

Research Report

International Baccalaureate Programmes: Longer Term Outcomes

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EXECUTIVE SUMMARY

This study investigated the longer term outcomes of participation in International Baccalaureate (IB) programmes in the lives of a number of former IB students. A qualitative life history approach was employed to generate rich narrative accounts of people's experiences of the IB and reflections on its lasting effects.

In-depth interviews were conducted with 23 women and men aged from 20 to 63 years who participated in IB programmes in a range of school settings, including international, government and non-government local schools, from the late 1960s to the early 2010s. Six people completed both the Diploma Programme (DP) and the Middle Years Programme (MYP), 14 completed only the DP, two people undertook IB subjects but did not complete full DP, and one person was a student at the International School of Geneva when examinations for the DP were initially trialled. Participants identify with more than 15 different ethnic and cultural groups and represent 13 different nationalities, along with schooling experiences in 14 countries.

Research questions

The study addressed the following research questions, which were developed by the International Baccalaureate:

1. In what ways do people in this study perceive participation in IB programmes to have contributed to vocational choices, employment pathways and their working life generally?
2. To what degree do informants believe that participation in IB programmes has played a role in their social, personal and/or family lives?
3. To what extent do informants report that participation in IB programmes has influenced their personal values, beliefs on matters such as diversity, and contributed to their worldview?
4. Do participants report that participation in IB programmes has predisposed them to engage with various forms of community service and/or action?
5. Do informants believe that participation in IB programmes has influenced their beliefs and actions regarding lifelong learning?

The life history interviews generated rich and detailed accounts of perceived IB impacts, from both recent graduates and from people who completed the IB as far back as the 1970s. Analysis of the interviews was undertaken in two phases; the first involved examination of individual life stories, while the second consisted of thematic analysis across all interviews. These were then interpreted in light of previous research findings on IB impact.

Findings

The findings from this study suggest a multiplicity of influences for the majority of people interviewed, including profound and long-lasting effects for some. These encompass influences on academic and career trajectories, as well as dispositional orientations and social values. Life

history interviews did not reveal discernible differences in perceived outcomes from participation in more than one IB programme.

International Mindedness, Critical Thinking and a Broad Worldview

Participants believed that the IB provided them with a broader view of the world. This included, for many, an explicitly international or global perspective. Closely related to this, critical thinking was identified as a core component of the IB and the development of the capacity for critical thought was regarded as a highly valued skill and disposition that has had an enduring influence on people's lives. A broad worldview, the capacity for critical thinking, and a deep understanding of the wider world was noted by many as factors that helped them become, as some said, "a more rounded person".

Educational Engagement, Academic Rigour and Lifelong Learning;

Many participants had vivid memories of a deep engagement with learning whilst participating in the IB. For some, this reflected a stark contrast with earlier schooling experiences and the IB provided a turning point. Many described the IB as academically challenging. For some, this provided an opportunity to excel, promoting self-esteem and confidence; others described it as difficult and stressful. A commonly held view was that considerable long term benefits were derived from the acquisition of research skills and the capacity for self-directed learning. There were also clear benefits for many in terms of securing a university place and receiving course credits. However, some early graduates described the IB as disadvantageous at a time of limited IB recognition. A number of people reported they found university disappointing after experiencing the IB, insofar as it was less rigorous and engaging.

Higher Education, Vocational Choice and Working Life

While only a small number of participants identified the IB as having a direct impact on their career choice or university studies, many people noted that the IB had considerably *influenced and shaped* their working lives. This was evident in reflections on how the IB had provided them with particular skills or dispositions, such as understandings of cultural difference, the capacity for analytical and critical thinking, the development of high-level written skills, and the acquisition of foreign languages. These factors were noted as having directly and positively impacted on their working lives.

Community Service, Social Engagement and Lifelong Friendships

There was wide variation in the extent to which community service was emphasised in people's schooling experiences and in their lives beyond school. A number of people noted that service was an important part of their lives. Some made clear links between IB experience and their community sector work, volunteering or activism. For others, multiple influences were apparent. It is difficult to ascertain the extent to which orientations to community service and social engagement are directly attributable to the IB as distinct from family, cultural or religious influences. Many participants described the development of strong friendships throughout the IB that have endured throughout their lives, with a number of people noting that social media has facilitated this in recent years, reigniting old connections and generating new ones.

Interconnected influences

Many participants found it difficult to distinguish between the influence of the IB and the broader context of their schooling experience. This provides an interpretive challenge for research investigating educational impact, particularly in trying to disentangle the many influences that shape people's lives and worldviews. This was particularly evident for former students of international schools, and especially clear in relation to issues such as intercultural understanding.

The impact of particular aspects of the IB programme, for example the service component, on people's later orientation towards volunteering and community engagement was also an area in which some people found it difficult to separate values derived from the IB or their family, cultural or religious beliefs. Comparative analysis in this study of international schools vis-à-vis local and public schools provides salient insights. Further research exploring these complex questions would further illuminate this.

Conclusion

Overall, the majority of former IB students who participated in this study believe that the IB has had an enduring and positive impact on their lives beyond school in a variety of ways. Drawing on the life stories provided by people who participated in IB programmes over the last four decades, this report throws light on the nuanced and multifaceted influence of the IB over the life course.

INTRODUCTION

This in-depth qualitative study investigated longer term outcomes of participation in International Baccalaureate (IB) programmes on the lives of former IB students. Drawing on life history interviews with 23 people aged in their early 20s to early 60s, the research provides rich insights into graduates' perceptions of the lasting effects of the IB over the life course. The study explores in detail what IB graduates themselves identify as those dimensions of the IB that have had an enduring influence in various domains of their lives. Participants in this study undertook IB programmes in different geographical locations and school types from the late 1960s until the early 2010s.

Given the historical development of the various IB programmes, and the central aim of the study to investigate the impact of the IB over the life course, the research focuses primarily on the narratives of people who participated in the Diploma Programme (DP). To explore the impact of participation in more than one programme, the study includes a subset of former students who completed both the DP and the Middle Years Programme (MYP). With the introduction of the MYP in 1994, the cohort of former students who completed both programmes are now aged up to approximately thirty years, while DP graduates are now aged up to their early sixties.

The study focuses on participants' understandings of how their educational experiences have shaped their social values, beliefs and worldviews, the extent to which they attribute participation in IB programmes as influencing their higher education pathways, career choices and working lives, as well as their view on community service and their attitudes towards cultural diversity and lifelong learning. It explores commonalities and differences in people's experiences and perceptions, particularly in relation to school type, geographical location, cultural context, and the life stage of former students.

All participants provided thoughtful reflections upon their experiences of undertaking IB studies and their understandings of its lasting impact in a number of areas of their lives. Perhaps most striking, however, are the views expressed by those people for whom more time had passed since completing their studies. Importantly, in relation to the overall aim of this study to explore longer term outcomes, a number of comments indicate that not only is the impact of the IB long lasting, but its effects manifest in different ways across the life course, often many years after participation in an IB programme.

This Report begins with an overview of the background to the study, followed by a description of the research design and methodological approach. Particular attention is given to the value and unique perspectives that qualitative life history approaches provide. Drawing on interview data, the remainder of the Report is thematically organized around the key themes that emerged from the interviews: International Mindedness, Critical Thinking and a Broad Worldview; Educational Engagement, Academic Rigour and Lifelong Learning; Higher Education, Vocational Choice and Working Life; and Community Service, Social Engagement and Lifelong Friendships. The Report offers some comments on the multiplicity of impacts and concludes with some consideration of

the implications of this study for further research into the longer term outcomes of participation in IB programmes.

BACKGROUND

The International Baccalaureate was established in 1968 at the International School of Geneva (IBO 2014a). The need for an internationally transportable academic credential was one factor that contributed to the development of the original IB Diploma Programme (DP). However, the aspiration also was much broader and idealistic. Indeed, an internationalist vision of a “forward-looking, liberal-humanist education of the ‘whole person’” (Tarc 2009, p. 119) and the aim of fostering “a sense of common humanity” (Rizvi, 2009, p. viii) have been central goals of the IB since its establishment. Put simply, a key aim of the IB DP that remains central to the IB mission today is the provision of “quality education for a better world” (IBO 2014b). At the heart of this vision is a commitment to educational programmes that foster engaged and active world citizenship through the provision of academically rigorous programmes aimed at fostering personal dispositions and social values that include a love of learning, civic participation, and international mindedness.

Today, the principles of a humanistic, holistic education that attends to intellectual, emotional, social and personal growth are encapsulated in the IB Learner Profile, which envisages the core aim of the IB as fostering “internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world” (IBO, 2013). By bringing together and fostering skills of critical thought and creativity on the one hand, and a concern with active citizenship and international mindedness on the other, “the IB espouses the principle of educating the whole person for a life of active, responsible citizenship” (IBO 2013, p. 1).

Since the creation of the Diploma Programme in the late 1960s, the IB has expanded its educational reach to young people across the globe through increasing numbers of IB accredited schools and a broadening of its programmes to include younger people. In the 1990s, the Middle Years Programme (MYP) and the Primary Years Programme (PYP) were introduced and the IB now caters to students aged three to nineteen years from a range of cultural, ethnic and socio-economic backgrounds (2014c). Currently, more than 1.2 million students in 147 countries take part in an IB programme (2014b). Early schools offering the IB were predominantly private international schools; but IB programmes are now offered in international, private and state schools, with the IB reporting that over half of the IB World Schools today are state schools (IBO 2014a).

The rapid rise in the number of young people participating in IB programmes and the growing stature of the IB provides a strong warrant for studies of IB graduates that evaluate its outcomes. There is now a large body of IB research (Tarc and Beatty 2012), including a considerable number of evaluation and programme impact studies. For example, recent large-scale studies of IB graduates, often in comparison with their non-IB peers, conducted in the UK, the USA and

elsewhere, provide data on the effects of IB participation for higher education pathways (Caspary 2011; Halic 2013; HESA 2011). To date, research evaluating IB programme outcomes has largely explored the impacts of IB participation during the immediate years following graduation, and in the context of educational performance and higher education pathways. Much of this has been focused on exploring outcomes and impacts through quantitative measures.

Some mixed-methods studies have explored qualitative and subjective dimensions of IB impact in relation to postsecondary school effects, including university preparedness, academic behaviours and performance and beliefs and attitudes towards learning (Aulls and Peláez 2013; Coca et al., 2012; Inkelas et al. 2013). Such work offers important insights into subjective perceptions of IB impact, beyond higher educational performances and measures provided by large scale and comparative quantitative studies. To date, the focus of this research has, however, been limited in terms of both temporal scope and a relatively narrow focus on constructs of learning and knowledge.

Other mixed method studies have demonstrated broader dimensions of IB impact. Culross and Tarver (2011), for example, examined the perspectives of former DP students who had completed, or were close to completion of a college degree. They found that DP graduates believe that the IB programme increased their cultural awareness while also providing academic benefits. As they note of IB graduates: “Overall, they perceived they had a greater breadth and depth of knowledge, improved creative and critical thinking skills, and improved oral and written communication skills”. Taylor and Porath’s (2006) small study of two cohorts of IB graduates, from 1996 and 2000, also indicated that DP graduates experience lasting benefits. Participants in their study attributed the following benefits to the IB: “a strong work ethic; critical thinking, organizational, time management, and communication skills; a broader perspective of the world; and life-long friendships” (Taylor & Porath, 2006, p. 154).

The studies conducted by Taylor and Porath (2006) and Culross and Tarver (2011) illuminate broad dimensions of IB impact. However, while studies such as these have provided valuable insights into the perceptions of former students about the impact of the DP, and specific units within it, research on the IB has, in general, been limited in relation to the breadth of impact explored, the predominant framing of impacts within the context of higher education and academic performance, and the temporal scope of investigation (that is, most studies have taken place relatively soon after completing an IB programme). As such, research to date offers little insight into the longer term impact of the IB and the wider subjective attributions made by graduates in relation to the enduring influence of IB participation over the course of their lives.

In light of the historical importance and growing significance of the IB in the international educational landscape, this study provides important new insights into what former students themselves view as long term outcomes of participation in IB programmes. With the establishment of the DP in the late 1960s, those who participated in Diploma Programmes are now aged up to their early sixties. It is thus a particularly opportune time to ask both early graduates, alongside those who completed programs during the intervening years, to reflect on its lasting effects. The primary focus of this study is on former DP students. However, given that

former students of the MYP are now aged up to their early thirties, a subset of people who completed both programmes was also included.

METHODOLOGY

This research was designed to complement and enrich a growing number of IB impact studies with an in-depth qualitative investigation that could illuminate the nuanced and multifaceted influence of the IB over the life course. A life history approach, informed by biographical and narrative methods, was adopted to provide the overarching methodological framework (McLeod and Thomson 2009; Plummer 2001; Roberts 2002). Life history is an especially fruitful methodology for generating detailed and rich insights into people's lived experience. It is an approach that seeks to understand the experiences of daily life, the views people express and what they say is important to them; and it provides an interpretive framework for analysing individual histories and personal reflections (Roberts, 2002). Life history thus offers a productive means of investigating the enduring influence of the IB within the broader context of the lives of IB alumni.

The central aim of the project was to explore perceptions of the lasting impact of participation in IB programmes in key areas of the lives of former IB students; these include their professional pathways, involvement in community service activities, attitudes to lifelong learning, as well as the ways in which the IB may have, more generally, shaped their personal values, beliefs about diversity and overall worldview. A secondary aim was to explore commonalities and differences in relation to the impact of the IB, as reported by IB alumni, with consideration given to factors such as age and life stage at the time of interview, type of school attended (e.g. local or international), school systems (e.g. public or independent), and geographical location and cultural context in which IB programmes were undertaken, and participation in more than one programme.

Research questions

The study was guided by a number of key research questions, which were developed by the International Baccalaureate.

1. In what ways do people in this study perceive participation in IB programs to have contributed to vocational choices, employment pathways and their working life generally?
2. To what degree do informants believe that participation in IB programmes has played a role in their social, personal and/or family lives?
3. To what extent do informants report that participation in IB programs has influenced their personal values, beliefs on matters such as diversity, and contributed to their worldview?

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4. Do participants report that participation in IB programs has predisposed them to engage with various forms of community service and/or action?
 5. Do informants believe that participation in IB programs has influenced their beliefs and actions regarding lifelong learning?

In addition, participants were asked whether there were any particular qualities of IB programmes that were influential for them at points of major life transitions or milestones.

Research Design

The research was designed to generate detailed narrative accounts of people's experiences of the IB and their reflections on its lasting impact. It employs a qualitative life history approach (McLeod and Thomson 2009; Plummer 2001), with the primary method of data collection being topic-focused semi-structured interviews. Interviews involved a focus on both recollections of schooling and the IB itself, as well reflections on the enduring influence of the IB within the broader context of participants' lives.

Participants were selected using purposeful sampling principles to provide "information rich" cases for study in depth (Patton, 2002). This approach is not intended to provide data for empirical generalisation, but to elicit rich understandings of a given phenomenon. To assist with the recruitment of participants for the life history interviews, and to generate some indicative data to explore in greater depth during the interviews, the research design included the development of a short online questionnaire.

Twenty three people participated in life history interviews; the majority of these had participated in the Diploma Programme (DP), with a smaller subset having also completed the Middle Years Programme (MYP). The development of prompt questions and the interpretation of material generated during the interviews were informed by life history, biographical and life course approaches (McLeod & Thomson, 2009; Plummer, 2001). Analysis of the interviews included consideration of individual life stories, as well as attention to commonalities and differences that emerged across interviews.

