was a clear recognition of a larger reality that was constantly and mutually reinforced. Mikkel best articulated this when he said, “students are very locked in this role that they need. That’s the way of the traditional school; it has been that way for many years”.

Mikkel’s sentiments about the ‘traditional school’ were shared by others, who began to see the disconnect between teacher’s words and actions. Elliot said:

sometimes it’s too easy, we have learned and we can tell them – but that’s not the point. And also it’s very important which teachers are showing the students how to learn because the students see us and learn what we are doing not what we are saying, so it’s important but we don’t do it a lot. The easiest thing is to do what we have done before.

Marius commented: “what we communicate to our students non-verbally is very important and that provides answers to why they don’t do what we are asking”.

The need for teachers to model learning, rather than to ‘teach’ learning was, then, recognized by some teachers. However, the deep feeling that the students were complicit in creating the systemic learning was still evident. Teachers, even those who saw the need for greater modeling of learning, saw the students as having the power to determine the style of teaching and learning.

The idea of the dependent learning relationship between teachers and students was reinforced when teachers who had previously understood the modeling of learning, expressed the feeling that students actually desired narrow teaching in order for them to succeed in the system. Amanda said, “yes, they feel comfortable in the routine. When I ask my student how they learn best I am often disappointed. I want them to say cooperative learning but they say that they learn best when I stand at the front and write things for us”. Mikkel agreed with this sentiment: “students like to do fact based activities. I think they like that more than to see us learning”. Amanda then responded to a question about what these sentiments actually meant to her. She said, “I think there are two answers. One is that they feel safe. And the other is that

we don't talk so much about how they learn and how they understand or help them to understand things on their own. That is resilience".

One teacher recognized the regressive pattern and saw the pathway forward as being centred on developing student resilience and their sense of agency. This, as the teacher suggested, would need to be led by changes in teacher practices. Mikkel said, "the fact that students are reliant on teachers to confirm things and to come up with answers I believe that their resilience can be increased by making the students more responsible for their learning – not always the teachers giving them the answers".

Overall then, there appeared to be a clear relationship between how teachers and students understand their own practice and the ELLI dimensions. That is, although there was a clear sentiment that teaching and learning practices and outcomes were not ideal within the reality of the Danish school system, this reality could be usefully explained with the ELLI dimensions. The ELLI dimensions themselves, and the qualitative data that was presented back to the teachers, could be used to add needed understanding to the often assumed or unspoken teaching and learning realities at schools. This would expose critical assumptions that serve to reinforce regressive attitudes and practices.

5.3.3 How can we clarify the relationships between the seven ELLI dimensions and school purpose?

5.3.3a Teacher perceptions of student purpose

Explanations for the reinforcement of the often regressive learning relationship between teachers and students can be found when we explore the relationship between the ELLI dimensions and 'purpose'. As was found when participants commented on the student ELLI reflections, the relationship between student attitudes and teacher attitudes was not a surprise to either group. Both groups were able to explain the teacher–student dynamic and each had a clear perspective about what they perceived to be the purpose of the other, which becomes mutually reinforcing. By examining these perceptions with the intent of understanding them in learning terms, our aim was to gain an insight into both groups and their learning practice.

Teachers across schools were asked about their perceptions of student purpose. Their responses were uniform, highlighting marks and qualifications as being the primary motivation. This type of motivation is described (Deakin Crick et al., 2014) as being an externally-focused motivation, rather than a motivation to learn and to explore that comes from within. Jytte said, “they are very interested in the marks. Especially our IB students, they are much more dependent on the teachers than our normal classes”. Carl said simply, “they really like good marks”. Elliot said that his students “stuck to the task and I thought it was resilience but there were also very clear instructions, so is this resilience?” The short answer to this was ‘yes’ in terms of stickability but not in terms of taking control of their own learning. The longer answer would require an exploration of the reasons behind the external learning motivation.

In the following extract, a teacher was asked about the link between performance and ELLI. What emerged was that student purpose was a key determinant in performance as well as in the extent to which they allowed themselves to connect with the ELLI learning dimensions:

[Interviewer]: Looking at your class and knowing what types of marks and their ELLI self-profiles are there any correlations between marks and ELLI profile?

[Mikkel]: the ones who are benefiting from this work are the ones who are in the top level of the class already. I think maybe we can move the middle ones – for example the silent students – but the bottom students, I don’t know, maybe they have developed an approach to school that they are only looking for the minimum and for that reason, they push this thing away.

[Interviewer]: What’s their purpose as compared with the higher achieving students?

[Mikkel] their purpose is belonging and to live up to parents’ expectation. They seek the social acknowledgment, from the teachers. It’s, confidence also, confidence and belonging.

[Interviewer]: what do they get confidence from?

[Mikkel] not the school but socially. They do it by ‘now I’ve handed that in, did you see that I’ve handed that in’ – not that it was really good or anything.

[Interviewer]: So it’s about realigning the purpose, isn’t it?

[Mikkel] Yes, for them to understand that this can help them. It's not just another thing to put on them. It's not a carrot for the top students to reach up and grab but it's like on the whole level – it's on all levels on all starting points you can become a learner.

The extent to which it is valuable to view marks or performance, is the extent to which we use it as a tool to explore factors of learning and purpose. For the teacher involved in that interview, the relationship between performance and purpose could be understood in learning terms and vice versa. The perception that students are primarily motivated by marks is a determinant in the type of teaching that teachers will practice and the proportion of students whose purpose actually is limited to marks. This is the regressive reinforcement of the relationship.

For the students, like the teachers, there is an understanding of the ideal and the reality. Taking the reality, the students recognize that there are more enjoyable ways of learning and, not surprisingly, they feel engaged by different methods. However, they expressed a belief that their purpose, as defined by the acquisition of marks, was imposed on them by the teachers. What the interviews reveal is that here is a sense of powerlessness when students think about change, they recognize that they will be unable to change the aims of the school system or the relationships with individual teachers. However, what they are much surer about is that even if they, as learners, are not being catered for, the system will ultimately prepare them for a happy life. These sentiments correlate with a low identification with the resilience dimension and can be understood by a clear feeling that, as students, they have little sense of agency. The following are student comments from across the schools, collected by teachers as a part of their PAR:

As a student are you able to change the way that you learn?

[S1] well, you can learn to like it but you can't say I don't want to take English because that's a part of our education. Something tells me there's got to be some smart heads somewhere saying this is what needs to happen, these things combined will give you a better education.

Can you tell your teachers 'I like to learn a different way'?

[S1] the teachers ask us 'how did you like the teaching in the last month, how did that work out for you?' We can respond back and say 'we didn't like this part

because we spent too much time wasted on it. We would rather spend more time on presentations than reading a book'. All the teachers seem to take in the input that we hand in all the time but nothing really changes.

[S2] for me, it's all about the teachers. At middle school I loved maths and I was good at it but when I came here I got a teacher who was bad at teaching it and didn't motivate me, so I lost interest total dependence on the teacher. But on the other hand I got a good English teacher and Danish teacher which gave me an interest in the subject which means that I continued.

5.3.3b Student explanation of their purpose

Student purpose is critical to allow teachers to make meaning of the outcomes and effectiveness of their practice. It is also critical for students to make visible the basis for their purpose, in terms other than cognitive outcomes, in order to avoid fixity and be prepared for future change. What has been suggested to this point, by examining teacher understanding of student practice, is that they are primarily interested in completion and attainment, which aligns with an externalized or script-based mindset. Characteristic of this mindset is a high degree of trust and this was evident in the interviews with students about their purpose – life has stepping stones and purpose is to reach the next stone. Further, the trust that students demonstrate in the following responses indicates that the trust is largely 'blind' or generated with an absence of critical reasoning. The language shows uncertainty about precisely how and why things will work out but, ultimately, they are sure that it will. The following responses were collected from students by teachers at the University High School, who asked a series of questions:

How would you describe your purpose as a student? Why are you here?

[S1] I am here because you can never predict the future. Going here is like insurance that you can go on and succeed. It's like money in the bank.

[S2] Being able to get into university. So I can get a job, so I can live off that job. I want the kind of course at university so that I can get the type of job that I like.

There is a connection between doing something that you like and are passionate about and you are able to make a living from. Will make you happy?

[S1] Yes, because if you are doing something that you love of course you will be happy doing it. So if you find that job then it means that you are happy – of course there are other things that make you happy like family and friends.

Do you see your time here as preparing you for a job or is it more than that?

[S1] My time here is the stepping-stone for further education. A stepping-stone is something that will give me knowledge and a feeling of what I like and what I don't.

[S3] I am using the gymnasium to find out what I want to do later because I don't know what I want to do later on in life because I have absolutely no idea of what I want to do. The right combination of subjects.

[S4] Generally STX [university-linked qualification] has more linguistic subjects but they are more irrelevant to getting a job that's useful.

[S5] In technology class I want to prepare myself for the real world rather than having a lot of virtual things. In Danish it's a lot of reading which doesn't catch my interest much. There's always going to be subjects that you don't like, there's nothing you can do about it. It's all part of it.

Teachers at the Capital High School captured the following conversations about how the students perceived their purpose at the school:

What is your purpose in being here at school?

[S1] Because I want to get an education, get a degree ultimately. But also about getting knowledge.

[S5] So that I can get a job.

[S4] It's like getting a security blanket.

[S6] Being socially active.

Does school prepare you for dealing with change, locally and/or globally? Is that a part of your purpose?

[S5] No, it's not something that just happens. I don't think it's something that we need to be afraid of because when you go back to the 40s 60% of the jobs didn't exist, so we still live today. People just naturally adjust to change.

How is the school preparing you to make good decisions and to prepare for the unknown unknowns?

[S2] We have society class, where I guess we are being prepared for society.

[S1] Yes but now it's fine, it's working for me. But when I'm done here, then reality kicks in. and I will have to adapt to that and learn it then but I don't have the need right now, so I don't really think about it.

The reality, represented anecdotally across all the participating schools, was that students had not made any conscious connections between their studies at school and their future lives in society. Indeed, the notion that they were a part of a global class that prepared them for citizenship seemed to be lost on them in a practical sense.

5.3.3c Teacher understanding of their purpose – Ideal versus real

When considering the implications of what their ELLI reflections suggested about the students and themselves, the teachers were asked to reflect on their teaching purpose and how it connected with their identified practices.

What became apparent was that the ideal and reality dichotomy identified when the teachers reflected on themselves as learners, was also strong when teachers reflected on their professional purpose as teachers. What emerged was an ideal purpose and a real purpose. Interestingly, the ideal purpose was not mythical but often based very clearly on real experience. Teachers identified a strong and positive link between their pedagogicum (integrated teacher training in which teacher candidates undertake teaching duties at a school, while also undertaking theory-based units at university) and their ideal purpose as teachers. There was a warm reflection about both purpose and practice during their pedagogicum and one that had since been eclipsed by the realities and routines of teacher practice. The factors that differentiated real purpose and the ideal purpose can be explained as a reflexive learning purpose, felt to have been eclipsed by the reality of school practice.

The following exchange with teachers at Silkeborg Gymnasium highlights the real versus ideal dichotomy.

Teachers' reflective data suggests that teachers don't strongly identify with the learning dimensions of critical curiosity, strategic awareness and resilience. Does that sound right for you?

[Carl] Yes, it's the ideal and the reality. In our pedagogicum we would spend time investigating the theory and practice all the time, so I think if we had these learning dimensions some years ago, it would be quite other answers.

What happened?

[Carl] Routine. And also a lack of time.

[Mathilde] It's a matter of priorities, I don't think about how I work with pedagogies, I just work and have a good relationship with my students. It's a choice.

[Lasse] In supervising pedagogicum you are forced to show different ways of teaching.

Did you enjoy that?

[Lasse] Yes because you get to do and see another view on education as well and you learn quite a lot even though she is brand new and there are lots of things that she needs to learn. She still has another view on teaching; you learn a lot from that. You should always go and see your colleagues teach for inspiration. Otherwise you get stuck in ways of teaching – not because you are lazy but because of lack of time. When you are mowing the lawn, you always start in the same place. It's just the way your brain works. When you see others, you can try doing it from a different place. When you are supervising a teacher you have two things in mind. How the class is learning and how the teacher is teaching. But that really only happens when you are linked somehow to the pedagogicum

[Mathilde] When you set an exam and see what other teachers focus on you get your own teaching in perspective.

[Majken] We have sometimes people talking for 15 mins about something that they are doing pedagogically. I really like that because we become more open-minded. We do it sometimes but not systematically. I would really like it to be systematic, maybe once a month because it would broaden everybody's horizon. But right now it doesn't happen like that for most teachers at least.

[Jytte] Since I finished my pedagogicum, I don't think I have reflected on my own learning process at all. I am sorry to say. I reflect on how my will students learn and how I can help them learn.

[Marius] I learned maths at university, then you do your pedagogicum. That's what you are learning afterwards. This pedagogicum was very useful for my maths, I enjoyed it. It's different as a teacher.

You identified least with resilience in your ELLI profile, how does that reflect you as a teacher?

[Lasse] Yes, no but if you asked my two years ago when I was doing my pedagogicum resilience was something that I identified with. I had time to focus and stick to a task and I was also able to design my own task, you know. But right now I can't – I have to find a quick answer that works. I'm not a learner, I'm a survivor. That's a problem. Each time there is a lack of creativity, even though I'm a music teacher I'm not creative because of a lack of time.

In your teaching you're learning about your students' ability to demonstrate their knowledge but do you consider that to be learning or not? (is your job as a teacher really a job as a learner?).

[Majken] It's difficult because we are so focused on teaching but not on learning.

[Mikkel] The need for changing and attending so many meetings take away from our ability to reflect on ourselves and our students. There is a focus on results all the time or things that you can mark or tick a box.

[Mikkel] It's a mindset of a teacher that puts us in this role. Many of us came from uni with idealism and with things that didn't fit with working lives and we had to adapt.

[Mikkel] We were probably better learners at uni.

[Lasse] It says that teachers need to go beyond the immediate curriculum to be a global teacher. I agree. But the hard part is how to do that.

[Mathilde] I think it depends very much on the subject that you teach. If you teach physics, you have a very tight curriculum and you have to teach specific things in specific ways. Others can easily adapt to other ways. But not all teachers have the same possibilities.

5.3.3d Teacher identification of factors that limit their 'ideal' practice

Teachers were clear that factors such as routines, lack of time, and tight and crowded curricula, undermined their foundation learning and teaching purpose. However, what they didn't feel was the sense of agency necessary to address the identified shortcomings of their reality. This sense of agency is often found in stronger identification with critical curiosity, strategic awareness and resilience. So, the expressed attitudes of the teachers in terms of their purpose

as teachers correlate with the strength of their identities as learners. For teachers to feel a sense of agency, they would typically have a critical understanding of the 'playing field', allowing them to be strategically aware and plot their own pathway forward. They would understand the factors that mitigate against a learning practice and be able to design ways to reduce the negative impact. Teachers were asked about their practice and how they understood it.

Frederik's comments were broadly representative of the participants' sentiments. It was put to him that "the most important part of critical curiosity is reassessing things that are taken as norms, as truths. Is that something that you do as a teacher? He responded by saying that "there's too much routine. Our teachers are very good in thinking about different ways of teaching, they have to. But they may be not always aware enough of the result of it". Challenged on this and how he made sense of his practice, Frederik said

I understand what you are saying. You are saying that we are doing a lot of that daily routine, planning and marking, I accept that's really right. If that's the definition of routine then I agree. Our teaching is in one direction. We don't have time at the end of each lesson to reflect. Sometimes but most of the time it's just routine teaching.

A teacher's personal life was also identified as a factor that mitigated against a learning practice. At Silkeborg Gymnasium Carl said:

I have been asked a few times about this and each time it is difficult because for me there is a difference between the ideal and the daily life. I have four kids under four, being a learner is a luxury. I don't have time. To prepare the teaching for tomorrow, I need to survive.

Frederik's comments raise the question of how he and other teachers actually make meaning from their own practice, beyond the external measurements. If teachers do not have time to reflect on their practice due to an overwhelming routine, how are they learning? The following is a dialogue with Ralf on meaning making in his practice:

What meaning are you making in your teaching?

[Ralf] They are the driving force that made us. Some teachers do have this as their driving force so I guess we connect our identity as teachers very strongly to this dimension.

What area are you making meaning in, subject area or self as learner or students as learners?

[Ralf] I guess we try to help the students to make meaning inside our subject but also to help them to make meaning to the outside world. Both ways of making meaning are important to us as teachers. In the Global Schools Network the last part is very important, the world as our classroom.

You've seen what people have been saying so far, which is most important to you in terms of your practice?

[Ralf] The students because in this I am forced to be aware of my own learning but otherwise I wouldn't be as focused on my learning but the students learning, which is the normal way of viewing. That you should not learn as much yourself but should teach students in order for them to learn.

Don't learn, teach?

[Ralf] Yes, that's the old way of looking at it.

Is that still current?

[Ralf] It's the main focus isn't it. There are all these goals, you should do this, you should do that but the main focus for me as I see it is the students learning process, not that the others aren't important but not as important.

5.3.3e Student reflections on teacher practice

Students also understood the constraints that teachers felt in a way that suggests a reason for lower resilience in teachers. One student at Vestamager Gymnasium said that "they are told what they need to teach, so they don't have their influence on what they teach. They have more ideas on themes that they like. So yes, they are bound in many ways".

