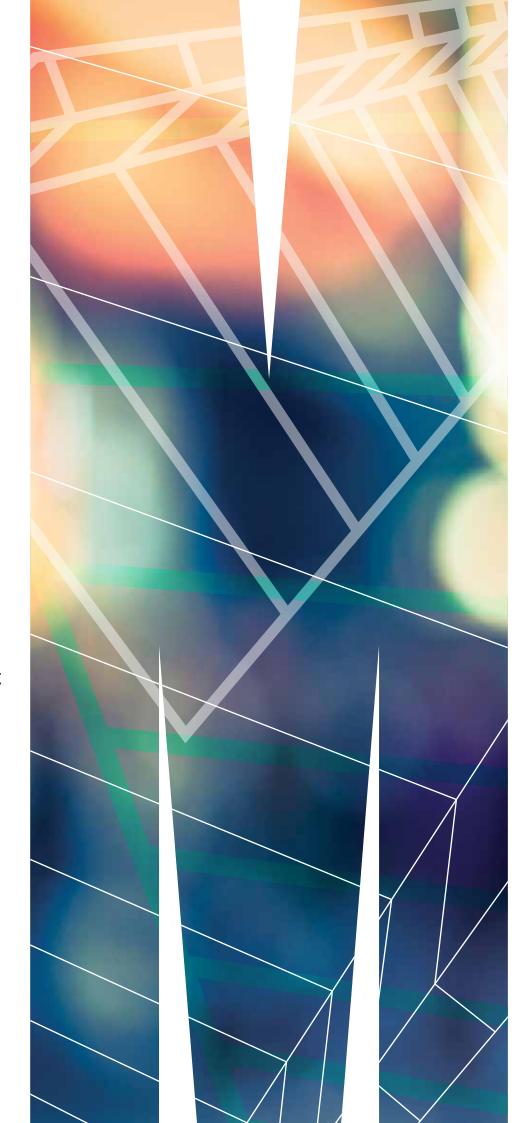


MONASH EDUCATION

Transcultural Capability and the PYP: Final Report

Associate Professor Lucas Walsh & Dr Niranjan Casinader



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Supplier Name: Monash University, Faculty of Education

Address: Faculty of Education, Monash University, Victoria Australia 3800

Co- Investigator 1: Associate Professor Lucas Walsh (Deputy Dean, Acting)

Email: lucas.walsh@monash.edu

Co - Investigator 2: Dr Niranjan Casinader (Senior Lecturer in Curriculum & Assessment)

Email: niranjan.casinader@monash.edu

Research Assistant: Joanne Gleeson

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A Executive Summary

Rapid increases in the flows of people around the world, both temporary and permanent, have meant that national populations – and within them cohorts of school-aged students – have become more culturally diverse, creating both challenges and opportunities for people navigating this diversity. The International Baccalaureate (IB) seeks to address this trend by developing "the intellectual, personal, emotional and social skills needed to live, learn and work in a rapidly globalising world" (IB, 2017a). Within this, the Primary Years Programme (PYP) aims specifically to prepare "students to become active, caring, lifelong learners who demonstrate respect for themselves and others and have the capacity to participate in the world around them". This is achieved through the teaching of five essential elements, one of which is "attitudes, which contribute to international-mindedness and the wellbeing of individuals and learning communities" (IB, 2017b).

To achieve these goals, it is necessary for PYP teachers to possess the cultural capacity to cater for such diversity as a professional attribute. However, current teaching approaches of multi-and inter-culturalism were conceived before contemporary globalisation; patterns of global mobility were less complex and interactions between people of different cultures were less frequent.

In today's world, advanced communications and transport technologies have increased the fluidity of demographic movement and societies around the world are now more culturally complex than before. Consequently, teachers arguably now need to possess a different form of cultural expertise to meet the needs of students, that of transculturalism, which is inclusive of the IB PYP globally constructed mindsets. Transculturalism sees cultural variation as a positive rather than a negative or issue to be addressed in some way (Casinader, 2016), and as the norm rather than the exception (Rizvi, 2011), which, in IB terms, translates to open-mindedness.

This project sought to understand how well transcultural skills are being developed and utilised by teachers in schools offering the IB PYP in Canada and Australia. Specifically, it determined and measured the degree of transcultural capability in teachers in four PYP schools (three Canadian, one Australian), enabling an evaluation of their transcultural capability, as well as if and how it impacts upon their teaching of the PYP with reference to the Learner Profile and intended student outcomes. There were five main conclusions:

- All 38 teachers who participated in the study demonstrated some degree of transcultural capability, with 50 per cent being designated as fully transcultural. These teachers showed a high degree of personal and professional commitment to the PYP core principles, as well as a high degree of global and cultural knowledge and awareness.
- There was a significant minority (23 per cent) of teachers who were distinctly less transcultural than the rest of the cohort. Although this group demonstrated professional commitment to the PYP and its principles, there was less personal commitment to its ideas and attitudes, predominantly because of their lower exposure to globalising experiences that immersed them in cultural difference. This was associated with a lower degree of global awareness, cultural knowledge and cultural awareness.
- Transcultural teachers tended to have experienced a range of cultural environments throughout their lives for both personal and professional reasons, whether they experienced these within their own country, or most often, internationally. Professional development for transcultural capability therefore needs to focus on long-term strategies that expose teachers to experiences of purposeful cultural dislocation; that is,

- being immersed in cultural environments that are vastly different to those in their locations of origin or custom.
- The length of teaching experience, direct PYP experience and age tended to have relatively little influence on the degree of transcultural capability.
- In the course of the study, it emerged that the vast majority of teachers were critical of the six-topic structure of the annual PYP. They saw the mandating of so many areas as delimiting opportunities for deep understandings of students and the PYP principle of student-centred inquiry learning. They recommended a reduction to 4-5 topics per year. This could free up time for greater depth of investigation of cultural difference in ways suggested by both participants and researchers.

Cultural Dispositions of thinking	CDT
Collective Action, Individual Focused	CI
Diploma Programme	DP
Independent Action, Community Focused	IC
Information and Communication Technology	ICT
Middle Years Programme	МҮР
Primary Years Programme	PYP
School 1 (BC, Canada)	S 1
School 2 (QC, Canada)	S2
School 3 (Victoria, Australia)	S 3
School 4 (BC, Canada)	S4
Transcultural (Independent + Collective Action/Individual + Community Focus)	TC

TABLE 1: Acronyms used in this report

B Background

Context and Key Concepts

Globalisation has intensified encounters with cultural difference throughout the world. Rapid increases in the international flows of people, both temporary and permanent, have meant that national populations — and within them, cohorts of school-aged students — are increasingly culturally diverse, creating both challenges and opportunities for teachers in navigating this diversity.

This heightened awareness of difference generates a need to develop capabilities to engage difference. It is particularly pronounced when looking at a country such as Australia, which is one of the locations of this study. It is situated adjacent to South and East Asia, regions in which approximately 3.6 billion of the world's 7.1 billion people reside (Dewey, 2013). The economic and geopolitical axis of power is shifting towards countries such as China and India, with profound implications for the region (White, 2012). Australia has one of the most ethnically diverse populations in the world. As the proportion of those born in Australia, New Zealand or the UK-Ireland decreases, the proportion of those born overseas has risen to being over a quarter of Australia's population (Hugo, 2012). Over one in 10 identifies as being Asian, which is twice the percentage from the preceding decade (Beech, 2013). In Canada – the other country in which this research took place – immigrants make up over a fifth of the total population, with the majority of Canada's foreign-born population residing in Ontario, British Columbia, Quebec and Alberta. More than 200 ethnic origins were identified in the 2011 National Household Survey, with 13 of them surpassing one million in population (Evans, 2013). Australia and Canada therefore present to culturally diverse contexts shaped by contemporary globalisation and have been used as the main settings of this research.

In the longer term, conventional educational responses to these challenges surrounding cultural difference have been limited for three reasons. Firstly, the nature of cultural education has historically relied on the identification of cultural difference as a problem to be addressed, rather than a variation within a normative societal state (Casinader, 2016; 2017). In the 1960s, the first cultural educational initiatives were – and often continue to be – perceived in terms of learning about the nature of other cultures and multiculturalism (Hassim, 2013). A shift took place during the 1970s and 1980s – mainly in Europe – towards the notion of "intercultural education", during which affirmative action was promoted to address negative attitudes towards difference, which was seen to be as important as knowing about them. Both of these approaches, however, ultimately set up cultural diversity as a clash of 'others'.

Secondly, regardless of the construct of the cultural education, the potential influence of the background attitudes of school educators on such cultural diversity programmes within schools has not featured significantly in scholarly research to date. This project seeks to commence redressing this imbalance. The monocultural Anglo-European nature of the Australian school teaching workforce, for example, was noted as being a potential barrier to effective multicultural or intercultural education in the late 1990s (see, for example, Troyna & Rizvi, 1997). Nevertheless, despite the increasing cultural diversity of the student populations previously is alluded to, and the concomitant growing cultural mix within school students, there has been a distinct reluctance on the part of the profession to either acknowledge or address this imbalance. Studies of the Australian teaching profession (for example, Dempster, Sim, Beere, & Logan, 2000; McKenzie, Kos, Walker, & Hong, 2008; McKenzie, Rowley, Weldon, & Murphy, 2011) invariably contain data on the birthplace of

teachers, but never on their self-identified cultural or ethnic background, beyond that of Indigeneity.

Despite this lack of engagement with the composition of the existing teacher workforce, there is growing evidence that, to a degree, teacher education is beginning to recognise the importance of building such cultural capacity within teacher graduates before they enter the school setting as service professionals, particularly outside Australia (see, for example, Gutiérrez Almarza, Durán Martínez, & Beltrán Llavador, 2015; Holmes, Bavieri, & Ganassin, 2015; Messelink, Van Maele, & Spencer-Oatey, 2015).

Thirdly, the ability of school educators to address the challenges and opportunities of cultural diversity may be hindered by the approaches adopted by school leaders and administrators, who have tended to adopt reactive policies in response to cultural divisions, rather than being pro-active. It could be argued that this propensity to re-action as opposed to pro-action is in line with the limited foundations of multicultural education and intercultural education, as it reflects a belief that cultural diversity is solely identified by the existence of divisions that can only be resolved by an institutional response. Typical approaches in response to incidents, it can be argued, tend to be framed on the assumption that cultural diversity has emerged as a problem to be addressed, rather than an acceptance that cultural difference is the reality. Studies such as Walton et al (2014), which looked at the attitudinal approaches of school leaders to racist student behaviour in schools, have supported this attitudinal dichotomy. Of the three approaches identified, two were based on either avoidance of the issue's existence ("procedural colour-blind") or a deliberate minimisation of its significance ("colorimeter").

Understanding the attitudes of teachers is also often absent from the research. Educational researchers have tended to lack investigation of adult attitudes to cultural education, especially since the late 1990s and early 2000s (for example, see Halse & Baumgart, 2000; Perry & Southwell, 2011; Sahin, 2008; Yong, 2007; Yuen, 2010; Halse, 1999; Santoro, Reid & Kamler, 2001; Santoro, Kamler & Reid, 2001). Schools often focus on institutional responses to student attitudes to cultural difference, rather than engaging the issue more directly by understanding the behaviour and attitudes of their teachers and administrators. There appears to be an unwritten assumption that all teachers are both willing and able to deal with matters of cultural conflict. An educational body will inevitably reflect the same diversity of opinions and attitudes towards cultural difference that can be found in its wider community; the issue, however, as is always the case of issues of moral and ethical import, is the degree to which teachers can respond to the needs of the community as a whole, rather than to their own personal approach. In consequence, it is hardly surprising that there is evidence that the effectiveness of cultural education programmes depends upon the cultural messages that are either explicitly or implicitly communicated to the student body by teachers, and that a school policy that utilises a "distributive-justice, colour-blind" orientation, which promotes and acknowledges "individual racial, ethnic and cultural differences" is the only one that has been proven to have an impact on cultural education (Walton et al, 2014).

The role of teachers in mitigating "Othering" and nurturing the benefits of cultural diversity is a complex, yet pivotal one in the school environment. It is our contention that implementation of school-based programmes and curriculum is not just dependent upon the nature and quality of the learning programmes themselves, or the receptiveness of students to the learning that is being offered, but also upon the implicit and explicit messages conveyed to the students by teachers in the delivery of those programmes and curricula.

Schools are the ideal location for teachers to address the challenges and opportunities of diversity, as educators are the main interface between student lives and the human environment surrounding them (Mansouri, Leach, Jenkins & Walsh, 2009). The long-term impact of educational programmes that are designed to enrich learning and school life through engagement with diversity, or to reduce the demonisation of cultural difference in school students, can potentially play a powerful role in the development of a more cohesive society.

It is increasingly important for teachers to possess the cultural capability to cater for this diversity as a professional attribute. However, current teaching approaches of multi-and inter-culturalism were conceived before contemporary globalisation; patterns of global mobility were less complex and interactions between people of different cultures were less frequent. In today's world, advanced communications and transport technologies have increased the fluidity of demographic movement and societies around the world are now more culturally complex than before. Consequently, teachers now need to possess a different form of cultural expertise to meet the needs of students.

The relatively new area of transcultural education, which features a reversed perspective of cultural difference as the prime state of global society rather than being one set in cultural contrasts that need to be brought together, potentially provides a more fruitful path to moving beyond these historical trajectories (Casinader, 2016; 2017). The difference between an intercultural and transcultural approach is essentially attitudinal, featuring a dual acknowledgement that true cultural understanding at a deeper level does not exist unless there is change within the teacher workforce along with that within the student body. Developing transcultural mindsets within students requires teachers with transcultural capability (Casinader, 2014; 2016; 2017; Casinader & Walsh, 2015). It assumes that diverse classrooms are to be expected. Difference is not a problem to be overcome, but an expected reality to be drawn productively into teaching and learning (Rizvi, 2011).

Transculturalism, therefore, is a capability that incorporates a change in a state of mind in the teacher; it is not just a learned competency that can be acquired, but an attitude that develops over time. The building of this capacity is enhanced by the possession of critical thinking and problem-solving skills, which enable people to be more open to difference and to be able to respond to it. It is imbued with a pro-active perspective (Aveling, 2007). It is our contention that developing a more transcultural disposition of thinking within teachers themselves may increase their capacity to deliver programmes and enact curricula in cultural diversity in a more effective manner that is consistent with the objectives of the IB.

There is a paucity of empirical research on transcultural dispositions of thinking in scholarly research. The IB presents a fertile context in which these gaps in research can be explored. The IB seeks to "develop the intellectual, personal, emotional and social skills needed to live, learn and work in a rapidly globalising world" (IB, 2017a). Within this, the PYP aims specifically to prepare "students to become active, caring, lifelong learners who demonstrate respect for themselves and others and have the capacity to participate in the world around them". This is achieved through the teaching of five essential elements, one of which is "attitudes, which contribute to international-mindedness and the wellbeing of individuals and learning communities" (IB, 2017b). These globally constructed mindsets incorporate a transcultural capability (Casinader 2014; 2016), as opposed to earlier pervasive concepts of cultural education such as multi-and inter-culturalism. As suggested above, transculturalism sees cultural variation as a positive, not a negative or issue to be addressed

in some way (Casinader 2016), and as the norm rather than the exception (Rizvi, 2011), which, in IB terms, translates to open-mindedness.

It should be noted here that there is ongoing debate about the nuances of terminology in respect of the assessment of cultural understanding. Where notions such as global competence (see Zhao, 2009) intersect transculturalism, we see the term "competence" as implying a finite level of understanding that can be acquired by merely doing a qualification or an equivalent. Cultural understanding is an eternally developing attribute that can be highly variable; a person may be highly 'competent' in one part of the world, but the reverse in another. For example, an individual may have a good affinity with the variations in 'Western' culture across Europe and North America, but may not be aware of the shifts in cultural perspective throughout Asia. Consequently, there has been an argument that a term that incorporates potential for individual growth in cultural understanding is more appropriate. Reference has been made to transcultural capacity (Casinader, 2016; 2017), whereas others are arguing for the use of *capability*. In this report, we have chosen to adopt the term transcultural capability in reference to an individual's level of ability to live and work within and across different cultures because of it is more representative of a mindcentred disposition to see the existence of cultural variation as a societal norm, and not an aberration.

Consequently, this report seeks to understand how well transcultural skills are being developed and utilised within teachers in schools offering the PYP in Canada and Australia. Specifically, it seeks to determine and measure the degree of transcultural capability in teachers in PYP schools, enabling an evaluation of their transcultural attributes, and if and how it impacts upon their teaching of the PYP with reference to the Learner Profile and intended student outcomes, specifically "...understanding of the world and how to function effectively within it" (IB, 2017b).

Researching the development of transcultural capacities in an applied context is a new area of research that seeks to inform the construction of personal and professional development programmes for potential and existing PYP educators. It aims to improve the probability of all students emerging from their IB education with consistent achievement across two aspects of the Learner Profile; that is, the attributes of being a "thinker" who is "openminded".

The project findings potentially have relevance to all IB programmes.

C Research Design and Methodology

This study has sought to:

- a) Identify the comparative transcultural capabilities within teachers in schools at an international scale;
- b) Further develop a measurement tool to comprehensively evaluate the transcultural capability of an individual; and
- c) To assess if and how this transcultural capability impacts upon the teaching of a common learning programme (the IB PYP) in terms of key aspects of the IB Learner Profile, and the intended IB PYP student outcomes, especially in respect of an "...understanding of the world and how to function effectively within it" (IB, 2017b).

The research design adopted in this project explored teachers' interpretations of four areas in a determination of the level of their transcultural capacities:

a) their understanding of thinking and thinking skills;

- b) the ways in which they communicate these knowledges and understandings;
- c) their knowledge and utilisation of pedagogical theory and practice; and
- d) their experiences of multi-, inter- and trans-cultural engagement.

In particular, the study used individual teacher data (n = 38) pertaining to these attributes to analyse the cultural dispositions of thinking (CDTs) exemplified and practiced by the teacher communities in each of four school case studies. CDTs (Casinader, 2014) are states of mind that reflect a particular cultural approach to specific types of thinking skills. Within each CDT, people from the same culture display some consistency in their conception and/or enaction of a thinking skill, separated by differing degrees in the combination of independent (individualistic) and interdependent (collective) elements of thinking. They reflect a difference in how people from different cultures conceptualise and communicate the actuality of thinking. The concept of CDTs is also based on the view that "culture" is not necessarily an ethnographic construct based on values, traditions, language and artefacts held in common by a group of people. Instead, it is primarily a mind-centred concept, defined more by commonalities in how people perceive their identity (Casinader, 2014; Geertz, 1973).

