An Investigation of IB Learner Profile Attributes in post IB diploma students

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Executive Summary
Abstract
The development of international mindedness is an explicit aim of the International Baccalaureate Diploma Programme (IBDP) and is described as a list of attributes in the IB Learner Profile. This is coupled with the aim that these values and attitudes will endure beyond the two year programme of study itself. This qualitative case study used a questionnaire with thirty alumni from one international school situated in France and a smaller number of follow up interviews to elicit retrospective views about the IBDP experience. It investigates whether past IBDP students display the attitudes and dispositions related to the IB construct of international mindedness and whether this has been manifest in their post school trajectories. This study builds on the body of research investigating IBDP impact.

The literature review explores the IB construct of international mindedness and factors influencing the development of values and attitudes and how education might influence this process.

The most significant results showed that this group of alumni almost unanimously perceived the IBDP as having been influential in the development of international mindedness and their post-school trajectories seemed to endorse this although the attribution of influence in choices for post school study was less clear. This study also endorsed findings from previous studies that IBDP influence tends to be valued somewhat later in career development and participants’ retrospective perceptions indicated that the ideological aims of the IBDP had not necessarily been clear at the time of study. Overall the study endorses the difficulty of separating the multiplicity of influences in the development of values and attitudes.

Despite this, results have important implications for the study school and other similar schools in helping to identify areas of potential focus when developing the IB mission. Teachers themselves emerged as one the most influential aspects of the IBDP experience which therefore carries a clear implication for hiring and new staff induction. There are also implications for the IBO in considering ways to heighten awareness of the IB mission and to assess its efficacy.
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Introduction

Research Focus and Rationale
We live in a world where globalization and complexity have become central tenets of society and the International Baccalaureate Organization (IBO) has responded by developing an international curriculum. The IBO has included the concept of «international mindedness» in the list of characteristics acquired by students completing the IB Diploma Programme (IBDP). Since 2006 international mindedness has been expressed as a set of ten attributes in the IB Learner Profile (IB 2006), which seeks to categorize the desired values and dispositions of an IB student across the continuum of the three IB programmes: PYP, MYP and the IBDP.

“It is not intended to be a profile of the perfect student; rather, it can be considered as a map of a life-long journey in pursuit of international mindedness” (IBO, 2008).

A central question to be addressed by this research is ‘does this life-long journey take place?’

Although the history of the IB has been well documented by Ian Hill (2007) and others, an aspect of its development directly relevant to this investigation is the conflict of pragmatic and ideological reasons for its initial development and in its subsequent growth. It is supposed to function both as a passport to (elite) university entrance for the globally mobile international community and, concurrently, for the promotion of an ideal of behavior, character and universal values (Bunnell, 2011, Cambridge, 2011, Hill, 2012). This investigation is concerned with all of the IB Learner Profile (IBLP) attribute statements but focuses particularly on the affective (the development of personal qualities and emotional skills) and social (collaboration with others and the ability to consider and evaluate different perspectives) aspects of learning (Bullock, 2011). As stated above it is clear that the IBO intends that these attitudes and dispositions will be life-long: “the IB programme is providing an education for life so the real test will come in twenty years’ time” (Walker, 2002a:10). It is therefore to be hoped that when students leave school and enter tertiary education and employment that the values established will not disappear but rather mature and develop in ‘real world’ situations and will manifest themselves in diverse ways (Hinrichs, 2002).

This study builds on the growing body of research investigating IBDP impact and the effectiveness of this aspect of the curriculum, and will complement the limited research that targets IBDP alumni. It is unique in its focus on the alumni of one IB school. The aim of the study is to help IB schools understand which aspects of education during the IBDP are likely to be the most potent in the development of the IBLP values and dispositions and to consider ways to evaluate the success of this aspect of the IBDP. It also encourages schools to consider aspects of school culture that may need to be adjusted to
maximize impact such as the process of staff recruitment or induction, the amount of experiential learning offered and the extent to which the IB ethos is embedded in all aspects of school life. Finally it raises some pertinent questions regarding the assessment of international mindedness.

**Context**
This study has been conducted amongst alumni of an international school in France who are also graduates of the 2 year IBDP at this school. The study school is a market led institution catering for globally mobile children of transnationalist corporation personnel and local children seeking English language education. Parents probably elect to place their children at this school for largely pragmatic rather than ideological reasons, i.e. for improvement of English language and improved chances for university entrance.

**Theoretical Framework and Research Questions**
Together with relevant IB research studies, literature from the domain of values education and the development of intercultural competence provides a theoretical background to think about students’ values and potential for changing them. Of necessity, exploration of certain areas, such as the terminology debate that surrounds international mindedness and the origin of the values expressed in the IBLP, has been brief or omitted. This paper describes a small scale research project designed to answer the following research question and sub questions:

*Do a group of alumni from one international school (in France) think the IBDP influenced the development of international mindedness in them?*

*If so:*
  1. *How do they feel this has been manifest in their post-school trajectories?*
  2. *Which aspects of the IBDP were most influential?*

The research report begins with a review of the relevant literature prior to a description of the research strategy and methodology. Results are then presented and analyzed followed by an evaluation of the research and recommendations for educators and further research.

**Literature review**
The literature review is differentiated into four areas directly relevant to this study:

1. The IB’s conceptualization of international mindedness and specifically the attitudes and dispositions described in the Learner Profile
2. Values, intercultural competence and international mindedness
3. Teaching and assessment of values and intercultural competence
4. IB impact research.

The IB construct of International Mindedness

Hill’s discussion of the origins and early years of the IB Diploma Programme describes the ideologically driven desire to create internationally minded global citizens, which means “an awareness of a common humanity and social responsibility” (Hill, 2007:29). This therefore is a definition of international education that, despite pragmatic elements, is ideology driven rather than market driven. In a later article examining the evolution of the concept, Hill states that whilst “International mindedness is the key concept associated with international education,” (Hill, 2012: 246) it is a concept that is necessarily constantly evolving. Hill acknowledges that the ‘awareness’ alluded to earlier could in fact operate at a purely cognitive level and that whilst the concept is knowledge and skills dependent, it is also a “values proposition” (ibid). Values such as openness, empathy and compassion are key to rendering the relevant knowledge and skills operational. Another of the key ingredients inherent in this concept is intercultural understanding “appreciating cultural diversity within and between nations, and the multiple perspectives which arise from it, is fundamental to international mindedness” (ibid). In the following exploration of the IB ideology the values aspect of the IB vision, the nature of intercultural understanding, and their areas of overlap are examined.