The routines and tight expectations help us to understand our ELLI learning reflections and that helps us understand the process by which the teachers stopped thinking of themselves as learners and only as teachers. A person's learning attitudes, values and dispositions need to be supported. Specifically, dimensions such as critical curiosity and strategic awareness and resilience are difficult to maintain in a 'narrow and vertical' environment. Hence there is a

reality of teachers identifying less strongly as learners. This highlights a need to arrest this with conscious learning support.

The connection between teacher practice and student practice appears a strong one and is borne out in the ELLI data. Hence, if teachers feel that they only have time to concentrate on what is important and what is concrete, this is the way that their practice will influence students.

When teachers across the schools felt that they were making a positive impact on students in an ELLI dimension, it appears that much of the intended learning dynamics were, or seen to be, more perfunctory and much less valuable as learning outcomes. A significant belief among teachers at all schools was that collaborative learning was effective at their schools and Danish schools more broadly. Having the teachers identify that they are limited in the extent to which they can engage in critical reflective practice, it was interesting to test this idea by asking the students. What was found was that students too felt that group work was useful but they were unable to identify how it benefited them as learners or the learning dynamic that occurred. Indeed, the dynamic that was described suggested simple cooperation rather than true learning relationships, as illustrated in the following:

From what you are saying, you feel that you are directed by the teacher, both in terms of how to go about it (what and how).

[S1] Yes, right. Well in group assignments, there's always one of us students that's controlling what's going on. If I was the leader, I'd say, Nicole you do this, and do that, and then Mette and Caroline would do that and that. And I'd not be thinking that much about those parts. I'd concentrate only on mine.

This dynamic highlights how the intended learning relationships weren't actually realized and this had the effect of contributing to a diminished sense of agency or resilience. The lower the level of responsibility or opportunity to take control of their own direction, the lower the sense of resilience. The students found a working logic to this, as one said: "it comes natural to someone. They're the dominant one in the group." Another student said "five people can put their heads together. We can see who will be the best leader. Christopher is good at doing his

assignment, if he says it's right, it's probably right. Mette is good at Danish, I have respect for her".

Equally, the dynamics of the group as described by the students demonstrates quite a high level of fixed attitudes to learning levels and abilities. This would be reflected as lower identification with changing and learning. The reality as described by teachers across schools manifests itself in the largely script-based or externalized learning practice and understanding of activities from both teachers and students. There was a very apparent sense of a lack of resilience among students; they were able to recognize it but did not feel the sense of agency to positively change the dynamic. The following exchange was contributed by Amanda and one of her students:

[Amanda] Why do you think it (resilience) is low with the students?

[S3] We have a lot of assignments to do and we have to just keep hanging on. Sometimes, you don't want good grades, you just want to get it over with. We don't have resilience so much.

A lower resilience might mean that you would feel like part of a machine. A higher resilience would mean you are not bound by that machine. Do you feel like you're part of a machine?

[S3] Yes.

Would it be the same with me and other teachers?

[S3] I think so, probably. In some ways I imagine that you and they are the same as us.

You do your assignments and get your results but in terms of reflecting on your learning, is that invisible?

[S3] Yes, we are told when we did great and what we did bad and what we need to work on. For example, I have better grades in Danish than I did before but when I asked my teacher 'it's a good assignment but I don't know why it's a better assignment because I thought it was only as good as it was before, my grade is better. But obviously it is better because my grade went up – but I can't say why. You make it and then you are done and you move onto something else

So over 2,3,4 assignments, they are not linked? You don't see a progression?

[S3] No, not at all.

The following conversation was reported by Carina between herself and her students at Vestamager Gymnasium. The conversation is very instructive about the learning value that the students recognized in terms of learning relationships. In it, the student paints a picture of externally-led learning, where a global mark is the sole determinant of the students' understanding of progress or learning. Here, the students were asked about how they self-assess.

[S1] I think that most of the time we know what we did and we talked together and then we get feedback and the grade and we talk about the grade so if somebody gets a good grade you know that person is good because of their mark. So we talk about that but we don't talk about real learning.

[S3] We have the idea that when Nicole is learning, I have a different way, so I am not really interested in how she learns it because I have my own way.

Carina then challenged the group to articulate their understanding of why they work in groups at all. She reported the following responses:

[S3] Well it makes us get the assignment done better.

5.3.3f Student characterization of the degree of teacher effectiveness

Despite the realities of the education system and school environments that have been described as machines, students are acute in their understanding of what good learning and teaching is and what it looks like. In this project, teachers worked as participant action researchers, working with ELLI enabled students, some for the first time. This allowed students to explain their feelings about teaching and learning practice in a learning language. Some students reflected on having experienced different pedagogies in different subjects but with ELLI they were now able to understand those in terms of how they develop different learning dimensions to match the different pedagogies. The following student characterizations were gathered by teachers from Vestamager Gymnasium. The teachers asked simply how the students saw or characterized their teachers. One student characterized a continuum "from passion to laziness. If a teacher is passionate they want to get better at what they do and they care about whether we learn or not". Another referred to passion, saying that

“passionate teachers are out of the box teachers”. One said that effective teachers “are teachers who link things to the real world not just out of a textbook”. Others drilled down further to link their characterization of teachers to learning, saying, “we know which teachers are ready to adapt to our needs”, with another student adding, “yes, I feel if a teacher wants to learn and if they do, I do also”.

The students were then asked about whether there was a difference between the teachers who were involved with the global class as opposed to those who did not identify as being a globally-focused teacher. Reported responses referred to Carina as being emblematic of a teacher with a global approach. Students were conscious of her inclusivity, curiosity, willingness to enquire and experiment and genuinely collaborate; a marked difference in their opinion from their other teachers. Carina’s students said that “our history teacher Carina likes to differ her classes. We were teaching other classes in history, the lower classes. So we were playing teachers too”. Another was reported to have said:

we have also experimented with different types of group work. We had different ways that the groups were made up and at the end of the unit we were asked which way was best for us. She is a good teacher. She makes us learn in different ways.

Others singled out Carina’s willingness to engage in genuine horizontal relationships. One student said:

Carina is very different from our other teachers. She wants to make it fun to go to school and she is passionate about her job. She is very sociable. So she is good at talking to people and receiving feedback. She uses feedback better than other teachers I think. She does that in front of us, not prefab. I guess that is critical curiosity and strategic awareness? She wants to get better as a teacher ...

Further to students characterizing individual teachers, they were clear about how they placed teachers on an effectiveness continuum. For one student, this continuum was characterized at one end with the word ‘slacker’. For her, Carina, was on the positive end of the continuum. She said of Carina, “she’s not a slacker teacher”. When asked what she meant, she explained:

someone who doesn't care about what the students learn and if the students learn. We had some maths teachers who weren't interested in whether we learned. It was just up to us. It was only his job to teach – does his part.

Exploring further, teachers interviewing the students at Vestmager Gymnasium asked what the students felt the ratio was between slacker and non-slacker teachers. Students responded saying most were in the middle with only 20% on each end. One student said, “there are probably more teachers who want to learn. Maybe, but most are in the middle”. Pressed even further about any perceived movement of teachers across the continuum, students were clear, “some don't really want to be better. But some want us to give feedback – like our Danish teacher. Our English teacher knows how to do things and wants it all to be done her way”. A belief in textbook overuse was evident in the discussion between the teachers and students, with one student's comment typical of the feeling, “I think they should use the textbook less often”.

Of critical importance to this research was the comments from students that linked teaching and learning with their interest in global citizenship. One student was reported as saying: “The ELLI dimensions are about learning, so I guess that the teachers need to become better at those; isn't that what school should be about? Isn't that what learning global citizenship is about?” And, “I can see learning in the ideal of citizenship but I don't see learning much in my classes. This project was about creating citizenship in classes too, right?”

At the Capital High School, the students saw the same difference between teaching practice but described the dichotomy as being ‘young and old’. Students were asked by teachers whether they saw teachers as having different practices and different purposes and whether or not they demonstrated all the ELLI learning dimensions in their classes. One student said that “In Danish we are doing a lot of learning relationships. It's always the same, so maybe they are not very creative. Maybe she doesn't know. Sometimes I think she could be more creative with the way she teaches”. Pressed on whether she felt a collaborative relationship with teachers, the student responded by saying:

it's different if you have a young teacher or an old teacher. Or a teacher who explains things rather than working from a book. We learn more from the ones

who cooperates and with whom we have discussions with instead of just getting told what's right.

Teachers were then interested to know what the students meant by the difference between young and old. They asked them what sort of learning dimensions they saw teachers modeling. Students responded by saying:

meaning making because they always make sure that we understand what we are doing. In history we have a young teacher. She has different topics and she draws different lines between the topics and they make sense. I think that that's a lot of meaning making.

At Vestamager Gymnasium, students understood the teacher dichotomy to be 'slacker' teacher and 'good' teacher, at the Capital High School, students characterized the same dichotomy in terms of 'young' and 'old' teachers. One student was reported as saying "A lot of the young teachers do a lot of changing and learning. They do a lot of different things. The older teacher, it's always the same in every class". The student said Mostly the old teachers just tell us things and we take notes". Irrespective of the characterization, the dichotomy appears the same across schools, with students valuing those teachers who demonstrate a learning identity, who are genuinely engaged citizens of their classroom. They recognized the difference and with the help of the ELLI dimensions, began to use the learning language to describe them.

5.3.3g Student understanding and attitudes towards using ELLI

What is clear from the student characterizations of the construct of effective teaching is that some of them were comfortable in using the ELLI dimensions as a learning language with which to communicate their understanding. This suggests that their introduction to the dimensions by their teachers working in the project was effective. However, what became apparent is that the introduction and stated purpose of the ELLI surveys and dimensions to the students across different schools was significantly different and, not surprisingly, produced different responses.

Students were asked how they would describe what the ELLI dimensions are and why their teachers were introducing them. The responses, not unexpectedly, mirrored the teacher

experience. What became apparent was that teachers understood the dimensions in a theoretical sense from the beginning but took some time to integrate them in a practical sense in their classes. At Odense Gymnasium, one student was reported as saying “they are different ways a student can find out which way they learn best and what kind of teaching you have to have to develop yourself in the best possible way”. Another said:

They have been mentioned a couple of times. One with strategic awareness where we had to like mostly when we do our homework or we were reading things we had to think about it, remembered and learned from the text by taking notes or reading slow or marking the important things.

Another student said, “And then we had something about groups, collaboration I think the ELLI dimension was. Like working in groups and it was better to sit in groups to talk about things than being alone”.

At the Capital High School, students responded, on the whole, more positively to the ELLI dimensions. Interestingly, the students understood the ELLI dimensions as being useful as a result of one teacher’s methods of introducing and working with them. However, they also recognized that some teachers introduced them as new content, rather than as a new way of learning. Students at the Capital High School were simply asked what they understood the ELLI dimensions to be. One responded by saying:

it’s a very different way of putting words to how you are as a learner. It makes you think about how you are as a learner. What do I do to learn stuff. What I normally do is just to do stuff. It makes you think. It makes me realize that what I am doing may not be so smart. You look at yourself differently. You don’t necessarily change stuff.

Another responded “I got more aware of why I like some subjects more than others. I really like science and in the ELLI survey, it was something with creativity and problem-solving which is something you do a lot in science”. Another said “ELLI tries to make things that ‘just happen naturally’ but are invisible, visible. I like that”.

At Silkeborg Gymnasium, students felt that the ELLI dimensions had been presented to them more as content to learn, in the same manner as learning subject matter from a textbook. They were not offered as something to own or for them to enhance the learning value of their activities. One student said:

to be honest a lot of us are very critical of the ELLI dimensions. We have had a lot of trouble seeing why we should learn about it and what are we going to do. So I think that maybe that has been the teachers' biggest challenge. To get us on board. Every time they said now we have to talk about ELLI, we were like ooooo no.

One student saw the idea behind the learning dimensions but did not see them as being practical: "I think for me something like, now I know what I'm good at and bad at but I need some tools for me to get better. We need something concrete I think". And another said, "I think it's a pain because we have to write about ELLI again and again and again. It's a pain. We've done it. For me it hasn't made a difference. I do everything already, they've just not had names".

From interviews with students, a powerful message emerged concerning the importance of modeled behaviours. From the descriptions of characteristics of effective and ineffective teacher practices it is clear, perhaps not surprisingly, that students are consciously aware of teaching and learning with which they either connect or do not connect and which teachers are purveyors of which.

In terms of their connection with the ELLI, students described how the teachers' introduction of the dimensions either connected with them or not; either way, they were aware of why. This is not surprising as the teachers involved in the project had considerably different individual ELLI profiles and learning and teaching identities. However, two things could be derived from the students words. First, those who modeled positive learning behaviours and integrated consistent learning practices into its introduction had students respond positively and begin to internalize the ELLI as a learning language. Second, students responded to teachers whose practice was to model learning not merely present material. This is key to understanding teaching and learning for global citizenship.

What becomes clear is that it is the modeling of citizenship through collaborative learning at the most local of levels, the classroom, that better prepares and engages students to understand a greater sense of global agency.

5.3.4 How are global purpose and practice connected?

5.3.4a Student expression of their global purpose

At the heart of the GEP was the aim to explore the nature of global citizenship and how the competences that enabled this identity could be developed with both teachers and students. Students and teachers were asked: “What is your global purpose? Why are you interested in the world?” Like attitudes to learning and to operating in a school environment, student attitudes to, or understandings of, global citizenship were varied but related closely to those of the teachers.

Student expression of global purpose, like their views on learning at the beginning of the project, fit within the script or externalized orientation. The following responses from students across the schools, articulated their global purpose as being a feeling of direct attainment, fitting with a script-based mindset. Students felt that global purpose was about tangible experience and attainment of skills and personal success. Their idea of global purpose was simply to go and work overseas rather than developing any form of higher order understanding of themselves and their ability to make greater sense of events, trends and ideas locally and globally, simultaneously.

Some students responded to the question “What is your global purpose?” simply by indicating that their primary global purpose was to live and interact globally. For example, one student said, “I want to go to Kenya”. Others said:

For me it’s about following my dream of leading an international company

Right here we do English so that we can become more global and go to other countries and to work.

I’d like to be a lawyer and this social science line. I’d like to move away from Denmark and the English would allow me to move somewhere else and make friends and communicate with people.

Travel and experience other things. When you look out of the window today it's boring in Denmark. The weather is like really boring. I was in Ghana once and I was like this is amazing.

I want to travel and see the things that I learn about. About global issues.

Other students expressed their understanding of a globally-focused class as preparing them for travelling and working globally. Critical, though, is that that preparation was expressed as the transmission of knowledge rather than any thought of learning dispositions. One student said: "global purpose is finding out about the world so that we will be able to go and work without problems". Others said:

well we will go out in the world and not be surprised about what's going on. We pretty much know what's going on – China and the USA ... especially in China because it's going to be the future important country. So we know a lot about China that other students don't know.

well you have to cooperate with a lot of people. If I go to China I have to work with a lot of different people who know a lot of different things. But I think the global class was meant to be where leaders are being taught (sic). The purpose of this class is to educate future leaders because we know a lot about the world and we know a lot about group work. I think.

Some students, though, did see global purpose as being much more closely located with a sense of understanding, with strong links to a learning identity and mindset. One student reported that "we want to learn how to be global learners in different ways. So we not only have education on the blackboard". Another said that they wanted to be involved in the global class: "So we can be like teachers to each other here and globally and to get new insight when you are working with other people. Because you might have read this text but the other one has read it in a different way. So you can compare our ways". Another said:

A global person interacts with people from different cultures and is interested in the different cultures. At school, we get the skills that maybe we can get a job in another country and not get stuck here ... For me it is getting perspective on things. Get to know myself better through interacting with other people.

Some students commented on their perceived difference to students in non-global classes. One said, “first I was thinking it would influence our time here at school. That it would be different from the other classes. For example we are going to Kenya, that was a big difference. But also that we are involved in the GEP and we would interact with international people”. While another reported, “we are very global. When we talk to students in other classes, they don’t reflect about the world. When we had visitors from Kenya we compared the value of our political systems, other classes don’t do that”.

The desire for interaction for these students and their desire to co-create a new and higher understanding is a critical departure from the simple desire to travel or the desire to help the disadvantaged. It suggests – although doesn’t say explicitly - a desire for understanding through interaction, which demonstrates a desire to make meaning possible through critical discussion.

5.3.4b Teacher perceptions of student global purpose

On the whole, teacher views of student global purpose was one dimensional, which seemed to match how the teacher’s saw their own role. Teachers understood their students’ desire to travel and see and experience new things, which largely matched with how the teachers located their interests and purposes. What was largely absent from both, however, was the sense of need to prepare *themselves* for doing so – beyond the general desire for knowledge and the feeling of trust identified earlier.

Teachers at Vestamager Gymnasium tended to identify the purpose expressed by those students with a script-based mindset (characterized by a desire for preparatory knowledge transmission) rather than those who saw the global context, as a way to enquire and to learn about themselves as much as other people. The following exchange with Carina, highlights that teachers understood the students’ understanding of global citizenship and their purpose. Teachers such as Carina accepted the students’ views as being positive and worked to satisfy student needs in this respect. However, when asked how students develop the type of competences needed to effectively interact globally and to be purposeful in making meaning from global interactions, teachers could not respond. The conversation went as follows:

[Interviewer] What are student expectations? Why did they choose the global stream rather than other classes?