As shown in Figure 1 below, there are five main CDTs, which are not fixed and do not have clear boundaries; individuals may well shift between them in the course of a lifetime. Rather than being organised in a sequential progression, the CDT sequence is best considered as a converging spectrum, commencing from polarised perspectives at either end. At one end are the more individualistic cultural thinkers (IS, IC); from the other, the more collectively or group-minded (CC, CI). In the middle is the transcultural group (TC), those who can shift between individual- and community-focused ways of thinking as the occasion demands, and most importantly, do not see either one as being naturally more superior than the other. The degree of overlap between neighbouring dispositions in the model (Figure 1) reflects the complexity of factors that can influence a person's cultural disposition of thinking. However, a key differentiator between the more individualistic thinkers (IS, IC) and the more community- or group-centred thinkers (CC, CI) is the way in which they approach the thinking skills of individual and community problem solving. The IS and IC thinkers tend to define these as referring to the location of the problem; that is, in the individual or the community. The CC and CI thinkers see them as referring to who is undertaking the problem solving; the individual or the community. Transcultural (TC) thinkers are able to see the process from both perspectives, integrating the two, or emphasising one or the other according to the detail and context of the situation at hand.

Cultural Dispositions of Thinking

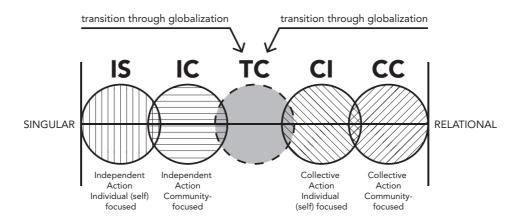


FIGURE 1: Cultural Dispositions of Thinking (Casinader, 2014)

Through this determination of CDT, an assessment can be made as to the degree of the teachers' transcultural capacities, both individually and as part of their school cohort, together with an evaluation of the implications of these patterns for effective teaching and learning within the PYP at each school. The closer an individual's CDT is towards the centre of the converging spectrum, the more transcultural their outlook and the greater their transcultural capability. In the context of this research, "effective" teaching and learning refers to student acquisition of the relevant aspects of the ideal Learner Profile; specifically, the attributes of being a "thinker" who is "open-minded".

Consequently, the findings present an assessment of the degree in which the capacities of the teachers within a school are aligned with the cultural expectations situated within the IB Learner Profile. These findings provide a base on which IB PYP schools can construct future short and long-term strategies to ensure that their teaching workforces are equipped with the capacities and skills to achieve the learner goals of the PYP, as well as potentially the IB's other learning programmes.

Four IB PYP schools from Canada (n = 3) and Australia (n = 1) were the case studies investigated for this research. Participating schools were:

- 1. School 1 (BC, Canada)
- 2. School 2 (QC, Canada)
- 3. School 3 (Victoria, Australia)
- 4. School 4 (BC, Canada)

This selection included consideration of the unique Canadian constitutional feature in the province of Quebec, and comparability in terms of co-educational provision. We are grateful to the IB for supporting the recruitment of schools in the Vancouver area. Due to the overwhelmingly positive response to our call for participants in the study, a decision was made by the researchers to include an additional fourth school to deepen and extend the research while remaining within the existing budget.

Ethical Considerations

This project was conducted in a sensitive and ethical way. Monash University, where the researchers are based, adheres to the highest standards of secure, ethical and culturally respectful research and evaluation. The Standing Committee on Ethics in Research Involving Humans (SCERH) reviews all research involving human participants at the University and primarily considers issues that constitute integrity, respect for persons, beneficence, justice, consent, research merit and safety. All research at Monash University is designed and conducted in accordance with the Australian Code for the Responsible Conduct of Research 2007; and ethically reviewed and monitored in accordance with the National Statement on Ethical Conduct in Human Research 2007. Research ethics approval was approved by the university's Standing Committee on Ethics in Research with Humans, under guidelines from the Federal Government prior to the commencement of any data collection involving human participants.

Research Aims

- 1. To determine the individual cultural disposition of thinking teachers within the four IB schools;
- 2. To analyse the patterns of teacher cultural dispositions of thinking, both within each school, and comparatively, in terms of the degree and nature of transcultural capability;
- 3. To determine the individual and collective personal and professional profile of teachers within the four IB school case-studies;
- 4. To evaluate reasons for the patterns of transcultural capability using these teacher profiles;
- 5. To assess the implications of these patterns for the effective teaching and learning of the relevant aspects of the IB Learner Profile (being a thinker and open-minded) in the school case studies, both individually and collectively; and
- 6. To construct a set of recommendations for the future development of teacher transcultural capacities and competencies in IB schools that offer the PYP.

Methodology

Schools and communities are complex environments where the relationship between professional knowledge, attitudes and behaviour are difficult to assess. Consequently, a multi-method approach was used to draw on a variety of existing and new data sources such as online surveys, individual face-to-face interviews, observation of school environments and practices, and analysis of school policy documentation. The methodological principles follow the process established through the foundational research undertaken in devising the model of cultural dispositions of thinking (Casinader, 2014), modified to address the specific context of IB schools and the PYP. The richness and depth of data required to ascertain the transcultural capability of an individual teacher meant that a comprehensive study of the entire teacher cohort in each school was not possible within the constraints of the parameters of this study. Therefore, each school was asked to provide a sample cohort of up to 10 staff that:

had a ratio of 1: 2: 7 in terms of senior management/middle management/classroom teacher; and broadly represented all the curriculum areas taught within the structure of the IB PYP.

The methodology consisted of the following key elements:

- 1. Pre-visit online survey
- 2. Visit by research team to school
 - a. individual interviews with sample cohort
 - b. observation of the school environment and educational practices, both within and outside of classroom settings
 - c. study of school policy documentation relating to learner attributes of being a thinker, reflective and open-minded.
- 3. Data Analysis
 - a. mixed methods analysis of online survey data using Qualtrics
 - b. mixed method analysis of interview and online survey data using Dedoose online software.
- 4. Construction of this final report and other future publications.

A more detailed summary is provided below.

Sample

Survey and interview data were collected between January and June 2017. The study adopted a generic purposive sampling approach, whereby three schools in Canada and one school in Australia were identified, with the support of IB, and sent an expression of interest to participate. Four schools, one in Victoria, Australia, two in the British Columbia province of Canada, and one in Quebec, Canada, were selected from schools expressing interest to participate. Selection was based partly on case differentiation. The Victorian school is an independent, co-educational P-12 school, with IB as a core curriculum in the primary years, as well as an optional diploma education programme in Years 11 and 12. The participating Canadian schools include: one independent, co-educational K-12 school with the IB as a core curriculum across primary, middle and diploma years; and two public, co-educational elementary schools, with the IB as the core curriculum. The three Canadian schools teach in the English language primarily, with French taught and spoken as a second language in one of them.

The sampling frame initially comprised 39 educators (six school leaders and 32 primary year teachers) who provided consent to participate in the research by completing the online survey instrument; however, one Canadian-based teacher did not complete the survey and, therefore, did not participate further in the research study.

The final sample comprised 30 females and eight males, ranging in age from 30 to 63 years. Nine participants teach in the Victorian school, representing the total number of teachers involved with the primary years IB programme in that school. The remaining 29 participants teach across the three different Canadian schools. All possess tertiary teaching or education qualifications. Overall teaching experience of the sample spans less than five years to 40-plus years, with all but six of the participants stating that they have in excess of six years' experience teaching the PYP. Multicultural teaching experience was assessed as low for the majority of the sample, excepting ten participants, five Canadian and five Australian. There appeared some correlation between multicultural teaching experience and travel experience overall; of the 10 participants with greater multicultural teaching experience, nine had

medium to high travel experience to date and had undertaken travel for both personal and professional reasons. Other than this correlation, there were no discernible patterns in the travel experience of the sample; there was significant diversity in the reasons for, destinations and travel duration of the sample overall. The majority of participants were born in the country in which they now teach, with only four participants born in countries other than their current residence. All of the Canadian-based teachers, except four, possess French as either their primary or secondary language, and this cohort overall showed a stronger predilection and capability in languages other than their primary language, compared with their Australian counterparts.

Measures and Procedure

The study adopted a sequential, qualitative-dominant mixed methods design, combining two existing approaches in the determination of an individual's transcultural capability. The concept of transcultural capability, derived from Casinader's (2014) model of cultural dispositions of thinking, was combined with the Community Field Experience model developed by the Faculty of Education at the University of British Columbia (UBC) for use with the Community Field Experience in an indigenous locale that forms a compulsory part of the UBC's elementary (primary) pre-service teacher education course (Andreotti, McPherson & Broom, 2015). Two assessment techniques resulted: an online survey and semi-structured interview, which were utilised to gather and analyse both qualitative and quantitative data.

Pre-visit Online Survey

A survey was created by the research team and delivered online to the four teacher cohorts. The survey was undertaken by each nominated school's teacher cohorts as the first stage of data collection. It obtained demographic data about each participant, with a special focus on the nature of the teacher's personal and professional background, and particularly the degree, timing and nature of travel experiences away from their location of origin. This data provided the foundation for the classification and analysis of each teacher's CDT. The model underpinning the survey (Casinader, 2014) was based on the premise that the receptiveness of an individual teacher to new cultural experiences, and therefore their potential capability in transcultural education, depends strongly on the degree and depth of their personal and professional experiences away from their place of birth. The underlying principle of the CDT model is that, the more exposed a teacher has been to *globalising* experiences – which can be defined as those involving experiences in unfamiliar cultural environments, whether within the country of origin or international – the greater the likelihood of the teacher developing a transcultural capability, and therefore, the ability of a PYP teacher to develop transcultural open-mindedness within IB students.

The 40-question online survey was administered to all 38 participants using Qualtrics software. Survey responses were identifiable. The survey included contextual and demographic text-based and multiple-choice questions, text-based questions seeking interpretative responses to skill and thinking terms, as well as hypothetical teaching situations, a range of five-point Likert-scaled multiple-choice questions seeking responses to different experiential and moral-based contexts, and lastly, a range of four-point Likert scaled multiple choice questions seeking views on teaching influences and perspectives (See Appendix 1).

Quantitative data was derived from Likert-scaled questions, which were scored and analysed using Dedoose and Excel. Five-point Likert-scaled question responses from participants were

scored in relation to their relationship to more transcultural attitudes, with the responses being scored positively in the direction of transcultural thinking. For example, if a transcultural response was to "agree", then "agree" responses were scored either +1 or +2, with "neutral" as zero and "disagree" responses either -1 or -2. The same occurred when a more transcultural attitude was to disagree; that is, "disagree" and "strongly disagree" were scored as +1 and +2 respectively.

In contrast, responses that were seen as being counter-transcultural, whether in or not in agreement, were scored as either -1 or -2. Four-point Likert-scaled question responses from participants were scored from zero to 3; with "no influence" responses scoring zero, and ranged to "strong influence" responses scoring a maximum of 3. Response scores were then summed and averaged, resulting in an overall survey score in the range of -2 to +2. Using Casinader's (2014) model, the questions relating to thinking skills were used to assign participants to one of the five categories on a spectrum of cultural dispositions of thinking.

Text-based survey responses from participants were coded and analysed using Dedoose software. Coding was objective, being based on language used by each participant, and utilised a coding structure designating text-based responses and interview excerpts as permutations of 61 different codes spanning independent versus interdependent thinking, personal and professional impact, influence on curriculum and pedagogy, as well as cultural dispositions of thinking.

Semi-Structured Interviews

Semi-structured interview guides were developed prior to interviews commencing specifically for this study. The purpose of the interviews was to consolidate and expand the thinking behind their responses to the questions in the pre-visit online survey, aiming to further explore and understand the degree and nature of an individual's transcultural capability, as well as the relationship of this to their teaching of the PYP. Questions investigated the professional and personal impact of teaching the PYP, exploring views on cultural diversity and understanding, interpretation of terms such as tolerance and international mindedness, as well as moral perspectives of how teachers engaged difference both individually and with their students. In particular, the interviews investigated if and how individuals have responded to their various travel experiences, whether personally and professionally. In the individual interviews, this exploration focused on the ways in which these experiences impacted upon their pedagogical and professional practices (including the ways in which they perceive the students that they teach) and in the specific ways in which they perceive the thinking skills of critical thinking, creative thinking and problem solving. (See Appendix 2.) Data from the interviews was rich and diverse, and we have deliberately sought to preserve the rich flavour and thoughtful depth of teachers' stories and responses in the findings below.

All 38 participants attended individual interviews, which were approximately one hour in duration and were audio-taped. Interviews were then transcribed, de-identified, coded and entered into Dedoose project software. Like the text-based survey responses, interview excerpts were then coded and analysed using Dedoose software according to the model of cultural dispositions of thinking (Casinader, 2014), as well as other criteria established by the research team as a consequence of conducting the interviews at each school. Coding followed the same parameters used for the online survey, as outlined previously. In total, approximately 3,200 excerpts were coded utilising over 4,000 code applications.

Synthesis and analysis of the various sources of project data used the analytical tools within Dedoose, following guidelines established by the chief investigators of the research team. Data were analysed by all members of the research team, with the research assistant taking responsibility for the administrative aspects of each deliverable.

Document Analysis

In addition, a small desktop review was conducted in which school policy documentation was analysed, together with appropriate conversations with participants, to provide a deeper understanding of the educational background within which the teachers of the school are working, and context for the interpretation and analysis of the data, especially with that relating to pedagogy and professional practice in relation to the PYP.

D Research Findings

The findings are organised below according to the research aims of this study. Before examining these, it is useful to outline the broad cultural context of these schools as described by their teachers.

1. The cultural composition of the four participating schools

School 1

The policy documentation of School 1 emphasised the community links between the school and its family base, a point that was highlighted by its PYP teachers. A participant from School 1 characterised their local region in Canada as being

"somewhat culturally diverse. We do have a very strong Iranian community...you see that in our mother tongue data; that the highest number for mother tongue will be Farsi, followed by Korean and Japanese and French...I think it is, relatively speaking, a culturally diverse school, although more diverse school communities can be found within the region" (Participant 5-TC).

Another interviewee from School 1 characterised her school as

"a really interesting mix...[T]he students hail from all kinds of socioeconomic backgrounds, we have lots of kids who have immigrated here, many students were born and bred like me here...We do have a lot of diversity here" (Participant 4-IC).

One teacher found that the wider community is becoming increasingly diverse, "with the changing dynamics in our [local] community as people immigrate here...At this school, it's typically families from Iran and that's about it" (Participant 3-CI). Another CI interviewee from School 1 also observed "many students here from many different cultures" but was unsure as to whether she would define the wider school community as culturally diverse:

"In my mind, diversity is when everybody's interacting together and where we're really open-minded to that, and while we do acknowledge that we have differences, we're more focused on what makes us like a community or a team or a group. I certainly see that for the most part with our students. I'm not sure I see that with our parent community and I often see groups of people when they come to pick up their children, very segregated...It is something [the leadership team] are aware of...It's something we'd like to work on but we also need parent support to do so. The kids are very open-minded, but sometimes I think it's a bit more lip service because I don't see them necessarily going to make friends with a kid that looks different than them" (Participant 2-CI).

This teacher's observation of the differing attitudes to difference demonstrated by the students as opposed to their parents is a reminder of the complexity of CDTs that exist within a community, and analysis of any situation requires an acknowledgement of nuances beyond broad generalisations that are often only revealed by qualitative methodologies. Her own strong degree of transculturalism, despite being CI overall, is also evident in her

comment that the school itself focuses on commonalities between people, whilst simultaneously acknowledging their differences: difference is not seen as a barrier to communication.

School 2

An interviewee teacher from School 2 characterised his local community as ethnically diverse, with Italian and

"Sikh communities present here, so that's very good to see in the streets all those people with different traditional clothing. Consequently, the students see [cultural difference] every day around them. But...do they understand it? That's something else" (Participant 15-TC).

In a similar vein, his fellow teacher said that

"because of the area that we are in, children are zoned for this school, and so generally...there are several cultures and so that is what ends up at the school. Now, is it very diverse? I don't know. I think there is quite a bit of diversity. I usually discover it when we do our celebrations unit and I ask parents if they celebrate anything at home...But in the school, I'm not so sure" (Participant 19-TC).

Some teachers at School 2 (e.g. Participants 12-IC, 3-CI and 10-CI) thought that the school itself was not very multicultural in student origins:

"We have probably somewhere along the 95 per cent of Italian origins and then a few other origins in the remaining five per cent, [but] our neighbour school...is multicultural at its best, [with students from] all parts of the world" (Participant 12-IC).

School 3

As reflected in its public documentation, the location of School 3 in a largely affluent bay side community school meant that its cultural environment is distinctly narrow in scope, which also has an impact on teaching practice. The school was characterised as uniformly "Anglo" by Teacher Participant 30-CI, making it

"incredibly difficult. Because I think you're fighting two elements. One is, you know, what we call the "[local] Bubble". Most of our families live on the [local] area. They...are fairly affluent families. But I think our biggest push was that when we're offering scholarships to children...who are from diverse backgrounds. So, we're trying to educate our kids that, yes, they belong to the [local] area, but outside the [local] area, there are lots of families who can bring so much value and so much cultural understanding to our school, that can open our eyes" (Participant 38-TC).

School 4

In terms of relative location, demographic situation and policy documentation, there was a degree of similarity in the community served by Schools 1 and 4. However, School 4

participants held differing views of how culturally diverse their school was, and its teachers showed a great deal of awareness of how the school's cultural environment had changed over time. One CI participant from School 4 believed that "our school is diverse in cultures, in languages, in beliefs, in philosophies but yet it's inclusive" (Participant 20-CI). Another CI interviewee from the same school held a different view:

"I think we have cultures represented in our community. Do I feel it's diverse? No. And why? Well, I don't even feel like my cultural experience has been diverse, [although] I feel like my Canadian experience has been very rich and way more rich than other Canadians. In our country, sometimes people don't leave their land, their geography for their own life, or even their own home. I know that exists in other parts of the country, but I believe you have to get out to see other things...I believe that it's changing all the time. Our staff is the most diverse that I've ever seen...in the 17 years that I've been here" (Participant 21-CI).

Similarly, another participant from School 4 noted how her community had become more diverse over time: initially,

"there were very few immigrant families, for example. It was fairly homogenous...And then we started to see waves of immigration that have affected our school over time — from Korea, from China and so forth. So that's been, kind of, the change that's happened over time....As our school started to change and become much more international in the scope of families, [the PYP] fit even more in terms of the intercultural and global mindedness and so forth" (Participant 23-IC).

Fellow teachers in School 4 concurred that the school had become

"culturally diverse in the population. I think we're culturally diverse with our staff and the people involved, the administration. I think curriculum based, it's still in the works of being more culturally sensitive and diverse...We have kids [from], I think, 20 different countries — I think they bring a lot of culture. It's those family are rich with their own histories and experiences, and they bring that into the classroom. And those conversations are promoted, and so we learn from each other and we are, I think, a little more empathetic and tolerant of each other..." (Participant 25-TC).