If international mindedness is at the root of the ideology underpinning the IBDP, then the Learner Profile is the IB mission statement transformed into a set of learning outcomes for the 21st century (IBO, 2006), an attempt to break a multi-faceted concept down into its components. It is preceded by this opening statement:

“The aim of all IB programmes is to develop internationally minded people who, recognizing our common humanity and shared guardianship of the planet, help to create a better, more peaceful world” (IBO, 2013).

In her comprehensive literature review, Bullock (2011) acknowledges the overlap between the 12 descriptors but separates them into 4 categories: cognitive, conative, affective and social. She defines the affective aspect of learning as “habits and beliefs that define our personalities [ ] acquired through our experiences from the moment we are born” (p.10). The LP attributes that fall into the affective category are those concerned with caring, risk taking and balance. In her examination of the social (or cultural) aspect of learning she refers to Vygotsky’s theory of social constructivist learning and the influence of the school culture that is tacitly embedded in a community on values and behavior. The LP attributes that fall into the social category of learning are those concerned with communication and open-mindedness. Clearly, values and attitudes are inherent in both the affective and social categories.
and it is these categories therefore that are most pertinent to this research project. Theory of values acquisition, how values are nurtured and the feasibility of changing attitudes in diploma age students are not addressed by Bullock (2011). In his critical review of the IBLP as a tool to promote international mindedness Wells (2011) also highlights the lack of reference to values acquisition and development in the IB literature. Some of the relevant literature in this domain in addressed in the following sections.

**Values, Intercultural Competence and International Mindedness**

Before considering how an individual’s values might be changed, this section explores what they are. From a sociological standpoint Hitlin and Piliavin (2004) conducted a literature review seeking to map the links between values, culture, social context and individual behavior. They addressed three essential questions: ‘What are values?’ ‘Where do they come from?’ and ‘What do they do?’ They draw on a variety of definitions including “Values are enduring beliefs that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end-state or existence” (Rokeach 1973 in Hitlin and Piliavin, 2004:362) and that of Schwartz (1992) who described values as cognitive expressions of basic human needs that could be categorized as biological, social interactional required for relationships, or social institutional needed for group survival or welfare (ibid). The conceptualization of values as enduring beliefs that guide behavior, i.e. personal or social conceptions that cause us individually or as a group to choose certain modes of conduct over others or evaluative beliefs, is accepted as a working definition for this research.

From a psychological standpoint values are organized structures of cognition or schemas that carry an inherent positivity and are articulated as a conception of the desirable. Schemas that we develop are emotionally tagged so a concept that results in a positive emotion or somatic marker is reinforced and kept and becomes an enduring value. Responses tagged with a positive emotion are more likely to be chosen. Somatic markers are derived from the automatic nervous system and therefore the choosing process is largely unconscious, unless we are embarking upon an extended decision making process where we might deliberately seek to overrule emotional response with reason. Hitlin and Piliavin explain that values are often conflated with other psychological structures such as attitudes, traits, norms and needs. They seek to differentiate between them, concluding that “the general consensus is that values hold a higher place in one’s internal evaluative hierarchy than attitudes” (ibid:361) and show less tendency than attitudes to change over the course of a lifetime. This conceptualization of values is shared by values educators such as Pearce: “sometimes we differentiate between moral values, which are what we feel we ought to do, and norms, which are what we customarily happen to do” (Pearce, 2013:8). Pearce also identifies the strong affective dimension inherent in values:
“Valuing’ implies that we care about something; that our judgment involves feeling. Emotion is central to the activity of values” (ibid:9). The IBLP describes desired behaviors in IBDP students but this affective aspect cautions that the link between values and behavior is not necessarily linear. The ‘should do/would do’ double design of the questions in Section 3 of the questionnaire used in this case study is designed to elicit information about participants values, acknowledging this non-linear affective dimension and the contextual influences described below.

In their discussion of sociological theories of values, Hitlin and Piliavin (2004) stress contextual influences that impact values and behavior (e.g. the influence of family, socio economic group, ethnicity and religion). Individual values may lose their agency as behavioral guides in the face of these influences. In decisions about action to be taken, values must compete with normative pressure and often a choice between conflicting values must be made prior to action. It is not uncommon to feel uncomfortable because normative pressures have triumphed over individually held values resulting in behavior that is incongruous with those values.

In the educational domain Silcock and Duncan (2001) endorse the significance of the values or knowledge – behavior gap. For example, they challenge the popular idea that experiential learning is an effective way to shape values; we can have a great deal of experience that leaves our personal values untouched, issuing a challenge to the place of CAS as a significant experiential learning element of the IBDP. Silcock and Duncan draw upon Piaget, Kohlberg and Vygotsky and stages of cognitive development to explain that the path towards mature cognitive functioning is conditioned by what is sociologically sanctioned. Crucially, societal influences are not just those in the immediate vicinity. Media pressure, for example, has become ubiquitous and almost inescapable. We can approve of things in a tokenistic manner and publically endorse certain values while our personal psychology remains untouched.

Much of the literature supports the importance of the concept of commonality or ‘universal’ values (Skelton, 2002, Gellar, 2002, Drake, 2002, 2007, Schwartz in Hitlin and Piliavin, 2004). Drake points out that although “some may feel that to speak of certain values as being universal is presumptuous, it is certainly possible to identify values which attract widespread endorsement and acceptance” (Drake 2002:3). Gellar (2002), Skelton (2002) and Drake (2002) all identify universal values as being a central tenet of international mindedness. Hofstede (2005) shifts the focus away from the ‘universal’, arguing that the interdependence of the 21st century multicultural world has not encouraged a lessening of diversity. Indeed, he points out that diversity is increasing, ethnic groups within nation states have increasing consciousness of their identity and are demanding political recognition. To function well in
In this context he argues that the essential attribute is to be open-minded with a strong sense and understanding of one’s own cultural identity as a necessary starting point, a concept that is directly reiterated in the IBLP as a desirable trait.

There is agreement in the literature that international mindedness is a state of mind that deals with the ability to understand and empathize with different cultures. Hofstede (2005) defines culture as “the collective programming of the mind which distinguishes the members of one group or category of people from another” and he asserts that this is learned via the social environment rather than inherited (p.5). Hofstede defines the link between culture and values, describing values as the “core of culture” (ibid: 8) and the first things that children learn, not consciously but implicitly (see below for further discussion of values acquisition). He defines them as: “broad tendencies to prefer certain states of affairs over others” (ibid) and gives examples such as evil vs. good, abnormal vs. normal, irrational vs. rational which has much in common with the accepted working definition of values as evaluative beliefs. Although Hofstede is skeptical about the possibility of fundamentally altering values through education, he does believe that intercultural communication skills can be taught and can enable students “to distance themselves from their own cherished beliefs” and thereby be aware of and encouraged to question their own values (Hofstede, 2005:231).