[Carina] Because they are interested in travelling and like to have work abroad. That's the main reasons. And I think that they want to help the world, heal the world. Maybe work for the UN.

[Interviewer] How do they expect to do that? What are they looking for from the school, from teachers?

[Carina] I think mostly they are thinking about it subject wise. In history class, there will be a lot of international history, not just Danish history in Danish they will read authors from another country. It's mostly in the curriculum rather than in the methods.

[Interviewer] How do they expect to travel and work abroad and to solve significant issues, which they want to do, which is great but how do they expect to actually 'do it'? Bono likes to solve the world's problems by having Band Aid concerts, how do they?

[Carina] I don't think that they are concrete about their thoughts on how at that age. They know if they want to travel to third world countries or maybe if they know about the Red Cross then they can say a company name. But exactly the actual work, I didn't hear them express anything specific.

[Interviewer] So how as global teachers do you prepare them for those things that they want to do?

[Carina] I don't know

[Interviewer] Is there an inside / outside of the classroom divide? When they are outside of the classroom they are different to when they are in. Does the thinking of the global group of themselves as learners change inside / out?

[Carina] Very much. All the students are interested in activities outside the classroom but I don't think that they connect the two.

5.3.4c Teacher global teaching practices

The teachers understanding of what a global citizen is and their sense of what teaching for global citizenship is, differed across the group but fell broadly into two categories: those who understood the key competence of a global citizen to be in the acquisition of knowledge about people and places; and those who understood it as about students being able to gain insight

from being exposed to a different range of authentic experiences that can be linked to global issues, local and international.

One group of teachers, across schools, viewed their role as teachers far more in terms of learning-based outcomes or through an affective lens. One teacher said that their role as a global teacher was to “make students curious and responsible about the world”. Others, similarly, concentrated on the development of learning competences. They said:

Competences that can be used in order to go on in the educational system: Critical thinking, being able to analyze and interpret any kind of media/text/speech/thing.

Competences that can be used in order to be an active and responsible democratic citizen: Self-awareness and responsibility, critical thinking, sense of group.

Others said that their role was to:

widen the optic of my students, to help them to be able to find out who they are, to help them to develop a critical sense of judgement.

To motivate and to make the student to think about their own world and compare it with the world just outside their door.

Let them understand the world, not just as they see it, but according to how other people see it.

At the beginning of the project, however, a significant number of teachers focused more on preparing students for global realities through transmission of knowledge and ‘standardized’ travel experiences. Carina at Vestmager Gymnasium was asked about how she goes about creating global learning. Her response was broadly typical of other teachers at the beginning of the project, focusing exclusively on cognitive or curricular responses to global imperatives. She said:

We try to give them knowledge about actual problems situations in the world. I started this year by dealing with the Ferguson riots and so providing an understanding of the issues and the problems and trying to explain why it happened and understand the media’s handling of it. To try to give them the feeling that they have an understanding and then they might be able to analyze

all the knowledge that has been thrown at them to try to manoeuvre it and you know what might be fact and what might be fiction. How can I construct an understanding of what is going on in this particular area of the world and be able to manoeuvre in it? So I think that that's part of that they expect in a global stream.

Carina's response is consistent with how many of the teachers at the beginning of the project felt about their role and purpose as 'global teachers'. Teachers' perceptions, from across the participating schools, about the goals of global teaching were evenly split between those seeing themselves as providers of knowledge and skills, and those who had a more experiential understanding of the intended outcomes. The following comments aligned with a script-based mindset:

The key priority for me is to teach the language and the culture that go along with it, so the students become aware of the fact that learning a language is to learn culture and often also another/different mindset.

My role is to obviously teach the curriculum, but to do so in such a way so that the students are interested and learn as much as possible.

My role is also to broaden their horizons to learn them (sic) about cultures and differences in different countries.

Giving the students the knowledge within the given subject but also to develop their persona and social skills.

First of all to give the students the academic input and tools they need.

This perception is broadly representative of teachers working towards global citizenship outcomes. It fits with the broader picture of teaching and learning identities as it highlights a largely externalized mindset. Specifically, the references to the 'giving of knowledge' and giving the feeling that they have an understanding (whether or not it exists in reality) are instructive here. Indeed, at the Vestamager Gymnasium, the understanding of what a global competence was seen as being fixed in the cognitive domain, without acknowledgement of the affective drivers. Teachers at this school were asked what essential global competences were. Andreas, the leader of professional learning in the school said that:

there are some general competences that are important when you are a global citizen, to take responsibility for challenges that you see around you. Also, this

competence about the ability to take action. That's very general competence, they don't have to be global but they are very important. We have worked a lot on these two dimensions but not especially in a global perspective.

Approaching the ELLI dimensions in a very different way to what was intended in the project, two teachers at Silkeborg Gymnasium explained that their school saw ELLI as being a useful tool to explore and develop student learning and achievement but stated that their purpose was not global. Carl said: "We didn't see it as a global tool but a learning tool that we pitched to the students as being something to adopt in order to get better grades". He was challenged about where that sat in relation to global citizenship and replied:

That was the school's purpose but that was not my purpose. I told my students that the ELLI dimensions were the dimensions of students who gain high marks. I said you need to have these if you want high marks. They are so keen on getting high marks they went vooom right to it 'tell us more about it' they said. The global focus wasn't my focus.

One example of a globally-focused activity highlights the script-based approach. Mia arranged for a guest speaker to discuss with the students his life in Egypt and issues arising with the Arab Spring protests. Mia said that the session was important to the class' global education and found it to be a successful exercise. She said:

they said that they enjoy hearing about the Arab Spring and that the students in those countries are quite similar to how they think. They want to express themselves and get involved just like them. And I think that in the workshops, it was a real experience. I think it moved them. They could see the relevance in understanding the relevance of what was going on in terms of the western media.

Mia was then asked about the impact of the session on the way that the students felt about themselves and their futures. She was asked whether or how they saw the session as being important to their futures. Mia simply answered, "I didn't ask them that way so I don't know". Here, Mia appears to have missed the opportunity to explore the nature of citizenship, as well as allow herself and the students to reflect on their own learning and how they construct their own meaning.

5.3.4d Student understanding of global citizenship

It is perhaps not surprising that just as the teachers' understanding of what a global citizen is varied, so too did the students'. The following responses suggest a view of global citizenship aligned with a learning mindset. The teachers' purpose was not only to acquire knowledge about the world or a global issue but to process it to form an understanding. Students who demonstrated a learning understanding of global citizenship said "I would say someone who understands other cultures and knows another language" and "Someone who works with other people and not closed off. And is good at seeing and understanding different aspects of different cultures". In a social science class, students were asked whether the social sciences were more connected to global citizenship than science-based subjects. Responses, again, demonstrated that the students understood global citizenship beyond a curricular or script-based understanding. One student responded, "In some ways you can connect all things but the social sciences are more clear. I can see the global purpose but it doesn't make us better global citizens". Pushed on this point, to define a global citizen, students in the group were reported as saying:

I think a global citizen is one who has a good understanding of the world as one.

Accepting.

A person who finds other countries interesting and you want to learn about them is a global citizen

For me it is a lot about understanding each others rituals. It's also about understanding the situation that the world is in today.

One student referred to a personal process, which suggests a learning understanding. He said:

to be a global citizen is to challenge yourself. You can't be a global citizen if you don't push yourself to interact with other opportunities and create meaning for yourself. You should be willing to take risks and to see other adventures. Maybe Kenya won't be amazing all the time but it is part of a personal process.

The references to understanding in these comments suggest some awareness or some connection between global citizenship and learning. There is a key difference between understanding something and experiencing it. One invokes the notion of Dannels, in that it

creates a meaning that can be shared for the betterment of all; the other implies that no meaning is necessarily derived.

The following comments from students across the participating schools about their understanding of global citizenship, suggest a script-based mindset. Characteristically, script-based understandings concentrate on knowledge and skills or actions, rather than on the process of engagement and the purposeful construction of personal understanding. One student was reported as saying, “I don’t want to live here but I want to go to places like [Ghana] and travel a lot. I think that makes me a global citizen”. Another responded by saying, “A person who is travelling and experiencing things in different countries. Maybe seeing different cultures”. For another, citizenship hinged on voting. He said, “If you don’t vote, you don’t have the right to complain about the problems. So, it’s [citizenship] just if you care.” Caring was also important to another student. Citizenship for him was about making a contribution:

you have to care, you have to do something. But paying your taxes might be the least but going into politics might be more because then you can influence. And then if you practice sport in your spare time you might be an instructor and do something for that society but not for the bigger one. I think you have to do something but not a lot.

At the Silkeborg Gymnasium, there was a recognition that the program of global activities was not connected to classroom activities and curricula – but could be. Teachers reported that students were engaged with global activities but that these experiences were not seen as being learning activities, certainly not in the same way as the students viewed their standard classes. The following exchange between a teacher and a student is instructive:

[Teacher] Does being more aware of learning through ELLI help you to understand better what’s going on around you?

[S1] So do you mean that we should not only use these in school but in our daily lives?

[Teacher] What do you think?

[S1] I haven’t seen that that way before. I always focused on the school.

[Teacher] Does it make sense?

[S1] Yes it does.

[Teacher] How does it fit with the 'global' in your global class?

[S1] Maybe when we go travelling, we also learn about their country and culture. That's also learning and we can use the dimensions.

[Teacher] So you are all going to Kenya, how are you being prepared for that?

[S1] We are being taught (sic) about their political system and culture. I wouldn't say we are being taught (sic) about learning. I can see now that I need more.

This exchange highlights the lost opportunities but also the understanding that a learning understanding of global citizenship could be achieved. The lost opportunity is borne out by teachers not making the global link clearly to students. Further to that, one teacher reflected on the impact on students' global mindset, having worked with ELLI. Asked how he felt about the ELLI impact on his students' global mindset, Carl explained that he and his colleagues did not consciously link the ELLI learning dimensions and, as a result, didn't see a change in student perceptions of global citizenship. He said:

I don't think it's changed much. This class is focused on the ELLI dimensions and they have had some input on global citizenship but only recently. I still think that it's the learning power that they are interested in. We haven't talked much about the global citizenship actually. It's more about the dimensions.

Overall, teacher and student responses indicated no strong connection between dimensions of learning and dimensions of citizenship. This suggests that determining understanding is based on exploration of global issues through curricula and on physical actions such as travel and exchange. There only appeared to be a small understanding of the learning competences that direct the interest and engagement in the world as it is immediately around them and beyond.

5.3.4 Is there a connection between teacher ELLI dimensions and them as action researchers/ learners in action?

At its core, the GEP aimed to create and support an authentic context for teachers to action research their methods and outcomes pursuant to global learning and teaching. Teachers were supported with professional learning and resources to follow a structured reflective process and school leadership teams offered support for this to occur. However, there was a feeling that there were factors across all schools that limited the teacher's ability to fully explore a new perspective and practices; the responses about the extent to which Carl implemented new teaching purposes and practices illustrates this. Across the schools, it was suggested, no clear reflective practice occurred, which meant that the amount and strength of purposeful action was diminished across the life of the project. When asked to reflect on their practice as it specifically related to the GEP, teachers made reference to the factors that they had identified as being important in limiting their 'ideal' practice.

A lack of real support from school leadership was identified as being of critical importance. Despite leaders promising to support teachers with time and resources, teachers felt 'alone' and this limited their ability to engage fully. When asked about the support of the project team at the school, Carl, put it simply, "The school offered no leadership support". Lasse, too, said that a lack of leadership support limited the value of the project. He said:

I think it's hard because some of the teachers feel that we were alone on this – apart from you. How much energy should we devote to this. It is / can be very time demanding. How much time do they (school leaders) think we should put into this because if you were really to stimulate this, really really it would take quite a while wouldn't it. In my class, it would take many hours of preparation for every class and that's fine sometimes but if you were to do it every time. Is this reachable, it might be but it's also hard if you don't know how much effort to put in because I have other classes. That is frustrating that we don't know how much to put into. We have (a new structure) that we have to register every hour that we put into a class. So that's what you find in your everyday life.

Teachers across schools reported that it was very difficult to find time to engage in reflective practice action research. When discussing the guiding principles and practices of the project, teachers were asked about the identified reflective practitioner model that teachers and schools agreed to implement. Teachers were asked what the reality had been. Mikkel said that "we have tried to give each other homework along the way. We sat together and tried to decide. We haven't had time to organize meetings to finalize an approach that would be sustainable.

So we struggled". Similarly, Mona said that "we didn't really, unfortunately. Mathilde and I have on several occasions last year but we have to plan better. We have had a lot of difficulties here at this school, which has made it very hard for us to plan properly". Lasse reflected that:

we've only held a small number of meetings to discuss how to focus on these dimensions and we agreed that we would do that for a couple of weeks. We have discussed it but we haven't found a certain answer but we have discussed different possibilities but not any answers.

While support from the school leadership in terms of allocated times and workloads would have had a positive effect on teachers feeling valued to enquire and experiment with their practice, there was still scope for each teacher to do this from within their usual practice. A mindset change does not require changes to working conditions. One teacher at Silkeborg Gymnasium said that while trying to act as action researcher, she found it difficult to visualize what her objectives were. As a result, she struggled to share her practice in the adopted reflective practitioner model. The following exchange with Jytte illustrates that while a lack of support from leadership was apparent, teachers struggled with adapting their mindset:

[Jytte] I think it is very difficult to talk about evidence because we are doing it differently and I try to come up with different ways to make them more critically curious ... when I plan a lesson I think of what I can take from it. I have been working on having the students ask questions according to a text ... but I just came up with this myself. How to get evidence? I don't know.

[Interviewer] The response that you are getting from the student is actually your evidence. You can then correlate this with the individual student data. Then, in professional dialogue with teachers you can say, 'here is my evidence' and what I am doing. The purpose of the Ning is to share this type of evidence.

[Jytte] I still find it hard to distinguish between evidence and anecdotes when it is me looking at my students. Should we collect student work to give to you?

[Interviewer] It's not about me it's about you sharing your evidence in learning conversations. This links to your reflections about the ELLI learning relationships being low.

[Jytte] Yes, your right. It's just difficult to really collaborate. Extra meetings, I mean it's difficult to put into a schedule, so if we had maybe a template it would be easier to set up. Is it enough that we are meeting three time per semester and discussing this. What are we expected to do?

[Interviewer] Look at the reflective practitioner cycle – follow the process. The number of meetings is not the most important thing, it's the thinking process that is the most important. What you are doing is 'it' it's just a matter of understanding your purpose in what you are doing and recognizing what happens.

[Jytte] It's a very new way of doing things for us.

Jytte's comments were echoed by Lesse and Carl. Carl suggested that "Evidence collection is a problem though. It's difficult because the global class are very skilled and talented and they are doing a very good job", the implication being that 'if it ain't broke, don't fix it'. These teachers suggested an absence of organized or supported reflective practice and a sense that the global class is fulfilling their objectives. Teachers responded to a question on how new methods spread in schools. Lasse said that:

they come from conversations in breaks, talking about what works / doesn't work. Some of us drive back and forth from Aarhus and we talk together and you get inspiration from that. If you just came to the school and did your teaching and left immediately, you wouldn't get anywhere, which is a sign that learning relationships are important.

From the responses of teachers to the question of how they operated as individuals and groups in the project, the structural and time factors were made clear. There were also references to leadership and suggestions that more could have been done to alleviate the impact of the factors that were seen to be limiting progress.

However, another clear and arguably more important factor appears to be that the teachers felt unsure as learners and desired concrete instructions rather than guidelines for learning practice. This is consistent with a less than strong conscious identification in practice with the ELLI dimensions that would be closely associated with an action research approach to teaching, namely: critical curiosity, strategic awareness and resilience. What is also worth noting is that there appeared to be a clear sense across schools that teachers had difficulty in engaging in team activities as learners in a way that would be consistent with the learning relationships ELLI dimension.

While the teachers became familiar with the ELLI learning dimensions in theory, they found them harder to identify in practice. Looking and planning for affective assessments proved difficult for most of the teachers. Asked if having identified the ELLI dimensions in planning led them to learn new things about the students, responses were equivocal. Mia responded, “how to find out whether they have moved. I can see according to the curriculum but it is difficult to evaluate whether it has done anything to the students in practice with ELLI dimensions. It might have but I find it difficult to see”. Similarly, Cecile expressed that she found it difficult to identify the connection. She said, “We did a lesson on learning relationships but if it did anything to improve their learning relationships it’s difficult to know”. Frederik said:

you would hope that the critical curiosity would be higher after the method because you have taught in a way that forces them to ask questions and you see that they did it so they might have learned it. But it is hard to put your finger on whether critical curiosity improved.

The problems that teachers across the schools articulated in terms of structural in-school support and being sure about identifying learning improvement and sharing that, were not unique to global teaching and learning, nor were they unique to teaching as a whole. They are characteristic of the process of change – whereby the initial enthusiasm for change gives way to being daunted and unsure before ‘clicking’ and developing confident agency - and the challenges that are entailed. The Ning online platform was developed to house the type of reflective discussion that would ideally make visible the challenges that teachers faced at individual schools so as to identify possible solutions. For the participants, however, it was daunting to share their artifacts without more confidence in their ‘accuracy’.