Again, to set the context, participants were asked about their personal journeys and their understandings of culture.

2. Backgrounds of participants

By and large, in line with the CDT model, participants demonstrating TC tended to have experienced some degree of cultural dislocation, having lived in and travelled to countries other than their birth country. This helped to develop their perception of cultural difference as the norm, although this is not the only determinant of transculturalism in PYP teachers). One TC teacher (Participant 25-TC), for example, had lived in India and travelled to

Bangladesh, Pakistan, Sri Lanka, Dhaka, Singapore and Egypt. Another (Participant 5-TC) was born in Canada, but travelled to a variety of schools by Grade Seven, including Italy and Guam, with one parent born overseas.

Not all TC and CI teachers had lived or travelled extensively. One TC teacher from School 3 (Participant 38-TC), for instance, had grown up in Australia and drew mainly from that experience.

Some TC teachers felt that the PYP affirmed their pre-existing mindset, typically influenced by family background and travel. As one Australian teacher from School 3 found:

"I think I grew up with parents who were very open minded in their approach. I never heard any criticism of anybody at home. It was very much people do a job, and so long as they do it well, it doesn't matter what that job was. My father was a POW [Prisoner of War] on the Burma Railway, but held no negativity towards the Japanese at all, even though he went through terrible things, so I think that was part of my background as I came through, and then when PYP came on board I just got more and more excited by it, because it made so much sense to me, and I think having the Learner Profile as the umbrella over everything we do I think created that common language, that common direction; I just think it has enhanced my teaching and enhanced me as a person" (Participant 36-TC).

The experiences of the IC group were also varied. One teacher from Canada grew up in Vancouver and travelled to Europe, participating in a French immersion programme. Teaching as a profession was not uncommon in her family (Participant 4-IC). Another teacher in Canada had undertaken extensive work experience overseas in places such as Thailand and Japan (Participant 23-IC). Another grew up in Quebec and travelled to France, Italy and other parts of Europe with family, as well as the Philippines and Netherlands (Participant 12-IC).

One Australian teacher (Participant 32-IC) had a desire to travel early in life, traveling to Finland, amongst other places, but this desire did not come from her family, but from within herself. Another teacher (Participant 35-IC) from the Australian cohort of participants spent many years of her teaching career "in government schools from a variety of multicultural settings..." within Australia and overseas. She said that travel "opens your mind up because you live in Australia; you live so far away; yes, you've got multicultural diversity; however, you don't see how other people live, so by going overseas, so I've been to America and...Italy" [opened her mind] (Participant 35-IC).

The following section explores the findings in relation to the first two research aims.

3. Research Aims 1 and 2: To determine the individual cultural disposition of thinking teachers within the four IB schools; and to analyse the patterns of teacher cultural dispositions of thinking, both within each school, and comparatively, in terms of the degree and nature of transcultural capability

The dominant CDT pattern across the sample groups was that the large majority of PYP teachers were either transcultural or one CDT away from it (see Table 2 and Figure 1 above).

School	CI	TC	IC
School 1	3	5	1
School 2	2	5	3
School 3	2	3	4
School 4	2	6	2
ALL SCHOOLS	9	19	10

TABLE 2: Cultural Dispositions of Thinking according to school (numbers of teachers)

Three of the schools had at least 50 per cent of the sample cohort designated as being transcultural, except for School 3 having a higher percentage of more individualistic thinkers (IC) and a lower ratio of transcultural teachers than the other schools. Such a variation was to be expected in light of the school's cultural environment, as outlined previously. The teachers here are catering for a relatively homogenous community in which the encountering of difference within a classroom is not common. More individualistic thinking, as opposed to the more collective approach that a culturally diverse environment can nurture, is therefore more likely to be reflected in teacher practice within such a learning environment – even if the Principal of the school was setting very clear policy goals towards the development of deeper social and cultural understandings within the school community at large. Nevertheless, it can be said that, in general, PYP teachers in all four schools had a cultural mindset that is generally aligned with the openness to difference that is embedded in the IB Learner Profile and the PYP principles.

Across all four schools surveyed, exactly half of the teachers interviewed can be said to be transcultural in their approach (TC), with a further quarter (23.7 per cent) being highly interdependent/community-centred in their thinking and therefore close to being transcultural (CI). This can be seen in the ways in which TC teachers highlight the complexity of thinking and the importance of relationships in that process, often through the power of narrative:

"...in kindergarten I say, 'Think outside the box. When you're thinking, there's not only one way to solve a problem. Think of all the different ways, put your heads together, and come up with all the different ways that you could solve this problem. When you're a critical thinker, you do not only think of one answer to the question. There's always many, many ways to think'...The box is, when I ask a question, there is one answer that comes to mind. Don't think of that answer. Go beyond that" (Participant 19-TC).

I think that's particularly true for when kids are trying to gather information, because it's all there, it's all at their fingertips, there's more information than one person can ever process out

there. So, how are you going to think through what you're going to do with that information and then how are you going to problematise it or fit it into what you already understand or perhaps you need to create a new way of understanding to process it. So, for me that critical thinking is being able to navigate the world around them, whether it's social or content based or wherever that is" (Participant 2-CI).

It is significant, however, that 26.3 per cent of the overall cohort can be said to be largely individualistic in their approach to thinking – the IC group. It was this particular group that tended to display characteristics of approach and attitude that were less attuned personally to the principles of the PYP, regardless of their professional commitment to PYP. The differences can be seen in the highly abstract nature of these teachers' comments on thinking, which are in strong contrast with the strongly inclusive tones of the TC and CI quotations above. For IC teachers, cultural variation tends to be relatively unimportant, as reflected in the focus on the concept of thinking rather than on the people-process interaction:

"analysing different things, bringing forth ideas from lots of different places, not passively just accepting something, putting their own slant on it but also prior knowledge of other things. And then it's used across all different areas" (Participant 32-IC).

"...thinking outside the box...you can still manage to do the critical thinking so making the best decision that you can with what you have at hand, but maybe take...a little unexpected route or...a different angle to try to solve your problem at that moment" (Participant 12-IC).

It is important to note that, regardless of this pattern, no teacher across the four schools could be defined as being highly individualistic (a CDT of IS: see Figure 1) or highly group oriented (a CDT of CC: see Figure 1), which would place them very much out of sync with the inclusive nature of transculturalism and the IB Learner Profile. In that context, the whole of the sample cohort appears to have at least some alignment with the global openmindedness principles of the IB student profile.

It is useful to contextualise Table 2 above in terms of participants' understandings of culture, which varied considerably. Some were linear and objectified, with others more complex, with a strong degree of association between teacher CDT and their notion of culture. One common theme across teacher CDT, however, was that the development of culture was a function of family background and the context of one's upbringing. For example, at one end of the spectrum, an identified IC teacher described culture as being reflected "in different ways...it's sort of what makes them, them. So, what they can bring with a reflection of what happens at home, of their culture and what they celebrate and what they believe in and what they do" (Participant 32-IC).

At the other end of the CDT spectrum, a CI teacher shared a similar view that culture is made up of "the values and the beliefs that you're raised with in your home first off. It's the ... wealth of resources or what you know that you bring with you wherever you go. It's your first point of reference. It's what you're growing up with" (Participant 10-CI). What is significant about this CI example, however, is that the teacher sees this family base as a starting point, a frame to be developed over a lifetime, and that culture is a changing

concept; that is, it is an attitudinal notion, which is a fundamental aspect of a transcultural approach.

Interestingly, such a view was also held by the more individualistic IC group, despite the fact that, in general, they held to a more traditional vision of culture, with a focus on values, traditions and religion; for example, one interviewee described culture as:

"where you're from. I would associate the culture, like where you were born. And then of course, you have your family traditions that are mixed into that. And of course, I would also put religion in there, because I think a lot of – culture and religion often are used – they're linked" (Participant 13-TC).

Similarly, another Canadian teacher characterised culture in terms of "Your beliefs, your values, your traditions, I guess your religion has a lot to do with it. Where you were born plays a role into it" (Participant 22-IC).

Nevertheless, some IC PYP teachers acknowledged that culture is

"evolving all the time, because I think what I thought of culture five years ago, is not what I think about now. It has to do with...the 'taken for granted' world that people bring with them in a certain place, and parts of that align with where you are, and [other] parts don't...I feel that from when I lived overseas myself. There were aspects of me and my culture moving overseas that were easily adaptable, or I thought, 'Oh, this is — it's the same, yes', and then there were those things that were absolutely mind-blowingly different, and I couldn't put a face to.

So, it's that constant negotiation, I guess, of who you are and where you are and so forth...Because threaded through that is also your personal...it's a very complex piece, I think, that changes over time, and depending on who you're with" (Participant 23-IC).

Such a common view was out of sync with other aspects of the collective view of culture. Overall, the more individualistically-focused IC teachers defined culture in more conventional terms. Another IC teacher from School 2, for example, defined culture as

"the set of values [that] is shared within a community...That doesn't really mean that you're coming from the same country, but you're sharing the same set of value at that moment, in that community....the way they raise their children and family values or the way they think education is important or even like what can you eat and what shouldn't you be eating as part of their traditions and things like that" (Participant 12-IC).

Similarly, another interviewee said

"it's who you are based on where you come from obviously, but it's also who you are based on who you interact with. So, I think culture is shaped by a lot of factors [such as] what your belief system is and what your values are and what traditions you may have, what celebrations you might do...I also think of it as a disposition...so who you are and the things you appreciate and what matters most to you as a person" (Participant 4-IC).

In contrast, a more transcultural view is evident in the following example, which highlights the importance of relationships and the strong transcultural tendency to place matters of culture in a narrative context in order to bring out the natural complexity of real-life situations; the notion of culture is being defined more as an inner manifestation of identity and not so much circumscribed by its outer, more tangible aspects:

"Il look at the way in which my dad is one of six and his youngest sister is married to a guy who is from Trinidad. She looks like Snow White and he doesn't. Their children now - they moved to [a suburb of Melbourne] because a lot of people around in that area are...of mix-mix race. To me, I think we are creating transcultural in that sense. What's the culture for those kids? I don't think that they should have to define that. I'm British and I'm Irish and I'm Australian, but then I'm also this. I think they are creating a culture of their own by joining together. To me that's what I see transcultural" (Participant 31-CI).

A range of other TC teachers enunciated this fluid creation of cultural identity:

- "having a connection maybe to your country's cultural traditions [or more specifically]
 whichever cultures you connect to... culture is the traditions from where you come
 from" (Participant 24-TC).
- "Culture sort of encompasses who we are, what we've learned, what our traditions are, what our experiences are... it's even the foods we eat, the clothes we wear, the whole sort of package" (Participant 19-TC).
- "who you are: your beliefs, religion, artefacts, possessions, the language. I think we're connected to the language. I think if I want to understand who you are as a culture, your culture, I need to know or understand in two languages. I think that's a big one that brings us together as IB, because we have a common language. And that's that IB culture... if you look at IB schools, they're very distinct in their IB culture, if that makes sense. They have the learner-profile attitudes... They have planners, they have the way of teaching, which is that culture [that teachers and schools] build [in contrast to] schools that are not IB, you can tell right away by the kids who come out of that school, whether they're an IB student or not, just by the way they're thinking, the way they behave" (Participant 25-TC).

In a pattern that was a move towards a transcultural notion that culture is far more than a set of community attitudes and beliefs, incorporating a certain mind-centred approach, CI teachers defined culture in terms of personal identity, such as "how you identify yourself; a certain group that you would belong to. And some people, it's based on where they come from. Some, it's their religion" (Participant 3-CI). A similar view was that culture is "…your belief system, your core values, potentially it's your religion, your traditions, your customs" (Participant 3-CI). Another CI teacher described culture as

"the set of expectations, understandings, world views that you kind of come with. It certainly can also be, like, food festivals...

but really, I think it's those pre-assumptions that we have in our minds that we don't know we have, because we're just growing up in it. So, it's like a fish swimming in water, they don't know they're in water. We don't know we're so submersed in our culture until we start to problematize it or somebody else says to us hey this is what you just said, here's how it affects me. Then we can sort of start to see the kind of context that we're living in. So, I think it's more so your assumptions about situations" (Participant 2-CI).

What do these different definitions and perspectives mean for the approaches taken by teachers to bring about cultural understanding and tolerance with students? The impact of a more transcultural notion of culture on PYP teaching is that it reflects a teacher's willingness to be open to difference and to be far more nuanced in their teaching about difference. The relationships and interactions between people are not defined or oversimplified by references to cultural identity based on outward appearances as fundamental and unalterable as skin colour. Instead, as one TC teacher in Canada outlined, it is about working with and teaching about the falsity of making general assumptions without considered thought:

"I actually teach it in Grade Seven. We try and look at the word culture and look at the word civilisation and what makes them different and unique...some people define culture as what religion you believe in, or what group you identify with, but I think often times that's kind of putting boxes on things a little bit, of just saying because you're this religion, you're this culture. I don't think that holds true anymore in the world. I think that culture really is just what you hold dear to yourself at a personal level" (Participant 9-TC).

Discussion of findings now turns to research aims three and four.

4. Research Aims 3 and 4: To determine the individual and collective personal and professional profile of teachers within the four IB schools; and to evaluate reasons for the patterns of transcultural capability using these teacher profiles

Nature and Degree of Travel Experience

Although the majority of the teachers at each school showed a high degree of transcultural capability, the range of factors that created that CDT was quite diverse. There was also more variation than might have been expected in the ways in which their dominant CDT was reflected in attitudes to different scenarios based on transcultural principles.

As outlined previously, one of the major influences on the creation of a transcultural capability is the nature and degree of globalising experiences that an individual has been involved with. Given that the sample cohort was either transcultural or only one CDT step away from being so, a significant degree of travel was to be expected, and such was the case. The entire sample cohort had travelled outside their country of origin, with only 10 per cent having only been in one other region. In alignment with the CDT model (Figure 1), the more transcultural teachers tended to have a higher degree of travel beyond their location of origin, both professionally and personally (see Figure 2). All but one of the transcultural teachers had been to at least two other regions of the world, with 74 per cent of that subgroup (35.8 per cent of the whole) having experienced at least four regions, including their place of birth. Significantly, most of the transcultural group had travelled in both personal and professional contexts, highlighting the view that transcultural capability is not just a professional attribute that can be acquired, but more of a personal mindset that needs to be stimulated and nurtured through 'globalising' experiences. Over 40 per cent of the transcultural group had medium to high levels of travel experience, and nearly 60 per cent had travel for both professional and personal reasons. This supports the CDT principle that exposure to different cultural contexts, especially if a matter of personal choice, helps to stimulate the degree of TC attitudes within an individual.

Some teachers highlighted found their international experiences to be personally transformative, naming certain immersive experiences as highly influential on their worldview and approach to teaching. For example, one Canadian teacher described the impact of a highly influential trip to Japan: "To really understand a culture, a country, I think I wouldn't have learnt the things I did if I hadn't gone to Japan..." (Participant 22-IC).

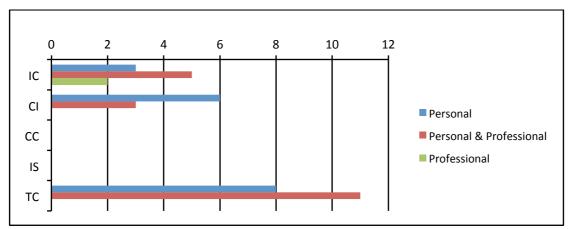


FIGURE 2: Degree of Travel Experience of Teachers according to Cultural Dispositions of Thinking

It is useful to reflect on one of the nuances of the interview findings in this respect, however. Several teachers believed that travel was influential, but not essential to promoting cultural understanding. The Canadian participant who had visited Japan suggested that, whilst her travel had been formative, it was not necessarily essential to understanding and engaging difference in her classroom:

"being around people from different cultures and learning about their cultures helps with [understanding cultural difference]...I think about my students in my own classroom, lots of our units are about like who we are and how we express ourselves. They're about their families about their traditions, so they're learning about that from each other...I feel like we're immersed in it right now, I don't feel like I have to travel somewhere...I think just being immersed in it here gives students and everyone here an open mind about differences and about learning about different ways of life for different families and their culture..." (Participant 22-IC).

Multicultural Teaching Experience

Interestingly, this capacity for transcultural thinking was present in a group of teachers, who overall (79 per cent) had relatively little experience in teaching within multicultural student environments (see Figure 3). This suggests that, for some educators, teaching experience within culturally diverse school cohorts may not be sufficient a pre-condition in itself for the development of transcultural attitudes, reinforcing past research findings (Casinader, 2014; in press; 2018) that transcultural capability is not just a professional attribute that can be fully acquired by professional practice or learning. Instead, its full activation or adoption by an individual necessitates a shift in *personal* attitude, which may or may not result from teaching in multicultural environments. For some teachers, teaching in multicultural environments is a professional choice and not necessarily a personal transformation.

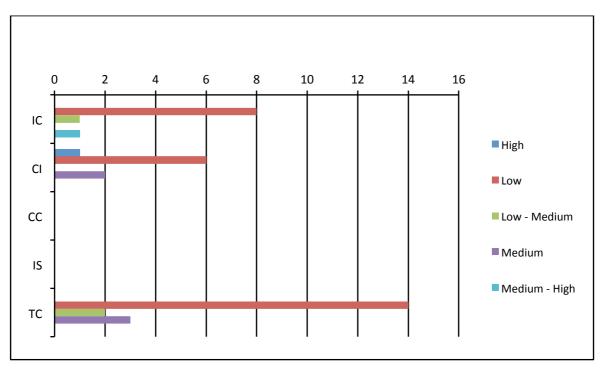


FIGURE 3: Multicultural Teaching Experience of Teachers according to Cultural Dispositions of Thinking

Place of birth

Another singular feature of the transcultural group was that, collectively, they were born in a wider range of countries (Figure 4). Unlike the IC and CI groups, who were all born in one of the two case study regions (Australia and Canada), the transcultural cohort originated in countries that not only included these two regions, but also continental Europe, Africa and South Asia.