It is worth noting here that Hofstede is skeptical about surveys seeking to elucidate information about people’s attitudes. He endorses the view that as people don’t always act as they say they will, and therefore using actions to infer values can be ambiguous. Hofstede recommends that this conflict between the ideological view and personal interest must be borne in mind in the interpretation of values studies. Hitlin and Piliavin (2004) also discuss the difficulties of measuring values: “Measuring values, like measuring many social psychological concepts, is imperfect” (p. 366). Their descriptions of values surveys developed by Rokeach and Schwartz (Rokeach 1973, Schwartz 1992 in Hitlin and Piliavin, 2004:367) have informed the development of items for this present questionnaire.

The IB construct of international mindedness emphasizes that critical cultural awareness begins with the awareness that one’s own values and ideological perspective are culturally determined and therefore potentially incompatible with others. The idea that agreement with ‘otherness’ is not always possible is endorsed by others, for example Byram, in his framework for Education in Intercultural Citizenship (1997 in Byram, 2008) and Gunesch in his discussion of Cosmopolitanism (2007). Both stress the need for a critical stance and that openness towards different cultural experiences does not necessarily require positive endorsement of the ‘other’. Like Silcock and Duncan, Byram places the affective dimension in first position arguing that without the will or disposition to understand there can be no acquisition of knowledge or active engagement.
Teaching and Assessment of Values and Intercultural Competence

The literature surveyed thus far identifies culturally situated values and the development of intercultural awareness as central to the development of international mindedness. This section of the literature review looks at how educators might effectively develop the values inherent within this construct and the central question of whether changing students’ values is possible.

As described above, values are personal constructs with inherent personal relevance. They are often adopted as truisms without much cognitive reasoning to support them. There is evidence that deeper cognitive reasoning, i.e. analyzing reasons for certain values, can strengthen values against attack or conversely help to change them (Bernard et al 2003 in Hitlin and Piliavin, 2004:379). The IBDP aims to exploit this in areas such as TOK, where it is hoped that explicit examination of cultural differences and values will lead to a critical examination of personal values and the development of an open minded approach. However this idea is not without dissent. For example, the argument that the strong affective dimension of values means that even a list of common values identified as shared or desirable will have different levels of adherence at a personal level. “People (e.g. police, students, politicians) may unreservedly profess anti-racist views without (for reasons connected with their personal histories) adopting anti-racist attitudes” (Silcock and Duncan, 2001:244). Haidt (2012 in Pearce, 2013:11) also disputes the notion that observation and reasoned discussion about hypothetical or others’ experiences can change our personal schema. For a value to be changed it must relate to our personal schemas, not be an ideal which we notionally endorse or to which we aspire. Both Pearce (2013) and Drake (2002) allude to the reluctance on the part of educators to acknowledge the emotional content of values, prizing the rationalist world view above emotions, despite recent research suggesting that purely rational decisions rarely exist and are usually not helpful (Drake, 2002:5).

Hofstede’s belief that “by the age of 10 most children have their basic value system firmly in place, and after that age, changes are difficult to make” (Hofstede, 2005:8) is challenged by other studies showing that values are influenced by factors such as age, education and societal changes (Di Dio et al, 1996, Seligman, 1991 in Coombs-Richardson and Tolson, 1995). Most scholars assume values to be relatively stable across the life course after being shaped through late adolescence” (Hitlin and Piliavin, 2004:365). These arguments inform this present study, which asks whether the participants perceive that their values were changed by the IBDP experience and, if so, how that was effected.

Literature in the IB domain (Gellar, 2002, Skelton, 2007, Cause, 2009, Dunne and Edwards, 2010, Lineham, 2013) discusses the idea that despite the stated ideology underpinning the IBDP it cannot be
taken for granted that students who complete the two year programme will have developed the desired values and attributes inherent in the IB construct of international mindedness and expressed in the IBLP. There has been a considerable amount of criticism that the IB has not provided enough guidance regarding how the IBLP attributes are to be taught, including a lack of guidance on specific learning experiences that might nurture its development and regarding the difficulty in measuring the development of international mindedness (Skelton, 2007, Haywood, 2007, Cause, 2009, Van Oord, 2007, 2013 Wells, 2011). Skelton agrees that it is not enough to be “well intentioned” with the expectation that these dispositions will be achieved through “osmosis”. Providing a context where children of different cultures exist alongside each other is not enough (Skelton, 2007:46). Skelton and others (Lineham, 2013, Wilkinson and Hayden, 2010, Wright, 2015, Thompson, 1998 in Hill, 2012) emphasize the potency of individual teachers and school culture to change values essentially asserting that the school should be ‘walking the talk’ or, put more formally, that the rhetoric should be reflected in the organizational culture of the school. The UNESCO supported Living Values Education Programme (LVEP) (Drake, 2007) is a values education programme that attributes its success to, in order of priority: the need for a clearly articulated set of values and a whole school ethos, a curriculum where values are thoroughly embedded in subject areas followed by a set of discrete lessons dealing with issues of morality. Skelton, Drake and Pearce (2013) all place a values imbued environment at the top of the list of what is required for values acquisition.

Byram’s Education for Intercultural Citizenship emphasizes experiential learning as key, advocating not only actual intercultural experiences as essential (Byram 2008:187) but also reflection on that experience. He also acknowledges the values – behavior gap and sees the test as whether or not what has been learned actually governs students’ lives and behaviors. “If and how learners ‘act’ on their reflections is not always noted by teachers, probably because the action is expected to take place in learners’ lives outside the classroom, and perhaps in the future rather than immediately” (ibid:210), linking directly to this post facto research where possible impact of the IBDP on post school trajectories is being investigated.

A thorough discussion of methods of assessment of values and attitudes that have been developed in other contexts is outside the scope of this research project but it is worth noting that although the academic aspect of the IB curriculum is rigorously assessed through coursework and examination, how we know whether students have acquired the desired attitudes and dispositions described in the LP is left unaddressed.
IB impact research