Recruitment and selection of participants

Recruitment of participants took place in consultation with the office of IB Alumni Relations, with existing alumni networks and databases providing the initial channels for recruitment. An invitation to participate was sent by the IB Alumni Office via email to 410 former IB students. This included all alumni who participated in DP programmes up to the 1980s for whom the IB had contact details (n=49). However, the majority of those initially contacted was a random sample of people who graduated in the 1990s and 2000s (n=361). To reach a larger number of former students from earlier years, the second phase of recruitment involved directly contacting IB

schools (n=53), in many different countries (n=29), with a request to make details of the study available to their alumni through newsletters, email or via a school website.

The invitation to participate included a link to information about the project on the Melbourne Graduate School of Education's website, as well as a link to a short online questionnaire (see Appendix I). The questionnaire was designed to both aid in the selection of participants for the life history interviews and provide some indicative data to explore in further depth during the interviews. The questionnaire sought to elicit basic demographic information, details about IB programme/s completed, including dates and geographic locations, perceived influence of participation in an IB programme on people's lives, and interest in participating in an in-depth interview. Respondents were asked to rate on a 5 point Likert scale the impact of the IB in relation to: i) values, beliefs and worldview; ii) personal conduct; iii) attitudes towards lifelong learning; and iv) choice of career. Two open-ended questions were included to prompt elaboration on perceived IB impacts. Responses to rating scales and open-ended questions were considered in conjunction to select participants for the life history interviews.

The first criterion for interview selection was reported significant impacts of IB over the life course. Additionally, selection was made to ensure variation in age and life stage, gender, nationality and ethnicity, IB school type, geographical location and programme/s undertaken. The exploratory nature of the questionnaire provided important background information and enabled careful selection of life history interview participants. Respondents who completed the DP were disaggregated into three age-based cohorts: 20-34 years, 35-49 years, and 50 years and over (for a demographic snapshot, see Appendix III). The sample of former DP students thus includes people who undertook the programme at various points in time, from the IB's inception in the late 1960s through to the early 2010s. It also reflects variation in the ethnic and cultural backgrounds of participants, geographical locations of IB schools and school types.

The purposeful selection of participants was made to ensure they richly reflected the phenomenon of interest (Patton 2002), that is, they perceived the IB to have had a considerable and lasting impact on their lives. Importantly, this approach to recruitment differs from those that focus on so-called extreme or deviant cases, which are unusual. For this study, this means that respondents typically reported considerable IB impact, but in quite consistent ways. While the results may not be generalizable to entire populations of IB graduates, the study does provide compelling insights into the experiences of IB graduates who believe they benefited from participation in IB programmes. The commonality of responses that emerged across a diverse group do, however, suggest that the results speak to broad issues of IB impact. This is supported by a number of other studies which have found similar effects.

Twenty-three people participated in the life history interviews; 12 women and 11 men. Of this group, 20 people completed the DP, six people completed both the DP and MYP, two people undertook IB DP subjects but did not complete the full Diploma Programme, and one person was a student at the International School of Geneva when examinations for the DP were initially trialled in the late 1960s. Participants represent 13 different nationalities, schooling experience in 14 geographical locations, and they identify with more than 15 different ethnic and/or cultural

groups. They include people who took part in programmes in a range of settings, including international schools and government and non-government funded local schools. Ten people attended international schools outside their own country (three with scholarships), four attended international schools in their home country, six attended public schools, two attended private local schools, and one person attended a local public school for the MYP and went to an international school for the DP.

To protect the privacy of participants, details that may lead to the identification of participants have been altered and pseudonyms are used throughout the report.

Life history interviews

Interviews were designed to elicit information about the participants' childhood and family background, the schools they attended, their recollections of IB programmes, and what they saw as the lasting impact of the IB. The semi-structured nature of the interviews allowed for participants to speak on a variety of topics that were important to them, but it also allowed for more focused questions to be asked. Focused questions were included to generate discussion around the key questions the study sought to address, in particular, the influence of the IB on people's professional pathways, community involvement, and views on issues such as international mindedness, cultural diversity and lifelong learning.

A semi-structured interview schedule with open-ended questions was developed (see Appendix II), with reference to the central research focus, that is, to explore the influence of the IB over the life course and the key research questions. The construction and conduct of interviews drew on specific insights and methods within life history and life course approaches (McLeod and Thomson 2009; Plummer, 2001). This approach was adopted to assist participants to generate a narrative account that included reflections on their schooling prior to participating in the IB, the experience of the IB programme itself, and on the on-going influence of the IB in their lives.

Interviews typically began with the researcher inviting participants to provide some general information on their childhood, family background and schooling prior to participation in an IB programme. This provided context for the subsequent reflections they offered in relation to experiences of the IB itself and life beyond school; it also served as a common starting point for the individual life-course narratives. Recollections of the IB programme were then explored, with the remainder of the interview covering both the time period following participation in the IB and reflections on its perceived lasting impact (or not). The open ended and semi-structured nature of the interview was crucial, as it allowed for flexibility and responsiveness as points of interest as they arose (Patton 2002; Plummer 2001).

A brief note should be made here concerning the subject of memory, which poses methodological challenges for approaches such as oral and life history (McLeod and Thomson 2009). Memories offer "a source of raw material about the past" but they are also "a subject for

historical inquiry in its own right” (Tumblety 2013, p. 1). Put another way, the issue of whether memories are true or false, comprehensive or partial is in some ways less important than what “the selective recalling and telling of them suggests about things that mattered culturally and subjectively, at the time of the event and in the time/s of the (re)telling” (Wright and McLeod 2012, p. 5). The value of memory and oral testimonies, albeit with recognition of the complexity of memory studies, is therefore widely recognised in historical research, as well as the social sciences (McLeod and Thomson 2009; Tumblety 2013).

The ways in which life history interviews are conducted is important (Plummer 2001). For this study, each interview took place via telephone or Skype Audio. While face-to-face interviews have been the traditional form in which qualitative research has taken place, in recent years there has been increasing attention to the value of telephone interviews and the use of new communication technologies (Hannah 2012; Holt 2010). The decision to conduct interviews by telephone or Skype was made for pragmatic purposes; it enabled a diverse group of people from a large number of countries to participate in the study, which would not have been possible had the interviews been conducted face-to-face.

There are both benefits and limitations to this mode of interview (Holt 2012). On the one hand, being physically present offers opportunities to create a greater degree of intimacy, trust and openness, and it often generates more impressionistic accounts that may derive from the setting of the interview and non-verbal aspects. Yet the anonymity or distance provided by a less intimate encounter can also facilitate narrative flow. Put simply, some people feel more comfortable with this type of communication. For this study, it did not appear either advantageous or disadvantageous; all interviewees appeared at ease with these modes of communication and all interviews generated rich narrative accounts of the experience of the IB and people’s reflections on its lasting impact.

The duration of the majority of interviews was between forty-five and sixty minutes. All interviews were audio recorded and transcribed. Participants were provided with a copy of their transcript and were given the opportunity to make amendments to the transcript if they so desired. Some people provided feedback and requested minor alterations; the majority did not. All participants were happy for de-identified interview transcripts to be provided to the IB.

Data analysis

Analysis of the life history interviews was undertaken in two phases; the first was an examination of individual life stories, while the second entailed thematic analysis across all interviews. Data analysis was conducted inductively with attention to emergent patterns (Patton 2002) and key areas of comparative interest. This involved the identification of core themes that emerged, both in relation to the perceived impacts of the IB (as reported by IB graduates), as well as drawing on researcher interpretation of the life stories. The final stage of analysis was consideration of research findings in light of previous studies on IB impact.

In the first instance, transcripts were checked for accuracy by listening to the audio recording of each interview while reading the transcribed document. Some minor errors were noted and corrected. Importantly, this process also provided the opportunity for preliminary analysis, particularly through attention to verbal nuances and tone not always apparent through reading the transcribed text alone. Short biographical notes were then created for each participant (see Appendix IV), emergent themes from individual interviews were recorded, and preliminary categories were developed to aid further analysis and cross-case comparison. Paying particular attention to the core research questions, as well as key areas of comparative interest, thematic analysis was then undertaken across all interviews and responses were coded into categories. Cross-case analysis provided insights into the many commonalities, as well as important differences, in people's accounts, which aided the development of comparative insights.

While the methodological and analytical approach summarised above is an accurate reflection of the tasks undertaken, such step-by-step accounts can never fully capture the complexity of life history research. Asking people to share their life stories, including their reflections on schooling and what they perceive to be its lasting impact, is a complex task, and one that also involves ethical dimensions. Participants place their trust in researchers when offering their stories for analysis. In some cases, people share very personal and intimate details of their lives, which must be dealt with sensitively. More broadly, all experiences or recollections shared are part of an individual's life story and thus need to be respected as such. Schooling, moreover, does not take place in isolation from the broader context of people's lives. So while the focus of the interview was on the IB, the stories told inevitably touch on broader aspects of people's personal and family lives.

Finally, while a biographical approach provided the narrative structure for the life history interviews that frame this study, analysis of IB impact involves close consideration of discrete or isolated details of people's life stories alongside the accounts of others, in order to identify emergent themes and explore commonalities and differences in people's experiences. It is at this point that biography and thematic qualitative analysis intersects, as interpretation moves back and forth from individual biographies and personal context, to the central research questions and broader themes animating this research.

The following section reports on the research findings, beginning with a brief discussion of the complexity of considering IB impact. It draws attention, in particular, to the importance of acknowledging the broader context in which people undertake the IB and the inevitable multidimensionality of people's lives. The remainder of the Report is organized around four overarching themes: i) International Mindedness, Critical Thinking and a Broad Worldview; ii) Educational Engagement, Academic Rigour and Lifelong Learning; iii) Career Choice and Professional Pathways; and iv) Community Service, Social Engagement and Lifelong Friendships. The interpretive analysis that follows reveals how these overarching themes emerged across interviews. Exemplary cases and verbatim interview excerpts (Patton 2002) are presented thematically to provide rich accounts of how people who participated in this study understand the longer term impact of participation in the IB.

PROJECT FINDINGS AND DISCUSSION

The life history interviews generated detailed narrative accounts of the enduring influence of the IB on the lives of graduates. Many participants reported long lasting and sometimes profound effects, although the specificity of perceived impacts was highly variable. In broad terms, the findings from this study support previous research, which suggests a range of lasting influences (Aulls and Peláez 2013; Culross and Taver 2011; Taylor and Porath 2006). These include the development of international mindedness and a broader perspective on the world, critical thinking, analytical and writing skills, positive dispositions towards lifelong learning and the fostering of lifelong friendships. More instrumental dimensions, notably advantages for university admission and the gaining of advanced credits, were also frequently mentioned, as was the benefit of IB studies for university preparedness. Some disadvantages were also noted.

The in-depth nature of this study and its temporal reach provides new insights into the perceptions of former students of the longer term impact of participation in IB programmes. It fleshes out themes that have previously been identified but not explored in such depth, across time and school type or, importantly, within the broader context of the lives of IB graduates. The life history approach enabled consideration of IB influences as part of wider individual biographies and educational trajectories. The age range of participants and their different cultural backgrounds and schooling experiences illuminates the richness of IB experiences more generally, over time and across the globe.

The ways in which people in this study came to the IB were highly varied. A common story was that parents, or indeed students themselves, were attracted to the challenge and opportunities provided by the IB. Others simply took up the IB because it was offered in their local school; a few people report being disengaged and at risk of early school leaving, while some were part of advanced or gifted programmes and the IB DP was considered a good option or a natural next step. The winning of scholarships made travelling abroad possible for a number of people. Several participants attended international schools in their home countries; in some cases, this came at the cost of considerable financial strain for parents who wanted to secure what they believed was a quality education for their children. One person reported that her father worked three jobs in order to send her to the school she attended. In this case, as with some others, the education offered by the school and/or the IB was highly valued.

There was a wide variety in descriptions of the family backgrounds of participants. Some described their families as international or globally mobile or noted that they had parents of different nationalities. Other participants described their upbringing and families as suburban, middle-class or working-class. Such factors are important to acknowledge when considering IB impact, particularly in relation to questions such as the extent to which the IB promotes international understanding. While there emerged discernable themes that point to commonalities and differences in experiences, for example, between those attending international schools and those attending local government schools, people's life stories highlight the complex interconnections between individual biographies and people's educational experiences.

Not surprisingly, the perceived influence of the IB on the lives of the people who participated in this study is highly variable and multifaceted. Nevertheless, what did emerge very clearly from the data generated for this project is that the IB has the potential to powerfully shape the lives of those students who participate in its programmes. While the particular ways in which this occurs is complex and shaped by numerous factors, including the school itself as well as family and social context, there are common themes that cut across cultural, geographical, social and school contexts, as well as across time. Importantly too, many of the perceived impacts appear to be holistic, infusing personal dispositions and attitudes in general, rather than being isolated to particular aspects of people's lives.

Before exploring in details the major themes that emerged, a brief note should also be made in relation to some of the general trends and differences in impacts, as reported by participants. First, the majority of people in this study were enthusiastic about the IB and its promise; indeed a deeply felt connection to the IB appears to have been a motivating factor for a number of people volunteering to be part of this research. Not surprising, then, the following sections detail many positive attributions made in relation to the IB. Yet it is important to acknowledge that critical comments were not uncommon. Some of these were directed toward the IB itself, including difficulties associated with managing heavy workloads, high levels of stress, high expectations of academic achievement and that the IB fostering of an overly competitive ethos. Amongst other concerns expressed, issues related to the quality of programme implementation and the instrumental use of the IB for purposes that benefited schools in terms of enhancing their prestige.

Another important factor to mention here is the variation in the age and life stage of participants, which inevitably shapes their life stories and perceptions of IB influence. For younger participants, completion of the IB DP was, of course, more recent and their reflections not surprisingly are often more focused on areas such academic impact and further study than those of the older participants. Even so, it is important to note that many of the young people also reported what they considered to be significant impact areas of their lives beyond higher educational pathways. However, for those participants for whom longer period of time had elapsed, reflections were often more wide-ranging. Indeed, it was not uncommon for people to note that it was not until many years after completing the DP that they were able to fully appreciate its overall effect on their lives. Given this temporal dimension, the Report is more heavily weighted towards the narratives of those participants for whom a decade or more had passed since completing the IB. The interviews did not reveal differences in perceived outcomes from participation in the MYP and DP, compared with DP participation only.

Despite the diverse group of participants in this study and the variability in life stories and responses to the central research questions, a number of common themes emerged. Importantly too, some key differences were also apparent. The commonalities and differences are explored in detail in the sections that follows, beginning with the question of international mindedness. This is dealt with at greater length than the other categories, due to both the complexity of the conceptual issues associated with international mindedness and the responses of participants.

Tarc and Beatty (2012) have noted that while conceptual analysis of international mindedness abounds, empirical analysis is limited, with research on the development of international mindedness an under-studied aspect of the IB. The findings from this study thus contribute to this important area of IB impact. In so doing, the following discussion explores the interconnected aspects of international mindedness with critical thinking and what participants in this study commonly refer to as a “broad” outlook or a “wider view” on the world.

International mindedness, critical thinking and a broad worldview

An internationalist perspective and the promotion of international understanding were at the heart of the founding vision of the IB and remain central to the mission and ethos of the IB today (Lineham 2013; Tarc 2009; IBO 2014b). International mindedness is, as Hill (2012, p. 246) notes, “the key concept associated with an international education”. Over the last several decades, globalisation and the rise of an internationally mobile professional population has fostered, in many parts of the world, an increasing interest in the promotion of international understanding as an educational aim (Hayden et al. 2000). This has occurred most notably within the international school sector, but it also increasingly reflects a broader aim of education more generally (Harwood and Bailey 2012; Hayden et al. 2000).

While there is not space here to fully engage with the conceptual complexities of issues around international mindedness, it is important to note that the defining features this concept, and indeed related concepts like intercultural understanding, global citizenship and cosmopolitanism, have both changed over time and are widely debated in the scholarly literature (Haywood 2007; Hill 2012; Vertovec and Cohen 2002). According to Hill (2012), during the mid to late 20th century, the notion of international mindedness included “intercultural understanding, language learning and human rights”. This shifted somewhat during the late 20th and early 21st century to encompass “principles related to sustainable development, awareness of global issues, and international cooperation as conflicts continued to arise around the globe” (Hill 2012 p. 245).