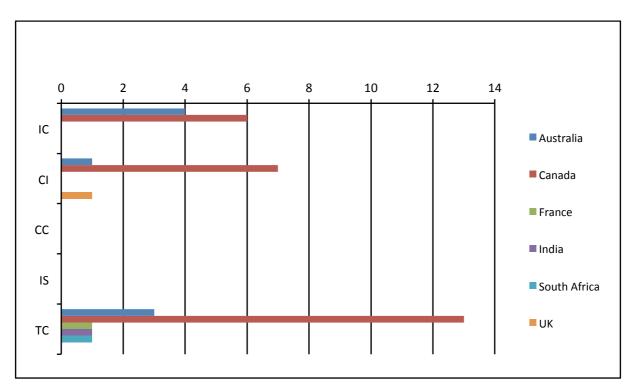


FIGURE 4: Place of birth of teachers according to Cultural Dispositions of Thinking

The reason why being born outside their country of work can be seen to influence transcultural capability is that the teachers in question have undertaken a deeper form of globalising experience through the very act of migration. For one teacher (Participant 16-TC), the move was a deliberate step towards personal cultural transformation as the migration was the consequence of marriage to a French-Canadian. For some of the transcultural teachers born in their country of employment, the globalising experiences took a different form, although the effect – immersion in cultural difference as part of daily life – was the same. For example, another teacher lived in several disparate locations around Canada before settling into her current position:

"My father is an RCMP member so the Royal Canadian Mountain Police...he's a retired member now but was a high-ranking officer, and at that level, we moved around Canada. So, when I think about my identity, it's not the place of where I am right now; it's a nationalist kind of approach to being Canadian. What's happened for me is a lot of my moral code and a lot of my

identity is as the daughter of a service person plus a national police force member, and his family were also in the service as well, so a lot of what I have embedded in me is, I think, a large part to our story is moving around as the [name removed] family (Participant 21-CI).

PYP Convictions

Logic would suggest that teachers who had a deep personal and professional commitment to PYP principles, including the IB focus on international-mindedness, would be far more transcultural, and that the reverse should also be true.

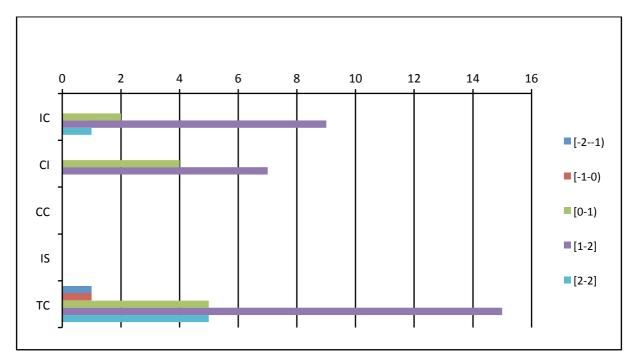


FIGURE 5: Degree of PYP conviction according to Cultural Dispositions of Thinking

Figure 5 shows the degree of consistency of the teacher cohort between their reactions to statements on the PYP course and transcultural thinking on a scale of -12 to +2, with rankings in the positives reflecting a strong support for PYP principles. As the chart shows, by and large, teachers in all three CDTs were predominantly in the positive range, and especially so in the transcultural group. It is possible, therefore, to say that overall, 80 per cent of the whole cohort was strong in its convictions as to the value of the PYP. This is general affirmation that teachers being employed by PYP schools are, as a rule, personally and professionally invested in the cultural education dimensions mandated for inclusion within the programme.

General patterns

Two general aspects of the findings are notable here, and serve to highlight that transcultural capability, and therefore, compatibility with the IB profile and the aims of the PYP, is not necessarily a mere function of biological or professional maturity. Firstly, newer, younger teachers were either transcultural or more community-oriented in their thinking. Whilst older and more experienced teachers could be found across all three cultural dispositions of thinking (see Figure 6), the younger teachers (that is, born after 1983) were

all either transcultural or close to it (11 per cent in total). Approximately 20 per cent of the entire cohort had less than 10 years of teaching experience, and all of these were either transcultural or more community-oriented in their thinking.

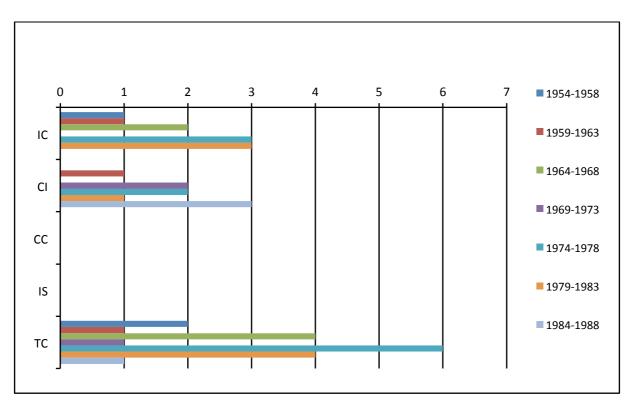


FIGURE 6: Date of Teacher Birth according to Cultural Dispositions of Thinking

Secondly, the transcultural group was far more globally aware, with 65 per cent demonstrating high levels of whole-world consciousness. In Figure 7, the higher numbers indicate a stronger commitment to notions of global awareness and the focus of the IB Learner Profile, the more individualistic (IC) cohort levels of global awareness were about 50 per cent lower than the transcultural cohort. This higher commitment by the transcultural teachers is also in alignment with the fact that they originated from a wider range of regions than teachers with other CDTs. It also reflects the likelihood that many of them has developed transcultural capability by being immersed in different cultural environments through the processes of everyday life and the need to adjust to new cultural environments.

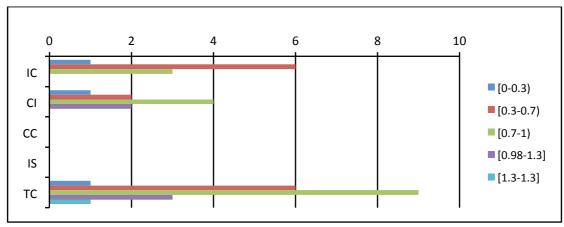


FIGURE 7: Cultural Dispositions of Thinking according to degree of global awareness

As with travel experience, however, the nuances revealed by the interviews in the case of global awareness, or, as defined by the PYP, 'international-mindedness', were most interesting.

Participants' responses indicated also some complexities beneath the data; particularly in relation to what they believe constitutes "international-mindedness". At one end of the spectrum, participants who were IC (more individually-centred thinkers) suggested that the PYP did not necessarily change their mindset, but gave them a language to articulate existing understandings. For example, one Canadian teacher said:

"My understanding of international mindedness has taken a bit of a journey, so had you asked me that before I'd taught in an IB school I probably would've answered along the lines that it's about being a good person no matter where you are. That hasn't really changed, [but] now I've just got the vernacular of the Learner Profile, [it] is kind of attached to that. Over the course of seven years teaching IB that just becomes the way that I frame my thinking around international mindedness...what do I view as internationally minded? It's a person who is open minded to all people and is eyes wide open no matter where they are" (Participant 4 - IC).

In a similar vein, another participant categorised as IC reported that:

"International mindedness for me is defined when we work across the 10 attributes of the Learner Profile. When a student is able to demonstrate all those 10 or able to explain them and to demonstrate them, at that point for me that's how I identify an international mindedness person because if you can be open minded, if you can be knowledgeable, if you can demonstrate those attributes then that person could easily transfer into another country and they are internationally minded. It doesn't mean someone that travels the world, it doesn't mean someone that knows all about the world" (Participant 14).

Others took a wider perspective to the question. One Canadian participant from another school, identified to be IC, said that international-mindedness was about

"taking those aspects of your humanity, and being able to recognise that other people throughout the world, and sometimes your neighbour or members of your own family, have similar traits or thinking or ideas to you. Regardless of the diversity or the difference, we have these common core things that run through our lives, and, you know, to...a large degree, we spend time on difference, and we don't spend as much time on those things that are very similar, you know, to us. We...all have a mother, right? I mean, not that simple, but, I mean, it is true. [It is] those transferable things" (Participant 23-IC).

Another Canadian participant from the same school, who we identified to be CI, characterised international mindedness as a personal responsibility; it is

"a disposition. I feel that defining it would make it something that people would try to assess and measure and I don't think you can measure culture, inter-culturalism. I think we have this desire to box lots of stuff and check things off, especially as educators. So, defining it is super hard for me.

I feel it's the openness, acceptance to understand the humankind, the human spirit, but also there's a responsibility for me to try to live that experience or to ask or question. It's not for you to tell me about you, it's for me to find out. I feel there's a responsibility and that's where judgments come in and things get misconstrued where if you don't find out for yourself then how does a person really know?" (Participant 21-CI).

The greater sophistication of perspective shown by those with transcultural capability was also evident:

"I think what we do is through our units of inquiry [is that] we're learning about different cultures, we are learning about different genders or sexual orientation. That's...the whole Learner Profile of being open minded and...being knowledgeable. I always tell the students, 'I may not know about your culture and I may not know your background so we're learning together, but it's important to be knowledgeable so that others can be open minded and understand why at a certain time of year this is why you're not eating certain foods or maybe you're fasting, whatever it is, we're learning together.' " (Participant 14-IC).

We now turn to research aim five, starting with the cohort as a whole.

5. Research Aim 5: To assess the implications of these patterns for the effective teaching and learning of the relevant aspects of the IB Learner Profile (being a thinker and openminded) in the school case studies, both individually and collectively.

The cohort as a whole

Personal Impact

Professional Impact

CDT	Capacities & Skills	Individual Growth	Competences & Skills	Relationships & Communications
CI	35.8	64.2	17.3	82.7
TC	38.4	61.4	8.7	91.3
IS	42.7	57.3	10.8	89.2

TABLE 3: Personal and Professional Impact by percentage codings of interview responses and cultural dispositions of thinking

Table 3 shows the teachers' perceptions of how teaching the PYP has affected them both personally and professionally, according to the per cent codings in each category. To a large degree, the teachers' perceptions of impact of their teaching of the PYP, according to the cultural disposition of thinking (CDT), mirrored that of the overall pattern. Across all CDTs, teacher comments showed that they were more aware of the personal impact on their growth as individuals (56-65 per cent codings) than on their specific capacities and/or skills (35-44 per cent codings: see Table 3). Once again, the capacities of cultural awareness and flexibility of thought were the specific capacities/skills in which progress was noted; approximately half the codings for each CDT reflected these two aspects.

Like the wider pattern, by far the greatest impact professionally was in the area of relationships and communications (80+ per cent codings in each CDT), with progress in student relationships and student outcomes being heavily emphasised. Although perceptions of development in their own competences and skills was much lower in each CDT, there was agreement within each CDT that the greatest impact in this area was in cultural knowledge (57-91 per cent relevant codings). However, the focus on cultural knowledge was much higher (91 per cent) in the more collectively situated thinkers of the CI disposition than those who were transcultural (65 per cent) or more individualistic (IS – 57 per cent). These differences suggest that transcultural thinkers may have a higher starting point in cultural knowledge than other CDTS, but also that the IC group is less open to different forms of cultural knowledge than the CI group, whose community-centred approach is more accepting of different perspectives.

These findings seem to suggest that undertaking teaching within the PYP tended to have more effect, personally and professionally, on those who were close to becoming transcultural in disposition, than those who were already transcultural. The impact on some of the key attitudes related to the IB Learner Profile, such as cultural knowledge and global awareness, was far more significant, with the greatest professional effect being in the area of connections with students, and then through this, by implication, progress in the quality of student learning outcomes.

5.1 Personal and professional impact on individuals

During the interviews, participants were asked about their experiences in teaching the PYP, including its strengths and limitations. Their qualitative responses provide useful contextual insights in relation to the survey findings presented this report. In particular, they highlight a practical reality; that the extent of a teacher's ability to fully utilise their personal and professional capacities in maximising the transcultural elements of the PYP is also dependent on them being given the curricular and pedagogical space to do so. Six themes emerged during interviews as to the impact of the PYP on teachers and their school communities:

(i) Creating a common language

One way in the PYP creates a sense of tranculturalism – the sense that difference is less important than commonality – is that it utilises a lexicon and language that is used by all involved in the programme. The benefits of having a common PYP language were widely reported by teachers in this study. One teacher from School 1 said, the PYP [and the IB in general]:

"gives language to what we are doing that is common to all kids... when I get them at 12 years old and I talk about tolerance and open mindedness the kids get it, they understand what those words mean. And so, I can give language to them to be able to describe what is actually happening, whereas I would do some of those things within a different context in not an IB language school but I wouldn't have labelled it the same way. It doesn't bring the kids together, it doesn't give them that ability to really think, [or] the commonality that brings them together and allows them to actually go further... in their understanding" (Participant 9-TC).

A teacher from School 3 held a similar view that "the common language is very important... to have that from grade to grade to grade where children are building on their understanding of what things are" (Participant 36-TC).

Other teachers extolled the wider benefits, such as this IC teacher from School 4:

"whenever a school adopts a framework, it provides an opportunity for teachers, and community at large, to speak the same language. So, for example, when we focus on Learner Profile...as a continuant school, we focus on PYP and MYP [Middle Years Programme] and DP[Diploma Programme] [so as] kids move through our school; there's not this constant reintroducing or reinventing language, which is really important. [The PYP] framework was also instrumental in...developing a team approach..., which helps a great deal with continuity of programme for kids, when the teachers are all working on the same page in terms of language and process...

I think the other thing that I hear from teachers, and from kids and parents, is that the ... difference in ways of learning for kids, and what they're talking about and what they're learning and what they're producing, has been a big shift... [W]hen I first came here, ...the school [was], kind of, a skills development school to some degree" (Participant 23-IC).

Creating a common language extended to parents of students. While the parents of one school were reluctant to embrace the PYP approach,

"over time, [parents] now are much more interested in the depth and breadth of conversations that...they have with their kids about [global issues]...Also things in terms of the collaboration piece with families, or parents, having a sense that their kids are working well with others. Because increasingly, I think parents are realising that their children, to be successful in the future, are going to be involved in teams of collaborative groups of some sort" (Participant 23-IC).

In short, the PYP common language creates a means by which teachers can generate the student interest in and acceptance of difference that underpins the notion of transculturalism: "with students 'coming from around the world', it builds even more of the interests in knowledge and understanding that our kids have about the world and about people coming from places" (Participant 23-IC).

(ii) The teaching practice of the PYP

As with any curriculum, the use of the PYP to teach international-mindedness is largely dependent on the teachers' acceptance of and commitment to the principles of that programme. To a large degree, the survey participants have come to accept the PYP and because of the impact that it has had on their teaching practice, regardless of any initial hesitance. For instance, during the early years of PYP in their school, some teachers were sceptical about why the school adopted the PYP, initially believing

"that the reason we were doing it is pure marketing. Consequently, it was necessary for leadership to emphasise the strengths of a 'great curriculum framework' and 'a great programme' that will take you on a journey...where you become a PYP teacher, which opens your pathways and doorways across the board..." (Participant 38-TC).

Another teacher in Canada alluded to a similar initial feeling when he said:

"I'm a big fan of the programme. There are certain elements of the programme that I'm not as comfortable with, but I mean, it's a brand, you know; it's a good brand, but it's still a brand. And so, I think I came here because of the IB programme; I came here because I looked at that programme and said, 'well that's the way I'm trying to teach' and so like it could come into that fit. I love what it's done at this school; I think it's been transformative, as far as education and how we teach and what our practice is. That has started to spread, where we have teachers here who go and work with other schools and do workshops and teach them things and I like that. It bothers me that it requires a brand for that to happen; but that's more of a comment on teaching than it is the IB" (Participant 5-TC).

The participant also thought the IB "have done a good job putting together a package that uses best practice." He had recently been seconded to a local university to teach a cohort of beginning teachers the PYP:

"What I really found when I got my head around what I wanted to do with them was I didn't so much teach them the PYP...I did teach them the teaching principles behind it and then, at the end sort of say 'and that's why in the PYP we do this.... So, I think it's that sound educational practice that everybody should be aware of and everybody should know that really jumps out and is big for me...The teaching practice of what is good education is what drives me; more than the idea of global education" (Participant 5-TC).

He added,

"it's more just what my priorities are. I have these kids in front of me and how can I be the best teacher that I can be? How could I turn them into critical thinkers? How can I turn them into people who don't accept information without considering it and making judgments for themselves? How can I turn them into people who are going to be good citizens? And in my mind with the IB, I think a lot of people come into the IB and hear about global education and international mindedness and they sort of have a certain view of what that is going to be all about...[but] that Learner Profile is those dispositions and things that are going to turn somebody into a good global citizen...it's not explicitly about 'we're an IB school because we are pen pals with somebody in China'. You know, it's more about creating the character and the type of person and that isn't necessarily explicitly an international thing" (Participant 5-TC).

This impact of the PYP on their approach to teaching also set up the teaching environment in which the valuing and acceptance of difference could be nurtured. As one IC teacher from School 3 explained, the PYP "values individuality, it values...openness and some creativity can come into it [and] it values input from lots of different people, places, things you can do. I don't see it as a structured thing. I value the flexibility within it" (Participant 32-IC).

(iii) Promoting critical thinking and problem solving

As described in the CDT model, there is a close association between transculturalism and the development of a deep conception of thinking skills that is inclusive of different cultural expressions of thinking. The value of the PYP in teaching these skills was widely recognised by the participants. In an information age that requires students to interpret the validity of all that they read (Participant 36-TC), the great advantage of the PYP's inquiry-embedded approach was that it inculcated a range of thinking skills, such as:

- critical thinking "looking in depth at things. It's analysing, it's pulling things a part,
 it's not just taking things at face value. It's asking questions...and find out answers"
 (Participant 36-TC);
- creative thinking "Trying to think of different ways to look at an issue, so it's very linked with critical thinking, but I think it's sort of trying to think outside the box. You

- know, we can go about something in quite a structured way, and I think it's about trying to clear our head and look at it in creative ways" (Participant 36-TC); and
- problem solving "trying to work with others, and individually, to come to conclusions about things. I think you've got to be using creative and critical thinking to solve problems. You know, even in a simple way with children if they're having a disagreement in the playground you're creatively thinking of how we can solve this problem so that everyone feels comfortable about it" (Participant 36-TC).

One Australian-based interviewee articulated the strengths of the PYP in "that we are hopefully helping children to be...critical thinkers, to be creative, to learn to problem solve, to learn to discuss together, to look at different points of view and then to consider where they stand on that." She believed that "having the attributes of the Learner Profile is also really important. I mean, you can be open-minded [but it] doesn't mean you have to take on everybody's point of view and that you don't have your own opinion, but you can still be open minded to alternatives" (Participant 36-TC).

The inquiry based approach of the PYP was central to the success of the PYP in this aspect as it focused on

"the kids asking the questions...it's open...you can be led to go anywhere...sharing their knowledge is the best part because they...become knowledgeable and they're teaching other students what they've learned, but they're also excited about finding out new information" (Participant 35-IC).