Several IB impact studies conducted in international schools have discussed the problem of separating the influence of the school environment and that of the IBDP and the associated difficulty of implying causality (Hinrichs, 2002). The School-University Transition Project (2007) was conducted by the IB Research Team at the University of Bath and focused on a plurality of areas to do with metacognitive skills and superior academic achievement. One of the questions addressed, “Do university students with IB diplomas display values associated with international mindedness?”, has direct relevance to this current project and the questionnaire used for the 2007 project has been used again in Section 3 of the questionnaire (see Methodology section for further discussion). The 2007 project used previous work in this area in preparation of the items for the survey, including Hayden’s study (1998) into teacher and student perceptions of international mindedness, a later study of 1,400 students in international education, half in IB programmes, investigating perceptions of internationalism (Hayden et al 2000) and Rançic’s work (1998) on cultural identity. Rançic’s work endorses the view held by Hofstede, Byram and Gunesch, discussed above, that it’s possible to hold strong views and identify strongly with a culture but still to display characteristics associated with international mindedness: “Rançic concluded that being international does not necessarily mean the loss of one’s original culture and history” (IB Research Team 2007:8). He also found that extensive international travel does not necessarily correlate with international mindedness. The School-University Transition Project found that “attitudes of mind” such as open-mindedness and flexibility “were deemed as highly relevant to “being international” whereas multi-national parentage was not (ibid:9). The only significant area where IB diploma holders differed from students holding other certificates was in their willingness to be challenged and to possibly change their own opinions. The design of the study did not allow the researchers to ascertain whether the apparent increased open-mindedness of IB students was due to IB involvement or other variables (ibid: 31) and overall validity of results was compromised by the limited numbers of respondents. The Transition Project was a large international study and although the sample was drawn from across all continents it faced certain difficulties, for example, in tracing former IB students. There were also a high number of independent variables, including differing cultural interpretations of the questions asked and perceptions of what international mindedness is, that impacted validity. The case study frame of this present study, where all the alumni participating experienced the IBDP in the same school, removes some of these independent variables and the study school alumni database facilitated access to post university IB alumni.

Other surveys aiming to elicit information regarding the development of international mindedness and the development of student attributes have included Wilkinson and Hayden (2010), and Lineham
(2013) both sampling current IB students as well as Wright’s recent retrospective study (2015) using a series of in-depth interviews to examine longer term outcomes. This case study aims to add to the body of research in this domain.

**Literature review: conclusion and further questions**

The IBO has developed a construct of international mindedness that is described as a set of learning outcomes: the values and attributes listed in the IBLP. This literature survey has found significant commonalities with other constructs, such as Byram’s intercultural competence (2008), Hofstede’s intercultural communication skills (2005), Gunesch’s cosmopolitanism (2007, 2013) and with studies that describe the impact of values education on holistic educational development and investigate the most effective models of delivery (Drake, 2007). There is common recognition (Byram, 2008, Pearce, 2003, 2007), shared by the IBO, of both the inherent affective dimension in international mindedness and the importance of the development of intercultural competence. It is somewhat surprising that studies of this nature are not referred to in the IB literature as rationale for their own construct. The IBO values experiential learning as being instrumental in the development of international mindedness, citing Kurt Hahn as influential in the initial development of the core requirements of CAS and the extended essay (IBO 2009b:30) but, as we have seen, this is not universally endorsed in the literature (Silcock and Dun can 2001). There is also disagreement in the literature as to whether the search for universal values is appropriate and, despite the lack of rationale regarding the selection of IBLP values, the IBO acknowledges this in its encouragement of a critical stance “It is essential that students engage critically with the learner profile, and the values embedded in it, rather than accept them unconditionally” (IBO 2009b:31).

Recent IB publications have gone some way to addressing the criticism of the lack of precision about how the IBLP attributes should be developed and aim to support schools and teachers in this endeavor. ‘Approaches to teaching and learning in the Diploma Programme’ offers “approaches and tools, intrinsically linked with the IB Learner Profile attributes, [to] enhance student learning for DP assessment and beyond” (IBO 2014 p1). In ‘The Diploma Programme: From Principles into Practice’ (IBO 2009b) the IB international mindedness construct is explored. “It is concerned with developing a deep understanding of the complexity, diversity and motives of human actions and interactions” (IBO 2009b p.6) and the importance of “intercultural understanding” is stressed. International mindedness is described as embedded in the subject areas and assessed through them rather than explicitly (ibid).

IB support systems such as the requirement to engage in professional development also seek to emphasize the IB philosophy and acknowledge the importance of the teacher’s role in modeling behaviors and values and the importance of the whole school culture and the hidden curriculum. The
literature review has demonstrated that there is disagreement as to whether this is sufficient. The IB does not advocate the need for explicit values education and the issue of explicit assessment of values and intercultural competence has not been addressed. Within the formal curriculum, the TOK course aims to challenge the view that values are fixed at a young age (Hofstede 2005) by inviting students to examine and question their beliefs, i.e. to become aware of their own values and culture which are most of the time unexamined, unobserved and automatic before addressing the ‘other’.

Questions remain as to the efficacy of these aspects of the IBDP and these IB systems, whether the critical stance that is encouraged towards the LP values is explicit enough or whether there is an implicit assumption that they should be accepted. Informed by the literature reviewed, earlier IB impact research and more broadly work that examines the development of values and devices that may effect change in personal values and their relationship to the construct of international mindedness, this case study considers the effectiveness of the IB in developing values. In Wright’s retrospective study she points out that the rapid growth in the number of IB schools has generated a considerable body of IB programme impact research but that: “Research on the IB has, in general, been limited in relation to the breadth of impact explored, the predominant framing of the impacts within the context of higher education and academic performance, and the temporal scope of investigation” (Wright 2015 p.7). The intent of this present case study is to add information to the small body of work that addresses this gap in IB research.

It seeks to elicit information about influence of different aspects of the educational experience during the IBDP by answering the research questions:

Do a group of alumni from one international school (in France) think the IBDP influenced the development of international mindedness in them?

If so:

i) How do they feel this has been manifest in their post-school trajectories?

ii) Which aspects of the IBDP were most influential?

Research Methodology

Research design
The research is designed to investigate whether past IBDP students display the attitudes and dispositions related to the IB construct of international mindedness as described in the IBLP and whether their post school trajectories have been influenced by international mindedness. The study also aims to solicit their retrospective views regarding the influence of their IB experience in the development of these attitudes and dispositions.
This investigation is framed as a case study of alumni from one international school. The literature review suggests a strong relationship between the development of attitudes and dispositions and situational context so a case study framework was chosen as it limits the number of variables impacting the development of attitudes and dispositions. It also provides the possibility of constructing an in-depth account of the interconnected and interrelated variables that are present and highlighting the IB graduates’ own voices. This qualitative research investigates students’ perceptions of a complex set of variables and the overarching paradigm is an interpretative paradigm where facts and opinion have been collected to build a clearer picture (Denscombe, 2010:153).

A mixed method approach was chosen for this research. The main tool for collection of data was a structured online questionnaire survey supplemented and triangulated by a set of follow-up semi-structured interviews allowing the consideration of responses from different perspectives.

The survey draws on the IB construct of international mindedness and the values described in the IBLP as well as factors identified in the literature survey as influencing values development. It specifically uses the questionnaire developed by the IB Research Team as part of the research tool for the School-University Transition Project (2007) which employs concept indicators to link the language of theory to the language of research and to measure this unobservable construct. The questionnaire was divided into the four sections listed below using a variety of closed and open questions and questions that rely on rating to enable statistical data to be obtained.