What the lack of confidence suggests is that the teachers were not strategically aware in their practice; they felt the need to follow a script, or to rely on an external source to validate their practice. In an interview with Mona, she revealed that her practice was atomized, her topics seen as being self-contained rather than linked to a higher learning design. As a result, she was only able to recognize the individual curriculum-based learning rather than the deeper learning development. This is highlighted in the following exchange with Mona:

[Mona] Well, Psychology 1A, what is learning. I ask students to talk about it in pairs and from that I get them to extract that being wrong is a part of learning and learning is a process.

[Interviewer] What then?

[Mona] We focused on Gardner and I asked them to visualize their learning styles. They like the drawing but their understanding was quite shallow.

[Interviewer] What was the ultimate learning outcome? You have other interesting activities as a part of the unit.

[Mona] There was no ultimate learning outcome. Should there be?

[Interviewer] For you to be able to see any growth in learning, you would need to be able to see how the students were able to recontextualize knowledge to demonstrate higher understanding.

[Mona] I guess this is something that I should have shared on the Ning for discussion before now.

Across all schools, teachers found working as a learner and as a teacher difficult in their existing work structures and identified different factors that fueled this difficulty. Consistent, then, with how the teachers saw themselves in terms of the ELLI dimensions was the challenge they faced in integrating ELLI into teaching, having been accustomed to work from pre-prepared lesson and unit designs. They indicated, across schools, that having worked in the GEP they could see the need but were yet to be able to model alternative practices. At the Capital High School, Mikkel spoke of the difficulties that he found in practicing and modeling learning for students. He said:

The fact that the whole school is not working on this project; the whole system is a problem; our structuring and our textbook material and everything is based on another type of learning and that's a problem that you have to invent everything. In a way you use the same activities but you have to make a huge effort to invent new teaching and this is not happening on a daily basis. It becomes short periods that you focus on it.

Elliot, too saw that there were challenges in working with larger groups. He saw scaling change as a problem. He said, "it's the group of teachers, it is not that easy for us to do things

in a different way and we really have to show our students how to behave, not just to show it. It's where we have to be better".

Mikkel recognized that this impacted both student and teacher progress in terms of learning but was unable to adapt his mindset. Instead, he looked at change as a laborious exercise in changing textbooks and lesson plans, not realizing that a mindset shift would change perspective and change practice instantly. He said:

If I have an English textbook and the assignments that are made for the students. These assignments will not be made with the ELLI dimensions. There is not already this type of thinking. That means that I have to adapt every single class and assignment. I believe in it but I don't have time to make that possible.

Seeing their subjects as being 'fixed' was a significant hurdle for the teachers across the schools, providing more evidence of a lack of strategic awareness. Teachers were asked to adapt their practice and look for different signs of student progress. Teachers, though, rather than being confident in themselves to find their own pathway forward, looked to existing textbooks or practices that might lead the way. In the liminal zone, the teachers did not feel confident to chart their own course forward. Carina, at Vestmager Gymnasium, was a teacher who students respected as being a learner. However, she indicated that she found it difficult to work as a learner and adapt her practice. She said:

[Carina] It could be a phase because many of our teaching books already have questions in them. And the way that we have to do our jobs, we don't have time to really dive into [the subject] and we need to plan a lesson quite quickly. The idea could be to bring in that material still but making a pause once in a while and giving the students the opportunity to get these questions into their own thinking. What happens is our goals for our normal syllabus take over, you know, and then it takes attention from specific learning parts, ELLI, and you don't have time to connect these things, so you go with your course plan. It's what we have to do.

[Interviewer] Even though the students indicate that they are very dependent on you?

[Carina] Yes, that's right. We need to make them less dependent. It's a problem.

Importantly, Andreas at Vestmager Gymnasium spoke of the difficulty for the students in moving from a script-based mindset to a learning-design mindset. The students had expressed this in their own interviews. However, it was clear that Andreas saw the potential solution as being external, or somehow outside of the teacher's control. He said that:

this global class are dependent in that they want very clear instructions and then they will do everything that they can. But it's difficult to make them less dependent when they are good at working under strict guidelines.

It was ironic that the dependency and desire for very clear instructions was precisely what the teachers desired to move forward. The result was that their teaching and learning modeled this for the students.

5.3.5 What new feelings, understandings and/or practices were developed or realized during the project?

5.3.5a Increased professional satisfaction (enjoyment)

Having outlined the challenges that teachers faced in working to more effectively model learning in their teaching, there was progress across the course of the project. One anecdote from Amanda (see below) highlighted how she had purposely and explicitly connected the ELLI dimensions while on an overseas tour with students and had achieved a direct and positive result in terms of the students' learning engagement. The example is significant, in that it demonstrated how the employment of the ELLI dimensions added value to a co-curricular experience and at the same time provided an authentic learning experience for the students to be able to apply once back in the classroom. In this case, the students had gained extra value from their global experience and developed their understanding of critical curiosity.

The teachers were asked what impact, if any, the ELLI learning dimensions had made on their thinking on teaching and learning and their practice. Despite the challenges expressed by the teachers, it was felt that they had made real progress and that they saw teaching and learning differently. Amanda at Odense Gymnasium said:

we have continuously asked students, 'how do you do your homework?' Or 'how did you do this task' and then 'in what way did you use critical curiosity?' We went to Scotland and I asked the students to use their ELLI dimensions while they were at a castle for the next two hours. One student said before he entered 'this is going to be boring ... another old castle'. But she said when she got in she thought about the dimensions and recognized herself asking herself questions. She said 'I wonder what's over there? I saw the audio guides and I wondered whether it would be worth me purchasing one for four pounds – this was me being critically curious'. She ended up doing the tour and we ended up having to wait for her because she was late coming out of the castle. After the castle we asked the students for examples of them being conscious of the learning dimensions and they gave us tons. I saw it working in action.

The satisfaction gained by successfully employing their understanding of learning power in the Scottish castle example was evident broadly. During the GEP, teachers had taken themselves on a reflective learning journey and, despite recognizing challenges in fully adopting a learning design mindset, had identified an increased enjoyment from their practice as a result. Teachers were able to see the ideal of a learning design practice both for themselves and for the students and they were able to experience – albeit to a limited extent – the increased enjoyment that that brought. Asked whether there was extra enjoyment for teachers in doing something new and being outside their comfort zone, Mikkel was unequivocal. He said “yes definitely, more motivation and reward. But I don't think you can do it every day. Having to all the time change change change but it is very motivating”. Marius agreed, adding simply “yes there is enjoyment”.

Teachers, having expressed the challenges that they saw with the project scale and enacting change in a team, also saw the positivity in working more collaboratively. The teachers were asked whether the new learning identity created by the GEP experience created a happier team of teachers. The answers were positive. Jytte said:

yes, I think so, definitely. If you are talking about how you can teach, then you are more interested in what you are doing. That you are involved in your situation. But if you are not involved, you have your work and your family and it is two different things. Now it is more you have to be a part of the school.

Ralf said, “I focus more on the students. I can see that if I was more conscious of my own reflective work then maybe that would pass on to the students. So that I am working in a way

that they are working". Ralf was asked in response to that whether there was, as a result, potentially more enjoyment. He responded positively, saying "yes, I think so, yes. But my motivation did not come from the beginning; it came from working with it. Seeing some sort of different approaches to teaching that inspired me". Similarly, Majken saw a pathway forward in her learning and teaching as a result of the learning language. She said, "it's about planning – how to get to the goals. For me as a learner, I have to make a plan, how do I learn this more".

The teachers' understanding of the ELLI dimensions across the life of the project increased and, as it did, they were able to see the impact of using a discrete learning language. In some cases, the language acted as a lens through which teachers were able to better reflect on both themselves as learners and themselves as practitioners. High amongst the positive elements of the project was the use of the ELLI learning dimensions as a common learning language. Marius from Odense Gymnasium said, "I think it's very important to use the learning language. A few years ago, we had an innovation project that didn't go so well. We thought that they understood the language but they didn't really". Elliot confirmed that this aspect had been a positive for him. He said, "Yes, I think strategic awareness is reflecting on your teaching and how you learn. Not planning but more how you end as a teacher. ELLI helps with that". He saw it as being beneficial for his teaching too, suggesting that:

I don't think I spend enough time on learning, on ELLI, I know that now. I have realized that I need to spend more time. It would be good for me to spend more time on how I am learning and communicating that.

Having responded that the ELLI learning language provided a useful communication tool, teachers were asked whether they were using the dimensions for their own enquiry. Carl said that, having worked with the ELLI dimensions, he was in a better position to apply the learning to specific groups. He said, "I remember a very weak class who are famous in the school as being the worst. One of the things that they lacked is resilience - now I have a word to use to understand them". Similarly, Cecile said:

When I first got to know the ELLI dimensions, the word resilience was new to me and now it's almost become a buzzword in Denmark because students generally

don't have resilience, it's a problem. So it's useful to discuss in all classes not just in globalization. Especially for young people because they don't have resilience, it's a big problem.

Carl also described his own learning context, which he credited to the ELLI dimensions. He said:

actually the new language was new to me, especially the resilience. It was new to me that I needed to make the students more resilient ... I changed my teaching in ... classes because it was something that I didn't know about before. I am now using it to research students and resilience. It's actually quite exciting.

Andreas at Vestmager said "we are very happy with ELLI in that it tries to create a learning language and that's going to be a big focus for us. Especially for students in a global learning situation. And the dimensions are very useful in that part of teaching".

Teacher reflections suggest that over the course of the GEP, having engaged with the ELLI, the dimensions better enabled them to collaborate professionally, despite the challenges that they had previously outlined. This is important given that a lack of professional time to collaborate was reported as something that teachers were concerned about, particularly in the first half of the project. Teachers were asked how their new form of collaboration worked structurally. Marius talked in terms of scale:

It's not just the five [who participated in the GEP]. At the latest conference, we had 17 or 18 people. And that's how we are thinking. You don't do much for a school if you only take one person or two to a course. It doesn't work very well. We take a lot of people and they come back and tell people and do. Then they are speaking the same language.

Mona suggested that she and her team were having greater success in encouraging collaboration with colleagues as a result of the dimensions. She said, "We have tried to get other teachers to use the ELLI dimensions. We are more certain now of encouraging others because we can express our thinking better". Carina was certain of the impact, suggesting that "we have also cooperated more together than we would have without ELLI".

Mikkel described how their mindset had changed in the way they operated collegially. He said:

yes, we are meeting. We have an agenda, which is the class and a language with which to talk about the students across our different subjects. This is the main change because now we interact with different teachers across subjects and it is a great way for us to see things in a different perspective.

5.3.5b Re-orientation of purpose from teachers to teacher-learners

Teacher reflections on the impact of working with the ELLI dimensions in the project suggest that they saw a greater learning purpose as a key element of their professional teaching practice. They reported being more conscious of the need to search for evidence of learning beyond the curriculum outcomes; they were now looking for evidence of learning through the lens of the ELLI dimension. Amanda said that, as a result of the project, she better understood that “evidence works on two levels. The specific ELLI reflections tell us how much they identify with the different elements. But between those sessions, examples like today’s classes tell you how they understand them in reality”. Hilda, a second-year teacher said that the impact on her was profound in terms of her mindset. She said:

yes, I think that me and we are as teachers seeing ourselves as learners more than teachers. So I think that that’s a very precise result we can see. They know that they are learners and want to learn.

Jytte agreed, saying “I think it’s made us more aware of the way we teach and why we do it. I think a difference is that I have tried to make it more explicit for the students, what we are doing and why we are doing it”.

Two responses captured the overall feeling of the group when asked about the impact of working with ELLI on their practice and their purpose as teachers. Mia said:

Yes for me it has, it’s brought a lot of reflection – how and why we teach. For instance being more curious. Making more time to consider, doing more brainstorm with the students. We are always so eager, we have to learn this and read that and test this. So taking more time to think, so we reflect as teachers and they get to reflect more. That’s really a good thing I think that I have gained from

this. There is lots of nice strategies for thinking and working with reflection that has brought me ideas.

Marius, also affirmed the positive impact of the project. Change had not happened immediately, as it took some time to adopt a different mindset, however, he said:

This project was very interesting and exciting. We try to encourage them to take this project because the teachers are moving forward. New teachers were nervous in this project at the start but now think it's very good. They are gaining a lot from this project and that's what we try to encourage. I can see it in ELLI, it means a lot to them to use ELLI to see what they have to do with students because the results are weak. So they are becoming a lot more learners.

5.3.5c Student impact

When considering the significant influence that teachers have on student learning and student learning identities, it is perhaps not surprising that with the growth of confidence and development of practices, students began reporting positive and more conscious attitudes and beliefs about their own learning. Students reported that, with ELLI, they were more aware of, and better able to reflect on, themselves as learners. Students increasingly saw the dimensions as allowing them to step away from themselves and reflect more dispassionately and therefore more accurately. One student reported that:

When I reflected on the ELLI dimensions formally with my class for a second time I saw that my thinking was changing. Actually, I was dropping in some place; I thought I was good at being able to put my work in order and plan what I need to do next but on reflection I could see that I wasn't. Thinking of the ELLI dimensions, it allows us to see ourselves through a 'neutral' lens. So now I really know I need to focus on this. For me, ELLI has helped me to get a look at my faults.

Other students reported their approaches to ELLI and what they had done over the previous three semesters around ELLI. One student said that "It was hard in the beginning to understand but it has got a lot better". Another added:

We have made ourselves more conscious about the many different ways that we interpret the world and interpret information. At the start we were not aware that there were so many levels or characteristic ways of learning. And once we became

aware that there were areas in ELLI that you were low at, you could change I think. Being aware of the problem definitely helps solve it.

Importantly, some students were able to articulate how their understanding of the ELLI learning dimensions had impacted on their practice. One student said:

Sometimes I think when I reflected on the dimensions, I answered to myself what I wanted to be and after the reflections I've been more aware of actually asking myself 'do I really do that?' In that way I think that the ELLI dimensions are good.

Interestingly, students were able to use ELLI to understand the effectiveness of teachers as being linked to their learning behaviours rather than based on a simple assumption of effort ('good or slacker' teacher). They began to see teachers as learners, which in some cases appeared to breakdown the notion that teachers held all the knowledge and offered a greater sense of agency. One student was relieved that her notions of teacher purpose was not accurate. She said, "I always had the picture that the teachers were always better but when I came here when we start a new project they say we are all going to learn together". Another student said, "I am really surprised maybe (that the teacher reflections were similar to how the students reflected). I didn't know they reflected like us. It makes me feel better". Pressed to explain this point, the student went on to say:

sometimes I don't see myself as smart and my teacher is the big smart one and she has all the answers and I don't. But at the same time it makes sense, how should they teach us about something that they maybe don't even know about themselves. If they are really bad at critical curiosity, then how can they teach us to be better?

One teacher reported a conversation between herself and a student, which she identified as good evidence of impact. The student talked about the benefits of being able to reflect and express herself in a learning sense; it was, in the teacher's words an expression of the student's agency. The conversation went as follows:

[Student] I think about my learning more now, it's not just unconscious. It's more concrete. Now we have words for it. So now we can put labels on things that we have always done.

[Teacher] So if you can now reflect on particular dimensions, does that help you to develop in those?

[Student] In some ways I think. Because you are more aware. Now when we get assignments, we think, 'how do we go about this?' So we can use the dimensions to help us. In Danish we are doing a lot of learning relationships. It's always the same, so maybe they are not very creative. Maybe she doesn't know. Sometimes I think teachers could be more creative with the way they teach.

[Teacher] Do you feel that you work in a learning group with teachers?

[Student] It's different if you have a young teacher or an old teacher. Or a teacher who explains things rather than working from a book.

[Teacher] Who do you learn more from?

[Student] The ones who cooperate and with whom we have discussions with instead of just getting told what's right.

[Teacher] Ok so you say that there's two different types of teachers. What sort of learning dimensions are they modeling?

[Student] Meaning making because they always make sure that we understand what we are doing. In history our teacher is young. She has different topics and she draws different lines between the topics and they make sense. I think that that's a lot of meaning making.

The teachers, across schools, reported that the ELLI dimensions had helped students to recognize change in some of their teachers. Some students across different schools identified individual teachers who they felt had developed since being involve in the project. By the end of the project, students were better able to recognize and differentiate the learning effects of teachers and to express it in a learning language. One student from Odense Gymnasium said "I can see it but it depends what subject it is. Technology yes, maths no. in maths, there's facts and that's all there is. It's hard to be a learner if you know all the facts. History too, it's not going to change. I see our history teacher being a learner". Similarly, a student from the Capital High School suggested that "it's not about the subject it's about the teacher being a learner by becoming a better teacher, it's that aspect"

5.4 Cycle 2 and 3 conclusions

Across the participating Global Schools Network, there was a clear recognition of the need for more explicitness in including learning power concepts in the curriculum, which most recognized, rightly, as teachers letting go of control. There was a high degree of reflexive awareness in some of these teachers – and it seems to have been stimulated by the project and the interviews themselves.