(iv) The PYP focus on transdisciplinary learning

Another educational manifestation of transculturalism is an ability to think in a transdisciplinary manner (Kidman & Casinader, 2017), and this aspect of the PYP was noted by many participants. A participant from School 2 found the PYP to be strong in enabling students "to create link[s] between the disciplines" and that "when they [are]able to get the skills to be able to make those links, they will be able to make links [with] those things from what they learned at school, with their daily life, outside of school" (Participant 15-TC).

One Australian teacher also found the PYP broadened his own outlook globally: "I, sort of, got swayed into the globalisation of the curriculum because I felt that we were becoming ... very much 'Aussie' in our curriculum delivery. We were trying to do a lot of integrated topics that were just Australian rather than global, so that was my attraction to PYP" (Participant 38-TC). Similarly, another kindergarten teacher from School 2 described how teaching in this way opened her own mind and approach:

"The children are 5 and 6 years old, so they're really sort of fresh out of the box, and it's unbelievable that when you give them just a tiny bit, how much you can get out of them, how much discussion comes out, how many connections they make to a very short experience of life that they have. You know, they connect—that's how they learn...They connect it to something that they already know, their base knowledge or experiences...[A]s a teacher, it's taught me not to focus so much on sort of the small themes, and really to think big and to think globally...[Students] need to understand that there is a world outside of...Quebec, Canada, and so on" (Participant 19-TC).

Consequently, teaching the PYP improved her skills as a teacher

"100 per cent. Why? Because in the past...everything was very sort of in the box, and I had my plan...I had my plan, and this is what we were doing today, and it was all there, and every child did workshop number 1, 2, 3, and 4, and then I corrected it and it went in their folder, and it was all nice and neat and super easy, right, because it's all very organised. And now I much more open to letting them sort of lead the teaching, so whereas before, somebody said, 'How does this work?' I would tell them the answer and move on" (Participant 19-TC).

(v) Promoting collaboration between students and staff

The positive impact of the PYP in generating a positive learning environment that encouraged the school community to work more closely together was also noted in the survey responses. A teacher from School 2 highlighted how the PYP promotes collaboration between and amongst teachers and learners:

"I really enjoyed in the Learner Profile and whilst to develop the kids ... to support each other – like if one of them is having trouble, then you can just encourage students to say – okay, what should you do? You see your mate is in trouble, what can you do to help him, to improve?" (Participant 15-TC).

Similarly, an Australian teacher from School 3

"loved the background structure that's in it and I like the way we develop the profile and the attitudes and all that's kind of going on in the background, but...I like the way it's the teacher's role to get that out of the kids and get that hands on happening. Kids are not at tables. They're not structurally sitting down trying to nut something out themselves. They're working with each other, they've got everything happening in the room, I'm there as the facilitator [to] bounce in, bounce out and sort of redirect their thinking...I'm not someone who teaches things in isolation, so I love how it can all be meshed together" (Participant 32-IC).

One IC teacher further highlighted the ways that the PYP promotes collaboration with and between students:

"As a framework, it's exemplary for using backward design and really keeping what are the things you really want students to understand and be able to do, and that focus on concepts. One of my frustrations as a student was always about relevance, 'Why am I learning this?' I believe that the PYP really addresses that in a meaningful way. Love the collaboration aspect to it, so the coplanning and co-teaching models that we put in place are really, really powerful...You can speak to the power of common language....[But] I don't see that as [just] it though; I really do think it's that emphasis on learning really worthwhile material,

worthwhile skill set, so an emphasis on process" (Participant 4-IC).

Another IC teacher from the Australian School 3 noted how teachers and students

"bounce off each other all day long. We work with each other. I don't like to think that they don't see me as this person, this guru who knows everything. I often show that I'm learning too and that I want them to learn through different experiences. Connections are a huge thing. I want them to piece everything together. I know I said I just live and breathe for six weeks, and even now, still I'm like this is our first unit of inquiry. I want them to constantly be making those connections, and I show action and I expect them to show action too and we know we're bringing in; there's lots of sharing and things like that" (Participant 32-IC).

CI teachers spoke positively of the PYP such as the way it allows students "to learn other people's perspectives, to learn about the world and issues that are going on in the world [and] to work with different people too, because of all the group projects and what not" (Participant 3-CI). But the PYP didn't change this particular teacher's personal worldview:

"because...even before coming to the international programme, I considered myself very much open-minded. I was very fortunate to grow up in a family that [was] very well read and watched the news, and we knew what was going on around the world...I wasn't sheltered" (Participant 3-CI).

An Australian TC counterpart affirmed this view, adding that the PYP promoted collaboration amongst staff by having a common language, as suggested above in Section 5.1(i). This collaboration extended beyond the school:

"one of my attractions to PYP was that cross-collaboration between, you know, Government schools, private schools, across the world. I think that had a huge attraction for me, because I think every staff member who's been a part of PYP, and is a part of PYP, brings something to the table. You know, you're not having someone who's an expert saying, 'This is how I think you should do it.' As you saw from my staff, you have staff who have been doing it for a while, some are new — but every time you become part of the PYP network, you are bringing something extra to that collaborative planning with it" (Participant 38-TC).

As one IC teacher found, being part of a cohesive network of teachers was another benefit stemming from

"the values,...the attitudes,...the whole Learner Profile and how they had this harmonious feel when I entered their school because it was our networking school as well, because, although it was a government school, it still had the PYP...I've been to other professional learning where they've brought in that inquiry, these units of inquiry and how they let the children wander and explore and I've always thought, 'Oh, that, - I really love that because you could have so many inquiries going on' and it's satisfying for the children because they're coming up with answers and solving what their questions are, or what their questions have been, rather than always being teacher directed. This was more...student led, student directed and...a bit more open, rather than structured" (Participant 35-IC).

Another IC teacher suggested that "because of the collaborative nature of PYP, it's also helped us as a school, [to] start thinking about co-teaching models and all kinds of things, which probably wouldn't have come about without PYP..." (Participant 23-IC).

At least one teacher from School 4 wished for more collaboration beyond the school, while acknowledging the benefits of the PYP in the following terms:

"I think it is a very robust, rigorous programme. I think it allows the teacher and the student, and the parents, it's like almost a collaborative process of learning, which I enjoy. [But] I'd like to see more school to school interactions, but that's logistics and demographically it's tougher that way" (Participant 25-TC).

Others had valued inter-professional interactions enabled by the IB and their schools. Some teachers commented on the way the PYP promoted more inclusion overall; coming to teaching in an IB school, one found it to be

"a very different view, with respect to education, pedagogy, practice, assessment. I was introduced for the first time to the Learner Profile, the attitudes and skills, and coming from another school system, I'd never seen something quite as accepting and inclusive, and that's what I really loved. And it's almost like you get a bug, like when you start teaching inquiry-based learning, student-centred, it kind of becomes part of you."

(vi) Enabling pedagogical leadership

The PYP also enabled the professional development and learning of teachers. As one teacher from School 4 found, the PYP

"put a new face on what I do. It moved me from an administrator, who does timetables and budgets and all those kind of things, to a pedagogical leader, and that [is] very much appreciated...and I still have an opportunity to sit down and talk with teachers about what they're doing and why they're doing that, and so that's been really rewarding" (Participant 23-IC).

Another teacher from School 4 also valued how the IB promotes professional development, with

"this hub or network that IB has where they offer conferences in certain areas in the world. And you're welcome to put in a professional request and travel there, and the school supports you. So that's the networking thing [where] you can borrow and tweak different teaching practices, and then you bring it and make it your own, into your own classroom" (Participant 25-TC).

The complexity and extent of these collaborative relationships that the PYP facilitates is also an indication that the PYP embodies a complex view of society as the norm, again reflecting one of the inherent notions of transculturalism.

5.2 Personal and Professional Impact by School

Personal Impact

Professional Impact

School	Capacities & Skills	Individual Growth	Competences & Skills	Relationships & Communications
1	39.0	61.0	8.1	91.9
2	44.3	55.7	4.0	96.0
3	48.3	51.7	14.0	86
4	26.1	79	20.4	79.6

TABLE 4: Personal and Professional Impact by percentage codings of interview responses by school

The distribution of teachers' cultural dispositions across the four schools was fairly similar, and it is therefore not surprising that the patterns of perceived impact relating to undertaking the PYP were also in alignment. Overall, each school displayed the same basic characteristics of teacher perceptions as indicated by the previous analysis; that is, there was a tendency to see personal impact in terms of individual growth rather than specific capacities or skills, characterised by: firstly, an emphasis on the personal impact of cultural and global awareness; and, secondly, on the professional impact of cultural knowledge, improved student relationships and higher student outcomes student outcomes. There were, however, certain aspects relating to each school that are worth highlighting.

School 1

This school can be said to typify the patterns of overall findings in terms of personal and professional impact, particularly in relation to improvements in cultural knowledge, cultural awareness and global awareness.

School 2

The key difference between this school and the others was the almost total lack of belief in the PYP improving their professional capacities and skills, especially in terms of cultural knowledge. This was the only school in the sample which was bilingual, and an educational setting where most of the surveyed educators have been brought up and educated in such an atmosphere. It could be, therefore, that the educators in the school did not believe that they had made any improvement in these aspects of cultural capability as they had been living and working in a diverse cultural environment for much of their lives in any case.

Even here, though, there were those who had been transformed by international travel, such as the CI interviewee mentioned earlier who had been profoundly affected by her stay in Japan:

"You can read about something but, until you're in it...I mean, how many books had I already read that were either written by a Japanese author and placed in that time, but I would have never understood it the way I did by being immersed...I try to use a lot of empathy or having them act it out, so having them imagine themselves as that other person, so any time that there is that difference, that clash — so I can't necessarily say that this is a cultural example but let's just talk about friendships and when the children are having trouble understanding each other and, 'Oh, he called me this,' or, 'She called me that,' or, 'She hurt my feelings.' I always ask them to imagine they're the other person and say, 'What if...you say that? What if those words come out of your mouth and they don't mean the same thing because for that person" (Participant 10-CI).

Another CI teacher from the same school also believed that to understand cultural difference, one can both meet it or be deeply immersed in it, but the latter was preferable:

"the more you live it one way or another, the better you're going to understand it...Nothing replaces experience...How well can you understand it if you haven't lived it? That's hard for me because I grew up knowing it. As an English girl in a French society, where all my French teachers would mess up my name...They'd even misspell it atrociously...So, I've always felt that difference in culture" (Participant 10-CI).

School 3

There were two notable aspects of the patterns at the school in which the educators deviated from the overall conclusions. The first is that the teachers saw themselves as being personally impacted in a wider range of ways than the other schools. For instance, whilst growth in cultural awareness and flexibility of thought was seen as being significant, as with other case studies, teachers in this establishment also saw growth in areas such as a greater appreciation of educational philosophy (25 per cent codings) and improvement in their standing in the community (16 per cent).

In similar fashion, the school's teachers perceived the impact of being part of the PYP to have had a professional impact across a wider range of areas. In terms of competencies and skills, improved leadership abilities (14 per cent codings) was also significant, along with cultural knowledge (79 per cent). Developments in relationships and communications went beyond improved student relationships and outcomes to include improved parent relationships (17 per cent) and staff relationships (17 per cent).

The reasons for these differences may lie in the fact that this school had the lowest number of transcultural educators out of the four case studies, a pattern reflected in a slightly more defined insularity. Nevertheless, some of the school cohort displayed strong transcultural characteristics. One teacher (Participant 31-CI) who had grown up in Australia in an Anglo-Australian environment, but had then worked in Asia, believed that exposure to difference

"is critical because I think then once I was able to, say, interact with parents from a different cultural background, I found that a number of parents had a really different expectation that I hadn't experienced before, but then being able to get to know them and see other ways in which that community worked. I worked with a local teaching assistant which I really struggled with to begin with because things that she did I just don't understand. Even things like very specific about the time that she was going to go and have her break, it was all about food and it was about this, whereas I had not come from that...but I think I needed to experience that and be involved with it to then truly understand where she was coming from..."

She argued that the type of immersion is important:

"When I think about the kids that I am teaching now and the difference that they would be experiencing, a lot of them obviously coming from quite a privileged background travel, but then what they're doing when they're travelling somewhere is staying in a big resort and maybe just seeing a surface thing. For me, it was once I'd lived within that existence...I had the curiosity to learn more and to find out more. I think that living in it is probably more what's going to bring about your understanding" (Participant 31-CI).

Experience of cultural difference abroad provided some teachers with a reservoir of experience upon which to draw; for example, one CI teacher from School 3 (Participant 30-CI) grew up in England, lived in the US and had worked in Hong Kong, which heavily influenced their teaching practice and general outlook:

"I find I've got a wealth of cultural understanding to fall back [compared to] that other people who haven't been exposed, like in my upbringing...all my experiences, I get quite concerned over tokenistic nods to culture, the way it can sometimes be displayed" (Participant 30-CI).

Another CI participant from School 3 felt that there was not

"enough exposure to difference [at her school] but I don't have the solution to how you'd do that without it also to being tokenistic...I had a parent last year send me an email and say we're thinking about taking her on a holiday to Vietnam next year so she can just really appreciate how much she's got and how little others don't have. I don't think you need to go on a holiday to Vietnam to be able to experience that, that exists within here and...I think a lot of people that grow up around here live in [a local] bubble and don't realise that life exists beyond [the local bubble]."

Some efforts were made by the CI teacher to engage visitors from the local community: "The school's got a connection with the...Indigenous community, we've now got a couple of students that come to school here" (Participant 31-CI).

School 4

This school stands out as being the main exception to the patterns of attitudes evident in the other institutions. The proportion of comments relating to impact in terms of individual growth was significantly higher than the other schools (79 per cent versus 50-60 per cent), but there was also a similar significant increase in comments relating to professional improvement in culturally related competencies and skills. In this school, 20 per cent of the comments emphasised growth in areas such as cultural knowledge, compared with 0-8 per cent in the other schools. This focus on growth can, to some degree, be seen as reflective of the highly transcultural nature of the school's PYP staff as a whole. It is also a reflection of their general enhanced openness to difference and thus a greater willingness to embrace personal change as a consequence.

For example, several teachers across all schools highlighted the powerful influence of international travel on their personal and professional identities, and as a corollary of this, their teaching practices. However, for one CI teacher from School 1, the effect had been far more profound. She had been on exchange to Africa whilst at school,

"and it was mind opening...I definitely thought I was open minded ahead of time but, having gone through that, it was jaw dropping how much you just learn from being away from your home and being a young kid and trying to make sense of everything, because I lived in some very different homes, like some homes that were very open minded and some very closed minded homes because at that time...I do in my heart believe that living and breathing something just helps you to understand it that much more and whether that be a new language, whether that be a culture, whether that just be a way of living,...when we can be hands-on, it just helps our minds be that much more aware" (Participant 20-CI).

5.3 Cross-school themes arising in relation to perceived limitations of the PYP

Other themes emerged across schools in which participants described certain limitations of PYP, which in turn may impact on the capacity to teach and learn about cultural difference. Despite the expressed advantages of a common PYP language - see Section 6.1(i) - a major concern expressed by participants in both Australia and Canada related to the *terminology* of the PYP. This concern had two distinct manifestations: firstly, in relation to the complexity of language; and secondly, in relation to the nuance and meaning of certain concepts – particularly "tolerance".

The first criticism that was by no means limited to one Canadian-based participant, who was relatively new to the programme. He had been initially overwhelmed by "the amount and the complexity of the language used to describe and...sometimes it was quite heavy to digest...the best thing was with the practice" (Participant 15-TC). Understanding, articulating and agreeing on the language used within the PYP was a sticking point for several participants. Changes to the language and meaning of concepts created issues for a few teachers. Another teacher from School 2, for example, found that

"we spend an awful lot of time on semantics, on the wording. Our PYP coordinator, you know, she would go off to a workshop, and she would come back and say, 'We're not quite doing this part right. We need to change and have ... more concepts in a central idea', and so now we're back...to the drawing board, rethinking our central idea. So, often times, we'll do that, and then not a couple of months later, that wasn't quite the way it should be, so we have to change it.

I'm all for improvement and fixing what needs to be fixed, but sometimes we spend an awful lot of time on just the wording of something, and the other thing that really has taken me a long time to get used to is the amount of assessing that comes along with the programme. We're assessing a lot. As you know, when you're assessing, you're not teaching, and when you're not teaching, you feel like you're behind" (Participant 19-TC).

Such comments suggest that the PYP lexicon needs to be continually reviewed to ensure that it remains both relevant and usable in the context of the PYP as a whole.

(i) The concept of 'tolerance' in the PYP

One unexpected finding was that, regardless of CDT, participants across all schools were often uncomfortable with the IB's notion of "tolerance". This notion is central to the lexicon of the PYP; however, the word "tolerance" was a particular point of contention with teachers in both Australia and Canada. Typically, participants who found it to be problematic found its inclusion in the PYP to be a

"very complicated one, I think a lot of kids don't truly understand it. But I think it is so important to be there. I'm constantly bringing kids back to that piece of the fact that it's okay to have differing opinions, it's okay to have your own ideas. But to be tolerant of somebody else means that you're accepting of those and not reactionary to it, but really thinking about it and it incorporates all the other essential elements, like empathy and open mindedness. In order to be tolerant, you're kind of all those other essential elements built in in order to be able to have tolerance. And a lot of kids, I teach twelve year olds, have difficulty with tolerance because they are quick to very much of their own mindset versus being tolerant to the mindset of other people" (Participant 9-TC).

A similar theme came up at another Canadian school:

"I think it's accepting of people even if you have a difference of opinions or thoughts. I had a little girl today say, 'They're being mean to me on the bus.' And I said, 'Well, how are they being mean to you?' And she said, 'They're just annoying me. They're just making noises and I don't like it. They're just running by me.' And I said, 'Oh! Well, this is where we have to be tolerant. You might not like what he's doing, and you can ask him to but he his younger', so I would say that there's some things that people that are going to do that are different than what you do. You might not even believe...or agree with what they're doing, but there

are...some behaviours that we just tolerate.' And I would say tolerate is when it's kind bothering you a little bit; that's when I would say tolerate. So, it's more of a negative term almost" (Participant 24-TC).

Another CI teacher shared the same view:

"we're using terms that work internationally and they used the United States as an example of where tolerance is going to be the word that's better understood over acceptance, which really shocked me, because for me tolerance isn't enough. But I guess that's just reality...sometimes you have to learn to tolerate others rather than truly accept them, but I always push for more—because to just tolerate means you're still not completely open. If you're only tolerating something, there's still a part of you that's resisting and deciding to hold on to your belief without being willing to accept that that really might be okay for that person, and I guess there are situations where it is, it does come down to tolerance but I think acceptance is the ideal" (Participant 10-CI).