**Section 1 - About Yourself:** Dichotomous and multiple choice questions designed to elicit factual information regarding age, parentage and educational history.

**Section 2 – About university/College/Post School experience:** A mixture of open and closed questions to elicit information about post-IB trajectories in tertiary education and employment and introducing questions about perceived international experiences.

**Section 3 – International Mindedness: Perceptions of international mindedness and self as internationally minded:** Questions designed for the School-University Transition Project (IB Research Team 2007) leave enough room for respondents to have their own definitions of this construct, so this section of the questionnaire comprises closed questions about belief and behavior that use the Likert scale where a range of responses can be given. The ‘should do/would do’ double design, where respondents concurrently record what they feel they ought to do and what they would do with reference to a particular issue, acknowledges the influence of cultural norms on behavior described in the literature by distinguishing between a value held as a guiding principle and what resulting action
is actually likely. To facilitate data analysis, questions in this section were pre-coded into cluster categories that reflected the subdivisions of the IB Research Team’s research original questions and that remain apposite in this study:

1. Challenge: are respondents prepared to have their views challenged
2. Tolerance and Respect
3. Interest and Awareness
4. Identity Active: would respondents actively promote their identity
5. Identity Passive: would respondents passively defend their identity
6. Friendship and Involvement

Section 4 - The IB Diploma experience: This section contains both open and closed questions. Respondents were invited to give honest personal comments about their IB experience and the possible influence of the IBLP in the development of attributes and choices made in post IB trajectories.

Recruitment of participants
Access to the school’s Alumni database, which contains the names and contact details of alumni dating back over the whole period of the schools existence, was obtained from the Senior Leadership Team at the study school. Piloting of the invitation letter and questionnaire took place in October 2014. The invitation to participate was sent to an initial group of all contactable alumni who had graduated with the IBDP between 2004 and 2014. This resulted in a sample size of 90. By including all the alumni in the database some effort was made to reach a representative sample but in small-scale research of this nature it is impossible to achieve a truly random sample. It is important to acknowledge that the voluntary nature of enrolment in the database of alumni might have compromised the randomness of the sample, therefore the limitations of data obtained from a convenience sample in terms of generalizability must be acknowledged at the analysis stage. However this case study was concerned to elicit rich understanding of a theory, not to enumerate frequency, and so the limitations of the data collected was deemed unimportant. The questionnaire was sent to all alumni who responded positively to the invitation letter. Initial response rate was relatively poor so follow-up emails and messages via social media were used to prompt responses and this continued over a period of 3 months.

The design of this research is sequential and one function of the questionnaire was to aid sampling for the semi structured interviews. The original aim was to select interviewees who represented a range of views. In fact, the range of views obtained was so wide that in the end the candidates for interview were selected to present a linear perspective over the 10 year sample. It was also hoped that this
would limit any bias in selecting interviewees. Interviews provided the opportunity to “follow up ideas, probe responses and investigate motives and feelings” (Bell, 2010:161). The interview schedule was prepared after the responses to the 30 questionnaires were analyzed and questions were prompted by the issues raised in the responses to the questions. This research and therefore the interviews were designed to collect retrospective views and so the limitations of memory must be acknowledged. Wright discusses the complexity of memory studies in terms of reliability and bias due to selective recall (Wright, 2015:12) but ultimately agrees with Cohen’s conclusion that “ex post facto research is a valuable exploratory tool [in an area where a] more rigorous experimental approach is not possible” (Cohen, 2011:211). Interviews lasted between 35 minutes and 50 minutes and they were audio recorded and transcribed.

General ethical considerations related to research in education have been referred to in the preceding section but as this is sensitive research with ethical dimensions due care was given to reassuring respondents that there was no implied judgment. Respondents were asked to share intimate opinions for which they may have felt vulnerable to judgment; therefore responses were dealt with sensitively and with respect for individuals’ opinions. In the interview process it was necessary to establish trust as interviewees were asked to discuss quite personal aspects of their lives.

The following section reports on the research findings, beginning with a brief discussion of the complexity of considering IB impact.

**Data presentation, analysis and discussion**

**Analysis Overview**
The process of analysis began with the preparation of data summary sheets for each section of the survey. Raw data from closed questions in Sections 1 and 2 was examined first to discover whether the use of purposive convenience sampling had resulted in any bias regarding sex or year of obtaining the IBDP. Other data generated from this section about parentage, educational history and information about areas identified in the literature as having potential relevance to the research questions was tabulated. Responses from the open questions in this section and Section 4 were collated into tables so that significant or recurring phrases pertinent to the research questions could be identified and selected. This selection process was conducted through the dual lenses of the IB construct of international mindedness and factors influencing values development stemming from the literature review. In Section 3 responses were collected into the pre-coded attribute clusters (figure 2) and the ‘should do’/’would do’ categories described in the methodology chapter. Overall results per cluster are described. Section 4 of the questionnaire, which focuses specifically on the IB experience,
generated the richest data in relation to the research questions and the interview guide was prepared to further probe ideas and opinions expressed in these responses. Interviews were transcribed and commonalities that arose prompted a degree of thematic analysis across the three interviews, employing the same thematic lenses used to analyze the responses to open questions in the survey. The findings are then discussed in the context of the research questions.

Presentation of Survey Results and Discussion

Section 1: About Yourself
The respondents were fairly equally split between male and female and represented an even spread over the 10 years of the study. 18 had parents of different nationalities and had lived in at least 3 countries and correspondingly had attended several schools. Helpfully, in terms of limiting variables, only 5 had experience of other IB curricula.

Section 2: About University/College/Post School experience
Guided by the research questions the data from answers to the open questions in this section was then tabulated to create a frequency tally of the range of responses and to identify emergent themes or patterns and ultimately to devise a coding frame. When asked about reasons for choosing university there were a wide variety of answers, with many simply pointing towards practical concerns such as location of university or specific syllabus content offered by the institution. Although only 4 respondents made direct reference to an international perspective in the chosen course it was nonetheless the most frequently occurring theme and 20 out of the 29 who attended university said that the chosen degree nonetheless promoted international mindedness with course content, location of study and international student populations being the factors most frequently referred to. Clearly the influence of this post-school study must be borne in mind when interpreting the results of section 3 of the survey, which explores the values and attitudes of the respondents. When asked whether post school trajectory had included anything specifically focused on ‘internationalism’, 20 of the respondents answered positively citing activities such as volunteering, travelling, studying or working abroad, improving language skills and making international friends.

Section 3: International Mindedness
The aim of this part of the survey was to explore the attitudes and values of the respondents through the lens of the IB construct of international mindedness.
In order to be internationally minded it is necessary…..