As with changing notions of international mindedness, the IB’s expression of this aspiration has also shifted with changing social, economic and political contexts (Tarc 2009). In the present era, international mindedness may be broadly understood as a term used to “capture a set of skills, understanding, awareness and actions thought to be necessary for being a good national and international citizen” (Harwood and Bailey 2012, p. 78). The attitudinal component includes open-mindedness, flexibility of thinking, respect for others, a positive attitude towards other value systems and cultures, and a belief that all people have the right to express their views freely (Hayden et al 2000). It reflects a worldview that seeks to transcend the limitations of one’s own experience, an appreciation of the richness of diversity and the capacity to move beyond particular nationalistic conceptions of the world (Harwood and Bailey 2012).

In 2014, the IB defined education for international mindedness as an education that “values the world as the broadest context for learning, develops conceptual understanding across a range of subjects and offers opportunities to inquire, act and reflect” (IBO 2014d). International

mindedness thus refers to a multifaceted set of dispositions, skills, knowledge and attitudes, including “knowledge about global issues and their interdependence, cultural difference and critical thinking skills to analyse and propose solutions” (Hill 2012, p 246). It also includes an important values component: in short, international mindedness or intercultural understanding is about trying to make the world a better place. Empathy, compassion and openness to others are thus critical dimensions (Hill 2012).

The multidimensionality of the concept of international mindedness identified in the scholarly literature and in previous research (Lineham 2013) was broadly reflected in the data that emerged from the life history interviews. Participants used terms such as international understanding, world mindedness, cosmopolitanism and global citizenship to describe a diverse range of attitudes, values, beliefs and actions that they connected with or attributed to their IB experiences and/or the schools they attended. They also linked notions of international mindedness to those kindred concepts identified by Hill (2012), particularly with respect to skills of critical thinking and the capacity for analysis and reflection.

The extent to which international mindedness was referred to explicitly, or was evident in people’s responses during the interviews was, nevertheless, highly variable. As Tarc and Beatty (2012) found, exploring international mindedness through interviews poses methodological challenges and produces diverse responses. While the present study shares those challenges, it has the advantage of drawing on a greater diversity of participants, both in terms of their nationalities and age and life stage, but also in relation to experiences of the IB in a variety of settings. It thus sheds new light on this under-researched area (James 2005; Tarc & Beatty 2012).

International mindedness

It is evident from the interviews that most former students in this study attribute participation in IB programmes, at least in part, to the development of international mindedness. Two prominent themes emerged. First, people who attended international schools commonly found it difficult to separate the influence of the IB programme from the overall ethos of their school or the international environment in which they were studying. In addition, family background and social context must be acknowledged as contributing to shaping of people’s worldviews. However, many former international school students did point to particular components of the MYP or DP to illustrate the ways in which the programme/s supported the development of international understanding. Second, what emerged very clearly from narratives of students who attended public or local private schools was a clearer focus on curricular or programme aspects that fostered a wider understanding of the world.

School type and the overall ethos of an educational institution clearly plays a major role in the ways in which people interpret and take up notions of international mindedness. All of the people in the older 50+ cohort attended international schools; David, Roza and Claire were awarded scholarships and studied abroad, Sabina attended an international school in her home town in Germany, and Edward was a student at the time in which the IB was being developed and trialled at the International School of Geneva. It is perhaps useful to begin the discussion of

participants' views on international mindedness by turning first to this cohort, beginning with 63 year old Edward's account of moving from the USA to Europe in the mid to late 1960s. His reflections provide important insights into both the early developments of the IB, as well as the experience of moving to a new country (his first time overseas) as a result of his father's work. As with many others who moved abroad, either with their families or to attend a boarding school, it was a transformative experience. As he said:

So many people from different parts of the world, and you know some places that I'd barely even heard of up to that point, and then I remember my first day there when we went to register for classes, just overhearing conversations about what people had done and where they'd been over their summer vacation. It was very different from the sorts of conversations you would have heard in California at my previous high school.

Edward vividly recalls the enthusiasm at the school in relation to the creation of the IB, particularly in his History class and to a lesser extent also in his English class. He remembers teachers asserting the importance of final year high school students being tested on their writing skills, with much critical discussion of multiple choice examinations. According to Edward, there was a considerable amount of testing taking place during the years he was there (1967-68) as part of the development of the IB. These included "basic IQ tests", essays, mock college entrance exams and range of other experimental tests. When asked if there was a sense of excitement with the development of the IB programme, he responds: "Very much so, very much so". The excitement spread, he recalls, from the teachers to the students, knowing they were "part of something new that could become something important".

Edward spoke of the history of the International School of Geneva, noting its founding ideals of internationalism and world peace. He recalls that being very much the central philosophy of the school during his time there in the 1960s and he notes that "they tried to inculcate that through the curriculum", particularly in history classes. He mentions that now, looking back on it, he sees much of the history he studied being not only world history, but "fairly intensively political history". The notion that the kind of history being taught for the IB was something quite different from that taught in public or national school settings was a theme noted by many participants, across the age cohorts. This was commonly recognised as important curricular dimension in the fostering of international understanding. As noted below, other subjects were also acknowledged as playing an important role in this regard, particularly, English and Geography.

While the aspiration of promoting world understanding was widely embraced, Edward reflects on the fact that there were "people in the student body whose nations were in tremendous tension with one another". Against the backdrop of the cold war, he recalls the "the East/West dynamic" being clearly present. The Six Day War of 1967 also brought national tensions into sharp relief. Edward did not recall arguments or disagreements but he did say that "there was an awareness that there were people from different sides, you know, present around us". There was a lot of discussion, he says, with teachers in classes and in Home Room groups "talking seriously about what was going on in the world, and noting that different people would see these events in different ways, and that we came from different perspectives and that, you know, as a school we

needed to live together”.

Immersion in an international school environment clearly has implications for the development of international mindedness. David, Roza and Claire, who studied abroad and completed the IB at during the 1970s, all point to the importance of the school context. David and Claire both noted that their schools’ ethos was the promotion of international understanding through education. The experience of simply being with students from many different countries was recognised as an important element. Fifty seven year old David, who grew up in Australia and moved to the UK to attend school an international school, reflected on this:

We were in dormitories ... and in my room there were four students to a room and there was an Italian, English, Chinese [student] and myself, and in my second year the Chinese boy had left and there was a Malaysian boy. So a broad, broad mix of students from all over the world.

For fifty five year old Claire, who was from Northern Ireland and, like David, moved to an international boarding school in the mid 1970s, the experience had an enormous impact:

The slogan at the school is international understanding and for me, that was the big, big thing. I mean I came from a really small, closed yet divided community, which I was very attached to and very defensive of, and it took me a long time to step outside to be able to look at it from the outside. ... it was a huge difference from what I was used to, and gradually I came to realise the opportunity I had, and that I was more interested in mixing with people from different backgrounds than just from one community, and that has stayed with me very much. ... So the international aspect was *huge* for me.

Fifty one year old Sabina, who completed the IB DP in 1980, had a similar experience. However, unlike Claire, David and Edward, she attended an international school in her home city in Germany. Sabina said that the primary reason her parents decided to send her and her siblings to an American school was because her father spoke two languages and he wanted this for his children. There was also an important idealistic element to this decision. As she explained:

Well my father, he was born in 1914, and he said in order to achieve world peace, you have to communicate, and in order to communicate you use languages, and German schools were not teaching languages, so he said it was sort of an experiment, which we didn’t like that at first, but I guess it turned out okay.

Edward, David, Claire, and Sabina all describe their schooling experiences as highly significant, shaping their lives beyond schools in very important ways. All of them now live abroad and all report that the international perspectives that were fostered by their education have influenced their working lives as well. Yet the question of IB influence is a tricky one for these former students, as it is for people in the younger cohorts who also attended international schools. As Sabina said:

I think you can't separate the IB from the fact that it's an international school because I think they are what they are, they adopted the IB ... because it fit their mission statement. I remember it as sort of world peace and understanding and tolerance. It was a little island of people who had a made a conscious choice to go there, and I think that was also the case with the teachers. Looking back, they were all really interesting people that had decided that they wanted to be expatriates and bring something into a new community, and I think that was like the spirit they brought in was like we're all here on this island together, and we're going to make it good, and it worked.

David, similarly, described the interconnectedness of influences in the following way:

The ethos was promoting international understanding through education, and there were students from fifty different countries. ... It was a fabulous experience, and I might be kind of conflating the whole experience of the IB with that experience of being in a totally international setting, you know students from everywhere around the world [but the] combined opportunity was just fabulous.

The "combined opportunity", as David referred to the experience of undertaking the IB at an international school was also recognised by more recent graduates, who expressed very similar sentiments and similarly enthusiastic comments about both the IB and their international schooling experiences. Yet the fostering of international mindedness and the opening up of new horizons as a result of their schooling was more complex for some.

For 58 year old Roza, spending two years abroad to complete her secondary schooling in the 1970s was a bittersweet experience. She was selected by her Polish public school to participate in a programme where a very small number of students were supported by the Polish government to undertake the IB at an international school in the UK. She offered a somewhat different perspective on the promotion of internationalism at the school she attended:

We were living in mixed dormitories, there were so many nationalities in every class and it was assumed that we would therefore acquire certain amount of internationalism, without any special additional emphasis, and very possibly that worked, very possibly because, how do I even say? It's so natural that people come from different states and that they differ in outlook. It's as natural as the air around you, that's true. But on the other hand, I would say that the expectation was rather that in the end, everybody would conform to this sort of European/American standard. That this one particular way of seeing things would prevail in the end, and anybody who still did not fit in after a certain amount of time, would be a bit left to his own resources.

While Roza offers a more critical perspective, she notes that this probably a view that she formed later in life, upon reflection on those earlier years, which she notes, she deeply values:

I was completely in love with that experience. It was so liberating, in a sense, and it wasn't just the fact of being in the UK. I think the IB system with this emphasis on your

individual opinion, it was such a novelty, and it was so liberating ... I will not forget that, I will not forget those things.

Unlike other people interviewed who had the opportunity to stay abroad and continue their university studies, Roza was required to return to Poland. She noted, a key component of the philosophy of the school she attended was that people should return to their own countries. This was also a condition of her scholarship and she was only granted a two year student visa. While she acknowledged that there was, in some ways, a sound rationale for this, she highlighted the implications of this for students like her:

So of course you see this philosophy has a big flaw, namely, it assumes that people are happy in their own country, and while it's probably quite right when you think of students from Holland, Italy, or the United States, but if you think about people like us, from Poland or from certain African countries ... I'd say this policy was naive to the point of being cruel because here you gave all those people a glimpse of what the world could be like, and now go back basically and waste it all, because nobody is going to need it anywhere. But well that was their policy. The trouble is, that in those days, pre internet, I wasn't even able, without somebody's help, to find out how possibly to apply to a British university or American university. Mind you, it would not have been easy at the best of times because of course I had no money even to pay for the application fee.

The complexities of the promotion of international mindedness are brought into sharp relief when considering the experiences of a student like Roza in the 1970s. The IB and the international school she attended provided her with a newfound outlook that fundamentally shaped her outlook and worldview. While this was a liberating experience for her, it was also problematic upon her return home. As a citizen of communist Poland and without financial resources, social connections or indeed a visa, she had no choice but to return to Poland, where opportunities for her to further develop an international outlook and related interests were curtailed by the political and social conditions of the time. She coped, she said, through "internal expatriation", a state she described as physically living in one place, but "you are somewhere else mentally".

For Roza, as with others, being in an international environment was critical to the fostering of an international outlook. Yet educational programmes and curriculum also play a valuable role. David said that he thinks of himself as a global citizen, something that he says is "very much informed" by "doing the IB". Edward noted the importance of his history classes, which he said were not restricted to national histories but dealt more broadly with "all the inhabited continents". Roza also commented on the ways in which the IB helped foster a broad and critical perspective, in contrast to a narrower and nationalistic perspective that she experienced in Poland:

I realised ... that our teaching, for instance, was only very limited. It was also very nationalistic. We were sort of given or served those things without thinking, without much reflection ... without ever seeing the larger picture behind things

In addition, Edward drew attention to the importance of schooling experiences that went beyond discipline-based learning. His strongest memory comes from broader aspects of the school programme:

I can't stress strongly enough how important the part of school life the Student United Nations was. ... I think it certainly crystallises a lot that was going on in my mind at that time ... We had enough students that International School students could represent all the countries, and we would spend several weeks sort of studying our cases, and the larger countries would have teams to represent them, and the smaller countries might just have one individual. The first year I was at the International School I represented Gabon in Equatorial Africa myself, but then the second year, I was part of the team that represented the USSR, and that was a real education in itself for an American who had never been outside North America prior to the year before.

The accounts provided by Roza, Edward, Sabina, Claire and David provide important insights into the fostering of international mindedness for students attending international schools from the late 1960s to the early 1980s. With the exception of Roza, their accounts are strikingly similar to those of young participants who completed IB programmes at international schools more recently.

Consideration of the experiences of a different group of former students, those who attended local public schools during 1980s and 1990s, yields another perspective on this complex issue. Clearly, the experience of attending a local public high school compared with that of an international school is very different; the student body is often more homogeneous, at least in terms of the nationalities of its students, and the ethos of the school more likely to reflect a local or perhaps national, rather than an internationalist outlook. The promotion of international mindedness in this context, then, takes rather different form, one more closely related to the development of critical thinking, and more reliant the IB programme itself rather than an ethos that infuses the entire school environment.

When asked about if a global perspective was prominent in the DP she completed at her local high school in the USA in the late 1990s, 33 year old Mara responded:

I think it came across in certain subjects more than others. Obviously in history where you have a particular filter on world history that felt very prominent, in English it felt fairly prominent with the focus on world literature. In art it also felt fairly prominent. We looked at a lot of artists from different places, different cultures.

While Mara's experience of the IB was in a local high school, there are some important connections or similarities to the experiences of those who attended international schools, underlining the importance of the broader context in which people develop their values, beliefs and worldviews. Mara lived and went to school in Washington DC, and she attributes the experience of being in the city itself as important. As she explained:

We were very lucky being in Washington DC with access to amazing museums, and so we got to go on really cool field trips and see a lot of international artists' work and stuff like that. And DC's also a very international city; DC has diplomats from all over the world and their families and their children, and all of that, so the school made very good use of the fact that you're in DC, and we went on really amazing field trips, and I think were exposed more broadly to a kind of global mindedness just in the culture of the city.

When 39 year old Benjamin, who attended a local USA high school in the early 1990s, was asked what he recalled about international mindedness in his IB programme, he responded:

I don't recall them saying, now we're going to focus on being cosmopolitan, but it was cosmopolitan, it was just a fact of life, when you're scouring all this literature, and I do remember them saying we're trying very hard not to be Eurocentric. So I guess in that way they were trying to be cosmopolitan.

Importantly, Benjamin noted that this gave him and his fellow students, "the tools to understand the broader world". He went on to provide examples:

I remember reading *Heart of Darkness*. That dealt with ... the colonisation and expansion of European culture and it coming into contact with other cultures, and then we read *Things Fall Apart*, an African novel that kind of talked about some of the same things but from the other point of view, from the African point of view, and that's one example, but it just seemed like we were always learning to think about things from the other point of view.