The data initially revealed a negative view of the reality of the education system, which led to a survival versus a strategic/creative teaching and learning paradigm. However, the interviews revealed that over the course of the project, the sense of increased learning agency meant that teachers felt that they had ways of overcoming challenges.

Significant in the words of both teachers and students was the recognition that ELLI brought a new language/vocabulary of learning and had an impact on practice. This was found to be empowering.

In interviews with teachers, common was what appeared to be teaching about democracy as a ‘correct worldview to be imparted’, rather than something to be critiqued so a worldview could be formed and owned (by students). This was reflected in much of what the students reported. The interviews highlighted important issues about dependency and ‘stuck-ness’ on routine learning, which became self-reinforcing. Because the qualities and confidence students needed to be able to learn for themselves were perceived (by teachers) to be lacking, that very lack was being reinforced by the way the students were being taught (i.e. this becomes a self-fulfilling deficit model). However, the sense of increased understanding and learning agency gave rise to its potential in the discretely global context into the future.

The interviews also underlined the essential importance of modeling the active, experiential learning that fosters learning power and self- and world-awareness (a critical component of global citizenship). Teaching ELLI as ‘another curriculum subject’ makes its integration impossible; it is bound to be received as ‘yet more burdensome data and what’s the point, it’s not examined...etc!’ Some of the students’ responses suggest this is what happened in some schools.

The accounts of the school and project leaders illustrate how well-established the global purpose from the participating teachers was and how well established co-curricular globally-focused programs were at the outset of this project. The research questions represent an in-depth investigation of whether and how the particular and distinctive ideas, principles and practical manifestations of learning power theory from the ELLI program would harmonize with this environment, impact positively upon it and produce data that would be instructive for future practices and directions. The responses from both teachers and students indicated that the experience has harmonized and prepared each group for the school learning environment and has acted as a signpost for future practices.

Initially, there was some natural apprehension. Would the ELLI language and constructs sit happily in the Danish education context and in the context of global thinking and practice; or would working with two such similar frameworks be confusing? Was the cost and logistical burden of the project going to be worth it? How would the students respond to ELLI? How would teachers, used to planning and delivering lessons, cope with the uncertainties, proliferations and demands of authentic inquiry? This project was something of a launch into unknown territory.

The result was that teachers did report the experience as challenging and sometimes difficult. There was apprehension in terms of making meaning from the data and the implications for their practice. A common teacher request in the early phases of the project was for 'concrete' pedagogies for them to use and specific directions or answers. The number and urgency of these requests diminished significantly over the course of the project as the conversations changed.

Indications were that the qualitative data generated by the project fit within the context of research conducted internationally (Deakin Crick et al., 2013), which identified teaching and learning patterns with the use of two metaphors – teaching and learning as script and teaching and learning as design. That research correlates with evidence from teachers in how they narrate themselves as pedagogues and from students in how they narrate themselves as

learners. The outcome was that pedagogy as learning design is seen to be the most potent pattern for achieving deep learning and student engagement because it fosters learning and agency. However, the evidence suggests that pedagogy as script is deeply and systemically embedded in western schooling systems.

Both teachers and students were clear about feeling controlled by a system in the Danish context, that they were not able to fully realize the extent of their teaching and learning practice. There was a palpable sense at the beginning of the project of a resignation to that fact. There were references from both teachers and students to their 'ideal' selves as opposed to their 'real' selves, which correlates with a learning design narration being their ideal but a script narration being the reality.

When teachers identified more strongly with the dimensions of changing and learning, critical curiosity and meaning making, we could expect their students to report higher identifications in these three dimensions as consistent with the script versus design dichotomy. A teacher with higher identification with these dimensions, according to Deakin Crick et al., (2004) would characteristically view themselves as learning designers who seek to respond to the diversity of needs and specifics of context. They would see their purpose as taking responsibility for linking the content of the curriculum to the lived experience and stories of the learners.

Importantly teachers reported feeling that they had, to some extent, re-orientated the purpose of their practice to one more aligned with the principles of learning design. They reported a greater level of professional satisfaction or enjoyment as a result of their different orientation and felt that having a learning language with which to communicate, enabled wider collaboration in the schools, serving to mitigate against the negative systemic dynamics.

In addition, the acquisition of a learning language was felt to better enable teachers to identify the learning needs of the students; something that the students themselves commented on. The student qualitative data also suggested that they were able to see changes in global

teachers. They reported that those teachers became more adaptive, more creative and collaborative, which they found to be positive.

There is good evidence then that this project, combining the ELLI dimensions with authentic inquiry in the global classes, built on the understanding that the schools had already experienced around preparing students for global citizenship. It extended the horizons of what the schools now recognized as possible through a conscious learning identity. This evidence permits the schools to move forward with enhanced confidence that the development of learning identities is of foundational importance to achieving the goals of the network. With the achievements of this project, teachers and students could continue exploring the connection between learning dimensions and dimensions of global citizenship by examining the global programs in depth.

CHAPTER 6: CONCLUSION

6.1 Introduction

In Chapters 3 and 4, data was presented and analyzed from across the four research cycles. In this chapter, a summary of findings is presented to provide an overarching understanding of the research. Specifically, the significant areas of literature reviewed in Chapter 2 are revisited and viewed through the lens of the findings, to deepen understanding of the data analysis. The following areas that were discussed in Chapter 2 will be revisited in this chapter as follows:

- Globalization
- Citizenship
- Glocalization
- Necessities for social and economic success and 21C skills
- Systemic responses to the notion of globalization (competences)

6.2 Summary of Findings

The goal of this research was to understand the nature of current practitioner awareness and future imperatives of the 21C glocal education paradigm. The results indicated that teachers, students, schools and systems understand the nature of citizenship and teaching and learning from within a cognitive lens. The teaching and learning that was observed as being practiced in the Danish schools centred on teacher presentation of knowledge and creation of contexts for student acquisition of experiences and skills. The intent was to inform them about the world and issues to be dealt with. However, this approach was at odds with a learning understanding of glocal teaching and learning.

This research demonstrated how teachers and students can genuinely collaborate through teaching and learning to explore and better understand the notions of citizenship and specifically, 21C global citizenship. It also demonstrated that this could be facilitated by teachers and students adopting a learning-based understanding of teaching and learning and citizenship. Critical to this was the mindset of teacher and student. The participants who demonstrated a more effective understanding of the connection between their teaching and their learning from within this context were the ones who, over the course of the project,

understood themselves and others better with the help of the ELLI learning dimensions. Lastly, the research indicated that teaching and learning for 21C global citizenship could be made visible and guided across localized contexts by mapping learning, teaching and citizenship practices and outcomes.

Data was collected in clearly defined phases, the first identifying the existing practice and priorities. It provided perspectives on the nature and implications of globalized teaching and learning via structured dialogic experiences across the project, including workshops and semi-structured interviews, consistent with Billet's (1996) situated learning theory. The second phase was practice-based on a PAR model. Data was gathered using the core research hermeneutic phenomenological approach, which centred on the creation of rich reflective dialogic experiences for educator participants.

In each iterative cycle, the data served to inform practice. The data was collected and analyzed concurrently to preserve authenticity and promote responsiveness. As noted in Chapter 3, this research approach was important in that it both scaffolded the participants' understanding and practice in terms of 21C global teaching and learning, while also generating rich and varied data to inform the research.

The results revealed that teachers could and did adopt centralized goals and were able to identify common curricular and co-curricular outcomes that were articulated by systems to different levels. The teachers who were involved in this research each identified strongly with these high-level goals. The research, however, identified that these goals and outcomes were subjectively understood even within this group and that this influenced their practice and, ultimately, the effectiveness in the eyes of the students. By adopting a set of learning dimensions, teachers and students were better able to communicate their understandings and practices and thus their perceived degree of progress. The results revealed that those who identified more strongly with the ELLI dimensions operated better in this environment and were able to see the benefits of their practice and the practice of others, as well as model this practice.

It is useful to view the significance of the study in terms of Delors' four pillars of learning: learning to know, learning to do, learning to live together and learning to be (Delors, 1996). The epistemic connections that Delors outlines between knowing, doing, living together and being is at the heart of citizenship, locally and/or globally. The challenge for educators and education systems is to understand that the connections between the pillars are critical to the strength of the pillars themselves. This research suggests that the strength of the connections between the pillars was related not to the knowledge that individuals and communities possessed but their learning dispositions and values. The value in the research was to find and understand the connections between the pillars themselves and the feeling of a sense of agency and community while doing so.

This chapter revisits the critical literature, reviewed in Chapter 2, and discusses the relevant elements through the lens of the data elicited from the research.

6.3 The challenge and importance of global citizenship and 21C globally-competent global citizens

What was observed and what is evident in the elicited data was that citizenship was largely taught as cognitive sets of facts. There was exploration of issues and engaging speakers and activities, including travel opportunities to a broad number of developing and developed countries. However, this study identified that the capacity of both teachers and students to explore, to enquire, to make meaning and to collaborate on locating meaning was not being addressed. Teachers and students were not purposeful in developing themselves as learners to act in a way consistent with the ideal global citizen.

The connection between global activities, the classroom and the curriculum, over the course of the research, did shift for a significant number of the participating teachers. What the teachers saw as being important in gauging the students' competences as global citizens hinged largely on their participation in activities and their knowledge of global issues. The Global Schools Network experience, however, meant that progress could and was made in this area of competence assessment. The interviews with the teachers suggested that through the experience of working with the ELLI dimensions, they became more aware of themselves

as people with the necessary type of learning dispositions for global citizenship and global teaching and learning.

The shift in the teachers' understanding of the practice implications of an affective approach to global citizenship was evident over the course of the project. Teachers used the ELLI learning dimensions to guide the assessment forms in their subject areas and they began to reach more concrete understandings as a result. That shift was also reflected in the views of the students, although to a much lesser extent, as teachers took time to internalize the new understandings and plan for them to be implemented in their classes. A minority of students working with the ELLI dimensions did not see a clear link between citizenship competences and learning competences. Some, however, were able to articulate the link in a learning language and to demonstrate an understanding of the dispositions of a globally competent citizen.

6.3.1 Globalization

It is useful at this point to return to Aninat's definition of globalization, discussed in Chapter 2. In it, he defined globalization as being an increasing interaction and integration of diverse human societies in all-important dimensions of their activities, economic, social, political, cultural, and religious. The experience of the GEP was that schools as micro-societies were difficult to shift in terms of increasing the interaction and integration of people and ideas – teacher-teacher, student-student and teacher-student. Both teachers and students reported a very routinized practice that included little co-construction of new knowledge and understanding in the way that globalization has played out in reality.

The UNESCO definition of globalization suggests that social relations become relatively delinked from territorial geography. In the case of the Danish schools, social relationships within the schools were still linked very much to territorial geography. That is, although students identified strongly with global affairs and a desire to travel and work globally, there was no demonstration of this type of supra-territorial relationship. Students were reported to have talked about experiencing Kenya and being interested in learning about China and the world, but there was no discussion of establishing horizontal relationships. Teachers too, were

not able to make the connection between provision of global experiences for students and the value of establishing truly collaborative learning relationships with schools, globally.

The implications for teachers and students in their understanding of culture then was that diversity was something that was seen on a global but not on a local scale. That is, while inclusion was spoken about in terms of global communities, tolerance of cultures was the dominant discourse in the classroom rather than a desire for the creation of a transcultural understanding and avoidance of the dominant culture / sub-culture dichotomy. The Capital High School was one that did not take the opportunity of its very diverse student population to explore the creation of a deeper understanding of learning. For a teacher with learning agency, abundant opportunity existed to support students with non-Danish cultural heritage (some very recent) to find a learning language with which to find their 'voice'. Their voice is critical to their learning needs being met and for their culture and experiences to be effectively harnessed by the class for heightened learning. This represented an opportunity for a truly localized global learning community but was passed up on account of their voices not being heard.

6.3.2 Citizenship

The significance of this research is emphasized by the contribution to the understanding of citizenship, particularly in the context of globalization and education. The understanding can perhaps be best articulated by revisiting the suggestion of the political Left that it is only appropriate to demand fulfillment of responsibilities after rights to participate are secured. As suggested in Chapter 2, teachers and students need to be given the opportunity to access global citizenship and the opportunity that it affords them. This research has demonstrated, however, that the notion of opportunity can be seen too narrowly. That is, while teachers and schools can and do offer students opportunities to participate in citizenship-focused activities, we cannot confidently equate the opportunity to act in these generally pre-determined and controlled ways with a true sense of agency. Both teachers and students identified a lack of agency as characteristic of their roles.

A common element of both rights and responsibility viewpoints is the actual contribution of the citizen to the society – whether as a perceived right or a sense of responsibility, real or otherwise. Participation is the process by which citizens are provided with the opportunity to influence public decisions. The roots of citizen participation can be traced to ancient Greece and the early American colony of New England (Cogan & Sharpe, 1986). Public involvement, or engagement, is accepted as being desirable and a means to ensure that citizens have a direct voice in public decisions. The notion that citizen participation and its relationship to public decision-making has evolved as an accepted positive, however, hinges on the notion of trust. That is, the acceptance that through public participation in decision-making, decisions that benefit society will be arrived at (Mize, 1972).

The findings of this research suggest that the trust needed for decisions in the public interest to be made, is based on skills and externally-derived knowledge established as truths in curriculum. The findings also suggest, however, that teachers and students alike are aware that they do not have the conscious epistemic mindset to create and co-create new understandings of their own society and that they are reliant on external systems and structures to communicate desired values and understandings. Indeed, both teachers and students felt that they did not have the agency to create their own thinking or decision process. The notion of trust, then, becomes important when one considers decision theory and the process that citizens undertake to arrive at the decisions that ultimately affect all.

The research indicates that sets of 21C skills are identified by policy-makers as being important to develop for students, in order to feel confident that they, as citizens, will act responsibly in the interests of society. Skills alone, however, do not offer change. What this research demonstrates is that a person's mindset or worldview is dependent on their identity as a learner. The acquisition of skills and a person's judgment on how, when, and where to employ those skills and for what purpose are very different. For the establishment of trust, society, local and global, should ideally find ways to be confident that citizens are learners. Insofar as how they choose to understand or employ their different skills, citizens would ideally do so following a critical learning process guided by an epistemic mindset.

6.3.3 Glocalization

Central to the founding understanding of this research is that global interdependence is a critical element of the 21C paradigm. The tensions that Delors (1996) suggested exist between local, national and global are seen in every realm of public policy and individual reality. As suggested in Chapter 2, societies have a notional choice between isolationism or engagement. The reality is that it is impossible to truly remain isolated in the 21C world. However, societies do have a choice in terms of how they choose to interact globally and the purpose of that interaction. Nations can choose interaction with the purpose of furthering their own national interests or they can choose to further their own national goals while furthering global goals, simultaneously. The latter is the purpose of glocalization.

At this point it is instructive to return to the CERFE research and the glocalization ideal map. CERFE identified seven principles proposed to govern the form and prevalence of glocalization. These are useful in understanding the nature of global interdependence. If viewed through an education lens, it is also instructive as a map for glocal teaching and learning practice.

This research took the principles (revisited below in 6.3.3a to 6.3.3g) and applied them to a teaching and learning context with the premise that the ‘nation’ was a classroom community in the school context. The logical extension of this analogy would be that the ‘citizens’ of the classroom would benefit most by not isolating themselves from other troubled classrooms, but by engaging with them in a shared purpose of creating new and more effective teaching and learning. The research revealed the following about glocalization in a classroom context.

6.3.3a Importance of local actors

This element highlights the necessity of the agency of local actors, their ability to critically assess local problems and needs, their knowledge, and their attitude to exercising governance over issues that affect them directly. This makes the difference in terms of success or failure in development programs. Seen through the lens of teaching and learning in the Global Schools Network, the sense of agency did not exist to the level that would satisfy the intent of this element. Although over the course of the project, with the aid of the ELLI learning dimensions,

teachers and students did better understand and display a sense of agency, the study suggests that the elements of the project would need to be adopted at scale for the reported sense of routine to be replaced by a sense of agency. The element of local actors in a classroom sense can be seen to represent either horizontal or vertical relationships. Vertical relationships were seen to ignore the voice of the student at the lower end of the vertical spectrum. The horizontal relationship, however, encouraged authentic and equal collaboration between teacher and student.

The implication for truly glocal teaching and learning then, seen in relationships between schools internationally, is the need for teachers and learners to speak for themselves locally, to enable sharing glocally. Involving local actors in characteristic school-school relationships appears not to satisfy the test for true collaboration of local problems, needs, knowledge and attitudes in practice. The GEP data suggests that the mindset required for such collaborations can be developed but are not yet being supported systematically.

6.3.3b The war/poverty nexus

The war/poverty nexus represents the vicious circle of poverty and conflict. In such situations, the culture that derives from and fosters it, tends to go beyond its place of origin to attain global dimensions. From this perspective, the entry point of glocal teaching and learning for tackling this nexus is not so much the issue of conflict resolution or poverty alleviation (which might represent well-intentioned yet patronizing developed / developing school-school relationships), but peace-building in connection with developing a positive and authentic learning culture. In a teaching and learning sense, poverty can be viewed as learning isolation and powerlessness, which can permeate whole schools and whole school systems. In the GEP, teachers and students reported a gap between teaching and learning; between purpose and practice; and between teaching and learning. The experience highlighted this nexus within schools but also between schools. The Global Schools Network itself was established with principles aligned to breaking the poverty nexus, yet teachers reported that, in reality, the relationship between the schools and the teachers, designed to develop and reinforce positive practices, was not succeeding in building sustainable bridges between schools.