16: to believe that all people have the right to express their views freely

<table>
<thead>
<tr>
<th>Circle the answer that reflects your views</th>
<th>Strongly agree/I would do this</th>
<th>Slightly agree/I might do this</th>
<th>No view</th>
<th>Slightly disagree/I might not do this</th>
<th>Strongly disagree/I would not do this</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

| Circle the answer that describes what you would do | ● | ● | ● | ● | ● |

Figure 1 Sample question

Responses to all 25 questions in this section were tabulated and inconsistencies in the ‘should do/would do’ responses were highlighted, for example where a respondent answered that he felt one should accept that ‘no one culture is superior to others’ (question 35) but would in fact not do this. This sort of incongruity was rare, but overall there was degree of consistency in the fact that a view strongly held was partnered with a less certain answer in the action category e.g. ‘Strongly Agree/Might do this’ or ‘Strongly disagree/Might not do this’, (see the summary of results section below for a discussion of this phenomenon). As described in the methodology, questions in this section had been pre-coded into clusters (figure 2) and summaries of results in these clusters are presented below (figure 3).

| Quantitative ORDINAL questions 15 -39 pre – coded into the following categories: |
|-------------------------------|--------------------------------------|
| Categories | Questions |
| Friendship and Involvement | 31: to socialize with people from other cultures rather than just live alongside them  
33: to be prepared to join in the cultural practices of others  
35: to accept that no one culture is superior to others  
37: to be willing to carry out a collaboration with people of other cultures  
38: to be willing to try to find pathway through an issue that does not offend people of any culture  
39: to be interested in an individual and his/her personality irrespective of which culture he/she identifies with |

19
Interest and Awareness
18: to be interested in what happens in other parts of the world
19: to show an active interest in people from other cultures living in my surroundings
20: to be aware of the cultural practices of people from other parts of the world (whether I know those people or not)

Tolerance and Respect
16: to believe that all people have the right to express their view freely
17: to accept the rights of other people to put their views into practice in their own society even if such a practice is unacceptable in my own society
24: to tolerate the behavior of other people even though I find that behavior unacceptable
26: to respect the views of others even though I disagree with those views
32: to respect another person’s viewpoint, even if I find it totally unacceptable

Challenge
15: to be prepared to compromise over my view
23: to be prepared to change my opinion about an issue when challenged by people with different view points
30: to be prepared to have my personal opinions challenged
36: to challenge the ideas of others

Identity Active
27: NOT to identify strongly with one culture
29: NOT to show a preference for only one national system

Identity Passive
21: to try to convince people of other cultures to share my beliefs
22: to identify strongly with my own culture and still have respect for other cultures
28: to be prepared to defend my own value system to those who do not share it
34: to encourage others of different cultures to learn about my own culture

Figure 2

In qualitative research of this nature, with such a small sample and where causality is not sought, statistical analysis was not deemed appropriate or useful but it is clear that in all categories positive responses outweighed negative responses. In the ‘Should do’ category ‘Friendship and Involvement’ emerged as the most important factor in ‘being internationally minded’ according to the percentage of ‘Strongly agree’ and ‘Slightly Agree’ responses. This is followed by ‘Challenge’ and ‘Interest and Awareness’. Similarly, in the ‘Would do’ category the same three factors emerged as most important, but with ‘Challenge’ as the most important (Figure 4). These results broadly reflect the results of the School Transition Survey (2007). This may indicate that the IBDP experience emphasizes these aspects over others when delivering its mission statement.
**Figure 3**

**Summary of questions: 15,23,30,36 – CHALLENGE**

- Challenge Summary Would do
- Challenge Summary Should do

**Summary of questions: 16,17,24,26,32- TOLERANCE & RESPECT**

- Tolerance and respect summary Would do
- Tolerance and respect summary Should do

**Summary Questions: 18,19,20,25 – INTEREST & AWARENESS**

- Interest and Awareness Summary Would do
- Interest and Awareness Summary Should do

**Summary Questions: 27,29 IDENTITY ACTIVE**

- Identity Active Summary Would do
- Identity Active Summary Should do

**Summary Questions: 21,22,28,34 IDENTITY PASSIVE**

- Interest and Awareness Summary Would do
- Interest and Awareness Summary Should do

**Summary Questions: 27,29 IDENTITY ACTIVE**

- Identity Active Summary Would do
- Identity Active Summary Should do

**Summary Questions: 31,33,37,39, FRIENDSHIP & INVOLVEMENT**

- Friendship & Involvement Summary Would do
- Friendship & Involvement Summary Should do
Section 4: The IB Diploma experience

Questions in this section attempted to identify whether it was an aspect of the IBDP itself or other aspects of the respondents educational experience at the study school that may have influenced the development of these values in an attempt to isolate, as far as possible, the IBDP experience from the international school experience as this has proved a stumbling block in other similar studies. Certain responses are quoted below to illustrate that the responses garnered in this section proved to be the most useful and insightful in terms of the research questions, eliciting the richest data. Responses required post coding, as described above, to identify emergent themes and tabulate frequency tally.

The first dichotomous question, asking whether respondents felt that the IBDP had been influential in the development of international mindedness, was answered affirmatively by 26 with only 1 negative response. Figure 5 below indicates which aspects of the IBDP respondents deemed to be most influential in the development of values and attitudes.
Figure 5: Elements of the IBDP deemed influential in the development of attitudes and values

'Teachers’ was the category selected by 16 respondents as most influential:

“Particular teachers represented and created a spirit of internationalism, by virtue of their life experience and convictions.”

Model United Nations (MUN), sports and special school activities such as International Women’s Day assemblies also emerged as recurring themes:

“My extracurricular activities were mostly sports-related; they developed the values associated with sports (respect, teamwork etc.)”

General school culture, the international student body was another repeated theme.

“Values, international mindedness and openness to difference was derived mainly from moving countries, and through being in an international school with peers from all over the world, being exposed to culture, values and attitudes different than my own. Especially through building close relationships with peers, during school or in extra-curricular activities which united through common interest in a particular subject and collaborating, overcoming challenges, making compromises, etc.”

In terms of IBDP components, CAS was the activity most often described as influential. Specific examples were CAS trips overseas and cross-section Performing Arts activities.
Responses to the questions targeting the significance of the Learner Profile itself in the IBDP experience and awareness of the IB mission to produce internationally minded people were less well defined but it emerged that for most of the respondents the role of the IBLP had not been clear in the IBDP experience. In order to investigate this further, questions directly targeting awareness of the IBLP and Mission Statement were clustered for comparison and triangulation. In most cases there was consistency of awareness and perceived influence. However this was not universal and there were some interesting incongruities that might point towards a lack of understanding of the relationship of the IBLP attributes to the construct of international mindedness. It is interesting that some of the respondents, despite being unaware of the IB mission to create internationally minded people, nonetheless felt that the diploma experience had influenced the development of international mindedness in them. This was explored further in the follow-up interviews.