The issue of how people may (or may not) describe themselves as internationally minded is an interesting one that offers an opportunity for exploration. While Benjamin, like some others interviewed, did not explicitly state that he sees himself as "internationally minded", it was clear from the interview that this was an important aspect of his worldview. For example, when asked what he saw as the overall influence of the IB, he responded by saying that he thought it had influenced his understanding of public policy. As an engineer, whose tertiary education was narrowly technical, he described the broad education that he received during the IB as fundamentally important to the development of this broader perspective. In raising the issue of public policy, he explained:

I can see the political debates pertaining to world events, and I feel like I can put them into context, put them into perspective of world history and step back from it, and also analyse it, break it down into its parts so I can understand it better ... And I wouldn't have [had that] ... because after IB I didn't choose to take any classes on liberal arts; everything I've wanted to do is technical, but having that background, I know that I use that when I'm understanding just the world we live in.

The taking of a broader worldview in particular subjects, notably through the study of literature,

history and geography, was frequently mentioned. Interestingly, in this regard, a number of participants described this as providing an important challenge to nationalistic views. As 35 year old James, who completed the IB at an American public school in the late 1990s recalled:

We talked about the US in a very honest way, which is not what you really get in a lot of, in most high school education in the US ... you just made me think of a course of in Latin American history where, it felt a little weird at first, but we talked a lot about like the US Government and the CIA's actions in Latin America and South America, and attempts to kill Castro and how a lot of things that our government did, like we explicitly, in high school, talked about how they were bad, you know, how the rest of the world sees us ... we didn't talk explicitly about the notion of American exceptionalism, but we definitely were taught to question and criticise the role of the US in foreign affairs and the thinking that you know everything that the US did was right, or something like that ... there was definitely a focus to see us in the entire world, and not just the US.

Students from other countries echoed this type of reflection. Twenty three year old Miguel, a Mexican citizen who completed the IB at a private school in Mexico City in 2010, noted that taking an international view was an important part of the IB programme. As he said: "The thing is that the IB provided units that would, well they have to be analysed from another perspective, other than from Mexican perspective". Indeed, this type of view was often repeated. Twenty year old Frederico, the youngest participant in this study, and one of the group who completed both the DP and the MYP, made a similar comment. Frederico attended a private religious school in his home city in Australia. He noted a particular focus on "internationalism" that involved a consideration of other cultures that was particularly fostered through his English classes and through reading literature from around the globe.

The comments of another of the MYP/DP students, 26 year old Stefa, who attended a public school in Poland, provides further illumination of the fostering of international mindedness in local public school contexts. She does not recall international mindedness as a major component of the MYP, but she speaks of a significant moment for her when IB alumni came to speak at her school about opportunities of studying abroad. She contrasts the widening of her worldview that was provoked by this event, with the social and cultural context of Polish society. She also attributes other incidental aspects of schooling as also important, including comments from teachers. For her, an important aspect was also the way in which particular subjects were taught:

Like you have to understand, Poland's so homogenised, there is almost no-one from abroad living there, everyone's white, Catholic, and all that stuff ... I think it was those little things, like teachers saying "oh yes, I'm going to Geneva for some training", that made you think we're part of something ... [and in] history ... it was thinking about the *whole* of Europe, the whole of the world ... and Poland kind of came up as an afterthought sometimes ... just opening up my mind to think about things in more wider terms than just Poland.

While many of the people interviewed, across all age groups, had clear recollections about the

promotion of international mindedness, for some, this was less prominent. When 34 year old Cooper, who went to a local Canadian school high and graduated in the late 1990s, was asked about this, he responded:

I think knowing what I know now, I'm not sure that there was that much of that. I mean we definitely learned about a whole bunch of things, more from like, in the geography classes we learned a lot about different countries and development, like international development and things ... but I that in many respects it was still a sort of very suburban Canadian perspective on things.

Similarly, 27 year old Alia, who completed the MYP and the DP as a local student at an international school in Africa, was equivocal on the question of whether the IB promoted international understanding. As she said:

Yes and no. When I look at what we [were taught], like in terms of the academics, we did learn things from different [perspectives], I mean we did the different wars, and you know it was from a very open perspective when we were doing that history, and we did South African history, and we did Russian history. So yes, you had a bit of everything. However, you learned most from the culture, from the people around you.

Family and the broader cultural environments in which young people grow up are, of course, also important factors in the development of cultural understanding and world mindedness, as Harith's story illustrates. He was attracted to the IB because he already had a strong internationalist outlook. His family were from Sri Lanka and they lived in Japan for a time before moving to Hong Kong where he was born. Towards the end of secondary school, Harith decided he wanted to be immersed in Chinese culture and become fluent in Mandarin. He sought out an international school in mainland China, where he completed the DP in the 1997. He acknowledges the importance of his family background to the shaping of his worldview, and as well as the experience of being in a school with students from a range of cultures. However, he clearly distinguished between the international school he attended and the IB programme, in terms of his very conscious sense of international mindedness. As he said:

We had to read a lot of global literature. So I read literature from Japan, Nigeria, the United States and UK. So lots of different types of literature, and I was thinking that maybe I would not have been so broad thinking and so internationally minded [had it not been for that]. And with history we did Chinese history, French, you know the Cuban Missile Crisis, United States, the Russian Revolution, we did a lot of global politics. However, if I had come at sixteen and said that I wanted to be a doctor [which he did become], I would have done maths, chemistry and physics, and my global perspective would have been very, very different. So I do think the global perspective comes very much from the subjects that I chose, and I'm so glad that I did those subjects because I feel that I can talk and understand politics a lot more than some of my very scientific counterparts.

Clearly, when considering the impact of the IB on the development of international mindedness, context matters. As Lineham (2013) notes, the ability for a school to promote international mindedness depends on a variety of factors that includes curriculum, but also broader dimensions such as the vision and ethos of the school, administrative styles and cultural diversity. The narratives of former IB students also indicates that biography is important, and it is difficult to disentangle the broad range of influences that shape people's worldviews, including family, school environment, religious beliefs, cultural background, and geographical location, from the influence of the IB alone. Yet as Harith and others note, there are clearly strong programme and curricular dimensions that impact upon the particular ways in which different forms of international mindedness are fostered, both within the context of multicultural international schools but also in local school settings.

Importantly too, international mindedness is closely related to the other IB impacts that this study has examined. The capacity for critical thinking was acknowledged in many people's accounts of international mindedness as pivotal in the shaping their understandings of history, politics, culture and their place in the world. Beyond abstract forms of understanding, international mindedness has also has practical effects. As elaborated below, it has been central to the working lives of a number of the IB graduates who took part in this study. These interconnections are drawn out in the sections that follow, underlining the complex, multifaceted and holistic enduring impacts of the IB. Before turning to those questions, however, some further explication is provided here of the link between critical thinking, international mindedness and the development of what many participants suggest to be the fostering of broad worldview.

Critical thinking and a broad worldview

As with international mindedness, the development of skills and dispositions associated with critical thinking are central to the overall aims of the IB. Critical thinking has long been regarded as an important goal of schooling. Yet its defining features are much debated (Mulnix 2012), and the term itself is commonly used as an umbrella concept that includes related concepts such as creative thinking, enquiry, reflection and reasoning (Hughes 2014). For the purpose of the present discussion, a broad conceptualisation of critical thinking is adopted, reflecting participants' own understandings of what they regard as the development of the capacity for critical thought. This includes both skill based and cognitive dimensions; it involves information gathering and processing skills and the use of those skills to guide behaviour (Scriven and Paul 2008). In short, and is both a learned skill and a habit of mind.

The reflections of participants in this study throw light on the many dimensions critical thinking entails, including dimensions that might be understood as attitudes, skills, dispositions, values and orientations to knowledge and the wider world. Importantly, critical thinking is not understood by most people in this study simply as a narrowly defined skill, but typically is conceptualised more broadly in terms of a critical orientation to the world.

The narratives of people in this study also suggest that critical thinking has ethical and political dimensions. In terms of IB impact, there are also temporal aspects to consider, that is, some of

the older participants suggest that over time, they have come to understand the impact of the IB in relation to their thought processes and orientations to the world, in ways that they did not appreciate when they were younger. This is particularly evident with some reflections on the lasting impact of Theory of Knowledge (TOK), which provides complementary insights into the study recently conducted by Cole and colleagues (2014). That study suggested that senior high school students had mixed views about the usefulness of TOK; many were unsure about its impact on their skills of critical thinking. Interestingly, a number of participants in this study suggested that it was not until many years later that they were able to see the benefit of TOK. As David said, of his experience in the mid-1970s:

You know, I benefited more from [TOK] after I did it than when I was doing it ... I think I was a bit immature from the academic perspective, I mean that was a very interesting subject, and I probably now get more out of thinking about the things that were presented at that time than I did when I was a student there.

In terms of broader reflections on the IB and the fostering of critical thinking, 35 year old Harith offers some insightful reflections. In exploring options for his secondary schooling, Harith noted that he was attracted to the IB programme primarily because of its internationalist outlook. However, the most significant and lasting benefit, he says, was that it fostered in him a deep capacity for critical thought:

When I entered the programme I was focusing much more on the *global* aspect, the “International Baccalaureate”, the international [dimension] ... When I left the programme, I understood more about the critical thinking.

When asked if he thinks that is something that he has carried through his life, he responds:

Absolutely! So to kind of explain my career path, I’m a doctor, I’m a paediatrician, but I have an interest in global health, diseases affecting children in Asia, but an important part of that is actually the science and the research behind it, and evaluating evidence and critically thinking about evidence. So I’ve gone down an academic element, and I really think that my background in the IB has made me *critically* think about things all the time, and I also think that the IB has always given me bigger picture thinking. I think the IB has moulded my personality that I’m not somebody who’s interested in minutiae; I’m always interested in the bigger picture. What is the simpler dimension and maximum impact on a global scale? So if you’re thinking about public health or international politics and global economics, you know those are the things that IB has taught me to think about, and look at the bigger picture.

When asked about what he sees as the core values of the IB, he says:

I think the core value of IB is to create global citizens ... Another core value is to create critical thinkers. So I think those are the two main things, and to be a global citizen involves many, many things – there’s tolerance, understanding, vision, [being] innovative;

it embodies lots of things, and the critical thinking is a fundamental part of it because the breadth of the programme and different styles of teaching and the different styles of assessment means you critically analyse everything, whether it's art or history or science, whatever it is, you have to be a critical thinker, and not to take things on face value.

Closely related, but distinct in quite important ways, to notions of international mindedness and critical thinking is the disposition of open-mindedness or what many people in this study referred to as taking a "broader view". This encompasses perspectives on global issues and international understanding but it also transcends those, infusing people's personal dispositions and outlooks. While most participants expressed this view, not everyone did. Sarah, for example, does not view the IB as having much of a major influence on her life, beyond the academic challenge of the program. Yet she does attribute the community service component of the course to making her "a more rounded person and more open to people who are less fortunate".

For 57 year old David, academic rigour and the development of a "wider understanding" were key dimensions of his IB experience, and ones that he could separate quite clearly from the influence of the international school that he attended. When asked what he saw as the core value of the IB, he responded:

I think one, was it was academically rigorous, it was designed to give people a breadth of knowledge. It was not to sort of generate narrowly focused people, but to promote and encourage students for a wider understanding of the world. So everybody had to do a second language. Everybody had to do their mother tongue, at some sort of level. Everybody had to do some mathematics. Everybody had to do a science subject. So it was equipping students with a very broad sense of knowledge, and of course Theory of Knowledge was even broadening that base as well. So I always saw that as a key value equipping students to go out into the world with a broad and wide knowledge of all the opportunities for academic study.

At the end of her interview, 51 year old Sabina offered a similar observation:

You know, honestly, it gives you a whole different view of the interconnectedness of things, different disciplines and how everything sort of relates to everything. I think that's the message that I got out of it.

Cross-disciplinary learning, which a number of participants noted was highly valuable, was cited by many as important to the development of a "broader view". Particularly noteworthy are the experiences of people who identify as primarily technical or predominantly interested in mathematics and the sciences, who took other subjects, sometimes begrudgingly, which was true for Benjamin. Cooper, who sees the breadth of subjects he studied as being critically important, offered the following comment:

I'm really more interested in sort of the social impact of computers, than programming per se. For me, I feel like programming is a means to an end and a fairly, it's creative but

it's not... not necessarily difficult, like how do you actualise something in the world in a way that people engage with, and you know can make a difference, and that's a different thing than just programming, and I think the IB was definitely helpful in those sorts of things, and thinking about how to think about those problems.

Cooper identified his geography course, and TOK as especially significant in this regard . A similar comment was offered by 46 year old Jessie, who went to a local Canadian high school in the 1980s. She commented that the mode of thinking fostered by the IB has significantly shaped her worldview.

I mean you see the big picture and the little tiny bits that fit into the picture no matter what. For me that was a huge deal. That has changed my view of the world right then and has always influenced my decision-making and how I'm responding to the world around me.

Jessie took only two IB subjects, history and TOK. While her exposure to the IB was, therefore, limited, she describes its impact as profound. As she said:

It changed my life as a person and set the framework for the rest of my life. Nothing else even comes close. I don't even remember my teachers or what I learned in any other class, other than those ones. I still remember the lectures. I still have the books.

Many participants reported that the IB fostered in them a broad outlook or worldview. For a number of people, this was the cornerstone of the entire IB and was evident across the entire programme. For others, specific subjects were cited as instrumental; most frequently mentioned were history, geography and literature. Many people attribute these subjects as nurturing an understanding of complex perspectives on the world that went beyond a nationalistic view.

Overall, strong themes emerged in relation to participants' views on international mindedness, critical thinking and the development of a broad worldview. Most respondents who attended local schools, both public and private, connected international mindedness primarily with non-nationalistic perspectives and critically informed views of the world. Many participants who attended international schools expressed similar views; they also commonly connected international mindedness with interpersonal dynamics, for example, feelings of familiarity and ease in multicultural contexts and comfort in working in international settings.

Educational engagement, academic rigour and lifelong learning

There is now a considerable literature base indicating that a range of academic benefits are derived from participation in IB programmes (Savendra 2014). In this section of the Report, the question of the extent to which the IB has fostered lifelong learning is explored with reference to the life history interviews. To more fully examine this question, the discussion includes

consideration of related dimensions, notably perceptions of academic rigour and reflections on educational engagement. Engagement is important for such considerations, as it is commonly understood to be a critical dimension of student learning and achievement (Connor 2009). In addition, the IB is widely acknowledged as an academically rigorous programme that promotes positive attitudes towards learning (Aulls and Peláez 2013; Coca et al. 2012), which in turn, also has important implications for the promotion of lifelong learning.

Participants in this study typically described high levels of educational engagement during their IB studies. They also reported that they found the programme/s to be challenging and academically rigorous, with many commenting that this entailed very heavy workloads. Overall, the findings from this study support previous research indicating that the IB fosters positive attitudes towards learning. The age range of participants in this study offers important new insights, suggesting these effects persist well beyond the years spent in formal educational settings, with more informal attitudes towards lifelong learning appearing to be long lasting.

Educational engagement

Experiences of educational engagement were commonly recounted in the life history interviews, with participants often contrasting the rich learning experiences of the IB with their previous non-IB schooling. For some, the role of teachers, as well as the IB curriculum itself, was pivotal. A number of people commented on the fact that their teachers had PhDs or were university professors, which they saw as influencing the ways in which the material was approached. Being “treated like adults” was another factor mentioned by some people, who saw this as having a positive effect on their schooling experiences and motivation.

In relation to the subject of educational engagement and its connection to lifelong learning, it is useful to consider here the experience of the two Canadian participants in this study, 46 year old Jessie and 34 year old Cooper. Both reported being highly disengaged prior to taking up the IB in their local public schools in Canada. The IB was a turning point for both of them. As Jessie said:

I wasn't just bored. I was almost stupefied, if you will ... So getting into IB was... first of all, the people in IB were incredibly different. I mean that alone was an eye-opener. No kind of drugs or weirdness. It was a group of equals, which was an amazing concept for me. We were all incredibly diverse, I mean actual diversity was strange. I felt like I fit in for the first time in my entire life, it was like a whole bunch of other freaks, weirdos and smarties, it was amazing.