Other teachers also described tolerance as being a "negative" term (Participant 5-TC) and wanted to see alternatives used (Participant 20-CI), such as "acceptance" (Participants 21-CI, 23-IC, 4-IC and 24-TC). Some (e.g. Participants 2-CI and 19-TC) offered a more nuanced view by coupling tolerance with being accepting and open minded:

"Tolerance means that you're not necessarily understand[ing] what's happening in front of you, so if it's a value or tradition or let's say, religion, but you are informing yourself about it and you choose to accept what is in front of you...In the PYP with the students that means that we need to celebrate our differences instead of be in conflict with them" (Participant 12-IC).

In essence, teachers found the PYP assumption that 'tolerance' had the same meaning and import for all people, regardless of location of origin or residence, to be flawed. It also contradicts the transcultural principles embodied in the IB Learner Profile and the inclusion of international-mindedness, which expects and celebrates differences in thought and acceptance as a normal part of contemporary life.

(ii) Inadequate time to inquire and learn

A theme amongst some teachers in both countries was the issue of *limited time* because of the pressure of having to complete the PYP themes in six weeks:

"I've often heard people say we need more than six weeks. Which I sometimes agree with and I sometimes don't. I know that people want to get in there but it actually turns out that they're doing more fluffy stuff than they need to...irrelevant tasks that are somehow connected to the trans theme or somehow connected to the central idea...I was, once upon a time, not okay with the six weeks but now I see the value in that."

By 'fluffy', she refers to what she sees as

"irrelevant tasks that are somehow connected to the trans theme or somehow connected to the central idea... when it was first starting,...we [were] used to [this] really nice activity, which is true. It was a really lovely activity, but was it really using kids time wisely?...They liked a certain activity that they really wanted to do because it looked good on the walls or it looked good in portfolio or something like that, which it possibly did. But it wasn't student driven" (Participant 32-IC).

For one interviewee in her thirteenth year of teaching the PYP,

"sometimes it can feel restrictive, so as much as it's wonderful that things are mapped out, you also sometimes feel that, even though it's inquiry and children are supposed to be leading, you're still making sure you don't step on other people's toes so, when a child goes off in a direction and he's going into oceans, being like, 'Oh, but you're going to go there in Grade Five so just hold back a little bit or do that for your own interests but keep in mind you're going to be doing that again later and let's steer you back this way,' so sometimes I feel I don't want to be putting out a fire. You want to be nourishing it, so it's a delicate balance" (Participant 10-CI).

A CI teacher in Australia felt that

"it would be great if we could just do four [topics] because then you can go deeper and go further. I find sometimes I go, 'Okay stop, we've stopped talking about that because we've got to go back to the line of inquiry,' and sometimes that can be quite challenging for the kids as well as me. But, I think the time aspect, for me, is the big one, and I think that's probably not an uncommon one that you hear in the PYP environment. But, the six themes are so important that you wouldn't want to drop any of them, but I do sometimes find I'm pulling them back rather than letting them go deeper...I find the difference between the training that you get in the PYP and putting it into practice is a huge leap, you get a lot of theory chucked at you very quickly and then you get put into the classroom and you're like: 'I've got to get the concepts, I've got to do this, I've got to get the student profile.' I think we, historically, try to do things too quickly instead of just slowing down and letting it happen'" (Participant 30-CI).

We shall return to the issue of time limitations in the recommendations below.

(iii) Rigidity of IB curriculum and integrating it with others

A corollary of the last concern was the rigidity of the PYP curriculum, and when combined, the two limitations were seen as making the PYP more focused at times on curriculum completion rather than sound, deep learning, This pressure was especially acute in all four

schools as they required to cover and meet local state or provincial curriculum framework outcomes:

"There is a little bit of rigidity, so I do find that the IB ideal of wanting to use the planner for everything you do [difficult] – I get where they're coming from, but, at the same time, in [terms of] practicality, it just doesn't necessarily work...you have to filter all of your science and social science curriculum through your six units of inquiry...well it's not necessarily feasible when you're a public school... We've been working on that, [and] we [also]have a provincially mandated curriculum to teach and that doesn't always jive" (Participant 4-IC).

One teacher from School 4 suggested "...for new schools, the planner is ridiculously difficult. There's no way that they can...sit down and do well with a planner, and for schools that have been in it for a long time, I think it's overkill" (Participant 23-IC). For another CI participant, teaching the PYP involves

"a lot of work. Even though I've been teaching IB for three years, I still feel like a beginner. I still feel at times — I struggle to make it as inquiry-based and open for the students as possible, because I teach Grade Four, so they are quite young still and there's lots of skills that I have to physically teach them. There is a lot of direct teaching that needs to happen and so I try and find that balance. Sometimes, I'm like 'I'm a bad IB teacher because I'm teaching them these things, they should be figuring it out themselves', but they're nine, so they need some more direct teaching sometimes" (Participant 3-CI).

Another teacher from the same school found that given "the amount of time we have in a year to actually cover everything, I often find I'm struggling for time to get things done in a really authentic way and a really purposeful way without taking away from another unit and letting kids explore. I find that really hard to balance sometimes" (Participant 9-TC).

(iv) The limitations of in-practice learning

One of the more salient general findings of the research study was that the teaching of the PYP itself can be an effective form of professional development for those involved. Figures 7 and 8 show the cohort's perception of how the teaching of the PYP had influenced their cultural capacities both personally and professionally. However, it would appear that the impact of such 'in-practice' learning is more profound if the teachers concerned are already transcultural. The effect is perceived to be much less in those who are more individualistic.

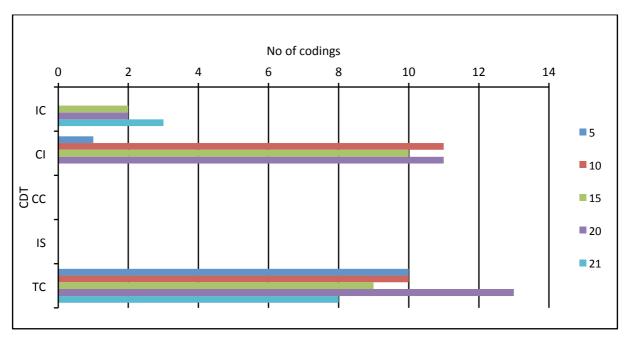


FIGURE 7: Cultural Dispositions of Thinking: Impact of PYP Teaching on personal cultural awareness based on length of teaching experience

Consequently, Figure 7 shows that transcultural teachers, regardless of whether they had been teaching for 5 or 21+ years, saw marked development in the level of their cultural awareness. The same occurred with those who were CI, especially those who had been teaching longer.

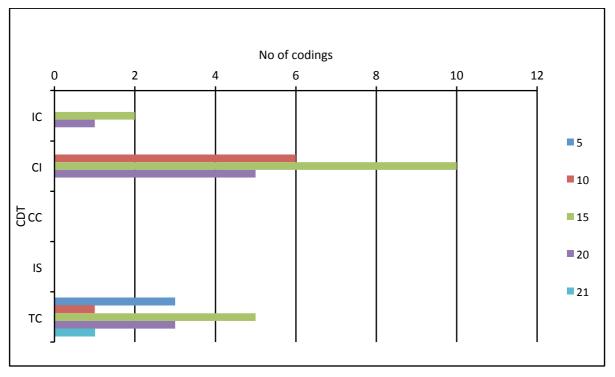


FIGURE 8: Cultural Dispositions of Thinking: Impact of PYP Teaching on Professional cultural knowledge based on length of teaching experience

In contrast, professional growth in cultural knowledge (Figure 8) was perceived to be more significant by the CI group, especially those with 10 to 15 years or more of experience. Indeed, overall the professional impact was more noticed by more experienced teachers. Only younger transcultural teachers saw such growth in themselves as a result of their reflections. These patterns suggest that this form of 'in-practice' professional learning in cultural capability is more effective in teachers who are already transcultural or disposed towards it. It is noticeable that, as shown in Figures 7 and 8, those with a preference for individualistic approaches are less open to growth in cultural capability, whereas those who have a more community centred way of thinking are inclined to develop such capability; that is, they (CI teachers) are more disposed to transcultural growth than more linear thinkers (IC). These patterns also indicate that professional development that seeks to increase the level of teacher transcultural capability should be seen as a long-term process; it cannot be achieved merely by the undertaking of specific professional learning activities. Teachers need time to develop their transcultural capability and cannot just 'acquire' it through one-off activities.

E Recommendations

<u>6. Research Aim 6: Recommendations for the future development of teacher transcultural capacities in IB schools that offer the PYP.</u>

The final section of this report seeks to provide the IB with recommendations of how the findings of this study could inform the future direction of the PYP. Our emphasis is on ways of expanding and deepening good practice, and potential ways of making excellent practice, common practice. There are five main recommendations that arise from this study relating to the future development of teacher transcultural capacities in IB schools that offer the PYP:

- 1) Embedding transcultural concepts and capability more deeply and explicitly in the PYP curriculum;
- 2) De-crowding the PYP curriculum;
- 3) Professional learning and development;
- 4) Initial teacher education and IB staff recruitment; and
- 5) Providing curriculum and operational space for the nurturing of transculturally oriented teaching.

<u>6.1 Embedding transcultural concepts and capability more deeply and explicitly in the PYP curriculum</u>

If transcultural capability in PYP teachers is desired by the IB, then this small sample of teachers suggests that it is starting from a strong base. Every participant in the study demonstrated some degree of transcultural capability, with half identified as fully transcultural, showing a high degree global and cultural knowledge and awareness, along with a deep commitment to the PYP core principles. However, the fact that just under a quarter of teachers was distinctly less transcultural than the rest of the cohort suggests that more work can be done in the areas of teacher ideas and attitudes. While professionally committed to PYP and its principles, these teachers demonstrated less personal commitment to its ideas and attitudes, views that appeared to be linked to a lower degree of global awareness, cultural knowledge and cultural awareness. This was not connected to the amount of time teachers had spent educating in the PYP. As suggested above, length of teaching experience, direct PYP experience and age appeared to have little influence on the degree of transcultural capability.

Whereas deep immersion in different cultures is of enormous value and associated with transcultural capability, enabling physical travel for teachers is not without practical, financial and personal constraints. Teachers reported, for example, that the ability to travel to IB workshops overseas was delimited by school budgets; consequently, other deeper forms of travel to inform cultural knowledge and cultural awareness may not be practicable within the finite resources of schools. A question, therefore, is how to develop IB capacity drawing from existing contexts, knowledge and practice?

Based on the testimonies of participants (who were treated in this study as experts offering powerful insights to guide research), the following areas could be used as a basis for amplifying transcultural capability in the PYP.

One starting point could involve creating a common language about what is meant by "culture". Definitions varied amongst participants, from background influences such as family, to values and dispositions. Articulating what is meant by 'culture' could be generated through professional learning conversations conducted within and between schools, and through IB workshops more generally. A corollary of this conceptual discussion could be

what constitutes 'action' and 'tolerance'. A challenge here is that some teachers were wary or overwhelmed by what was labelled by one as "semantics". But rigorous, reflective and critical discussion about the values, meanings and intentions of any educational programme should be arguably central to its on-going development.

As a result of these conversations, the IB could explore ways of explicitly embedding transcultural capability in the IB curriculum, or alternatively, investigate modifying the existing curriculum in some way to incorporate it.

6.2 De-crowding the PYP curriculum

Part of this could involve freeing up time within the existing curriculum framework. Teacher feedback from both countries suggested that covering six transdisciplinary themes in one year may be too much, with several suggesting that removing at least one area would enable them to pursue the areas in more depth; consequently, there may be a need to create: (i) more opportunities for student inquiry; and (ii) more time for teachers to collaborate.

With regards to learning, efforts to "get children into being ... creative, deep thinkers" may be constrained because "they're just getting into things and you have to move on because the next timeframe is coming, and I think that's a real shame" (Participant 36-TC). One recommendation from teachers was for the IB to allow students more time on fewer areas of inquiry: "look at...Grades One and Two. You've got your six transdisciplinary themes... Do three in one year, three in the next. Stretch out your time for inquiry. This would allow students to profoundly "get to go into what they're researching and really understand it and really master their learning and the way they end up presenting their project and they own it." (Participant 10-CI).

Staff also valued opportunities to

"get together and...talk pedagogy, we talk content, and we talk all – basically all the essential elements...I think the limitation piece is the amount of work it takes to get there, in terms of collaboration. And we're really fortunate to have...ample release time for people. But if I was in a school where that wasn't the case, I don't know how it would operate. So, teachers need an opportunity to sit down and talk. And in our model, at this time of year, we're trying to collaborate and reflect and so forth, and meanwhile the teachers are just trying to keep the kids under control. So, it's kind of hard...to be a reflective intellectual about your teaching...it is a programme that I think requires systemic timetabling and release time for people to be able to do their jobs. I wonder, too, sometimes that with the PYP planner, I think for a school that's been involved for 10, 12 years, sometimes the planner and planning process gets in the way of good teaching, because it's so complex...sometimes teachers will express that concern, like, 'There's so much paperwork', which really, in many respects – the intention is to help student learning, but I'm not sure it always does..." (Participant 23-IC).

Some teachers in both countries further identified a challenge in covering the IB curriculum as well as meeting the mandated requirements of local curriculum (particularly in Australia). Several British Columbian teachers, however, noted that the new curriculum in that Canadian province was more aligned to the spirit and intent of the IB, and was thus easier to

teach simultaneously in a coherent way. This is not so much a recommendation as a consideration to be taken into account.

6.3 Professional learning and development

Teachers described the influence of the PYP on their teaching practice, emphasising its powerful conceptual framework and teaching principles beyond "the IB brand" (Participant 5-TC). The PYP focus on transdisciplinary learning was seen by many participants to be a major benefit of the PYP. One participant specifically referred to the power of transdisciplinary learning to enable students to make connections and collaborate while respecting each other's differences. This openness to disciplinary difference with transdisciplinary teaching aligns cleanly with the inherent principles of transcultural thinking, another reinforcement of the embedded transculturalism in the PYP and the IB in general. It is also a connection that is the subject of recent, ongoing research into inquiry teaching across the disciplines (Kidman & Casinader, 2017).

There is potential scope in IB professional learning to more explicitly develop transcultural education rooted in a reversed perspective of cultural difference as the prime state of global society, rather than being one set in cultural contrasts that need to be brought together (Casinader, in press; 2016). The IB could explore ways that teachers could improve the transcultural capability of PYP teachers, which, in turn, could enable them to develop transcultural mindsets within PYP students. This includes provision of professional learning and development that could be driven by pedagogical leaders who have demonstrated high transcultural capability.

Our participants have provided some useful ways of engaging cultural difference upon which opportunities could be leveraged to build transcultural capability. Some of these included: the power of being immersed in different communities (both locally and internationally); presenting students with examples of difference and using the inquiry-based approach to explore them and make personal and global connections; drawing from the experiences of students from diverse backgrounds within classrooms and through class conversations; exploring cultural diversity through excursions and incursions by the local community; and through the use of information and communication technology to enable exploration of and dialogue with people from diverse backgrounds. Much of this, as we have seen, is already being done and often done well by PYP teachers. The challenge is to make excellent practice a common practice.

6.4 Initial teacher education and IB staff recruitment

Teacher education is beginning to recognise the importance of building such transcultural capability within teacher graduates before they enter the school setting as service professionals (Gutiérrez Almarza, Durán Martínez & Beltrán Llavador (2015); Holmes, Bavieri & Ganassin (2015); Messelink, Van Maele & Spencer-Oatey (2015)). One school leader highlighted the kinds of mindsets that he was seeking in recruiting new staff:

"I was looking for staff who were diverse in their thinking, that they [did not have] one mindset on, [that is] 'This is the best way of teaching and this is the best way of delivering great learning programmes.' I was looking for more staff who...had different backgrounds [and who] had an experience overseas. I was looking for that staff member who was ready to embrace change and not think that we just have to, you know, align ourselves to the [national] curriculum, but we can look at other things we can

do. So, my recruitment of staff, and then looking at staff within your own team who could come with you on that journey, were the staff who...I felt I had a connection with in the sense of they were ready to do left and right thinking [and] weren't just single-minded that, 'We have to teach maths this way, or we have to teach', you know, 'social studies this way'. They were looking for other pathways to do it" (Participant 38-TC).

His personal view was that

"if we've only got teachers and staff who are only teaching for developing kids' knowledge, skills, understandings, I think we've got the wrong calibre of teachers. I think we should have teachers who are constantly questioning, 'How should we live in this world?' And if they're not doing that on a daily basis with their own lives and then trying to impart that on their kids through their own teaching styles, knowledge, wisdom — you know, my biggest thing is I keep putting to the staff that we want to be able to develop in these kids — and it starts with you as teachers — a sense of gratitude, strong sense of empathy and, for this generation of kids, they need to have mindfulness. Now, if we can't do that ourselves, then how can we expect our kids to do it?" (Participant 38-TC).

The development of a transcultural tool that would aid in teacher recruitment was also recognised as being of value by the principal of one of the Canadian schools, but it is a possibility that has potential global salience in the delivery of the IB, as well as for providers of initial teacher education.

<u>6.5 Providing curriculum and operational space for the nurturing of transculturally oriented teaching</u>

This recommendation derives from the many examples provided by participants of practical illustrations of how they engaged difference within and beyond their classrooms. Participants provided four main examples in which IB PYP schools can provide opportunities to experience and learn about cultural difference, but such approaches were not common across the sample schools. Collectively, these examples reflect priorities for inquiry learning that need to be embedded more firmly in the teaching of the PYP across IB schools, either through modifications to the PYP's official IB documentation, or through IB PYP schools committing to operational policies and processes that promote such learning experiences.

(i) The power of being immersed in different communities

Some teachers talked about the power of immersion from in terms of their own experience and providing opportunities for students, either through travel or school exchanges. A teacher from School 1 (Participant 24-TC), who grew up in Canada and came from a culturally diverse family of teachers, extolled the powerful experience of immersion in other cultures. Her previous travels to Australia, Africa, New Zealand, India, Europe and the Caribbean were

"very eye opening for me, being a person from [a community in which] everybody was the same culture, everybody spoke the same language, everybody went to the same church...I realised I

that was very closed minded when I was younger...having an adventurous spirit I think, is what led to that aspect of really wanting to try and get out and see the world. And I bore really easily!"

An IC participant from School 1 also emphasised the learning power of students being immersed in different cultures: "you have to make them live the difference. For any learning and anything to come about you have to put in place an opportunity for students to really learn" (Participant 4-IC). Another IC teacher from School 2 in Canada felt that

"to live that difference is probably the key component of understanding another culture or another country. However, at the age of my students they pretty much talk with whatever the parents choose to show them and whatever we choose to show them at some point. So, I would say live it as much as possible" (Participant 12-IC).