Final questions attempted to tackle the difficult issue of separating variables, broadening the list of potential influences to introduce external factors more explicitly (Figure 6).

Although 16 out of the 30 respondents cited the IBDP as a significant factor in the development of international mindedness, rather more (24) cited the sample school itself, correlating with responses to the earlier question about the influential aspects of the IBDP in which teachers and general school culture were seen as most significant.

Questions that arose during the analysis of the survey were formulated into an interview agenda in order to provide some structure and guide the interviews. Interview data is reported below.

Results of Interviews
All interviews began with a reminder of the purpose of the research with reference to the questionnaire, outlining the objective of the follow up interviews and a general conversation about post school trajectory and current situation.

The audio recordings were transcribed and emergent themes, commonalities and differences relevant to the research questions were identified and recorded. The report of the interview data is arranged thematically around key themes that emerged from the interviews. Verbatim interview excerpts are provided to illustrate the rich data that was gathered. To protect the privacy of interviewees pseudonyms have been used. All the interviewees offered insightful reflections on their IBDP experience at the study school. Anika described the difficulty of remembering details of her school experience 10 years ago and a degree of prompting was necessary with all interviewees to elicit comment on details of the programme and their experience.

All 3 interviewees stressed the influence of the international school community itself, the general ambience and the international demographic of the students in particular.

“I wouldn’t really say that the IB was the reason that I have probably other values than maybe people who don’t have an international background. But I think it’s the context, the fact that you meet people from different places” - Anika

They were in agreement regarding the difficulty of separating the international school experience from the IBDP experience. However, all interviewees had attended other schools in other countries, including both international and local schools, and they were able to offer comparisons with earlier schooling experiences.

“I could see that we were a more internationally minded community compared to a US school” - Marie

Anika suggested that the impact of her experience at an international school in Saudi Arabia had had a greater influence on her values and attitudes than the impact of the study school environment or the IB curriculum and felt this was probably due to a more culturally diverse student demographic at the Saudi school. All interviewees referred to the impact of having lived in different countries and different cultures as formative experiences.

Both Anika and Marie alluded to the elitist nature of the study school community. Anika felt that the limited demographic in terms of social economic group and the likely associated high educational level of the parents of students would have “pre-selected” a group of students disposed to an international
outlook by their family. Marie and Marcel also referred to the “little bubble” of an international school community, although this was not necessarily a negative perception.

“I think with a lot of children in the same position I was in, one parent from one place, one parent from another, you’re living in another place and you’ve moved to many different places in between. You have this sense of not really belonging to one place and being in an international school gives you that sense of belonging because you are with a bunch of like-minded individuals.” - Marie

The awareness of the interviewees regarding the international mindedness mission of the IBDP varied from a complete unawareness to a high level of awareness. In interview it emerged that Marcel felt that this had gradually revealed itself during post-school contact with students who had experienced other curricula.

Marcel and Marie both mentioned the sense of an enduring influence of the IBDP experience that had manifested itself in long lasting IB friendships and sense of kinship with other IBDP graduates, a kinship born of shared experience but also the perception of a similar mindset.

“I don’t think you feel it [at the time] because I think you see that afterwards when you meet other people who’ve done different systems. So I see people in England who’ve done A levels and there is a complete shift between having done IB and having done for instance A levels. Not in personality but in terms of knowledge, in terms of having that critical element.”

- Marcel

Despite her stated lack of awareness of the IBDP ideology further discussion of Anika’s responses to the survey showed that she was able, retrospectively, to identify instances where her views had been challenged, specifically in TOK. In terms of the IB curriculum, TOK was the area referred to by all three interviewees as being effective in challenging the attitudes and values, although Marcel felt that this was largely due to the international student and teacher profile of the class. He was in a unique position of having spent time living with a student who had done the IB in a local British school and he felt that her experience of many aspects of the programme had been quite different and much less ‘international’ than his.

CAS and English were other areas of the curriculum also referred to by all three interviewees as influential aspects of the IB experience. Marie and Marcel specifically referred to the World Literature section of the English syllabus as an area that encouraged a different perspective and the development of critical thinking skills. Marcel went further to say that other areas of the curriculum, namely math
and science, had not “felt international”. In terms of general language acquisition, Anika felt that a proficiency in English was an important aspect of international mindedness as it is so widely spoken. When prompted Marcel and Marie were also in agreement that the ability to speak a second language and a willingness to learn another language were crucial elements of international mindedness.

All 3 interviewees described MUN as having been influential an experience.

“I think there is a lot of encouragement to accepting other cultures other races and even other religions and other ways of thinking and the debate was fantastic, the way we worked in MUN and we understood other countries. MUN definitely sparked a lot of my desire to work with other countries.” - Marie

But it was perceived as being an extra-curricular activity and therefore not directly associated with the IBDP. Further discussion asked them to consider the level of awareness that a students might have of IB influence in the delivery of the programme and the whole school culture and they agreed that with the benefit of hindsight it is becomes clear that students have only limited awareness of IB influence in the classroom and in the school.

“At the age of 16 you don’t really think about the programme actually being structured for a certain purpose.” - Marie

The difficulty posed by the multiplicity of influences in peoples’ lives while at school was further explored and specifically the degree of possible influence that the IBDP may have exerted on choices of university level study and post school trajectory. Both Marie and Anika felt that their choices were more directly influenced by life experience and family but Marcel admitted that the influence the IB, and specifically TOK, had had emerged only after some time and directly influenced his choice of post graduate study in Political Communications. In the following section the key points from both the questionnaire and the interviews are synthesized.

Conclusions and recommendations

Summary of findings
All but one respondent described the IBDP as having been influential in developing international mindedness in them and results from Section 3 of the survey indicate that this cohort of alumni do display attitudes and values that align with those described in the IBLP. But international elements of post-school study and experience mean that the IBDP cannot be isolated as the only contributing factor to the persistence and possible growth of these traits.
For some respondents IBDP influences on post-school trajectories seemed clear, with many having chosen study programmes with international components or dimensions and similarly career paths with an international component. However, only some respondents attributed these choices to IB influence, many cited family or other life experience, including living abroad, as more influential. As in Wright’s retrospective study (Wright, 2015), it was clear in the responses to open questions and in the interviews, that the passage of time and post school life experience had allowed a certain perspective to develop and that participants were inclined to value IB influence later which would seem to endorse George Walker’s ‘20 year test’.