Jessie reported that starting the IB in the mid-1980s gave her a whole new insight into what education could be. The IB was, she said, “a *completely* new experience”. What is interesting about Jessie's story is that she was only allowed to take two IB courses – History and TOK – because she did not have the academic record to enrol in the full DP. Yet just these two courses were enough to thoroughly change her view of education and schooling.

A similar story of a newfound academic engagement emerged in Cooper's interview. Like Jessie,

he attended a public Canadian high school. He recalls that he learned of the IB through friends and thought it would be interesting. However, he had to convince the teachers to allow him to undertake the IB because he would not have been admitted on his academic record. He believes that the IB was instrumental to him completing high school, saying that without the IB, “there’s a reasonably good chance that I might have dropped out”. As he explained:

I went from sort of my failing grades in the regular high school programme to like, yeah, certainly straight As in the provincial thing and finished with like a pretty good Diploma score and an extra certificate on top. So it was just like night and day, sort of thing, in terms of the academic performance. It’s like oh, I can do this. I’d never been an A student ... So that was a very positive transition for me I think.

While the stories recounted by Jessie and Cooper point to very positive outcomes of participation in IB programmes in relation to fostering educational engagement, some participants had a very different experience. For 55 year old Claire, rather than an experience of educational engagement that bolstered self-confidence, the IB, for her, diminished it. She won a scholarship to study abroad but once she arrived at her new school, she found the IB to be “a complete shock”, noting that academically it was very difficult. One of the reasons Claire said she wanted to share her story because she believes she is not a typical IB student. As she explained:

I’m speaking to you because I was a particularly bad student for the IB and I know you’ll get lots of testimonies of people who were particularly good and high flying, and I’m not one of them.

Nevertheless, Claire reports that attending an international school and completing the IB was, an enriching experience overall. When she went back to study later in life, she says that she drew on the skills she learned during the IB. What is particularly interesting, then, about her story is that she came to value the IB experience many years later. In her words, the IB was “a bit of a disaster” but she goes on to say that she does not regret doing it.

The experiences of academic engagement clearly varied considerably among the participants in this study. Not surprisingly, it also varied across subjects. Commonly, people referred to English, Geography and History as particularly memorable and especially engaging. The influence of particular teachers was also noted by many as critical to the ways in which they engaged with the subject matter.

Academic rigour

The IB is widely recognised for its academically rigorous programmes. Participants in this study all reported that their schooling, particularly the DP, but for some also the MYP, was challenging. The ways in which people reflected on this experience in the life history interviews was highly variable. A number of people reported that they found the IB to be particularly stressful and difficult. For others, it was remembered as stimulating and rewarding but not overly difficult. Being challenged, academically, was vividly recalled by many former students. As James, who

attended an IB school in the American South, said when asked about his strongest memories of the IB:

The most interesting thing about the programme in general was that the teachers sort of challenged you. There a number of classes in which I would get like, I don't know a B plus or an A minus, and the teachers would talk to my parents and complain that James is not working hard enough, and I was like, "well I got an A, why should I work harder?"

As James' comment indicates, the role of the teachers was very important, and this was a common theme across the interviews. Participants commonly referred to particular teachers that pushed them academically or prompted them to strive further. Some provided examples of teachers expecting multiple drafts of assignments, so that the points that they were developing could be fully drawn out. For others, it was the overall pedagogical approach and the way in which the material was critically examined. A number of people were also aware of the academic credentials of their teachers, which they attributed to both high levels of academic rigour and particularly sophisticated pedagogical approaches. As Jessie commented:

The IB teachers, well at least at that point, were professors, they weren't teachers. So they had a completely different viewpoint on how you approach the material [the importance of being] self-reliant. A completely different way of dealing with issues of whether things are right or wrong or how you present your arguments.

For some, there were particular elements of the IB that were recalled as significant in terms of academic rigour. For 41 year old Aadrika, the exacting requirements of her psychology course have stayed with her. Psychology was the only IB subject that she undertook, and it was only because she wanted to do psychology, which at her international school in Japan, was only taught as an IB subject. As with Jessie, who took two IB subjects in Canada, the IB had a lasting impact on Aadrika, although in a very different way. For Jessie, the impact of the IB appears holistic, shaping her outlook, views on learning and appreciation of the world more broadly, while for Aadrika, the foundational skills she acquired through her IB psychology course have had a powerful influence on her academic studies and current work towards a PhD. Intellectual integrity and rigour, which she attributes to the IB, have been critical. As she articulated:

These were some of the things that the IB co-ordinator had told us, you know, you know don't try to you know plagiarise, you write what you know, quote when you can, paraphrase if you can't, give due credit rather than you know take the credit. And just do your best. So that's something that I've always followed.

More generally, the academic programme was remembered by all students as being of a high standard. Twenty five year old Mateo, who was born in Brazil but moved to Switzerland with his family, completed the MYP and DP at an international school. He remembers the IB as involving a heavy workload. It was not something that he found stressful, but rather he describes it as just "constantly intense". This type of response was reported by about half the participants in this study.

For 57 year old David, the IB was remembered as being of a high standard and level of rigour but his overriding memory is not one of a stressful experience. He comments on how much he enjoyed being treated like an adult who had the capacity to investigate and research a subject. Twenty eight year old Ethan expressed a similar view. As he said, “you were kind of expected to behave like mini adults, which I thought was pretty cool”.

Cooper, like a number of other participants in this study, found the IB DP challenging and engaging but not overly stressful. As he said of the pressure to receive high grades:

Personally, I’m not really motivated by that kind of thing. I never really have been, and like I don’t stress about grades, and so I feel like it was more a challenge than anything. ... There were engaged teachers and there was something [interesting] to do. It was more that than the worry about academic performance.

He goes on to say, however, that he recalls this being an issue for other people in the programme at his school. Thirty three year old Mara, who completed her DP at a US high school remembers that some students would become very upset if they did not achieve very high or near perfect scores. As she explained:

It was a lot of pressure. It was a lot of work, and the students, like I said there was a sort of mix of students that were very driven kind of in and of themselves, and who were being driven by outside factors like their parents, and you know, the desire or need to get into a good college or something.

Similar reflections were also offered by others, with the pressure to perform well academically seen by some participants as being a pressure that was put upon students in some schools. Benjamin, who completed the DP at a public high school in the USA in the early 1990s commented:

It seemed like everyone was laser focused on having a high percentage of students pass the IB exams ... I think that some of the people who were in administration seemed to have an agenda to get a certain number of people into the ivy league colleges or other highly esteemed colleges, and I think put unnecessary pressure on the students. ... I am not sure why, if it was for their own agenda, but it seemed like you had a group of pretty high strung people there, and I don’t know, I liked the intensity, I like people being intense, but I don’t know what I would do differently, but yeah I do think it was probably too intense, probably people getting at age sixteen, seventeen, getting too upset about getting into colleges or getting, you know, certain, you know SAT scores on standardised tests, people making that out to be a bigger deal than it actually is.

Twenty five year old Benedita, who completed the MYP and DP at an international school in her home city in Portugal, offered a similar reflection:

I think it was very competitive, and that was a big pressure. We were all very stressed. Now, looking back, it's like, wow, I was a very stressed kid. So that was one of the down sides of the IB, I think.

As noted above, not all students who undertook the IB saw themselves as especially capable, academically. Fifty-five year old Claire, reflected on the difficulty of moving from her small school in Belfast, where she excelled academically, to being part of a highly academically capable group of students from around the world. As she said of her experience of doing the IB in the UK in the late 1970s:

I struggled academically all the way through ... I'd been one of the brightest in the school or else I wouldn't have gone [won a scholarship for the international school] but I found the work hard and voluminous. I mean there was really a *lot* of work. And also, it was a big surprise to me to find myself with students from other countries who were far, far brighter and better educated than I was, especially from Scandinavian countries for example. And so it wasn't easy *at all*, but I don't regret it.

Later in the interview she said that she did not do well in the IB, which made her angry at the time. However, as her above comment indicates, Claire came to appreciate the experience of IB later in life. Reflections on difficulties encountered during IB studies were not uncommon, but the specifics of this varied considerably for participants in this study. Sabina's comment, perhaps most typically sums up the collective view: "I liked it. It was hard".

Lifelong learning

While educational engagement and academic rigour were highlighted as very important, more specific attitudes towards learning do appear to have been fostered by the IB. Thirty-five year old James, for example, who went to a local US high school, vividly recalled some of the dimensions of learning in the IB, particularly in his geography class, that have stayed with him and which he has picked up again at university, many years later:

Like the normal geography class in the school was very mundane and they learned where places were and, you know, names, exports and things like that. But we [students doing the IB] learned more about the intricacies of things like food aid and market aid to developing countries ... And we learned about contraception in developing countries, in, you know, geography class and that giving contraception to women in developing countries is one of the best ways to improve levels of poverty from generation to generation because women have less children, and women can control their own bodies and the size of their families and things like that ... I'm back in graduate school, and some of the stuff that I learned in that class, I don't know, they still resonate right now.

James felt very strongly that the IB was pivotal in his development of a lifelong attitude towards learning. As he said:

The type of stimulation that I got from the IB programme, I don't know, it was an incredibly fulfilling time intellectually, and with sort of the disappointments in some other academic situations, I've just sort of consistently challenged myself, in terms of just sort of continuing my own personal development. Like if there's something that I want to learn, or I don't know how to do, I just sort of do it. If I need a website built, I'll learn how to build websites. If I need something edited ... I learn how to edit more. If I need to write a song, I'll write a song ... So I guess I just sort of modelled that myself in terms of just independent, self-directed study.

Cooper offered a similar appraisal in terms of how the IB shaped his view of learning:

I think the approach to learning, how to think about learning, and how to approach problems, not from a memorisation or by the book sort of approach, but actually like, how do you think about new problems? That's been really, really important to me in life in general. I think the emphasis on real learning, versus grades, was super important to me, you know, it's not about grades, it's about understanding and learning, and curiosity and that's been for me, throughout my whole life, that's been so important and just opens up so much more, versus just going to work and doing your job. It's like everything is about being creative and learning stuff.

At the end of his interview, David was asked what he saw as the overall influence of the IB. After mentioning the fact that he has lived his life "in an international context" and sees himself as a global citizen, he remarked that he sees "an on-going interest in further education" as critical. For David, as with a number of other participants, the Theory of Knowledge course he undertook has had enduring influence. As he explained: "I think that has certainly been a pivotal influence in my life since completing the IB". He goes on to say that he sees the impact of his education in both a formal and informal sense, particularly mastering a second language. While he took Chinese at school, he says he did not master it. However, he later became fluent in Japanese after moving to Japan.

Many participants had vivid memories of a deep engagement with learning whilst participating in IB programmes. For some, this reflected a stark contrast with earlier schooling experiences, with the IB providing a turning point. Many described the IB as academically challenging. For some, this provided an opportunity to excel, promoting self-esteem and confidence; others described it as difficult and stressful. A commonly held view was that considerable long term benefits were derived from the acquisition of research skills and the capacity for self-directed learning. It is evident in the narratives of participants in this study that the IB fostered a positive attitude towards lifelong learning.

Higher education, vocational choice and working life

One of the core questions this research sought to address was the influence of the IB on people's vocational choices, employment pathways and their working lives more generally. While research

on higher educational pathways abounds, studies examining the influence of the IB on career choice and vocational experiences is limited. Previous research has suggested post-tertiary benefits in relation to securing graduate level jobs, employment in higher wage sectors and higher degrees (HESA 2011). Yet there has been little detailed and qualitative exploration of perceptions of the influence of the IB on people's careers and working lives.

This section of the Report begins with participants views on higher educational pathways, before turning to questions of vocational choice and working life more broadly. A considerable body of IB research has focused on post-school influences in relation to higher education pathways, with many studies suggesting a positive effect of participation in IB programmes on graduates' tertiary careers. Research indicates elevated levels of post-secondary enrolments of DP graduates in comparison to non-IB students, as well as higher retention rates once enrolled in university courses (see, for example, Coca et al., 2012; Conley et al., 2014; Edwards & Underwood, 2012; Halic, 2013). Other studies suggest beneficial effects in relation to preparedness for the academic demands of higher education (Aulls & Peláez, 2013).

Participants in this study identified a range of benefits for university study that were derived from their IB experiences. In relation to the research question of influence on people's career choice, only a few people indicate a strong link between the IB and their career choice. However, what did emerge very strongly from the life history interviews was a clear indication that for many people, the IB has considerably influenced and shaped their working lives. This was evident in reflections on how the IB had provided people with particular skills or dispositions, such as understandings of cultural difference, the capacity for analytical and critical thinking, the development of high-level written skills, and the acquisition of foreign languages. These factors were noted as having directly and positively impacted on their working lives.

For some, aspects of the IB programme converged with previous interests to inform the ways in which people pursued their careers, the directions their careers took or an orientation to working life. For others, the IB appears to have instilled in them the confidence to pursue their vocational aspirations. For a small number, a specifically political orientation, which they attribute to the IB, is clearly evident in relation to their working lives. These themes are explored throughout this section, beginning with experiences of higher education and perceived benefits, and sometimes the downsides, of participation in the IB on higher educational pathways.

Higher education

Most participants reported that the IB provided them with considerable benefits for tertiary study. Many cited positive effects in relation to ease of university entrance. This was particularly evident in the accounts provided by more recent graduates, that is, those that undertook IB studies from the 1990s onwards, a time when the IB experienced considerable growth (Brunell 2008) and was becoming widely recognised by higher educational institutions across the globe for its quality and rigour. For earlier graduates, the benefits for tertiary entrance were not as clearly evident, and indeed for some, the IB was a distinct disadvantage.

Almost half of the participants reported receiving advanced credits for university subjects, most commonly reducing a typical four year degree to three years, which clearly had considerable practical benefits. Mara, who completed the DP at a high school in the USA in the late 1990s commented on the implication of this:

It had a very practical outcome of essentially meaning that I didn't graduate from college with any debt. Doing college in Canada at the time was cheaper than in the US, and only doing three years instead of four, you know, it saved me that much more money. So I was very unusual for someone in my position. I left college with a really great education and no debt, which allowed me to buy a house by the time I was 28 [while] most of my peers are having a harder time with because they have a lot of debt. So it was small, but it was actually quite important I think.

The financial benefits of receiving credits was identified as significant for a number of people. Yet there was also a negative aspect, as noted by 51 year old Sabina, who completed the DP in Germany but undertook tertiary studies in the USA:

I have to say one great benefit of the IB was that they gave you a year's credits. So I graduated after three years with Bachelor's degree, which has financial benefits. But they end up cutting all your free electives, so all you do is stuff you have to do, and you don't really have that year's worth of opportunity to, you know, probe around other subject areas, which I think I really would have benefited from.

For Sabina, as with some of the other earlier IB graduates, there was another limitation of the IB in relation to her tertiary studies. She noted that at the time she graduated, in 1980, the IB was not accepted by German universities. She recalls there were discussions at the time, that the IB was negotiating with the German Ministry of Culture and Education, and that the expectation was that by the time she graduated the IB would be recognised. However, this did not eventuate and she was thus faced with the prospect of completing another year of secondary schooling in Germany, or travelling abroad for university. She chose the latter.

A not dissimilar experience was recounted by Claire, who believes that she would have finished school with better grades had she attended a local school in Belfast, which in turn would have enabled her to enter a good university. At the time that Claire completed the IB, she says that it was relatively unknown to universities in the UK:

We had a lot of trouble explaining what the IB was to the British universities... it wasn't an advantage at all, and of course at the time with two As and a B in "A" Levels, I could have got into a good university, and was even considering applying to Cambridge, but all of my teachers made it quite clear to me that I had absolutely no hope whatsoever of getting into a decent university, let alone Oxford and Cambridge, so there was no point in

applying, which was also tactlessly done and was very unfortunate. I felt I didn't get much academic support throughout that time, but that wasn't so much to do with the IB, it was to do with the school *at the time*.