A teacher from another Canadian school held a similar view:

"[to understand cultural difference], you have to be immersed in it. I mean, I think you can get the peripheral sense of culture from observing, but I think you have to be [immersed]. And even immersion doesn't necessarily mean that you're going to be culturally aware, I guess. And part of that is just – in my view – is just the invisible parts of culture that you never know, and you just have no sense of what a person is and feels from the exterior view of them. Because to a large extent, and again from my experience overseas, much of my day was spent trying to not appear different, so obviously you change your behaviours to get that – to fit in, you know?" (Participant 23-IC).

Similarly, for another teacher from School 1 (Participant 9-TC), previous travel to Australia and New Zealand, as well as to Europe on a French exchange programme, "opened my mind" (Participant 9-TC). In a similar vein, a TC art teacher from School 2 (Participant 15-TC) grew up in France, travelled through Europe and spoke multiple languages. He described how travel influenced how he teaches the PYP: "Mostly by the relationship with the students, and using the technology [such as] Google..." He suggested that

"with the cultural diversity, it has to be triggered with some relation or subject about the unit of inquiry. Like sometimes, we're talking about Japanese art and we have some students from [a] Japanese family or at least an Asian country [and they ask], 'Please, tell us about it – what do you know about it?'... [we need to] make students aware that everyone is carrying some form of 'cultural baggage'; that is, a cultural background and set of norms...and as a teacher, I'm going to use those bricks to build...".

A CI participant from School 4 also saw great value in student exchanges for more senior PYP students:

"there's individual [ones] where students can go on their own, but then there's also the travel groups where they will go and they'll go to different countries and usually have a home stay option, which I believe strongly in because there's no better way to get to know people than to live in the home with them. And I got to go with a group - it was my third year here and I went to Japan with a group of Grade Six to Eight students and, myself, I got to stay in a home stay during that time and it was awesome because we kind of communicated with each other with a little dictionary. But there is a way of living together and getting to know each other despite the language but, for the younger kids, getting to explore different cultures. Just in the way that IB and PYP is based, it's ensuring that, when we're delivering curriculum, it is done in a way that explores different opinions, different ways of thinking" (Participant 20-CI).

(ii) Presenting students with examples of difference

The importance of challenging students by placing them in safe, yet unfamiliar situations was mentioned by some teachers as a key to students gaining some understanding of difference. For example, when asked how students can explore cultural difference, one teacher working in Canada thought students

"need to be presented with differences. I think you can get very trapped in teaching into presenting one different perspective and I think opening up your curriculum in opening up the content area that you're dealing with and recognise that there are differences. An example would be health education: different cultures of people believe different things in relation to how to keep yourself healthy. And so, me saying, 'This is how you keep yourself healthy', oftentimes I will send it home, say 'Ask your parents, ask your friends what do they do and bring those perspectives into the classroom'...I think it's very much coming back to exposing kids to that idea that there are different perspectives on things and that when you're becoming more knowledgeable...

I think there is something to be said to be being immersed in it and not just touching on it...I'm still in the trying to get to that part where we're immersing and I don't think necessarily we're totally there yet. I think it's important that kids do get immersed in it, 'cause I think it's one thing to see it in paper or hear about it, but to actually experience those differences speaks volumes. And I've seen it in the couple of first nation's pieces that have come out within our school community of just how connected kids can come when they're actually in it [as opposed to] just hearing about it or watching a video on it" (Participant 9-TC).

(iii) Drawing from diverse students within classrooms and through class conversations

The integration of students' own experiences into the inquiry learning process, where possible, was seen by several teachers as an important tool, and one that negated, to some

extent, the need for students to "live" difference to understand it. As explained by one kindergarten teacher who grew up in Quebec and studied in Spain (Participant 19-TC), she drew on the diversity of children within the school

"who come from different backgrounds [and] who have different experiences. Not everybody lives with a mum and a dad. There are children who have two mums in a school. There are children that have two dads. There are children that live with their grandparents, so they are exposed to that kind of difference" (Participant 19-TC).

Another teacher from School 3 (Participant 38-TC) who grew up in Australia also drew from the diverse experiences of children within the school:

"the biggest, most powerful time I've seen it happening here, is when children have come from another country and where that particular child starts educating the other kids about what their lifestyle was like from their previous country. And I think having these children be a part of some children who have come down from our Indigenous community, and understanding what their life is like, they've got a deeper understanding of how different their worlds are compared to what they normally are used to in their own home life" (Participant 38-TC).

Such an approach, which appears to emphasise cultural difference, serves to highlight another feature of transculturalism in that acknowledges the existence of cultural diversity, whilst simultaneously viewing that variation as the norm. To be transcultural is not to ignore difference; it is to transcend its existence as an inevitable concern on the assumption that homogeneity is the natural order.

The same Quebec-based teacher also spoke about the importance of ensuring that children obtained access to information from all perspectives, even in the face of parent opposition, so that any student-centred inquiry was based on sound knowledge:

"I think that it's usually ignorance of the information that keeps people intolerant or not accepting. So, I think if you educate children, especially when they are so little and so malleable and so easy to sort of mould – I think that if you teach them, they very slowly start to believe you, and even if they don't live it, they understand it, they learn it..." (Participant 19-TC).

In relation to "information" she cited the example of one

"experience where a parent took offence to the fact that I was teaching children about the Jewish religion, and we were learning about different celebrations of the world, so I told them some of the celebrations that they celebrate in different countries and some of the religions that go along with it, and although we went through some of the symbols that are associated with different religious celebrations, I wasn't telling them to believe in them or to pray to anybody in particular; I was just giving them the information, which is what I explained to the parents – that I'm

simply here to give the information. The child then learns the information and takes it where – you know, it's in there and eventually it would come out.

But for a parent to say, 'I don't want you to teach my child what to think' — that isn't our role. I don't think we've ever told a child what to think. We tell them the information, we hope to be sort of honest in what we teach and not give our particular opinion, ... to give them the skills to find out the information, [and] in kindergarten, oftentimes they don't have enough of the knowledge, and so we give them a bit more information. Also ... children are super inquisitive naturally and they ask a lot of questions, but when they don't, I pry. I say, 'Is anybody curious to know what kind of pets they might have in a country in Africa?' And then they'll say, 'Oh, yes, I saw a program, and then they start to bring out their background knowledge. But sometimes if I don't pry deep enough, they don't remember what they know, so it's kind of your job to remind them of what they know" (Participant 19-TC).

But she added that

"sometimes you're battling with what has been taught at home, and you know, you are giving your opinion when you're doing that. When I'm telling a child that they should be accepting of this, this and this, it's my opinion. It might not be their parents' opinion either. It's tough" (Participant 19-TC).

Teachers used other means to bring difference into the classroom. One participant explored cultural difference through classroom conversation:

"kids actually talk about it with themselves, in the class...We also provide them situations and scenarios, we give them pictures and say, let's talk about what's happening in the world here. Why do you think this is happening to this person? What do you see, notice, in this picture? I think that's really good because it's bringing back to what they already know about that culture. And then...opening their minds about it" (Participant 25-TC).

Similarly, another IC interviewee felt that encounters with difference could be created

"through a lot of discourse...we had them really analyse what is culture, what is civilisation, where is the crossover, how do you view that, and the discussions were really rich and they brought out a lot of their family biases. It just came out through the discussion and you mediate those, and you have to be open to the fact that students have views as well..." (Participant 4-IC).

One CI teacher in School 2 noted that students are "not always open-minded and empathetic as they should be to others. So, we've worked really hard on instilling that we should be accepting other people's differences, culturally and also in their behaviours"

(Participant 3-CI). Another CI teacher from School 3 believed that whilst one does need to experience cultural difference to understand it, exposure can occur in a variety of ways:

"I think you've got to be exposed to it, and exposure doesn't always have to be direct firsthand experience. It can be education, it can be listening to people, it can be firsthand living it, or reading it, or listening to someone who's been through it; primary sources I think are the richest sources of information.

Kids always go straight to the internet, but I think talk to someone first before you go to that level. I think under a steep level of understanding empathy comes quicker if you have experienced it because you have that sort of feeling already, but I don't think you need to have it in order to learn it. Maturity helps as well. The more times you're exposed to it, the more times you hear it, the more times you listen to it, the more it sinks in. For example, talking to the kids last year, when we did the unit of inquiry on Indigenous Expression, I had to say to them at the beginning, 'I actually don't know a lot about this subject. I'm learning alongside you,' which is really challenging. We did a lot of reading about it and I would say to the kids all the time, 'Okay, my opinion has now changed, I used to think this, but now I think this about the subject.' Especially about a lot of the information around the artwork, I didn't realise that dot paintings and line paintings were different and they came from different areas, and I always talked to the kids about that.

Then, we went to the Art Museum and heard firsthand from an Indigenous artist and they told us what it meant to them, and I kept bringing the kids back and saying, 'This is how our understanding is growing, this is how my reflection is changing.' I think the first-hand knowledge was really important for me because I hadn't had that before, and I said to the kids, 'This is something that I probably won't experience, I'm unable to experience this myself because I can't put myself in that person's shoes because I'm not an Indigenous Australian, but when I was growing up I was an Indigenous English person who then moved to a different country and had to experience — fish out of water,' and was explaining things to them that I did that they didn't understand." (Participant 30-CI).

Language education, in particular, was seen to be a powerful tool:

"I think one of the things that...we try to do as much as possible, is...that in PYP, we value and we respect, and we try to draw out those opportunities where kids are able to use language – maternal language. As we go forward in our school, it becomes a little bit more difficult, because our language of instruction is English, and we can, and we've had to deal with, the pods of kids who prefer to speak in another language. And for some teachers,

they believe that that's limiting their development of the English language. So, it's that balance...whenever possible, we try to...have opportunities, for kids with mother tongue...it's all those little things – those little nuances...that help us to... realise how we approach people, what we say, and what we're careful not to say too" (Participant 23-IC).

A CI teacher from School 4 drew from local curriculum and diversity:

"with the new [local] curriculum...we're really trying to integrate our Aboriginal ways of knowing, so incorporating storytelling, incorporating that there's different ways to learn than just the standard write, copy, learn. So, I'd say, it might not be how this culture learns. Like, it's not...direct instruction, but it's more of an open way of getting the kids — even like doing calendar with little guys. Some kids speak another language and they want to share that language with their friends and say the calendar in that language that morning and teach their friends. Or...I'd say to my kid, 'Do you speak Mandarin or Cantonese?' and they would say, 'Chinese'... he has his little books that he likes to bring in, but he's got kids that cannot read Chinese and they're all reading these books together...it's just them exposing different parts of their culture to each other and sharing that...it's the kids feeling comfortable" (Participant 20-CI).

It is important to note, however, that some teachers struggled with exploring diversity using the human resources of the school community. One CI teacher commented that

"sometimes I struggle with the fact that we're trying to have experiences with kids as teachers, so the Canadian...kid is going to try to have a cultural experience with [other] ones, [but] I don't have that richness, I don't have the lived story to pass that off" (Participant 21-CI).

Another CI teacher was initially uncomfortable teaching culturally diverse classrooms of students:

"I do believe in my role too, that I am the school mum for my kids for most of the day, so I do use that term with them quite liberally and they do call me 'school mum'. When they call me mum, I say, 'I'm your school mum'...it's stopping the divide of the title and the role that I have because, culturally, it was a big piece for me. I'd had school friends who were Asian and from other countries, but I hadn't ever taught [them as] student. I'd only taught Aboriginal students and people from a cultural background that were European or Canadian. So, when I first moved here as a teacher at our school, I had no idea that in an Asian culture the teacher was equated to be the Buddha. That was three or four years in and I was so uncomfortable with that because that positioning of hierarchy. So, I try to teach my class as a non-divisive rule; 'I am the school mum, I'm your helper but

we learn together because I don't know everything.'...that's my approach" (Participant 21-CI).

Sometimes, we see evidence that these conversations, excursions and examples of difference being based upon encounters to expose students to "the Other" based on explorations with outward appearances, such as skin colour. Nevertheless, despite the oversimplifications represented by such an approach, these examples were then used as an entry point into deeper inquiry based explorations of how understanding differences can highlight what all peoples have in common.

(iv) Exploring differences through excursions

Another way of exploring difference was through field trips, such as "a museum around Christmas time and we see all the different Santa Clauses around the world" (Participant 19-TC). A school leader from School 3 provided a powerful example of an excursion to remote Australia:

"The biggest one that I was so proud of was with my connection with the children...who decided to take on the Future Problem Solving project of looking at Indigenous communities and being with three of those students when they were in a remote village in Western Australia for a 10 hour drive, and just seeing their eyes open up and coming back from that wanting to do more. To me, that was the most life-changing experience...there are now 10 kids out there in the world, in Australia, pushing hard for Indigenous education, pushing hard for raising the profile of what we can do to help and support these communities and, more importantly, have an understanding of, they can't force their own western civilisation onto these communities" (Participant 38-TC).

It is important that such excursions are not seen to be "exceptional outings", but opportunities to deepen understanding of difference as a normal part of contemporary life, rather than understanding "the Other" in and of itself.

(v) Using information and communication technology (ICT)

The advantages of ICT in schools were seen by several teachers to be an effective way of exposing students to difference. One IC teacher used communication technology to provide students with opportunities to engage difference:

"I can Skype a group overseas. You can expose them through videos that people – that you have a connection with from other places around the world. You can set up a classroom and a provocation that would make them understand what it's like" (Participant 35-IC).

And when the technology fails, the same teacher uses it as an opportunity for problemsolving, citing an example from the morning the interview took place, during which "we had a great provocation" where the class explored alternatives:

> "And then we started to come with solutions: 'Well, we can this'; 'well we can do this'. So, I think they've got to be given similar experiences as close as you can and a unit of inquiry does that. You give them the provocation first and then you

teach the concepts within that...we've got a new Chinese girl in our classroom who doesn't speak a lot of English. Well, how hard is it for her? So, I suppose you've got to expose children to those things to be able to teach them; having contact with different network groups around the world enables you to do that in interesting ways" (Participant 35-IC).

Another Australian-based CI teacher also used Skype:

"technology is a wonderful thing at the moment. I've got friends who teach in America and England and Hong Kong and one is South Africa, so I try to Skype. We were buddied up with one class for a year and that worked really well because we were doing the same things but with different resources or with a different spin on it, so that worked quite well. Setting up that sort of global awareness is effective.

We've done a few challenges where we travel around the world doing – there is one where you walk around the world and every time you get so many steps you explore a new country, and...all those old school but really important activities you can do, which I think kids really enjoy. But...I find our children here their view is narrower, in a way, than the children in international schools that I taught because the international school kids have travelled and they've been to these faraway places, so they have the firsthand visual understanding" (Participant 30-CI).

Another used Google Earth to show students

"that travelling is not something that back in the time was something fancier, and affordable. Today, many people will travel in their life for work, for job, so it's becoming more and more [globalised], like for many of us and especially this generation is coming, they will feel less...in the borders, they will be able to travel at less and less cost, with all the explosion of air traffic companies. So, it's become cheaper and cheaper and they will have this opportunity to grow up in the world where — you want to go there? Just go! This is what we wish for them and this is what we encourage to seek those opportunities of travelling, of meeting people, of having all those experiences. I think — it was very good for me to have [a] European background [which] it drives to question about where I come from, what I speak and that. And...we create links or we create bonds — with the students about geography and about future" (Participant 15-TC).

(vi) Drawing on the Local Community

Several teachers saw engagement with the school's local community as an essential part of teaching about difference. One IC teacher from School 2 started with investigating local cultures: "we're going to talk about our local first nations and then we're going to go around the world. What's a first nation in other parts of the world and try to compare and contrast,

what's the similarities and what's the differences between those two groups of people" (Participant 12-IC). An Australian teacher did not think a person has to encounter difference in the broad community directly to understand it, but that local community activities were important:

"You don't have to directly encounter it, but you're still exposing the children to other places, and you've got to do that in a careful way... to avoid probably a value-laden approach and sort of an 'us and them', and 'one is better than the other', so it's a matter of looking at basic needs need to be meet, and some people unfortunately are not having those needs met, and how can we go about helping that?" (Participant 36-TC).

Instead, she drew on the local community to provide encounters with difference:

"we do a unit of inquiry here when they're looking at beliefs and values, so rather than looking at religions as such, you're looking at beliefs and values through different people's religious beliefs. They're going out to various places. I think that's probably one of the other things - getting first-hand experience from those people and using those primary sources have been a real benefit of the PYP. It's probably something we didn't do enough of beforehand, and I think that's so powerful for children to hear other people's experiences, [such as] when we looked at immigration we got grandparents and parents in who had been through situations, so they can tell their first-hand experiences to the children. So, we utilise what we have here, and I think that's very powerful" (Participant 36-TC).

Nevertheless, she was unsure of the efficacy of exposure to these kinds of differences "unless you're somewhere for a longer period of time", citing her experience of living in Canada,

"because perhaps, in my bubble, where I lived [in Australia] I wasn't exposed [but In Canada] I was doing different things. I was using public transport much more, so I was exposed to difference more...I think anything that builds you as a person therefore makes you a better teacher...you bring that into what you can then discuss with the children, the questions you can pose to them, you know, the depth at which you plan units of inquiry, the way you think about things" (Participant 36-TC).

Two CI teachers drew from their own experiences, as well as those of their students:

"I often integrate my travels into my teaching. Every single year I talk about my experience in Ghana and I talk a lot about Australia ... So I like to teach that this is what different cultures look like, they have some very amazing things, they're autonomous, they have skills, they have abilities, I show them pictures, we talk about different celebrations. Whoever's in the class at the time, I'll pool them and see 'what kinds of things do

you guys do' and try and really integrate all the different types of celebrations and traditions that different cultures have. So, I think it's more of a logistically a meeting thing rather than a living type thing, because of our set up" (Participant 3-CI).

Another CI teacher based in Canada drew from her own ways of learning:

"I learn best by doing, and I think that's the same with many of our students. So, if they have the opportunity to learn with kids that are different than them, engage with material that is not culturally typical for them, I think employ strategies around dialectical thought considering multiple perspectives. If that's sort of where you're going with the emergent, for me I think that is the most meaningful way to engage students and is to also teach with a social justice focus and critical literacy. When we passively consume things, the kids aren't necessarily involved in making their own meaning.

But I think that critical literacy also ties to what we're doing here with inquiry, it's making that meaning for themselves and considering how somebody else might feel differently in relation to a text or video. Certainly, it's important to invite in guest speakers and that's a really key part of our Grade Five programme because we want to make it as real life as we can. But my goal with the guest speaker is it's not necessarily diversity, it's more the topic they're talking about. My goal with diversity is to give the kids lots of different literature to read, to read stories from different perspectives, to choose maths problems that don't have Sally and Bob for every single question, for example...I have noticed over the last few years, the kids are really picking up on that and they will be quick to say how come it's all men in that picture, or they might say something like how come everybody in that picture has blond hair."