The research question also asked which areas of the IBDP were perceived as having been most influential and, as in previous studies (Hinrichs, 2002, Lineham, 2013, Wright, 2015), literature (English and French), history and particularly TOK were areas mentioned by respondents as providing rich forums for discussion and acting as potent tools for challenging values and attitudes. This somewhat challenges the view of Silcock and Duncan (2001) and Haidt (2012 in Pearce, 2013) who express reservations about the efficacy of reasoned discussion about hypothetical or others’ experiences in changing values. The repeated references to these experiences, including the recall of specific lessons and discussions, would appear to dispute the idea that personal schemas, as described by Hitlin and Piliavin (2004), cannot be challenged both by the proximity of others and by vicarious challenge. Silcock and Duncan (2001) argue that sociological sanctioning is necessary if changes in values are to transcend the tokenistic and it is perhaps specifically the multi-cultural context of the international school that can provide the sanctioning of “pluralism with limits” (Byram, 2008) and thereby sanction change. Silcock and Duncan are also skeptical about the value of experiential learning in shaping values but the results of this survey also demonstrate that CAS activities are perceived as influential in this domain.

As in Wright’s study (2015), the results here point to a “multiplicity of influences” in the development of values and attitudes for these respondents and the associated challenge for educational impact research in trying to separate the influences that shape peoples’ lives. Wright and others (Hinrichs, 2001, Lineham, 2013, Hayden, 2000) note that there is a particular difficulty for those who had attended international schools in separating the international school experience from the IBDP itself. Whole school culture and teacher input were repeatedly mentioned as influential in the development of values. It became clear that interviewees were not necessarily aware of how teaching strategies and content choice, made on their behalf by teachers, and whole school ethos might have been influenced by the IB curriculum. Lack of awareness regarding pedagogical decisions may contribute to the difficulty of separating programme influence from school influence. The visible part of the curriculum to which students have access is the tip of the iceberg, tiny in proportion to the whole.
Conclusions

This mixed method research and has found that this cohort of IBDP graduates appear to display values and attitudes that reflect the IB construct of international mindedness. Post-school trajectories together with answers in Section 3 of the survey would imply that these views are held in more than a tokenistic manner. In line with extant research it is clear that, even within a case study framework, the multiplicity of uncontrollable variables makes it much harder to imply causality, a common feature of ex post facto research. However, this research was concerned with perception and the data gathered indicates that respondents perceived these values to have been influenced by the IBDP and the research was therefore able to answer the main research question. The question of whether it is too late to influence values and attitudes at the IBDP age (Hofstede, 2005) was examined in interview and although this led to discussion around the influence of earlier life experiences this was not perceived to be the case.

In his response to Hinrichs’ research, Cambridge (2002) raises the issue that students electing to enroll in an IB programme may be predisposed to international understanding rendering international mindedness a cause rather than an effect. Anika alluded to this in her interview, describing the restricted demographic in terms of the socio-economic group of students at the study school and the likely associated high educational level of the parents as giving rise to a “pre-selected” group of students disposed to an international outlook by their family. The strong and enduring influence of the study school and what was perceived as ‘generic international school education’ was remarked upon in responses to survey questions and by the 2 interviewees who had studied and continue to live outside of their ‘home’ countries. In consideration of the extent to which the sample represents the whole population of alumni from the study school and generalizability it must be acknowledged that strong feelings of connection to the IB or the study school may have been motivating factors for people who volunteered to be part of the research and this might therefore result in positive attributions to either the IB or the school. Enrolling in the alumni database is done on a voluntary basis, and those joining are likely to be those with positive feelings about their school experience. Encouragingly though, despite having similar reservations, Wright found that critical comments were not uncommon amongst her cohort of IB alumni (Wright, 2015:15). This was mirrored in this study, most clearly in the interview data, where prolonged conversation and careful attention to avoid interview bias led to interviewees being comfortable to criticize their IBDP experience when appropriate.

Recommendations for further research
The IBO is clearly committed to ongoing investigation of IBLP impact.
“Much of our ongoing research into the learner profile and international mindedness in schools is looking at ways to facilitate and demonstrate their growth. Finding effective ways to reflect at a personal level and to celebrate and evidence that growth is an important part of that formative cycle. Finding ways to support our schools with this and to share good practice is something we are committed to and actively working on.” (IBO pers. comm 17/04/15). I would recommend the following areas as worthy of further investigation:

- A survey amongst alumni of a school running parallel non-IB and IB curricula could be a way of limiting variables to determine IBDP impact.
- The degree of awareness held by other stakeholders, for example parents, of the IBLP attributes and the value that they themselves ascribe to the ideological dimension would be an interesting area of investigation as the “dichotomy of mission, one idealistic, the other pragmatic” clearly endures (Bunnell, 2011). Cambridge recommends research targeting parents’ and students’ decisions to enroll in the IB programmes (Cambridge 2002).
- Investigating how instrumental teachers feel in influencing their pupils’ values. Does the subject matter or modes of instruction associated with the IB curriculum facilitate that? Is this the same for all subject areas?

**Recommendations for practice and policy**

By defining what these respondents have identified as important in their IBDP experience, this study is useful for the study school and for others offering the IBDP in helping to identify aspects of school culture on which to focus to maximize the impact of the IB mission. The recognition of the potency of teachers themselves in the development of IBLP attributes carries an associated implication for schools in hiring of faculty and new staff induction procedures. The importance of the values-imbued whole school culture, often referred to in the literature, has also emerged as highly influential and schools will want to address how the rhetoric of international mindedness is reflected in their organizational culture (Skelton, 2007). Although it has been outside the scope of this project, the question of assessment and a discrete values education course have arisen both in the literature and from this research. If international mindedness is an important and valued aspect of the IB curriculum, why is it not taught directly or assessed? The confusion surrounding the IBLP and the ideological dimension of the IBDP that was revealed in this research might be addressed in this manner. The IB has resisted the model of explicit values education but it would seem that the efficacy of the ‘osmosis approach’ where international mindedness is “embedded in subject areas and assessed through them” (IBO, 2009b) might be questioned. If international mindedness were an assessed component of the IBDP, perhaps using entrance and exit values surveys similar to the one used in this study or other contemporary assessment formative strategies, then surely no student would leave unaware of this aim.
References


Bullock, K., 2011. International Baccalaureate learner profile. Literature review IBO


Heyward, M., 2002. From international to intercultural: redefining the international school for a globalized world *Journal of Research in International Education* 1: 9 pp. 9-32


International Baccalaureate Research Team, 2007. School- University Transition project


Walker, G., 2010. East is East and West is West: IB position paper. IBO


Wright, K., 2015. International Baccalaureate Programmes: Longer Term Outcomes University of Melbourne