Roza, and two other girls who received Polish scholarships to undertake the IB in the UK in the mid 1970s, faced a similar problem when returning to Poland:

In spite of what we were told at the beginning, suddenly the universities didn't want to accept the IB. While all other students had already been accepted properly into their studies, here I was without a proper school leaving certificate, that the administration of the university would understand. There was a lot of intervention from the Ministry of Education, and in the end we didn't have any choice, we just to enter the English department of a university. That was the only option we got, to study English.

Roza describes the transition to university as "a big step down". As she describes it, it was an experience far removed from the atmosphere of discovery and curiosity and exploration that was at the heart of the IB. It was, she said, "back to the area of certainty and just repeating other people's formulas". A range of similar sentiments were expressed by a number of people in this study. Thirty five year old James, who completed the IB at a public school in the USA described university as "a bit of a downgrade academically", while 28 year old Peter, who studied at an international school in China and went on to a university there said it felt "more like going a step back than forward".

While this type of disappointment was noted by many, a strong theme that also emerged was that people felt that the IB provided a sound preparation for the demands of tertiary study. As 46 year old Jessie said, she found the transition to university easy because "they trained us basically to approach the world from a university perspective". A number of people also noted that some of the content of their universities courses had already been covered during the IB DP. Twenty three year old Miguel, who completed the IB at a private school in Mexico, made the following observation:

The topics covered for each one of our courses were much more sophisticated than the regular topics that you would have in high school ... after I graduated and went to university, I found out some of the information that I was getting in the university, I already knew because of the IB programme.

A similar comment was offered by 28 year old Victoria, who completed the DP as a local student at an international school in Papua New Guinea in 2004. As she said:

The IB prepared me for a lot of things like referencing ... how to put together an essay, you know, how to structure it, really how to read and comprehend certain material as well, a lot of which, when I think back to university, a lot of my peers at the time had to

really learn that in their first year ... it wasn't so much of a learning curve ... I thought that university wasn't as harsh as the IB.

As these comments indicate, the transition to university was a disappointing experience for some, while others felt that the IB provided had provided them with the skills and knowledge to successfully navigate tertiary education. Most participants in this study completed bachelor level studies, with a number of people also completing (or currently undertaking masters) level courses. One participant also holds a doctorate, with another currently undertaking doctoral studies.

Vocational choice and working lives

In relation to the *choice* of university courses that would lead to particular careers, most participants did not identify the IB as having a direct influence on their decisions. However, some did cite particular influences. Twenty three year old Miguel, for example, studied biotechnology engineering; a factor he says was strongly influenced by visiting a biotech lab in Mexico as part of his IB studies. Ingri, who is the same age as Miguel but grew up on Norway, completed the IB DP at an international boarding school. She reported that undertaking Peace and Conflict Studies during the IB was pivotal in her choice of university studies and the career she would like to pursue. Ingri completed a bachelor degree in Development Studies, and is intending to continue her studies at master's level.

The CAS component was also identified as significant for some. Twenty eight year old Ethan, for example, who completed the MYP at a public high school in the USA then won a scholarship to attend an international boarding school, credits the his experience with working on lifeboats as instrumental to his recently completed PhD in naval architecture. For 35 year old Harith, the community service he undertook for the IB also had a major impact on him. He cites this experience as instrumental to his decision to become a doctor. Up to that point, he had been intending to work towards a career in politics, economics, international relations or diplomacy. But this changed after working with UNICEF in Sichuan Province in China for CAS:

I learnt about vaccination programmes and the impact on vaccinations on maternal and child health and how that can impact the economy, and I was fascinated, actually [about] global health. I realised that maternal and child health is actually very important for global economics, and so that's when I thought, well, why don't I become a doctor [laughs] and go through it that way. So I do think that was the IB, but, well, the IB made me do CAS, the IB made me broaden my higher levels, and CAS led to me to think about global health. So yeah, and then critical thinking has led me to do global health actually in an academic sense

While only a small number participants identified the IB as having a direct impact on their career choice or university studies, many people noted that the IB had significantly influenced and

shaped their working lives. This was evident in reflections on how the IB had provided them with particular skills or dispositions, such as understandings of cultural difference, the capacity for analytical and critical thinking, the development of high-level written skills, and the acquisition of foreign languages. These factors were noted as having directly and positively impacted on their working lives.

The interviews with the earlier IB graduates, in particular, underscore the important and varied ways in which the IB has had lasting influence on their working lives. This is particularly evident in relation to intercultural understanding, which has played an important role in the working lives of several participants, notably, 57 year old David, 55 year old Claire and 51 year old Sabina. David provides an example of when he was working for a mining company and was involved in negotiations in Australia over Native Title:

The interactions with the traditional owners were very significant ... and the reason I raised that, to me that was nation building ... it was very exciting work, and I also credit the experience of doing the IB and going to the school I did in informing my thinking when I did that role.

He goes to on explain:

The negotiations were critical ... effectively that was a community that had been colonised by white people and very destructively, and the on-going impact of that post colonisation society, that's what it is, with all of the negative impacts that you would expect. And then of course overlaid on that was the mining activity that had taken place for thirty or forty years. So I felt that all of the time, you know, at the IB, the work that I'd done, was actually preparing me for that four years ... probably the most exciting work that I had done during my career.

David has worked for many years in the resources sector. He describes his career as "very internationally focused". After completing tertiary studies back in Australia, he undertook a masters degree in Japan and lived there for eight years. He has also lived in Hong Kong, China and the USA. He credits the two year IB programme that he undertook in the 1970s as a "very formative time", and one that has informed his working life in a variety of ways.

Sabina also credits the IB with having a considerable influence on her career. She cites two areas that have been critical. One is concrete and skills based, that is, being bilingual, which has enabled her to work as a journalist for a foreign news agency. As she explained:

The fact that I knew both English and German was so beneficial. You know without that I think my life would have been very different, had it not been those language skills, which I don't know if I can attribute just to the IB, or to the fact that I went to an international school.

The other influence Sabina mentions as significant is the IB approach to learning and investigation that has been central to her work as a journalist. As she said:

I think that more so than other programmes... the way the curriculum works is really different from the way sort of a regular, in our case high school programmes work in that it does effectively tie in different areas of study. So they try to co-ordinate what you're doing in one class with what you're doing in another class, and I think that's really, as far as journalism goes, I think that's a really sort of realistic approach to things, and I also think, at least in our school, part of the IB, they always hammered it into our heads is that you need to be *critical* thinkers, and I think that is one of the maybe the last... because one of the things that journalists can be given credit for, it's what they should be, you know to think critically about things. So I do think that that kind of work ethic or thought ethic was part of the IB that helped me later on, and also really I think *liking* journalism for that.

For Claire, who now works in international relations, her IB education and the school she attended also provided her with a solid foundation for her later work. She studied law for one year before taking some time off then enrolling in a theatre and drama course. She then worked as an actress and later moved into international relations in France, where she now lives. When asked if she saw the IB as influencing her working life or career path, she responds:

Oh completely. I mean even my interview for this job ... I said I have contacts everywhere, and it's true ... It's not even the details of the job, it's more ... the whole kind of feeling and attitude to international relations ... You know the combination of a country like Northern Ireland and going to an international school gives you a very different... well, I mean... a very positive view on international relations really.

Claire also teaches English in a French university. She makes a similar comment in relation to that aspect of her work:

We have 35% international students, and my classes are often very mixed, and I feel very comfortable with that. It's something that I know, and these students are older than I was when I was in an international context but I recognise it and I feel comfortable with it, and I feel like I impart that to my students. You know I make a big fuss of them, and I make a big deal of the fact that there's a mixed group and that we all have a lot to learn from each other.

The international outlook that Claire and David drew attention to, as well as the language skills that Sabina mentioned, were also acknowledged as important by some of the more recent graduates in this study in terms of their working lives. For 39 year old Benjamin, who completed the IB at a public school in the USA, the IB did not influence his career choice – as he said, “I was kind of born to be an electrical engineer. I was playing with circuit toys when I was ten” – but he

says that it gives him an important context for his career, in terms of how he approaches problems and more broadly, in terms of the development of an international understanding. As he explained:

I'm travelling next week to the United Kingdom to meet with a client and I feel like having a broad perspective helps me understand people from different backgrounds, and I think it just colours everything I do.

Benjamin goes on to say that the IB has really helped his career in ways that he would never have expected. He explained that when he started the IB, he was actually looking for a technical high school to attend. However, there was not a local option available for him. Being very technically minded, he did not at first welcome or appreciate having to study a broad range of subjects. However, upon reflection, he says:

The history I got ... that was pretty intense. I *did not like that at the time*, and I actually think it was probably one of the more beneficial things about the programme – the ability to write well and to appreciate literature and other points of view. That was huge. And now I actually do paid technical writing, and I *know* I'm using what I learned in the IB and that I would have opted out if it had been an option when I was fifteen, but I'm glad I hadn't now.

What Benjamin notes here has been identified in other research. Coca et al. (2012) found that many DP students interviewed for their study specifically identified the IB as fostering the development of analytic writing skills. The capacity for research was also frequently mentioned. For 26 year old Stefa, who completed both the MYP and DP in a Polish public school, this has been an important skill that has carried through into her working life. Stefa works for an encyclopaedia, and she explains the importance of this:

My job is quite demanding ... I think maybe the way I approach a research topic, it might have been shaped by what I did in IB ... it just framed it, like it's showed me, well okay, when you do have a problem and you want to learn about it, this is what you do. I think, I think it's definitely something I wouldn't have got from another type of education definitely.

More broadly, the approach to learning that was fostered during IB studies is noted by a number of people as important to their working lives. Thirty four year old Cooper, for example, identified this as appreciably shaping his approach to his work as a computer programmer. He refers to the way in which the IB was focused on "learning to learn" and the development of positive and creative ways to approach problems as very important, as do a number of other participants.

The findings from this study in relation to higher educational pathways broadly support other research that has identified benefits for IB students compared with their non-IB peers. There were also clear benefits for many in terms of securing a university place and receiving course

credits. Yet the interviews also shed light on the complexity of impacts. Many participants experiencing disappointment with university studies, insofar as they found it less rigorous and engaging, and some of the earlier graduates had difficulty securing a place at all in some universities at a time in which the IB was still developing. Some participants made links between IB experience and the career choice, but more common was the response that the IB has shaped their lives in ways that have proved highly beneficial for their careers. Speaking more than one language, critical, analytic and writing skills, and a broad or international understanding were commonly identified.

Community service, social engagement and lifelong friendships

Creativity, Action and Service (CAS) is a key component of the IB, which aims to balance the rigorous academic elements of the programme with “life outside the world of scholarship” (IBO 2014e). This section of the Report considers the findings from this study in relation to community service, social engagement and friendships. With regard to these categories, the research sought to ascertain the influence of IB impact beyond academic studies and working life, to a consideration of IB impact more broadly in terms of social life and community engagement.

There was a high degree of variability amongst participants in relation to their experiences of service and community engagement throughout their IB programme. As detailed below, some people reported that CAS was central to their programme; for others, it was not emphasised at all. The range of activities undertaken was also highly varied. David, for example, did marine service, which involved assisting a local university with oceanic research and volunteering for a local life-saving club; Cooper was supported in pursuing media production and activist work in Canada, and Harith did community service with UNICEF in China. Some, like Sabina, reported that they didn’t think that community service was part of the IB at the time they did the programme, while others, like Peter, believed that their school just “ticked the boxed” for CAS.

For a number of early IB graduates, questions of service or volunteering, social engagement and lifelong friendships were clearly articulated. For some of the more recent graduates, such broad reflections on the enduring influence of the IB was less clear, with responses often centred more around academic impact. Importantly, a number of participants in this study commented that their motivation to be part of this research was to be of service. Indeed, a number of people were quite passionate about the IB and were very keen to share their stories.

Community service and social engagement

The life history interviews suggest considerable variability, both in the ways that IB schools approach service and in students’ experiences of this part of the programme. This variability was, in turn, reflected in a wide range of attitudes. For most participants, creativity, action and service (CAS) was noted as a significant part of their programme; this included most of the early graduates. Overall, the majority of participants reported this to be an important part of their IB programmes, and a dimension of their schooling that has had a significant influence on their lives

beyond school. In addition to the service or CAS component, it is also clear that other IB subjects have also influenced people's attitudes towards service, volunteering and activism.

As noted above, some participants made a direct link between CAS activities and their later career choices. For others, CAS was considered, more generally, to be an important component of a broad education. For a number of participants, the impact of this aspect of the IB was only fully appreciated many years later. As 55 year old Claire commented:

I think all the community services were useful, and I think that was a very positive aspect of the IB, and it made me socially aware. I mean, I came from Belfast, I couldn't be less interested in politics or in philanthropy or socialism or anything, and I think that started me being interested in those kinds of things. It took a while to come to fruition because I had a fairly disastrous student career after that, but I think it was a really good thing to do, and particularly for students of that age with very different international backgrounds.

However, consideration of cultural difference, again, complicates seemingly benign activities like "service". For 58 year old Roza, the idea of service was one that was totally foreign when she encountered it as part of her IB studies in the 1970s. When asked about this, she responded:

I came to very badly equipped even for the process of community service, because this was something that was touted all the time in any Communist state, do community service ... and this is typically either just doing work for which someone else is getting the money ... It wasn't community service, we just did the work instead of people who are supposed to be doing it, and they were sitting on benches smoking and very happy [laughs]. So typically that's what it was, and I was very, very, very averse to that concept. I couldn't believe anybody in their right mind would actually volunteer to do such a thing.

For Roza, the IB provided her an entirely different view. She went on to say that much of her life since school has been centred on service. It is clear that for Roza, as many others, the IB has had an incredibly important and enduring influence on her life in a range of areas. It is also clear that for a number of people, one of the longer term impacts of the IB is the way in which it has shaped views and practices related not only towards volunteering but also towards activism. Indeed the interviews revealed that for some, community engagement and activism is a central dimension of the lives of some participants, although the focus this takes is variable.

James, describes his activities as being: "mostly environmental activism, [and] sort of anti corporate activism". He recounts being heavily involved with the Occupy movement in Los Angeles, New York, Washington DC and Chicago. Interestingly, he went on to say that in recent times:

I've sort of been focusing more on a lot of the stuff that I remember from the geography class, like I'm sort of focusing on social issues here in Los Angeles but also in a world context ... particularly environmental policy and military actions, and fossil fuel

consumption. So that's sort of where I am right now. It took a while ... what I actually really did learn in the IB programme, it just sort of trickled back. So a lot of the work that I'm trying to do right now is social justice work, but it's heavily influenced by the broadening view that I got in the IB programme.

Jessie reported that the IB had been critical for her in terms of her decision making throughout her life. When asked for an example, she cited her long history of community activism and her decision to stand as a Greens Party candidate in Canada:

Well, I became a Green Party candidate ... because the activism that I'd been doing for the past twenty years I didn't feel was good enough. I wasn't making enough of an influence.

She goes on to explain that she believed had it not been for the IB, she would not have done taken this step into politics. Fellow Canadian, Cooper, has also been very involved in various forms of volunteering and activism. When he was in his 20s, he was participating in more traditional, on the ground, activist networks. Today, being very successful and busy with his IT career, he says:

It's a tricky thing, how do you best allocate time and resources. And a lot of the things that I did when I was a student, I don't feel like that's a good use of my time necessarily, and so it's sort of figuring that out somewhere, looking at various funding contracts and things to effectively fund activist work and that kind of thing ... And in my work [IT programming], I do a lot of open source work and security work and that's definitely the sort of activist perspective on that and that's super important to me.