6.3.3c Mainstreaming and peace-building

According to the CERFE glocalization principles, the creation of peace is central to any developmental strategy. In a teaching and learning context, peace represents a harmonious relationship or genuine collaboration between teacher and student, leading towards authentic learning. Peace is symbolic of internalized and shared learning goals and with a genuine sense of agency. In contrast, conflict in a classroom is symbolized by incongruent goals and pedagogies that offer little agency to students. The concreteness and content of peace are the pedagogies that highlight a shared purpose of enquiry. What is of critical importance is that the pedagogies have, and are demonstrated to have, real dividends in terms of collective learning. In the GEP, teachers and students reported a lack of agency and an incongruence of purpose, which, far from building an epistemic mindset, served to mainstream a static and dependent mindset. The data from the GEP, then, highlights that, where it was achieved, pedagogies and purpose created a mainstream peace that both teachers and students were aware of and felt positive about.

6.3.3d Link between stability, poverty-reduction and development

Building on the development of peace, the link between peace and the systematic reduction of poverty hinges on stability. In a school context, the stability described by both teachers and students was one of routine, with predictable actions and outcomes. However, these led to a low association with resilience and agency. The CERFE glocalization elements refer to the virtuous circle of stability, poverty reduction and development that, in the long-run could counteract the vicious circle of poverty, war and conflict. In a school context, stability is order or learning structure that makes learning outcomes and learning forms both visible and predictable. Teachers in the GEP made reference to the learning structure that they found effective during their pedagogicum (Danish teacher education practicum). The pedagogicum program offered them the type of learning stability and structure that they felt supported not only their learning but their development as learners. There are implications, then for the school and systemic structures that are needed to promote stability and growth through a visible learning structure, such as with the use of the ELL learning dimensions.

6.3.3e The role of the city

As suggested in the CERFE glocalization elements, cities are the places where civil societies are emerging with more strength and where relations with governing and administrative bodies are more direct. In a teaching and learning context, either in the classroom, across a whole school community, or across a network of schools, the conscious nexus of ideas and approaches build a genuine cosmopolitan strength of learning, akin to the reference to physical cities. This element can be highlighted by the very process of globalization itself, the spread of ideas and critical collaboration that leads to higher forms of knowledge and new supra-identities. The experience of the GEP was that a 'city' could be and was created during times of physical coming together at workshops and conferences, however, the virtual city of the Ning failed to eventuate. True to the CERFE suggestion, the schools in the Global Schools Network were not able to create a genuine city, instead living in isolated or at best semi-autonomous satellite cities. The result was that the idyllic city of learning and innovation was not created. More positively, however, by the end of the project the teachers and the students, through their collaboration, could see a concrete vision of the city and its potential.

6.3.3f Governance

Imperative for school leadership teams and for systems globally is supporting the learning and teaching practices. This implication deals with governance, both at a micro and a macro level. Governance, like learning itself, can be viewed in different ways: as compliance; externally motivated; through an epistemic lens; or as being internally motivated. This entails a double movement: on the one hand, bringing the benefits of globalization and of learning, globally, to local levels; on the other, supporting and empowering local realities so they can contribute their perspectives, opinions and demands to the global decision-making process. Like the notion of stability, this process has significant implications for policy-makers in terms of their governing vision or purpose.

6.3.3g The use of global knowledge.

The movement towards glocalization is strengthened by the characteristics of the knowledge society or creation of a learning 'city'. These include increased circulation of knowledge, communication and peer-to-peer learning, and the possibility to insert local actors and organizations into global communication circuits. This can enhance the practice of a real multi-

culturalism, in which local players and their cultures, far from being depressed and nullified, can access the global arena and find ways of cross-fertilizing with each other. The implications for teachers and for education systems is on the development of teachers with learning identities, as well as sustainable structures that support the development of learning cities, globally. Trigwell's (2000) differentiation of teacher practices with regards to the SoTL is instructive as it makes clear the actions that are compatible with a glocal teacher. Trigwell's Level E teacher is one who not only learns about their teaching and about their students and, indeed, about their own learning, but who also shares and critically engages with a broader global teaching and learning community; at once the Level E teacher is a glocal teacher.

6.3.4 Necessities for social and economic success and 21C skills

The necessity of agency and an epistemic mindset are important for individuals as well as for interdependent societies. The new forms of interaction and communication that operate in a greatly enhanced knowledge-based global economy has changed both the process with which business operates and intended outcomes. Phenomena such as the growth of social media have identified new criteria for success and new required competences with which to succeed. Organizational structures have become flatter, decision-making has become more decentralized, more information is shared and real collaboration within and between organizations is imperative. Indeed, it is suggested (Trigwell et al., 2000) that as a result, a new set of knowledge transfer skills and practices are needed to enable effective performance in this context.

This research, however, suggests that teachers are not modeling such practices and are, instead, reinforcing the type of vertical relationships that are now outdated in successful organizations, globally. Teachers referred clearly to their schools as being vertical organizations, places of great routine and repetitive pressures, resulting in a lack of agency. As a consequence, teachers reported that their teaching practices remained largely unchanged, something that students also commented on. Students also reported no recognition of the 'new normal' and the types of learning competences that they would need to succeed in achieving the global career that they clearly identified. The result, however, was that while both teachers and students

understood, and taught or learned about, the changing global landscape as knowledge, they inadvertently appeared to perpetuate the problem.

6.3.5 Systemic responses to the notion of globalization (competences)

What is common in articulations of purpose and outcomes is that an affective competence and an epistemic mindset are central. National goals are expressed in terms of the qualities and the competences needed for future generations. The findings of this research indicate that such aspirational statements are not being systematically addressed at schools. That is, the communication of these goals has been clear and teachers feel a clear sense of responsibility to achieve them. However, the reality is that they also feel a lack of agency in terms of exploring them or finding artefacts of success through their practice.

The data gathered in Denmark suggests that high-level goals articulated in national initiatives are not being followed through into systematic practice at the school level. The Danish RESEARCH2020 initiative was designed to create a strategic basis for Danish research. It reported that “new, intelligent investments must contribute to solving great societal challenges and lay the foundation for future jobs and welfare” (Ministry of Science, Innovation and Higher Education, 2012, p. 4). It suggested that RESEARCH2020 would provide a visionary basis for decision-making and a solid starting point for targeted investments in research with the greatest societal potential.

The original intention of this research was to include Australian schools in the Global Schools Network. However, the Australian schools that were approached were either not willing or able to join the study. The result was that conclusions could not be drawn as direct comparisons between the Australian and Danish contexts. A further implication was that teachers could not act truly globally as part of a global network between Denmark and Australia.

However, existing Australian research (Deakin Crick, Goldspink & Foster, 2013) suggests similar scenarios to those in Denmark, with teachers operating to a script rather than a learning design. The high-level systemic goals as articulated in the Australian National Goals for

Education (2008) set out to address skills and dispositions leading to successful learners, confident and creative individuals and active and informed citizens. As part of their research, however, Deakin Crick, Goldspink and Foster (2013) interviewed teachers and identified two broad patterns in the ways they understood their approach to their task. They labelled these (i) teaching as script; and (ii) teaching as dynamic design. The results indicated significantly more teachers in the study cast themselves as implementers of a script, either handed down to them or derived from the actual content of what was to be learned. Their reflections and accounts in interviews cast them as passive and dependent in relation to their practice, being “purveyors of pre-determined knowledge” (Deakin Crick Goldspink & Foster, 2013, p. 15). The research findings align with the findings of this study in terms of teacher dispositions, and suggests a similar need to address the causes and systemic nature of the issue.

6.4 Responses to the research questions

The experiences of the teachers who were involved in this research suggest that glocal teaching and learning in the Global Schools Network in Denmark is not yet compatible with an ideal model. The experience suggests, however, that there are elements and practices that can be developed in a supportive environment which could create the type of mindsets, purpose and practice to ‘enact’ truly glocal learning and teaching outcomes. Below are brief and direct responses to the research questions.

6.4.1 How do teachers understand the theory and practice of the 21C paradigm?

Participating teachers in this research largely saw the 21C education paradigm almost exclusively in the cognitive domain. Teachers saw teaching and learning for global citizenship as important and a core purpose, but only recognized curriculum-based opportunities to develop their students in this way. Teachers appealed to their students’ sense of social justice and the need for collaborative practices in reaching positive outcomes. What was apparent, though, throughout the research, was that their practices and actions served to undermine their intent. Students were engaged in aspects of the global program (e.g. listening to guest speakers and traveling), but mirrored the teachers’ cognitive understanding. Global citizenship was seen as knowledge and understanding to learn, rather than as a (learning) mindset to be developed.

6.4.2 How do educators communicate and engage in 21C professional learning and practice?

Participating teachers, broadly, expressed a teaching identity rather than a learning identity. The result of this was that opportunities for professional learning based conversations were largely lost. Teachers reported that they felt they had had, at one point, a conscious learning identity but only when they were involved in a formal learning process as students themselves (e.g. in a Masters course or in their professional pedagogicum). In the teachers' words, the pedagogicum had the core professional learning elements that allowed teachers to practice, explain, discuss and theorize about their practice, developing new techniques as a result. The pedagogicum aligned closely with a praxis enquiry approach.

6.4.3 How is scholarly teaching and learning practice created and supported?

A significant factor in supporting scholarly teaching and learning practices is the ability to recontextualize learning situations from one classroom to another. That is, the ability to understand dynamics and meaning from a maths class to a humanities class; to understand and find meaning in the core teaching and learning dynamics that are at play. Teachers able to find relevance in the dynamics of others' classes are critical to purposefully engaged scholarly teaching.

The extent to which teachers were engaged in scholarly discussions depended on the extent to which they communicated in a language that transcended curriculum. This research suggests that using the ELLI learning dimensions as a common learning language was important to bridging the contextual gaps that existed. The language, a quasi-learning Esperanto, better enabled the teachers to both extend colleagues with reflective questioning and, importantly, extend themselves to reach deeper conclusions about their students' learning and their own teaching and learning practice.

As forecast in the beginning of this thesis, a theory-in-practice for glocal teaching and learning practice was developed as a part of this study. This is discussed in Chapter 7.

CHAPTER 7: A THEORY IN PRACTICE

7.1 Introduction

This study found that as the 21C globalized world becomes increasingly complex in terms of its interconnections and the need to engage in multiple contexts simultaneously, there is a welcome resurgence of interest in the notion of citizenship and in its education. The need to understand one's place in the local *and* global communities is now a reality but one that also demands a more complex understanding of the meaning and practice of citizenship. The multiple contexts in which citizenship exists makes it difficult to understand it as anything more than an ideal type. However, without a holistic understanding of its meaning, the need to adapt to 21C realities will remain unmet, as will the opportunity of exploring citizenship as a means to make epistemic connections to teaching, learning and intercultural mindsets and practices. The key to positive change in teaching and learning for citizenship is recognizing that teachers, like students, need to model active learning. The challenge for schools is to create in classrooms and in staffrooms, communities that model - not preach - fluid forms of enquiry, collaboration, and sense-making of the type that is desired and required of citizens on a global community level. That is, the goal of teaching and learning for 21C global citizenship is to 'be' the citizen that is desired.

Citizenship, or a sense of mutually obligated belonging, exists equally in communities of all scales and identities, from the supra-national, to the multi-national, national, local and to the school and all its individual classroom communities. In each case, there is the core element of interdependence and also expectations of meaningful collaboration across communities with diverse populations. It is important to note at this point that diversity of culture and identity exist far beyond race and ethnicity. In each of these communities, there are formal and informal forms of teaching and learning or of the creation and sharing of wisdom and development of innovation. In each of these communities there is difference to be at once promoted, harnessed and synthesized for a higher meaning to be co-created. The co-creation of meaning and purpose from across diversity is a true representation of an intercultural

mindset and teaching practice and is critical to understanding citizenship of a pluralistic society, local and global.

In this chapter, a theory-in-practice is presented as a positive guide to holistic glocal citizenship teaching, learning and 'being'. It was developed in direct response to the research question: how is scholarly teaching and learning practice created and supported? It outlines a teaching and learning design and suggested resources and analytic tools to scaffold glocal teaching as 'dynamic design'. The theory-in-practice recognizes the two learning paradigms and provides a 'bridge' between the two with the use of the ELLI dimensions, adapted to reflect dimensions of global citizenship so that students and teachers can make connections to the ELLI learning dimensions in a classroom context. The development of glocal learning descriptors can be seen as a quasi-Rosetta Stone, acting to connect two separate cultures through separate and indistinguishable languages for a single holistic understanding.

7.2 Glocal teaching and learning: A guide for teacher practice

A critical element to emerge over the course of this study was the importance of learning identity to both teaching and citizenship. The strength of teachers' identification with each of the ELLI learning was made visible and contributed to an overall learning identity. It is this identity that gave the teachers a real sense of community both within their own school and as a part of the GEP. The following theory-in-practice 'translates' glocal citizenship into an equivalent glocal teaching and learning practice.

Global citizenship is not about what somebody looks like, what they know or even what they believe. It is about how they think and learn and why they do so. Societies, local and global rely on their citizens to act 'responsibly' to ensure the fairest and best results possible for all. Whether a citizen is motivated by exercising a *right* to contribute to public decision-making or is motivated by a sense of *responsibility*, acting responsibly is to understand issues that present themselves, holistically, and to respond in a conscious and informed manner. Edmund Burke famously suggested that the only thing, which is necessary for the triumph of evil is for good people to do nothing.

Burke's assumption here is that he or she who acts and acts responsibly in the interests of the community, local or global, is a good person. Perhaps the bigger assumption though is that people are capable of acting and acting responsibly. This is a critical point for glocal educators, as it is educators, locally and globally whose responsibility it is to develop people's willingness to act and their capacity to act.

7.2.1 How are glocal citizens developed?

Being a glocal educator means being a citizen, local and global, it means being a learner and it means acting as agents of learning – through teaching. As a glocal educator, you develop locally and help others develop globally, students who:

- Have learning role models.
- Learn to learn.
- Understand and experience the power of independence and interdependence.
- Have a learning lens through which to view the world.
- Have a learning language with which to share themselves and their experiences.

Being a glocal educator means being a glocal learner. It is, simultaneously and continuously:

- About what, why and how you understand and question the things around you.
- Learning about yourself as a learner.
- About how you learn.
- About the skills of learning.

Being a glocal educator means creating and sharing learning and how learning is created with others. It is, simultaneously and continuously, about:

- Sharing your learning with others.
- Understanding the thinking and thought patterns of others as a way of creating your own understanding.

- Believing that by sharing learning and building learning relationships, you can become an ever-more effective learner.
- Facilitating and fostering learning relationships with those around you: colleagues, peers, students and community members.
- Understanding learning and teaching relationships as being horizontal rather than being hierarchical.

Being a glocal educator means being conscious of yourself as a learner and being empowered to continually search for meaning. It is, simultaneously and continuously:

- About being dependent on only yourself for your own thoughts, thinking and learning.
- About making your own meaning.
- About being able to approach your thinking from a variety of different angles.

7.2.2 What do global citizens actually do and how do they think in real life?

In order for the interconnection of elements to be visible, it is useful to think of dimensions of global thinking and learning as being like a metro network map, with commuters easily able to navigate their journey to their destination. Using a visual tool, it is possible to identify different dimensions and how they fit together. Like a commuter with a metro map, a global citizen can navigate their own thinking and learning to reach a stronger global citizenship destination.

7.2.3 Making sense of glocal learning and teaching using ELLI

The experience of this study highlighted the importance of reaching a reflexive understanding of teaching, learning, and global citizenship. It also highlighted that effective teaching and learning for global citizenship best occurs when teachers and students can understand them as a single language. The following are examples of how the ELLI dimensions can be understood in terms of global citizenship.

7.2.3a Critical curiosity

Successful politics, parties and individual politicians of any nature, persuasion, or constituency are centred on constructing an often complex meaning or purpose while communicating it through a very simple message for voters to understand and associate with. The premise of this practice is that people will not vote for something that they do not understand. The question, though, is how much of a citizen's decision-making is based on understanding and how much on trust or catchy slogans? In the recent European Union (EU) elections, the Danish People's Party (DPP) ran on the campaign slogan of "No More EU". While a simple enough message, it raised many questions and contained many assumptions about a great many complex purposes, practices and effects of the relationship of Denmark to the EU and indeed, Danish identity. A responsible Danish citizen at the election in May 2014 would have been one that was critically curious about the notion of "No more EU". British citizens faced the same issues when reading the UK Independence Party's "Who really runs this country?", or Dutch citizens when hearing the Socialists say "Superstate no, Cooperation yes". Deconstructing the slogans in terms of their meaning and implications, by checking facts, logic, and assumptions free from political or other allegiances, is essential to acting as a responsible citizen, both locally and globally. Exercising a right to vote but, more importantly, exercising – and being capable of exercising – the responsibility of being critically curious about issues of collective importance is a necessity.