She brought her international experience to the students through

"lots of photos, lots of videos, as much as I possibly can, talking about it, having them ask questions, answering to the best of my ability, having them make connections to their own lives — in some ways is it different, well maintaining that the word 'different' does not mean a negative thing... I talk to them all the time about Wet Markets, and that's where I used to go shopping for my food. When I was working in Hong Kong I'd go to a Wet Market and there would be live animals and they'd kill the animal in front of me sometimes and could take home the chicken, and the kids are like, 'Oh gross, that's so disgusting. Why would they do that? It's so mean', but I would say to them, 'Well, that's just the way it's done, that's the way it is when you're in that environment, and to me, at the time, it was like, 'Well, do I want a fresh chicken? That's where I'm going to go.'"

She seeks to help them to "understand that that difference doesn't equal bad and just kind of getting them to understand and appreciate that different places are going to look different and that's okay and that goes for their self-identity as well" (Participant 3-CI). The challenge for her is to move beyond tokenistic encounters with difference:

"I always get a bit challenged when we do Chinese New Year and everyone always does a lantern or a dragon. It's a sad tokenistic side of things – sometimes I think schools don't go deep enough, but then it's really hard to go deep without making a judgement call, and that's where, I think, we have to step really carefully" (Participant 3-CI).

An ongoing challenge in relation to these examples is to ensure that these learning activities or experiences move beyond tokenistic gestures to more embedded infusions of diversity into everyday life. Such encounters would seek to foster openness to difference and nuanced teaching and learning about difference.

F Conclusion: A Future Perspective

A difficulty with interculturalism, which is central to the mission of the IB (n.d.), and multiculturalism, is that they fail to take into account certain contemporary dimensions of globalisation, embedded as they are in the pre-contemporary globalisation era of the latter 20th century. The increasing interaction, cohabitation and work of people around the world demand needs for global competence (Zhao, 2002) and "the ability to move across cultures comfortably and fluently" (Zhao, 2009). "As well as understanding other cultures", write Hannon, Patton and Temperley, "developing global competence offers up for scrutiny our sense of our own identities, core values, and cultural practices" (2011, p.4).

This report is arguing for something more. We deliberately use the more expansive term transcultural capability to encompass both cultural understanding and the ability to live and work within and across different cultures, the outcome of a disposition to see the existence of cultural variation as a societal norm, and not an aberration. It is a cultural approach that is framed around modern concerns, in which difference is the accepted reality and homogeneity the abnormal.

Overlapping and intersecting this is a wider interest in developing 21st century skills alongside *transcultural capability*, such as problem solving and critical thinking (Kahn et al., 2012). These approaches focus on emotional and social dimensions, and in schools, are typically focused on students; however, this research has examined the under-developed area of teachers.

This report starts with understanding the influence of background attitudes of teachers in determining the effectiveness of student-focused efforts to engage cultural diversity and its challenges and opportunities, not only in schools, but also in preparing students for life beyond the classroom. It is based on the premise that teachers need to possess a different form of cultural expertise to meet the needs of students in and from culturally diverse settings. Its investigation of teachers' transcultural capacities, individually and as part of their school staff cohort, has explored the implications of patterns of CDT for teaching and learning within the PYP. Being transcultural means seeing cultural variation as the norm rather than the exception. This is akin to "open-mindedness" in the IB. Most of the PYP teachers were either transcultural or one CDT away from it. At least half of the sample cohort in three of the schools had designated as being transcultural. Just over a quarter of all participants were largely individualistic in their approach to thinking. It was this group that tended to display attitudes and approaches that were less attuned personally to the principles of the PYP, regardless of their professional commitment to PYP, which overall was very high. These participants demonstrated highly abstract comments on thinking in strong contrast to the strongly inclusive tones of the TC and CI participants. Their focus on the concept of thinking rather than on the people-process interaction had, as its corollary, a view that cultural variation was relatively less important.

There was an association between teacher CDT and their individual notions of culture, the development of which was shaped by family background and the context of the participants' upbringing. Overall, the more individualistically-focused teachers defined culture in more conventional terms, such as a set of values shared within a community. More transcultural views highlighted the importance of relationships and a tendency to place matters of culture in a narrative context to bring out the natural complexity of real-life situations. Culture here is being defined more as an inner manifestation of identity that is fluid and changing and less by the outer, more tangible aspects of culture and difference.

A more transcultural notion of culture reflects a willingness on the part of the teacher to be open to difference and more nuanced in their teaching about difference. Human relationships and interactions are not reduced to simplistic references to cultural identity based on outward appearances, such as the colour of one's skin. They were more globally aware, with a majority demonstrating high levels of whole-world consciousness.

For those demonstrating a transcultural CDT, the range of factors that created it was diverse. A major influence was the nature and degree of globalising experiences that an individual has been involved with, such as travel. Nearly all the transcultural teachers had visited at least two other regions of the world, with the majority of that subgroup having experienced at least four regions, including their place of birth. They had travelled in both personal and professional contexts, suggesting that transcultural capability is not just a professional attribute that can be acquired, but more of a personal mindset that needs to be stimulated and nurtured through 'globalising' experiences. This is important to the recommendations.

We suggest that the realisation of transcultural capability requires a shift in personal attitude, which may or may not result from teaching in multicultural environments. In the context of the PYP, this has implications for teacher recruitment (what they bring to the PYP); professional learning (what they develop 'on the job'); and teaching and learning (what they do 'on the job').

The benefits of having a common PYP language were widely reported by teachers in this study, and extended beyond the school to the local community. Language is important. It is a powerful way of galvanising and uniting teachers to a common purpose. Meaning, too, is important, with disagreement over meanings of key terms such as tolerance highlighted by multiple teachers in both Canada and Australia. These aspects of the PYP were closely linked to teaching practice. How notions of tolerance and culture are defined therefore flow on to teaching practice (i.e. what they do 'on the job').

The basic methodologies of the PYP lend themselves to transcultural approaches, such as the inquiry-based approach and how it encourages cross-disciplinary and critical thinking. Part of a future response seeking to enhance transcultural capability could involve identifying pedagogical leaders to be champions who demonstrate the personal and professional mindset. This is not something that should be taken as given amongst PYP teachers, but as something that can be grown by leaders within schools and IB communities. The findings of this small study suggest that there is already a rich reservoir from which the IB could draw.

But this, in turn, requires resourcing (for travel and professional learning) and flexibility within the curriculum and time – factors that some teachers suggested were in short supply. Time is needed not only within the PYP, but also in relation to developing transcultural capability in general. As we have suggested, professional learning and development that seeks to increase and deepen teacher transcultural capability should be seen as a long-term process; teachers need time to develop their transcultural capability and cannot just 'acquire' it through one-off activities. As suggested earlier in this report, the findings of this research have potential relevance to all IB programmes.

Teachers themselves provided practical illustrations of how transcultural capability could be developed within their teaching and learning environments. They spoke of the power of being immersed in different communities outside of school and in terms of their own personal and professional experience. Within classrooms, they provided practical illustrations such as presenting students with examples of difference, drawing from diverse

students within classrooms and through class conversations, using ICT and drawing on the local community. Key to these examples is a need to move beyond "thin" experiences and notions of culture to rich transcultural learning that moves beyond 'the Other' to diversity as a normal state of contemporary human life.

In the PYP, where the notion of international-mindedness is significant, recruiting and developing teachers with a high degree of transcultural capability can play a key role in developing "inquiring, knowledgeable and caring young people who help to create a better and more peaceful world" (IB, n.d.). It is on their attitudes and approaches to difference that the effectiveness of the PYP in enabling students to develop according to the fullest sense of the IB Learner Profile will depend.

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H Appendices

Appendix 1: Survey

Q1

Consent Form

I understand I have been asked to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I will keep for my records.

I understand that:

- I will be asked to be interviewed either by one of the Co-Investigators of the Project
- unless I otherwise inform one of the Co-Investigators before the interview, I agree to allow the interview to be audio-taped and/or video-taped

and

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

and

I understand that any data that the researcher extracts from the interview / focus group / questionnaire / survey for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics without my signed consent below.

and

I understand that I may ask at any time/prior to publication/ prior to (insert date) / prior to my giving final consent for my data to be withdrawn from the project

and

I understand that no information I have provided that could lead to the identification of any other individual will be disclosed in any reports on the project, or to any other party

and

I understand that data from the interview audio recording and transcript will be kept in secure storage and accessible to the research team. I also understand that the data will be destroyed after a 5 year period unless I consent to it being used in future research.

and

I understand that data from this survey and interview will be attributed to me during the collation and processing of the project data, but that my data will be de-identified through coding and/or pseudonym in any report, presentation or publication arising from this project.

O I agree (1)	
Q2a In which school do you work?	

Q2b What is your name? (We need to know this in order to cross-match data from this survey. Once the data has been entered, names will be removed from the data be identified only by a code.)	
Q3 Please provide a brief overview of your personal and professional background, veference to any overseas experiences during life (both personal and professional). specific countries and the exact nature of your experience in these places	
Q4 Which languages do you speak? How proficient are you in these languages (e.g. advanced, intermediate, beginner)?	native-speaker,
Q5 What circumstances led to you learning these different languages?	
Q6 How do you use these languages in your teaching, if at all?	
Q7 Which language is the one that you use most effectively with your students?	

ıw 8y	hy is this the case?	
_		
_		
_		
9 Is y	your current teaching of students in	fluenced in any way by language?
_		
_		

Q10 To what extent do you believe that the following factors influence your approach to teaching the PYP program?

the Fire program.	No influence (1)	Limited influence (2)	Moderate influence (3)	Strong influence (4)			
Conflicting world views (1)	0	0	0	0			
Historical injustices (2)	0	0	\circ	\circ			
Language diversity (3)	0	0	\circ	\circ			
Social-economic inequalities (4)	0	0	0	0			
Race (5)	\circ	0	\circ	\circ			
Gender (6)	\circ	0	\circ	\circ			
Mental health (7)	\circ	0	\circ	\circ			
Sexuality (8)	\circ	0	\circ	\circ			
Religion (9)	0	0	\circ	0			
Aboriginality (10)	0	0	\circ	\circ			
Other (please specify) (11)	0	0	0	0			
Q11 What do you believe is meant by each of the following terms? Note: It is up to you how you explain your understanding of these terms. You are free to give a formal definition, or express your ideas in your own style, conversational or formal.							
Q11a critical thinking							

_	
Q11b	creative thinking
_	
_	
Q11c	problem-solving
_	
_ Q11d	individual problem-solving
-	
-	
Q11e -	community problem-solving
_	
_ Q11f	thinking skills
_	
_	

a What is your gender?
Female (2)
○ Male (3)
O Preferred choice (4)
O Prefer not to say (5)
b Where were you born?
c How would you describe your cultural/ethnic heritage?
d How many years have you been teaching?
O - 5 years (1)
O 6-10 years (2)
11 -15 years (3)
15-20 years (4)
21 + years (5)
e How many years have you been teaching the PYP?
O - 2 years (1)
3- 5 years (2)
O 6 + years (3)
f In which year were you born?

Q12 About you: please provide details on the following.

g Your main academic major and/or teaching discipline
h Which of these statements reflect your family context in this country? (mark all that apply)
I am living in this country permanently. (1)
I am living in this country temporarily. (2)
I was born in this country. (3)
Both my parents were born in this country. (4)
Only one of my parents was born in this country. (5)
All of my grandparents were born in this country. (6)
One or more of my grandparents were born in another country. (7)
i In your school context, do you define yourself as:
an ethnic minority (1)
a religious minority (2)
a language minority (3)
a minority in terms of socio-economic status (4)
a minority in terms of sexual identity (5)
another minority (please specify) (6)
Not applicable (7)

During your lunch break after a class, you overhear four people discussing the topics below. For each topic, there are four statements. Indicate the degree to which you agree/disagree with each of these statements.

Q13 Topic 1: How do you prepare for new/unfamiliar experiences?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I try to understand as much as I can in advance in order to feel informed. (1)	0			0	0
I try not to over plans in order to be open to new experiences. (2)	0			0	0
I prepare as much as possible so that nothing surprises me.	0			0	0
In order to avoid unfamiliar experiences, I try to keep things as predictable as possible. (4)	0			0	0

Q14 Topic 2: How do you approach conflicting perspectives?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I try to figure out who is right. (1)	0	0	0	0	0
I try to figure out what the gap in the communication is. (2)	0	0	0	0	0
I tried to help people arrived at consensus. (3)	0	0	0	0	0
I see conflict as an opportunity for growth. (4)	0	0	0	0	0

Q15 Topic 3: How do you behave when you find yourself in a new place?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I avoid unfamiliar situations as much as I can. (1)	0	0	0	0	0
I don't change my behaviour because others should accept me as I am. (2)	0		0	0	0
I try to adapt, as much as possible, to what others expect of me. (3)	0			0	0
I appreciate the uncomfortable learning that occurs in those situations. (4)	0		0	0	0

Q16 Topic 4: How do you feel about immigration?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Immigration should be tightly controlled. (1)	0	0	0	0	0
Immigrants should fit into the culture of the country they are in. (2)	0			0	0
Immigration enables us to learn from different cultures. (3)	0	0	0	0	0
Immigration opens us up to our own contradictions.	0		0	0	0

Q17 Topic 5: How do you explain economic inequality?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Inequality is inevitable because some people work harder than others. (1)	0	0		0	0
People with more resources do not do enough to help those in need. (2)	0		0	0	0
The economic system benefits people with more resources, and it needs reform. (3)	0			0	
The economic system is inherently unfair, and we need a new one. (4)	0			0	0

Q18 Topic 6: How can the world's problems be solved?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
By minding our own business. (1)	0	0	0	0	0
By trusting our experts to apply existing knowledge in their field. (2)	0			0	0
By promoting a greater understanding of each other's perspectives. (3)	0			0	0
By imagining completely new directions: problems cannot be solved using the same thinking that created the problems in the first place. (4)				0	0

Q19 Topic 7: What is the biggest challenge to sustainability?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
There is no challenge. How we are living now is perfectly sustainable. (1)	0			0	0
We do not invest enough in renewable energy sources. (2)	0	0		0	0
We cannot agree on a common definition of sustainability.	0	0		0	0
Our current thinking prevents us from seeing the planet as a living entity.	0	0	0	0	0

Q20 Topic 8: What is our primary role as prospective educators?

To deliver the content prescribed in the curriculum. (1) To facilitate student learning to achieve curriculum	0	0	0	0
student learning to achieve				
objectives. (2)	0	0	0	0
To assist students to understand the world beyond the curriculum. (3)	0	0	0	0
To engage students with possibilities and limitations of understanding. (4)	0		0	0

Q22 Topic 10 (from a child visibly from a minority group, but Why is it that most teachers and principals are white?	: born in your country)
Q23 Topic 11 (from an Indigenous child) My grandmother says that our people and our land are the s	same: is she right?
Q24 Topic 12 (from a child from a family high on the socio-ed If people keep cutting down the forests and polluting the wa are adults still doing that?	aters, we will not be able to survive. Wh
Q25 Topic 13: Has the background of the child affected your try and explain how and why.	response that you have provided? If so

Q26 Topic 14: The PYP has made me more convinced of the value of...

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
local and regional cooperation (1)	0	0	0	0	0
international cooperation (2)	0	\circ	0	\circ	0
learning different languages (3)	0	0	\circ	0	0
learning to see things from different perspectives (4)	0	0	0	0	0
acknowledging that everything is interconnected (5)	0	0	0	0	0
the contribution of immigrants to the society I belong to (6)	0	0	0	0	0
seeing the bigger picture (7)	0	0	\circ	0	\circ
people in my country being exposed to different perspectives (8)	0	0	0	0	0
considering	0	\circ	\circ	\circ	0

Q27 Topic 15: How do you prepare for new/unfamiliar experiences?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I try to understand as much as I can in advance in order to feel informed. (1)	0	0		0	0
I try not to over plans in order to be open to new experiences. (2)	0			0	0
I prepare as much as possible so that nothing surprises me.	0			0	0
In order to avoid unfamiliar experiences, I try to keep things as predictable as possible. (4)	0			0	0

Q28 Topic 16: How do you approach conflicting perspectives?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I try to figure out who is right. (1)	0	0	0	0	0
I try to figure out what the gap in the communication is. (2)	0	0	0	0	0
I tried to help people arrived at consensus. (3)	0	0	0	0	0
I see conflict as an opportunity for growth. (4)	0	0	0	0	0

Q29 Topic 17 How do you behave when you find yourself in a new place?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I avoid unfamiliar situations as much as I can. (1)	0	0	0	0	0
I don't change my behaviour because others should accept me as I am. (2)	0		0	0	0
I try to adapt, as much as possible, to what others expect of me. (3)	0	0		0	0
I appreciate the uncomfortable learning that occurs in those situations. (4)	0			0	0

Q30 Topic 18: How do you feel about immigration?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Immigration should be tightly controlled. (1)	0	0	0	0	0
Immigrants should fit into the culture of the country they are in. (2)	0		0	0	0
Immigration enables us to learn from different cultures. (3)	0		0	0	0
Immigration opens us up to our own contradictions. (4)	0			0	0

Appendix 2: Teacher Semi-structured Interview

Guiding Questions for researcher

Q1 Please provide a brief overview of your personal and professional background, with special reference to any overseas experiences prior to your participation in the PYP.

Q2 What were your expectations of the PYP in terms of how it related to you? Were these met? In what ways/why not?

- a. Personal expectations
- b. Professional expectations

Q3 From your perspective, what are the main benefits that have resulted from your participation in the PYP?

- a. Personal
- b. Professional
- i. Relationship with school students and staff
- ii. Educational knowledge
- iii. Impact on teaching practice
- iv. Impact on capabilities and capacities
- v. Dealing with cultural difference
- c. Overall

Q4 Were there any issues or concerns resulted from your participation in the PYP? How have these affected your capacities and work as an educational professional, if at all?

- a. Personal
- b. Professional
- i. Relationship with students
- ii. Educational knowledge
- iii. Impact on teaching practice
- iv. Impact on capabilities and capacities
- c. Overall

Q5 Having taught the PYP, what you believe is meant by the following terms?

- a. critical thinking
- b. creative thinking
- c. problem-solving
- d. individual problem-solving
- e. community problem-solving
- f. thinking skills

Examples of Supplementary Questions

- Q6 How has the PYP changed you: a. As a teacher? b. As a person?
- Q7 Would you call this school a culturally diverse school?
- Q8 What does culture mean to you?
- Q9 To understand cultural difference, do you need to live it or just meet it?
- Q10 What does tolerance mean to you as a PYP attitude?
- Q11 What does international mindedness mean to you?