A number of more recent IB graduates also cited community activism and volunteering as important to their lives. Twenty five year old Benedita, for example, who completed the MYP and DP in Norway, says she was actively involved in Model United Nations in school. After finishing the DP, she has continued to do volunteering work. She is a volunteer for Greenpeace and she has also just taken up a position on the Board of a nature organisation in Sweden.

While many participants in this study being reported being involved in various forms of activism and volunteering, many of those who did not continue this beyond the formal requirements of their schooling expressed, in various ways, that the IB had provided them with an appreciation of the value of service. The comment offered by 28 year old Victoria, who completed the DP as a local student at an international school in Papua New Guinea, is typical in this regard. She says that while she does not do as much community service as she thinks she should, she believes that CAS made her a "more compassionate" person. For Miguel, community service was, he says, an "eye opening" experience. He explains:

In Mexico there exists a real division between the rich and the poor, for example, so by doing these projects and encouraging other people to participate, I think [it helped me] to realise that not all the people are living in the same situation as me, but that I am able

to help them and we have these programmes.

For 23 year old Ingri, her service included work in prisons, looking after the children of visitors who were meeting with inmates. This left, she said, a lasting impression on her, “that people are people and no matter what”. For the majority of participants, service was understood as an important part of their education, one that went beyond academics to encompass the education of the whole person. As 28 year old Ethan commented: “I think you realise that it is an important part of a healthy, responsible society, and I would credit the IB with helping me come to that realisation”.

However, not all participants reported that as being a formal requirement of the IB beyond their academic subjects. Sabina, who completed the IB in Germany in 1980, had no recollection of service as part of her IB experience. In response to questions about whether there was a service component in her IB programme, she responded that her school in Germany did not do anything like that, “no, no, nothing at all”. A number of other participants indicated that while CAS was indeed part their programme, it was not considered as important as the academic subjects, and in some schools it appears not to have been considered essential. As twenty eight year old Peter said, of his school:

We pretty much didn't do anything really. We did a little bit, but I just think our school really didn't organise it ... we did a few things, but I do have to admit that at some point the school just said, okay, you know, just write things up and we'll count it.

Peter's and Sabina's comments, however, were not typical. For most other participants, an orientation to service was central to their IB experiences. It is difficult to say whether the activism or volunteering work that many people in this study report to be an important part of their lives is attributable to their IB experiences or whether it stemmed from other influences. Like many other aspects of the IB, it is difficult to disentangle the impact of CAS or service from other aspects of people's lives, including family, religion and culture. What is clear, however, is that the IB provided many people in this study with a deep appreciation of the value of service, both in relation to their own lives and worldview, and the importance of service for civic society.

Lifelong friendships

In addition to community engagement, service and activism, social networks developed through participation in the IB were identified as highly important for a number of people in this study. Indeed for some, these social bonds comprise a critical and long-lasting aspect of their IB experience. As James said:

I'm still in contact with most of the people that I knew from the IB programme and I think we're all still sort of in contact because there hasn't been a similar point in most of our lives where we've been surrounded by other people on the same level of intellectual development ... we all sort of look back at it, and we just can't find it anywhere else.

This was a common theme that emerged across the interviews, and an aspect of people's IB experience that is highly valued. A number of people also spoke of a sense of familiarity, or recognition, or shared experience of the IB, which transcended the cohort they studied with. Harith, like a number of others, noted that the IB and the school he attended had given him an "international family". Several people also reported that the advent of social media enabled them to rekindle connections with classmates after many years. As Claire said, "One great thing about this experience is that I've kept a lot of friends that I've gotten back in touch with thanks to Facebook".

Many participants spoke at length about their CAS experiences and the friendships and social bonds that developed as a result of their IB studies. Their accounts attest to the importance those aspects of the IB programme that move beyond academic subjects. The narratives provided by people in this study do suggest that the aims of the IB in relation to the development of reflective and responsible citizenship are borne out when considering people's reflection on CAS and their overall IB experiences.

Final reflections

At the end of the life history interviews, participants were asked to "sum up" what they believed to be the overall influence of the IB on their lives. While much of this has been covered in previous sections, some further overall comments by a number of participants are offered here because they distil in quite distinct ways what people perceive to be the overall impact.

A number of people commented that while they could speculate on what they believed to be the influence of the IB, it was difficult to know how life would have been for them had their schooling been different. As Benjamin said:

I feel like it's been very positive, and it's hard to know because I don't know what it would have been like without it, but I can definitely say that it's been very positive.

More than twenty years after finishing high school, Jessie offered this reflection:

It gave me a perspective that I never would have had otherwise, and I would not be the person that I am today, I would not have recovered as quickly [from childhood abuse], I would not have been able to get a hold of my life as quickly, I would not be able to see the world around me with the clarity that I can see it, and make the changes that I want to make, and know that I can make those, and know how to do that, and know what needs to be done – there's nothing that was more important and more influencing in me than that two year period.

Aadrika, as with a number of others, said the course itself has stayed with her:

Many of the things that I learned as part of the IB programme are things I have never forgotten. You know so even though I pursued the same subject [psychology] for so many years, some of the things that I learnt as part of the IB programme are things that I've never forgotten, whereas that's not the case with you know the other courses that I pursued.

When I asked if she could sum up the influence of the IB on her life overall, 58 year old Roza, who did the DP in the UK but has lived in Poland all her life said:

I think the IB gave me certain core values [including] independence – independence of thought – and responsibility for what happens to me in my life. Because throughout everything that I was describing, I never once thought that someone else should be responsible for solving my problems, making things better [laugh] and again, I completely ascribe this kind of outlook on life on the IB course.

In summing up the overall impact of the IB, David said:

International focus, lifelong learning and a sense of being a global citizen with still a very strong sense of curiosity about an eclectic range of things. I've take an interest in lots of things and read extensively and I think all of that was encouraged and well fertilised during those two years of doing the IB.

For 27 year old Alia, the overall longer term influences are both academic and social:

Academically, it prepared me for university a lot more than I gave it credit for ... And also in the social regard, you find you're more open to ideas and different opinions and different beliefs ... it's just sort of inherent in you now to have an open mind and just embrace everything and learn from everything.

On a playful note, Mara reflects:

It's made me a pain in the arse during dinner conversations [laughs] because I'm so contrary. It sort of turned me into a contrarian, and I think it was developing that habit of mind of sort of always questioning things. So I love to play devil's advocate, which my husband doesn't appreciate very much [laugh]. I think, you know. I think the sort of just general orientation towards learning about the world, and being engaged with what's happening in the world.

INTERCONNECTED DIMENSIONS OF INFLUENCE

While the findings of this research are presented thematically, it is important to reiterate the interconnectedness of those dimensions that people consider to be the lasting effects of the IB. Disentangling IB influence from other influences, for example, the ethos of particular schools or

the role that family or religious belief might play in the shaping of personal and social values, is difficult and in some cases, impossible. An example of this is the question of the extent to which the IB promotes international mindedness. As noted above, a number of participants found it impossible to distinguish the influence of the IB from the school setting itself. This was particularly evident for a number of people who attended international schools.

While it may not be possible to offer a definitive account of the discrete effects of the IB as distinct from other influences, important insights were nevertheless gleaned from in-depth analysis of people's life histories. Close analysis of individual biographical accounts, as well as cross-case analysis, enabled the consideration of factors such as school context, which revealed contrasts, for example, in experiences of attending local government schools vis-à-vis international schools. This enabled empirically informed impressions to be drawn out regarding the IB influence. While separating curricular or programme impacts from those that derive from the broader culture or ethos of a school or other influences is acknowledged as an analytical challenge, it is also important to recognise that each participant brings a unique set of personal experiences that shape their recollections of schooling in general, and their memories of the IB in particular.

CONCLUSION

The life history interviews generated detailed narrative accounts of the enduring influence of the IB on the lives of graduates. As the above discussion illustrates, perceived impacts of the IB were wide-ranging, and some only become clear many years after completion of IB studies. While this study included a range of IB experiences, clear differences were not evident between those who participated only in the DP, compared with those who completed the MYP and the DP. Overall, the majority of former IB students who took part in this study believe that the IB has had an enduring and positive impact on their lives. People reported that the IB provided them with a broader view of the world, including for what many people describe as an international or global view. Related to this, many participants identified the IB as fostering critical thinking, both in terms of particular skills of critical analysis, as well a broadly critical orientation to the world. A broad worldview, the capacity for critical thinking, and a deep understanding of the wider world was noted by many as factors that helped them become what a number of people described as well rounded person.

For many people, their IB studies are recalled as a time of deep educational engagement. For a number of participants, this differed markedly from their previous schooling experiences. Many people described the IB as academically challenging; some participants reported enjoying this, while for others the high workloads and expectations of achievement were experienced as stressful and difficult. Participants reported a range of perceived long term academic benefits of the IB, including acquisition of research skills and the capacity for self-directed learning. More practical benefits, including university entrance and course credits, were also mentioned. Commonly, people in this study experienced some disappointment with the transition to

university, insofar as they found their tertiary studies, particularly the first year or two, less engaging and rigorous than the IB.

Several participants reported that the IB had an influence on their choice of career or university course. More commonly, however, people referred to the IB as having influenced the way they approach their work. This includes recognition of the value of the analytical and critical thinking developed through the IB, the acquisition of high-level written skills, as well as the ability to speak foreign languages. Intercultural understanding was also cited as having a direct and positive influence on many people's working lives. A number of people reported that service was an important part of their lives, with some linking their IB experience to their community sector work, volunteering or activism. For others, multiple influences were apparent, including those deriving people's families, cultural background and/or religious affiliations. Finally, many participants described the development of strong and lifelong friendships, with a number of people noting that social media has facilitated this in recent years, reigniting old connections and generating new ones.

This study provides important new insights into the influence of participation in IB programmes over the life course. Reflections offered by earlier graduates, in particular, illuminate the multifaceted and long lasting impact of schooling experiences. It was not uncommon for people to say that it was not until many years after completing the IB that they came to appreciate the benefits. It was, therefore, often through reflections provided by those people for whom a considerable time had passed since participation in the IB, that the nuanced and complex influences of the IB were apparent. Almost all the people in this study, and certainly all the people in the older cohort, perceive the programme as having enriched their lives and shaped various dimensions of their lives in positive ways. With much IB research focused on the immediate post-school years, further research with early graduates, particularly with people who completed the IB in period 1970s to early 2000s, would provide an important complement to this study, building the knowledge base of the longer term influence of the IB over the life course.

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REFERENCES

- Aulls, M. W. & Peláez, S. (2013) *Exploring the Learning Benefits and Outcomes of the IB Extended Essay in Preparing Students for University Studies in Canada: Student Perceptions of the Impact of the Diploma Programme and the Extended Essay on the Academic Demands of First year in University*. Montreal: Department of Educational and Counselling Psychology, McGill University.
- Brunell, T. (2008) The growth of the International Baccalaureate Diploma Programme over the first 40 years: A critical assessment. *Comparative Education* 44(4): 409-424.
- Caspary, K. (2011) Postsecondary Enrollment Patterns of IB Certificate and Diploma Candidates from U.S. High Schools. *Research Brief*. Menlo Park, CA: SRI International.
- Coca, V., Johnson, D., Kelley-Kemple, T., Roderick, M., Moeller, E., Williams, N., and Moragne, K. (2012) *Working to My Potential: Experiences of CPS Students in the International Baccalaureate Diploma Programme*. Chicago: The Consortium on Chicago School Research.
- Cole, D., Gannon S., Ullman J., Rooney P. (2014) *Theory of Knowledge (TOK): Exploring Learning Outcomes, Benefits and Perceptions*. Bethesda, MD, USA. International Baccalaureate Organization.
- Conley, D., McGaughy, C., Davis-Molin, W., Farkas, R. & Fukuda, E. (2014) International Baccalaureate Diploma Programme: Examining College Readiness. Bethesda, MD, USA. International Baccalaureate Organization.
- Connor, J. (2009) Student Engagement in an Independent Research Project: The Influence of Cohort Culture. *Journal of Advanced Academics* 21(1): 8-38.
- Culross, R. and Tarver, E. (2011) A Summary of Research on the International Baccalaureate Diploma Programme: Perspectives of Students, Teachers, and University Admissions Offices in the USA, *Journal of Research in International Education* 10(3): 231-243.
- Edwards, D. & Underwood, C. (2012) IB Graduates in Australian universities: Entry and Outcomes A case study of two institutions. Melbourne: Australian Council for Educational Research.
- Hannah, P. (2012) Using Internet Technologies (such as Skype) as a Research Medium: A Research Note, *Qualitative Research* 12(2): 239-242.
- Harwood, R. & Bailey, K. (2012) Defining and Evaluation International Mindedness in a School Context. *International Schools Journal* 31(2): 77-86.
- Hayden, M., Rancic, B., and Thompson, J. (2000) Being International: Student and Teacher Perceptions from International Schools, *Oxford Review of Education* 26(1): 107-123.

-
- Haywood, T. (2007) A Simple Typology of International-Mindedness and its Implications for Education. In M. Hayden, J. Levy & J. Thompson (Eds.), *The Sage Handbook of Research in International Education* (pp. 79-89). London: Sage.
- Halic, O. (2013) Postsecondary Educational Attainment of IB Diploma Programme Candidates from US High Schools. Geneva: International Baccalaureate Organization.
- HESA (2011) *International Baccalaureate Students Studying at UK Higher Education Institutions: How do they fare?* UK: Higher Education Statistics Agency.
- Hill, I. (2012) Evolution of Education for International Mindedness. *Journal of Research in International Education* 11(3): 245-261.
- Holt, A. (2010) Using the Telephone for Narrative Interviewing: A Research Note, *Qualitative Research* 10(1): 113-121.
- Hughes, C. (2014) Theory of Knowledge Aims, Objectives, and Assessment Criteria: An Analysis of Critical Thinking Descriptors, *Journal of Research in International Education* 13(1): 30-45.
- IBO (2013) *IB Learner Profile*. International Baccalaureate. Retrieved from: <http://www.ibo.org/myib/digitaltoolkit/files/pdfs/learner-profile-en.pdf>
- IBO (2014a) *History of the International Baccalaureate*. International Baccalaureate. Retrieved from: <http://www.ibo.org/history>
- IBO (2014b) *International Baccalaureate*. International Baccalaureate. Retrieved from: <http://www.ibo.org>
- IBO (2014c) *Four Programmes at a Glance*. International Baccalaureate. Retrieved from: <http://www.ibo.org/programmes>
- IBO (2014d) What is International Mindedness? International Baccalaureate. Retrieved from: https://ibanswers.ibo.org/app/answers/detail/a_id/3341/~what-is-international-mindedness%3F
- IBO (2014e) Diploma Programme Curriculum: Core requirements: Creativity, action, service (CAS). Retrieved from: <http://www.ibo.org/diploma/curriculum/core/cas/>
- Inkelas, K., Swan, A., Pretlow, J. and Jones, J. (2013) *Exploring the Benefits of the International Baccalaureate Extended Essay for University Study at the University of Virginia*. Charlottesville: Center for Advanced Study of Teaching and Learning in Higher Education, University of Virginia.
- James, K. (2005). International Education: The concept, and its Relationship to Intercultural Education. *Journal of Research in International Education*, 4(3): 313-332.