7.2.3b Strategic awareness

Glocal citizenship means being willing and able to work through seemingly intractable issues to make meaning. The world's most intractable issues involve a potent mixture of geopolitical, cultural, religious and contemporary and historical elements and actions. Contemporary situations such as the Israel-Palestinian conflict and the geopolitical circumstances surrounding the MH 17 crash can appear too daunting, or too complex to instigate an opinion or even understand. Other issues, locally and globally, such as euthanasia, abortion, and marriage practices, are truly glocal in nature and pose complex moral, cultural, ethical and legal considerations that lead many, when asked to offer an opinion or get involved in action, to reply simply that the issue is too hard or they retreat to simple ideas or slogans. A glocal citizen, however, though daunted by the enormity of some issues, has the thinking and learning process to allow them to make sense out of any situation; they have a toolkit full of

learning tools that enables them to gain entry into an issue and meaningful discussion or action. As a glocal citizen, whether it be by fulfilling a perceived right to act and contribute, or indeed fulfilling a responsibility of citizenship, a person needs the tools with which to do so.

7.2.3c Growth orientation

Although many glocal issues seem intractable, a glocal citizen is confident and motivated to grow as a learner and to be in a position to act with purpose and a well-placed conviction. Through action, a glocal citizen also knows that he/she is getting better at learning and thus more capable of action. A citizen sees engagement with any and all issues and with others as being opportunities for them to grow and, importantly, as being contexts for them to do so. A citizen might look at a cultural festival in their local community as an opportunity to experience fun with different foods, fashions and music. A growth-orientated citizen would additionally be aware of how the festival provides an opportunity for them to become a better learner. Typically, a growth-orientated citizen would ask themselves:

- Have I considered opportunities for improvement?
- How might this unit and/or activity make me a better learner?
- What is the potential of this unit to help me develop my learning?
- What might it suggest about my thinking in other contexts?

7.2.3d Learning relationships

Global citizenship has come to be recognized as being the interaction of people globally, whether physical, financial or cultural, creating a sense of shared destiny. It is the shared destiny or interdependence that gives rise to articulated global rights and responsibilities or a sense of citizenship. The value of the increasing interdependence comes in the new and stronger relationships that go beyond cooperation to become collaborative. Cooperative relationships are ones that share practices, materials in a division of labour model. Global trade and manufacturing models are examples of this. Collaborative relationships, though, are relationships that are flat in structure and involve sharing learning and its processes as well as the products or experiences in a scholarly process. Scholarship is the simultaneous sharing of a learning process as well as the learning outcomes and is ultimately an expression and

demonstration of glocal citizenship. A scholar thinks, works, collaborates, learns and helps others learn locally, nationally and globally. A glocal educator, one whose practice is scholarly, identifies and connects the thinking and identity of their classes to learning, as well as the thinking, learning and practice of students from different contexts, to create a higher meaning.

7.2.3e Creativity

All dogs have four legs. My cat has four legs; therefore, my cat is a dog. In all communities, there are countless examples like this of failed logic, of entrenched ways of thinking and of acting that, despite good intentions, actually create harm. National identities are examples of collective logic; their identities are expressions of who its citizens are, where they have come from and what they collectively believe. Often national identities, like that of South Africa, however, are born out of extraordinary events or outdated notions but persist amongst other factors due to a lack of a creative alternative – the failed logic went that if South Africa does not have apartheid, it cannot be South Africa. In this case, the post-apartheid identity reimagined its national heritage as a rainbow nation for a new and more prosperous future. Examples of positive reimagining of national identities can be found globally, including Grundtvig's 19th century reimagining of Danish identity from imperial power to one centred on scholarship and community; or the reimagining of the Australian identity from an Anglo-Celtic antipodean bastion to one centred on progressive and multi-cultural values and practices. In each case, the ability of citizens to be creative has been critical to producing positive results.

7.2.3f Resilience

Malala Yousafzai, the 15-year-old Pakistani girl who famously survived a Taliban assassination attempt after defending the right of girls to be educated, recently established a new UN supported worldwide petition calling for urgent action to ensure the right of every child to safely attend school. Malala's story is a clear demonstration of resilience, which is a critical element of global citizenship. Having acted to overcome significant adversity, she was able to confidently develop innovative new programs aimed at equity in education globally. Her story is most remarkable, though, not just for her physical resilience in surviving an assassin's bullet but because of her strong sense of learning efficacy, her ability to understand

new cultural and educational contexts globally and her internal motivation to search for and create new ways to promote and achieve universal access to education. Malala is one example of many millions of lesser-known resilient global citizens who, like her, feel able to act globally and/or locally on the basis of their own initiative, not as a result of rules and or specific direction.

7.2.3g Meaning making

Glocal citizenship is a feeling of belonging, a feeling that is based on being able to understand a community, local and global; a community that has meaning for you. Finding meaning though can be challenging. How can we give account to, measure or make sense of actions and experiences that emanate from hundreds, thousands, or even millions of interacting lives across local and global communities? Global citizens need a lens through which to see meaning. Without a lens, community, life, lives would appear a meaningless infinity of isolated actions and thoughts. To derive meaning, our mind needs a filter capable of drastically editing this infinity, much in the same way as a camera needs a lens before it will photograph anything that is recognizable to our eye. The camera lens of a global citizen sees the relationships that exist between incidents, events in seemingly different contexts, and constructs a montage or a combined image in a way that makes sense to them and for a reason that they find important. Meaning making is clear in the case of what became known as the Arab Spring protests. What began in Tunisia with the police seizure of Mohamed Bouazizi's vegetable cart, and his subsequent self-immolation in protest, ended with the overthrow of regimes in Tunisia, Egypt, Libya and revolutionary movements across most Arab nations in North Africa and the Middle East. Grievances on a local and seemingly isolated level, when connected and viewed through a lens of liberty and democratic freedoms, created a higher meaning on which people took more collective action.

7.3 Glocal educators learning metro

Agency is an important element to citizenship and learning. In this project, teachers needed to be guided in their practice with ELLI in order to find their own agency. The issue, however, becomes how to support and to guide without creating a checklist or script-based approach to practice. To that end, agency for both teachers and students can be developed by providing

them with a map that highlights the key elements of glocal citizenship learning and, importantly, highlights how they interconnect. The intent is to empower teachers and students alike to navigate their own path.

7.3.1 How do the key learning stations connect?

Seeing the connection between the key learning stations is important to being a glocal citizen. In the map (see Figure 5), styled as a metro train map, stations with ELLI dimension names are grouped with key learning stations to highlight the different roles. For example, the conscious learning station is linked with the strategic awareness and critical curiosity ELLI stations. They are placed on the affective line and are connected to specific skills and understandings on the cognitive line. At the end of each affective station is the meta-cognitive line, which highlights learning experiences. The conscious learning dimensions are anchored in specific skills and understandings. Learners need to know the tools and processes of their trade in order to share where, when and how they use them – and why. This is the connector to the sharing learning (refer to 7.3.3) dimensions – if a learner is not conscious of the tools and processes that they adopt in their own learning, they will not be able to share them with others. They need to have found meaning in their learning tools and trust that with those tools they can grow as learners and, as such, share learning through collaboration (as opposed to simply cooperating with one another) as a valuable experience. The learning to learn dimensions and the sharing learning dimensions are mutually reinforcing and are both critical to enabling continuous learning dimensions.

7.3.2 What is conscious learning?

The conscious learning element refers to the learning tools that people possess – and are aware that they possess – and how they use these tools to create new and valuable meaning for themselves and others through continuous learning. Conscious learning combines the critical curiosity and strategic awareness ELLI dimensions. The core of this element is the important link between a person's awareness of the tools, processes, and/or skills of learning that they need and the veracity or appropriateness of the area of enquiry for those tools to be fully utilized. Learning how to discern the importance of a task or an experience necessarily involves a person making a critical assessment of both outcomes and processes. Deep learning

requires a continual re-setting of a problem or a learning context, which is a difficult but necessary process to undertake in order for the ultimate learning outcome to be totally relevant and useful. The extent to which the difficulty level can be overcome is the extent to which the person possesses learning skills, processes and strategies to do so. An uncritical teacher will teach units of work multiple times without critically (re) assessing both the intended outcomes and the effectiveness of the learning produced. An uncritical student shies away from asking themselves the hard questions in favour of the safety of routine, however tedious. A critically and strategically aware student will enjoy the challenge of continuously seeking to question their learning and teaching and search for new insights and practices, safe in the knowledge that they possess the learning tools and strategies to ultimately do so successfully.

7.3.3 What is sharing learning?

At the core of sharing learning is rich enquiry, a belief that learning relationships develop learning to a greater extent than being alone. The extent to which both students and teachers are able to ask higher-level questions determines the level of and/or scope to share learning – as opposed to knowledge. The learning processes involved in rote learning or information gathering are limited and thus limit the potential for meaningful learning dialogue. Learning conversations are enabled after the establishment of essential elements to the enquiry and the issue becomes about how and why people make sense of these elements in different ways. The conversation is about learning and interpretation, not about right and wrong answers. Participants in learning conversations have reflected on their own processes and logic (strategic awareness) and are able to analyze, characterize and question (critical curiosity) the same of others. The growth orientation (changing and learning) becomes implicit in this as there must be a belief that through collaboration (learning relationships) we can develop as learners and as thinkers, as well as cooperatively complete a task. A theory that says that people learn more from each other than by themselves underpins this. It is the difference between the actual learning by independent problem-solving and the level of potential learning through problem-solving in *collaboration* with peers. The critical difference between merely cooperating with peers and collaborating with peers is learning development; with cooperation, one simply shares or collates knowledge, with collaboration, one shares learning and develops as a learner.

7.3.4 What is confident learning?

The confident learning element refers to a feeling of self-efficacy with relation to learning, a feeling of self-reliance, a faith in one's ability to overcome any situation through learning; a positiveness that situations can be approached from different angles and through different lenses and that by doing so, solutions will always emerge. Through sharing, learners consciously possess a suite of learning tools that they are able to connect and adapt in and to any situation to create new and valuable meaning for themselves and others. Confident learning combines the resilience and creativity ELLI dimensions. The core of this element is the ability to harness the combined power of the learning to learn and sharing learning elements to develop a learning courage that manifests itself in creativity and resilience. It is the courage to be able to act autonomously and to exercise one's own judgment where required, even when it breaks with conventional wisdom. It is the courage to be outcomes-focused rather than process-driven as one has the faith and the conviction to try different approaches and to stay the course until a positive outcome is achieved. A confident learner is comfortable in the role of explorer, somebody who is happy to chart an unknown course, without fear of getting lost, as they have the necessary learning navigation equipment. A confident learner knows and is comfortable with their own identity and that they can navigate their own learning journey towards a clear destination.

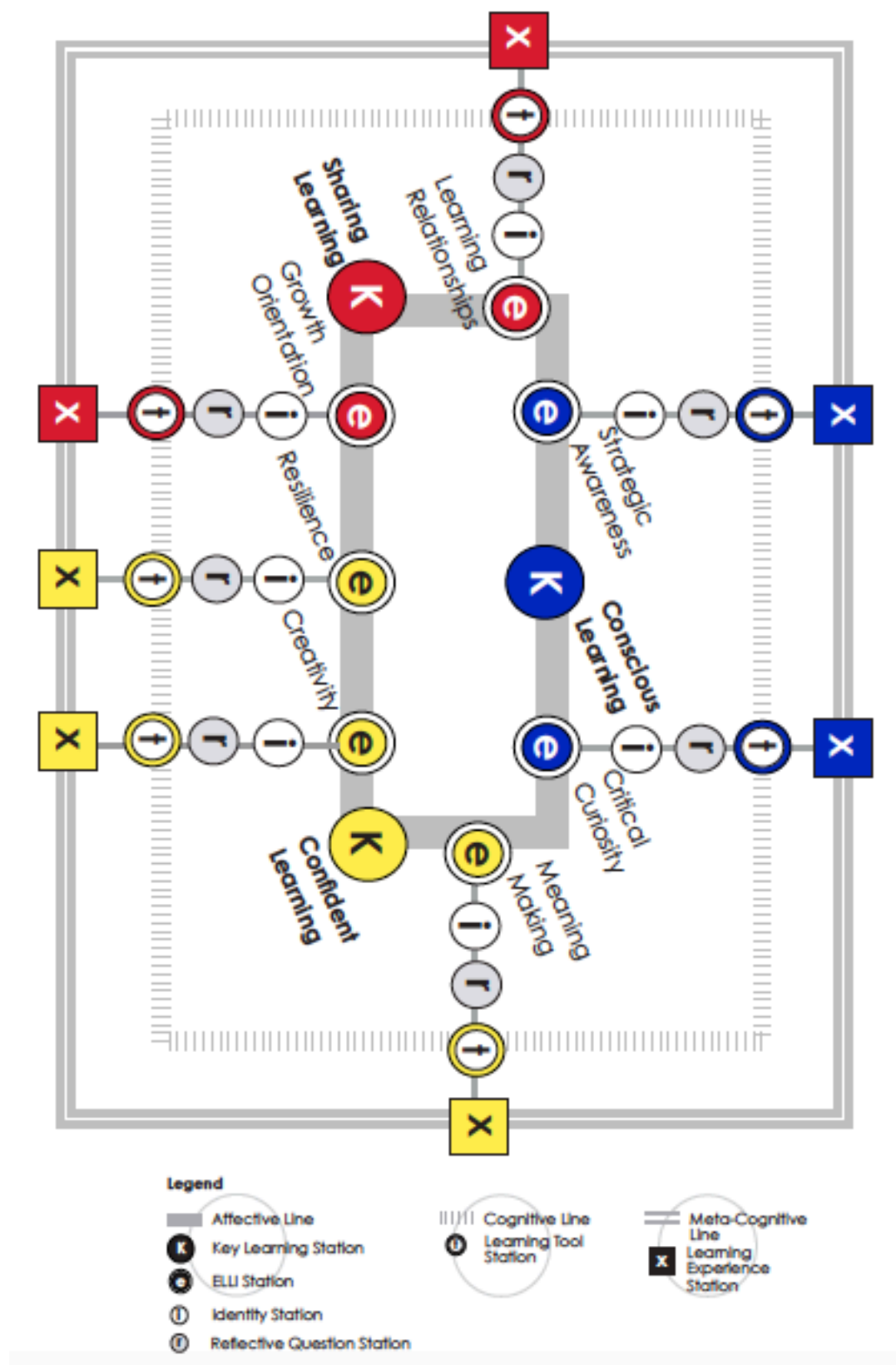


Figure 5: The global citizenship metro map

The GEP data suggested much that was lacking in terms of teacher practice and learning identity. The PAR nature of the study, however, interactively made meaning of the mindsets and practices and was ultimately captured in an expression of purpose and experience. This study highlights what teachers and whole communities have long had an awareness of, that teaching, learning, and plural citizenship are intrinsically interrelated. Further, it highlights, as it has been understood, that they cannot be taught effectively as isolated practices or knowledge, as each encompasses elements and assumptions (conscious or unconscious) of each other. The recent advances in learning analytic tools offers support for teachers, students, whole schools and communities to make visible the elements of a 21C global citizenship identity and strategically plan for positive practices and outcomes. The tools offer 'living data' to make each of the elements visible and support their epistemic connection. This, in turn, enables us to reinforce and develop our understanding and practice of each. Teaching, learning, intercultural mindset and citizenship; each element offers both an entry point and pixels to the 'life' picture.

7.4 Looking beyond the cognitive: Making intercultural attitudes visible

One method of identifying a teacher's citizenship aptitude or capability is by making visible their intercultural mindset. The Intercultural Development Inventory (IDI) (Singh and Qi, 2013, p. 71) was developed to test a person's experience of cultural differences rather than simply their actions or skills. It describes a person with a global mindset as making sense of cultural differences and commonalities based on their own and other culture's values and practices; using cultural stereotypes to recognize cultural difference; and supporting more complex perceptions and experiences of cultural difference and commonality. The IDI comprises five factors that represent increasing levels of intercultural sensitivity: denial and defence (least sensitive), reversal, minimalization, acceptance and adaptation, and encapsulated marginality (most sensitive). It is useful in making visible the way that individuals and groups experience cultural difference. From that, inferences can be drawn about how they and their community view citizenship.

There is real value in measuring intercultural competence as it highlights which of the dimensions should be further developed. It also provides the potential for a critical link to be

made between an intercultural identity and a learning identity that is fundamental to positive citizenship education. The way forward to consciously developing an intercultural identity will necessarily involve the development of learning agency, of enquiry, collaboration, and sense making. Important for any community is for its citizens to understand the basis on which the views and attitudes were and are established. The exploration of one's learning identity helps us to explain intercultural views and practices and point the way to future development.

7.4.1 Equipping citizens for 21C diversity: A focus on learning attitudes, values and dispositions

While the development of a cognitive competence, skills, knowledge and understandings, are essential properties of civic and citizenship education goals and outcomes, the need still exists to focus on the development of an affective competence. Positive learning attitudes, values and dispositions are the enablers of the cognitive citizenship competence. Teaching the familiar citizenship rights / responsibilities and active / passive dichotomies, as well as political and constitutional knowledge and that of cultures that exist within pluralistic societies are of great importance, this is not in question. However, able 21C citizens are those who are more than a sum of their knowledge and skills; they are active learners; critically curious, seeking to make sense from what is occurring around them, wanting to collaborate and share understandings with different people(s) around them. A cognitive understanding of civics and citizenship through knowledge and skills alone will only serve to model behaviours and attitudes that flow from a fixed and static understanding of citizenship and intercultural possibilities, thereby perpetuating a spiritless and static polity. The as yet unmet need in citizenship education, then, is to make the affective learning competence visible so as to be able to consciously develop and support it.

7.4.2 Learning agency in action: Beyond universalism and towards inclusivity

The conscious acknowledgement of learning as part of a community's identity and development of learning agency significantly impacts that community's degree of inclusivity; the higher a learning identity is prioritized and equated with a community identity, the more interculturally based its identity is likely to be. Sociological understandings of citizenship identify both a set of practices that are of social, legal, political and cultural character and also how these practices are institutionalized as normative social arrangements. They are often

based on a simple universalist understanding of citizenship such as fixed notions of universal human rights or equality under a single law. The effect of arrangements that flow from a universalist mindset give greater access to those citizens whose culture is in line with the majority social norms and less to those with different understandings and traditions. Consciously or unconsciously, then, a universalist mindset means that the extent to which one can participate in the practices and processes will depend on a citizen's ability to understand and internalize the society's normalized social arrangements.

A community's inclusivity will depend on the extent to which the normalized social and cultural arrangements truly reflect the diversity of the community, nation or classroom. That is, to the extent that they have been developed as being the product of a genuine collaborative process and that continue to be so. This reveals the image of a true intercultural community as opposed to a community of many cultures that has adopted a majority universalist view. That, in turn, will be dependent of a citizenry, in all its plurality, that is willing and able to genuinely collaborate in order to realize an intercultural understanding of its own national identity. Its willingness and ability must be deliberately crafted by educators and community leaders.

7.4.3 Re-orientating teacher mindsets and practices

Critical is the development of a conscious learning identity for students and teachers and citizens alike, to positively participate in a plural and democratic society, enabling them to make their own contribution to that society. The process of constructing teachers' purpose or identity in the context of teacher professional learning and pre-service teacher education, however, appears to be widely assumed rather than being treated as a discrete area of a teacher's identity to be explicitly developed (Trent, 2010; Vargesse et al. 2005). This represents an important challenge for schools and universities, as the extent to which teachers are able to use pedagogical [cognitive] knowledge and effectively develop their self as teacher learner / teacher citizen in the classroom and in their school community, depends on the extent to which they have internalized (affective) learning as a set of values and dispositions; that is, the extent to which they developed a learning identity of their own (Usher and Sandvad, 2013). The reality of that is that it often appears to be absent from schools' strategic planning in the civics and citizenship area and, as a result, so too are the pre-conditions or school professional

learning structures that are necessary for the development of teachers' positive affective dispositions for the real-life citizenship practice.

Recent research (Deakin Crick, Goldspink & Foster, 2015) into teacher purpose or worldviews consistent with that of a positive learning identity, indicates that those assumptions should not be automatically made. This is of critical importance to a reasonable expectation of civics and citizenship outcomes. As Deakin Crick, Goldspink and Foster (2013, p.16) stated:

teacher's narratives about themselves and their practice reveal two alternative accounts of their teaching practice. One is externally derived and focused on the transmission of knowledge and the other is authored by teachers and focused on students taking ownership of their own learning. Critically the dichotomy is revealed as their capacity to either form judgments and make their own informed decisions (about learning or teaching) or conversely to merely follow a script prescribed for them by the curriculum.

What this research emphasizes then, is the imperative of teachers being supported to develop a stronger sense of learning agency; this being critical to modeling the type of positive citizenship that is desired. A more deliberate approach to teacher professional learning is needed, then. More deliberate approaches are needed to create more certainty about teachers' ability to create and measure students dispositions that enable them to be active and informed citizens: to question, understand, and contribute to the world in which they live.

Becoming critically conscious of these assumptions is key to achieving personal growth, development of practice and the achievement of an inclusive plural community of learning.^[1] To this end, a new dispositional tool which has been developed, the Incept Dispositional Analysis of Practicing Teachers (IDAPT) (Incept Labs), has been shown to help teachers make visible and evaluate the implications of their own and more or less shared assumptions about knowledge and learning. Usage of the tool across educational contexts thus far has been shown to support deeper reflection on the purpose and practice of teaching. The IDAPT data supports teachers and leaders to explore similarities and differences in assumptions, which impact on their practice. Critically also, the results help to make the link between a teacher's classroom citizenry, their wider community and their place within it. Together these accelerate individual and community learning about how to improve the depth

and quality of teaching and learning for students.

7.4.4 Professional learning from community growth

Important to empowering the school community – students, teachers and parents - is to reach a critical and personal understanding of the nature of citizenship and themselves within their own construct. In a plural democratic society, it is the autonomy and agency of the individuals and groups that is the key. Incumbent, then on the educational institution is to recognize its normative social and cognitive patterns and identity and take deliberate steps to developing them as being sustainable and inclusive. Teaching and learning for intercultural mindsets and positive citizenship dispositions consist of those social practices, which enable a competent citizen – teacher and student - to participate fully in the national culture. Educational institutions are critical to cultural citizenship because they are an essential aspect of socialization of the child into the national system of values.

An active learning language with which to communicate and develop these norms is critical. ELLI is a learning analytic tool that offers a reliable method for making visible a person's learning attitudes and dispositions. ELLI is a tool that has been designed to stimulate change through the rapid feedback of data to individual learners. It measures a person's resilient learning power, the ways in which individuals regulate the flow of energy and information over time in order to achieve a particular purpose. Acting with purpose and being able to communicate and collaborate are essential factors in citizenship and are essential competences for teachers to develop and model in school communities.

7.4.5 Towards a synthesized identity that combines learning, teaching, and intercultural mindsets with a complex understanding and citizenship practice

A focus on citizenship as a discrete competence can provide more than merely a snapshot of a person's mindset as a citizen. It can provide a critical insight into a person's lived education experience, whether as a teacher or learner or both. The extent to which we can understand citizenship as a fluid and active concept, in theory and in practice, is the extent to which this has been or is being modeled in school communities and classrooms. Citizenship, like learning, is a social practice that combines knowledge and learning to learn skills and provides an authentic context in which people can engage and make sense of what is around them.

Citizenship dispositions, like all dispositions, are modeled either consciously or unconsciously by parents and all other community members from birth, but are dispositions that need to be constructed and modeled consciously in schools. A school community mirrors a healthy and inclusive learning community but only when it consciously develops students and teachers alike as interculturally competent citizens of the school community.

Generally, however, school communities still mirror national communities, which, in practice, largely operate on fixed knowledge practices and static understandings of citizenship. The findings from the research conducted in Denmark are instructive when applied to the Australian context. The current discourse on citizenship in Australia, primarily legalistic and centred on considerations of rights, responsibilities and jurisdictions, obscures the important dialogue on identity and intercultural capital. The opportunity and need, then, for educators to reflect on, explore, and create co-constructed civic and learning identities and practices in classrooms are also obscured and ultimately foregone. However, by exploring, creating and modeling an inclusive citizenship as a dynamic learning and teaching community, schools can support the development of teachers and all school stakeholders to understand themselves as learners. This would enable a positive impact upon how they understand citizenship, engage in their education, and participate in and across communities. That is, the individual who sees learning as being fixed and externally derived is more likely to view citizenship and their connection to or inclusion in the learning community as externally-based or built on adherence to pre-determined truths or rules and vice versa.

7.5 Recommendations for practice: Six key elements

This study found that major organizations and institutions (e.g. UNESCO, IB) create a profile of the 'ideal' student as an internationally-minded global citizen with sets of attributes and curricular outcomes. This is prevalent across national and international educational systems' policies and priorities but serves only to beg significant questions about the role being played by school leaders and teachers.

The Australian Curriculum rationale for Civics and Citizenship across Foundation to Year 10 (ACARA, 2015) is broadly representative of the content-centred approaches that are adopted

globally. It rightly suggests that its study “is essential in enabling students to become active and informed citizens who participate in and sustain Australia’s democracy” (ACARA, 2015, v8.3 F-10 Curriculum). However, its operating assumption is that citizenship, local and /or global, has primarily a fixed meaning and set of practices and can be presented as a single, normalized understanding. The curriculum does give attention to the essential cognitive elements required but, critically, does not address the necessary dimensions of learning required for true co-creation of inclusive [learning] communities.

The curriculum rationale merely leaves open the possibility of students gaining more than a simple cognitive understanding of citizenship. It suggests that:

[through] the study of civics and citizenship, students *can* (my italics) develop skills of enquiry, values and dispositions that enable them to be active and informed citizens; to question, understand, and contribute to the world in which they live (ACARA, 2015, v8.3 F-10 Curriculum).

This makes a critical assumption that armed with prescribed knowledge and the possibility of developing positive values and dispositions, students will emerge as “reflective, active and informed decision-makers” (ACARA, 2015, v8.3 F-10 Curriculum). This assumption, then, is dependent not only on the teacher’s civic knowledge but on them possessing positive civic attitudes, values and dispositions and the ability to model these to contribute to a dynamic and inclusive school polity.

The UNESCO Global Citizenship Education (GCE) Topics and Learning Objectives (2015) provide the most recent and excellent description of GCE outcomes for students. UNESCO describes key domains of learning, learning outcomes and attributes as well as curriculum topics. However, most remarkable about the publication is its absence of references to school leadership imperatives and teacher learning attributes and outcomes that are necessary to purposefully develop and recognize progress towards the global citizenship goals. The following six key elements were identified in this research as important to the development of students as globally-minded citizens and essential for schools to lead sustainable and successful GCE approaches:

- 7.5.1 Modeling citizenship dispositions in your own [classroom] community.
- 7.5.2 Finding congruence between how teachers view GCE and how students view it.
- 7.5.3 Creating an inclusive community: Understanding GCE as having multiple entry points and multiple contributors.
- 7.5.4 Linking service learning to classroom learning.
- 7.5.5 GCE enquiry-based dialogue: Community purposefully working together.

Each is discussed in more detail in the sub-sections below.

7.5.1 Modeling citizenship dispositions in your own [classroom] community

Modeling learning and citizenship behaviours in schools and in classrooms is the most effective way to develop the same with students. The methods with which the teacher seeks to find meaning for themselves by seeking understanding from their community or class are the same methods that we understand as being effective pedagogies. Modeling the construction of knowledge, connecting learning to lives and aspirations, negotiating learning through dialogue and applying authentic assessments in a classroom, are example behaviours of effective teachers; they are also behaviours of engaged citizens.

So, isn't this already happening? Not according to research, such as that conducted by Deakin Crick, Goldspink and Foster (2013). This suggests that teachers' practice, having been observed across primary and secondary contexts, is broadly script-based and there is an absence of the types of pedagogies associated with modeled citizenship.

7.5.2 Finding congruence between how teachers view GCE and how students view it

Teachers teach students about the importance of intercultural relationships and the notion of citizenship but tend to do so largely in terms of knowledge or skills. Students, though, while not necessarily disagreeing with what is being presented and indeed, who are interested in GCE, would prefer to access the discussion via a different entry point: career. This does not have to be problematic if teachers are able to find the important epistemic connection, which would provide an authentic entry point to discussion for students. In this case, the connection between intercultural ideals and imperatives as they apply to globally-focused careers are strong. The established congruence between the essential intercultural competences needed

and the social and career capital generated represents the basis for purposeful and engaging GCE.

7.5.3 Creating an inclusive community: Understanding GCE as having multiple entry points and multiple contributors

GCE can be a divisive force within schools if a dichotomy emerges between those who ‘wear the global hat’ or contribute to GCE and those who do not. That is, there are teachers committed to co-curricular global action projects, including overseas tours and exchanges, and those who prefer to solely concentrate on disciplinal teaching and learning. The dichotomy is a false one, though, *if* both can be seen to be making an equal and purposeful contribution to GCE.

If approached as a set of opinions or values, or actions, the notion of global citizenship can exclude teachers and students alike, who have different conscious purposes. However, more positively, there are multiple entry points (see Figure 6) for each member of the school community to access GCE, including deep disciplinal learning and learning to learn in a classroom context. The critical factor in successful whole-school communities is the teachers’ ability to understand that GCE can be viewed through different lenses and identify their contribution by making epistemic connections between the different entry points. That is, a teacher effectively teaching science and developing students as learners in a science lab can and does make an equal contribution to a student’s GCE as a teacher leading global field trips in geography.

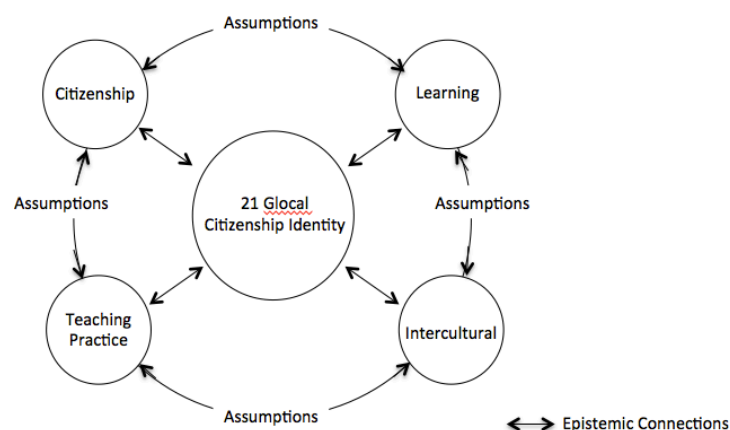


Figure 6: Developing global citizen teaching and learning identities: Multiple entry points

This research, then, highlights what teachers and whole communities have long had an awareness of: that teaching, learning, and plural citizenship are intrinsically interrelated.

7.5.4 Linking service learning to classroom learning

Students in globally-focused high schools such as those in the Global Schools Network have indicated in this study that while they willingly engage in and value globally orientated activities and programs, they consider them separate to their development as learners – which they see as taking place solely in the classroom. One student was reported to have said that “I don’t see a connection between my classes and going to Kenya. The two are separate, like train tracks. One is for fun, for experience and the other is for marks”. The sentiment is a common one but one that can be addressed by teachers recognizing that learning values and dispositions are as much a part of service learning contexts as they are in the classroom and should be consciously recognizable in both. Being able to recognize learning and learning to learn in both contexts enables a mutual reinforcement of both disciplinary and GCE and an ability to celebrate GCE learning outcomes.

7.5.5 GCE enquiry-based dialogue: Community purposefully working together

Inclusivity and multiple entry points are of great importance to every school and to GCE, and are critical to engaging all stakeholders in a positive dialogue. To connect the different key factors and to give them a broader authentic context, it is important for schools to develop a shared whole school GCE enquiry that is inclusive of a diverse set of stakeholders and ideas but provides a clear context for the stakeholders to be able to work towards using their own lens. What is it, beyond grades and university entrance that we want to develop across the community? The ideas and practices to emerge from a broad-based dialogue has real potential to go far beyond simple descriptors of values and skills. However, like in a classroom context, dialogue needs to be scaffolded as enquiry. A community that joins together to imagine, evaluate and hypothesize is likely to resemble - in action as much as intent - the global community that each stakeholder desires; inclusivity of vision through the harnessing of diversity.

7.5.6 Support the enquiry with a clear action learning program

Recognizing and scaling successful implementation of actions one to five is critical to sustainable success. Sustainable GCE growth and improvement depends on a systematic harnessing of artifacts, effective ideas and practices that can be implemented in unique contexts within and across schools using a plan-do-study-act cycle. A key feature of schools and communities with conscious and sustainable improvement of practice and outcomes is their ability to support all school stakeholders to reflect and act upon the community (classroom and/or global) in order to transform it.

In conclusion, and importantly, this research has highlighted the challenge of global citizenship education. It has highlighted the difficulties that teachers, schools and systems encounter in pursuit of their high-level goals. Importantly, in response, this research has also recommended a theory in practice for schools to adopt in order to create in classrooms and in staffrooms, communities that model - not preach - fluid forms of enquiry, collaboration, and sense making of the type that is desired and required of citizens on a global community level.

APPENDICES

APPENDIX 1: Ethics Approval

From: Quest No Reply

Sent: Wednesday, 5 December 2012 11:53 AM

To: Bill Eckersley

Cc: Adam Usher

Subject: Ethics Application - Approved

Dear ASPR WILLIAM ECKERSLEY,

Your ethics application, 'Creating 21 C 'glocal' educators: Meeting the professional learning challenges of 21C globalised education.', Application ID HRE12-309, has been accepted and deemed to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)' by the Victoria University Human Research Ethics Committee. Approval has been granted for two (2) years from the approval date; 05/12/2012.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date or upon the completion of the project (if earlier). A report proforma may be downloaded from the Office for Research website at: <http://research.vu.edu.au/hrec.php>.

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment. It should also be noted that it is the Chief Investigators' responsibility to ensure the research project is conducted in line with the recommendations outlined in the National Health and Medical Research Council

(NHMRC) 'National Statement on Ethical Conduct in Human Research (2007).'

On behalf of the Committee, I wish you all the best for the conduct of the project.

Secretary, Human Research Ethics Committee, Office for Research

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