-
- Lineham, R. (2013) Is the International Baccalaureate Diploma Programme effective at delivering the International Baccalaureate mission statement? *Journal of Research in International Education* 12(3): 259-282.
- McLeod J. and Thomson, R. (2009) *Researching Social Change: Qualitative Approaches*. London: Sage.
- Mulnix, J. (2012) Thinking Critically about Critical Thinking, *Educational Philosophy and Theory* 44(5): 464-479.
- Patton, M. (2002). *Qualitative Research and Evaluation Methods*. Third Edition. Thousand Oaks, CA: Sage.
- Plummer, K. (2001) *Documents of Life 2: An Invitation to Critical Humanism*. London: Sage.
- Rizvi, F. (2009) Foreword. In P Tarc, ed, *Global Dreams, Enduring Tensions: International Baccalaureate in a Changing World* (pp. pp. vii-ix). New York: Peter Lang.
- Roberts, B. (2002) *Biographical Research*. Philadelphia: Open University Press.
- Saavedra, A. (2014) Academic Civic Mindedness and Model Citizenship in the Baccalaureate Diploma Programme. RAND Working Paper prepared for the International Baccalaureate Organization. Santa Monica, CA. RAND Corporation.
- Scriven, M. and Paul, R. (2008) Defining Critical Thinking. National Council for Excellence in Critical Thinking Instruction. Retrieved from: <http://www.criticalthinking.org/pages/defining-critical-thinking/410>
- Tarc, P. (2009) *Global Dreams, Enduring Tensions: International Baccalaureate in a Changing World*. New York: Peter Lang.
- Tarc, P. and Beatty, L. (2012) The Emergence of the International Baccalaureate Diploma in Ontario: Diffusion, Pilot Study and Prospective Research, *Canadian Journal of Education* 35(4): 341-375.
- Taylor, M. and Porath, M. (2006) Reflections on the International Baccalaureate Programme: Graduates' Perspectives, *The Journal of Secondary Gifted Education* 17(3): 149-158.
- Tumblety, J. (2013) Working with Memory as a Source and Subject. In J. Tumblety, Ed., *Memory and History: Understanding Memory as Source and Subject* (pp. 1-16). London: Routledge.
- Vertovec, S. and Cohen, R. (2002) Introduction: Conceiving Cosmopolitanism. In S. Vertovec and R. Cohen, Eds., *Conceiving Cosmopolitanism: Theory, Context, and Practice*. Oxford: Oxford University Press.
- Wright, K and McLeod, M (2012) Public Memories and Private Meanings: Representing the "Happy Childhood" Narrative in Oral Histories of Adolescence and Schooling in Australia, 1930s-1950s, *Oral History Forum d'histoire orale* 32, Special Issue: "Making Educational Oral Histories in the 21st Century". Retrieved from: <http://www.oralhistoryforum.ca/index.php/ohf/article/view/424>

APPENDICIES

Appendix I: Online Questionnaire

International Baccalaureate Programmes: Longer Term Outcomes

A qualitative study investigating the influence of International Baccalaureate programs on the lives of alumni

You are invited to participate in a research project looking at the longer term influences of International Baccalaureate (IB) programs on the lives of IB alumni. A key aim of the research is to gain insights into alumni ideas about how the educational experience may have shaped personal values, beliefs and overall worldviews, and contributed to key life-stages.

There are two main parts to the study: 1) a questionnaire which you and a large number of IB alumni have been invited to complete; and 2) an oral/life history interview which a small number of IB alumni will take part in. The information on this page concerns the questionnaire only. The purpose of the questionnaire is to give us some broad insights into alumni perceptions about the impacts of the IB on their lives. It will also help us identify and select possible participants for the interviews.

This research is being conducted by Dr Katie Wright of the Melbourne Graduate School of Education at The University of Melbourne, and is funded by the International Baccalaureate (IB). Approval to conduct the research has been given by the Human Research Ethics Committee at the University of Melbourne.

Should you agree to participate in the first phase of this research, you will be asked to complete a short online questionnaire. We anticipate that this would take no more than 15 minutes to complete.

In this questionnaire you will be asked for basic information about, for example, your age, nationality, and the type of IB program/s you have participated in. You will also be invited to share your thoughts about how, and to what extent, participation in an IB program has impacted on aspects of your life. At the end of the questionnaire, you will also be asked if you would be interested in participating in an in-depth interview. If you are interested in taking part, we will ask that you provide contact details.

Please note, your participation in this study is completely voluntary. Should you wish to withdraw at any stage, you are free to do so without prejudice. Please note, however, that unless you provide your contact details, your responses will remain anonymous. We intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Should you provide your name and contact details in the final questionnaire

response, these details will be kept in a password-protected computer file, and separated from the questionnaire data that you supply. This information will only be able to be linked to your responses by the researchers, for example, in order to know how to contact a small number of questionnaire respondents about possible participation in the interview phase of the research.

Once both phases of the research are completed, a report will be submitted to International Baccalaureate. Some of the findings will also be presented at academic conferences and published in academic journals. All research data will be kept securely at the University of Melbourne for at least five years from the date of publication of any material relating to this project.

The data from this project will be provided to, and retained by, the International Baccalaureate Organisation.

If you agree to participate in this research, please answer yes to the question below. You will then be directed to the first page of the questionnaire. If you do not agree, please answer no or simply close your web browser.

Should you require any further information, or have any concerns, please contact Dr Katie Wright: +61 (3) 8344 3372. Should you have any concerns about the conduct of the project, you are welcome to contact the Executive Officer, Human Research Ethics, The University of Melbourne, by telephone: +61 (3) 8344 2073, or by fax: +61 (3) 9347 6739.

1. Do you understand the information provided above and agree to participate in this research?
2. What year were you born?
3. What is your gender?
4. What is your nationality?
5. In what country do you live?
6. What ethnic or cultural groups do you identify with?
7. Did you complete the IB Diploma Programme?
8. What year did you complete the IB Diploma Programme?
9. Did you undertake the IB Middle Years Programme (MYP)?
10. What year did you START the IB Middle Years Programme (MYP)?
11. Did you undertake the IB Primary Years Programme (PYP)?
12. What year did you START the IB Primary Years Programme (PYP)?
13. In which country or countries did you participate in an IB Programme?

The following questions were presented on a five point Likert scale, with ratings ranging from no influence to major influence

14. To what extent do you view the IB as influencing your values, beliefs and worldview?
15. To what extent do you view the IB as influencing your personal conduct?
16. To what extent do you view the IB as influencing your attitudes towards lifelong learning?
17. To what extent do you view the IB as influencing your choice of career?
18. In what ways do you see the IB as having influenced your values, beliefs or attitudes?
19. Please describe the most significant influences you regard the IB as having on your life beyond school?
20. Would you like to participate in an interview to discuss your experiences of IB education and how you see the IB as having influenced your life beyond school?
21. Thank you for expressing an interest in the next phase of this research.

We are seeking people who would like to talk about their experiences of the IB and its impact on their lives. Participation in the next phase of the research would involve an interview (by telephone, video link up or face-face) that would last approximately 90 minutes.

If you are interested in taking part in an interview, please provide your details below and a member of the research team will contact you.

Thank you for your participation in this research

Appendix II: Interview Prompt and Indicative Questions

The following prompts and indicative questions guided the semi-structured life history interviews.

1. When and where were you born?
2. Where did you live as a child/teenager?
3. What sort of work did your parent/s do?
4. Where did you go to primary/elementary school?
5. What are some of your strongest memories of primary school?
6. Where did you attend secondary school?
7. What are some of your strongest memories of secondary school.
8. Do you recall the reasons for attending an 'IB school' / choosing the IB?
9. Could you please say a little more about the School where you took an IB programme? e.g. was it a public/international/local/private school?
10. What do you remember about the IB program/s you undertook?
Explore school culture and values; Teaching and Learning approaches/ Pedagogical style – e.g. inquiry / self-directed learning; Curriculum content e.g. academic and community orientation / interdisciplinary nature of courses such as TOK; Service; Extended Essay
11. What sort of things do you remember that were promoted as core values of the IB?
12. In what ways, if any, do you regard the IB as having influenced your outlook?
13. Did you attend university?
14. If so, in what ways, if any, do you regard the IB has having influenced your decision to study at university?
15. What did you end up doing after school or university?
16. Do you regard the IB, or any aspects of the IB program, as having influenced your choice of career?
17. Do you regard the IB, or any aspects of the IB program, as having influenced your ideas about civic participation or community service?
18. What do you see as the most significant impact that the IB has had on your life?
19. Thinking back over your life, do you regard any aspects of your IB education has having influenced major any decisions that you have made?
20. If you had to sum it up, what would you say that you see as the most significant impact that the IB has had on your life – this might be overall, or at different points in your life?

Appendix III: Participant Demographic Snapshot

This appendix sets out the basic demographic details for life history interview participants for the former DP and MYP students, organised into the four cohort used for recruitment (three aged based and one MYP/DP). Details of nationality and ethnicity reflect responses provided by participants in the initial online questionnaire.

Name	Age	Gender	Nationality	IB Country	School Type	Ethnicity	Resides
Cohort I: Participants aged 50+ years, participated in IB Diploma Programmes from 1960 to 1980							
Edward	63	M	American	Switzerland	International	Caucasian	Switzerland
Roza	58	F	Polish	UK	International ⁱ	Polish	Poland
David	57	M	Australian	UK	International ⁱⁱ	Caucasian	USA
Claire	55	F	Irish	UK	International ⁱⁱ	White	France
Sabine	51	F	German	Germany	International (Local)	German	USA
Cohort II: 35-49 year olds, participated in IB Diploma Programmes during the 1980s and 1990s							
Jessie	46	F	Canadian	Canada	Public	Celtic	Canada
Sarah	46	F	British	UK	International	White Brit	UK
Aadrika	41	F	Indian	Japan	International	Cross-cultural	India
Benjamin	39	M	American	USA	Public	Not specified	USA
Harith	35	M	British	China	International	Chinese Sri-Lankan	UK
James	35	M	American	USA	Public	African-American	USA
Cohort III: 20-24 year olds, participated in IB Diploma Programmes from the late 1990s to 2010							
Cooper	34	M	Canadian	Canada	Public	Not specified	UK
Mara	33	F	American	USA	Public	Caucasian	USA
Peter	28	M	German	China	International	Caucasian/Asian	Germany
Victoria	28	F	British	Papua NG	International (Local)	UK and Papuan	Australia
Miguel	23	M	Mexican	Mexico	Private (Local)	Hispanic	Mexico
Ingri	23	F	Norwegian	UK	International	Norwegian ⁱⁱⁱ	Norway
Cohort VI: Multi-programme participants (MYP + DP), graduated from the Diploma Programme in the 2000s							
Ethan	28	M	American	USA, UK	Public (MYP) International (DP) ⁱⁱ	Caucasian	USA
Alia	27	F	Canadian	Tanzania	International (Local)	Indian ^{iv}	Tanzania
Stefa	26	F	Polish	Poland	Public ^v	Polish	UK
Benedita	25	F	Portuguese	Portugal	International (Local)	Not specified	Sweden
Mateo	25	M	Brazilian	Switzerland	International	White Brazilian	UK
Frederico	20	M	Australian	Australia	Private (Local)	Italian	Australia

ⁱ Scholarship and support from the Polish government

ⁱⁱ Fees via scholarships provided by the international school they attended

ⁱⁱⁱ Norwegian/Scandinavian and Iranian/Middle Eastern

^{iv} "Ethnically Indian, culturally a mix of Tanzanian and Canadian"

^v Some fees were noted due to the 'high ranking' of the school nationally

Appendix IV: Participant Biographical Notes

Prepared by Emma Buchannan

Short biographical notes for each participant have been prepared to provide further details on the backgrounds, schooling and post-schooling experiences of each person who participated in life history interviews. Biographical notes are organized into the three age based cohorts, 50+ years, 35 - 49 years; 20 - 34 years; and the cohort of MYP/DP participants, whose ages range from 20 - 28 years.

Cohort I, 50+ years: People who participated in IB programmes between the years 1968 to 1980

Edward

Edward, aged 63, is a US citizen, and currently resides in continental Europe. He grew up in the US, but moved with family to Switzerland for several years in the late 1960s where he attended an international school. In 1967 and 1968 he participated in what was effectively an IB 'pilot programme', which included the development of IB examinations. A number of Edward's teachers were instrumental in establishing the IB Diploma, and were very involved in international education movements of the time. After high school, Edward returned to the US with his family, where he gained a degree in Art History and Philosophy. Following that he became a Religious Minister and served in the church for a time. He also undertook further graduate studies in the UK, and currently works in Europe for an international religious organisation.

Roza

Roza, aged 58, is a Polish national and resident. She graduated with an IB Diploma in 1976, having won a scholarship to attend an IB international school abroad. Prior to that, she attended state primary and secondary schools in Poland, during the Communist era. Roza was required to return to Poland after her IB graduation, and recalls limited options for higher education in her home country. She gained an arts degree in English literature. Since that time, Roza has engaged in a variety of paid and unpaid work, including political activism, language translation, tutoring, writing, parenting and community work. Since the late 1980s, she has also been involved in international scholarship programmes.

David

David, aged 57, is an Australian citizen, currently based in the US. He graduated with an IB Diploma in 1976, having won a scholarship to attend a residential boarding school in the UK that provided the IB as the sole curriculum. Prior to that, David attended government funded primary and secondary schools in Australia. Following completion of the IB DP, David returned to Australia and gained a Bachelor of Science. He subsequently won a scholarship to study in Japan, gaining a Master of Science in that country. Since graduating, David has worked in the natural resources area, and has also completed an MBA in the US.

Claire

Claire, aged 55, is an Irish citizen, currently living in continental Europe. She graduated with an IB DP in 1978 from an international residential school in the UK, which she attended after winning a scholarship. Prior to that she had attended a private girls' preparatory school, and an all-girls grammar school in Northern Ireland. After graduating, Claire studied law for a year at a UK university. She then pursued her interests in the dramatic arts, and subsequently completed an honours degree in Drama and Theatre studies. She then worked as an actor for some years. After moving to France, she undertook a Master's degree in Literature, gained a teaching qualification, and began teaching English at university level. Claire currently has a varied role in the Higher Education sector, including teaching in the humanities and working in international relations.

Sabina

Sabina, aged 51, is a German citizen, and has been living in the US for many decades. She graduated with an IB Diploma in 1980. Sabina undertook the IB programme at an International school, in her home town, in Germany. She attended the same school, together with her siblings, from kindergarten through to the completion of her high school studies. Students at the school could undertake either the full IB Diploma, or individual IB courses. The study body was predominantly American international students. Following a 'gap' year after the IB, Sabina moved to the US, and undertook a bachelor's degree in International Relations, focusing on history, politics and economics. Since then, she has worked as a journalist in both a freelance capacity and for major investigative media organisations.

Cohort II, 35 – 49 years: People who participated in IB programmes in the 1980s and 1990s

Jessie

Jessie, aged 46, is a Canadian citizen and resident. She undertook individual IB courses, specifically Theory of Knowledge (TOK) and History, alongside other regular curriculum subjects at a Canadian Public High School. Jessie graduated in 1986. Prior to commencing at the school that offered IB subjects, Jessie had attended many Canadian public schools, as her family moved frequently. Following high school graduation, she enrolled in a Science Degree. Since that time, she has been engaged in a wide range of work and activities, including parenting and working in the arts. She has held leadership roles in various Green, spirituality and humanist movements. She is currently completing her bachelor's degree, with a view to gaining entry to a higher degree by research programme.

Sarah

Sarah, aged 46, is a British citizen and resident. She undertook the IB DP in the UK, and graduated in 1987. Moving to Scandinavia as a child, for family work reasons, Sarah attended a number of local primary schools. She returned to the UK in her teenage years with her mother and siblings. Sarah undertook her 'O levels' (now GCSEs) at a Comprehensive school, and then completed high school at the IB college. Following this she studied medicine in the UK. After a period of travelling

and undertaking varied work, Sarah decided to change her career. She retrained and currently works as an allied health practitioner.

Aadrika

Aadrika, aged 41, is an Indian citizen and resident, who undertook psychology as a single IB subject as part of her high school studies at an international school in Japan. Aadrika studied psychology as an IB subject because it was the only option for her to complete this subject, which she was determined to do, even though she was unable to undertake the full IB Diploma. Her school offered IB subjects to students undertaking other programmes. Aadrika's father had an international occupation, and her earlier schooling experiences were in Asia, as well as Europe and the Middle East. She has gone on to study psychology at master's level, and is currently completing a PhD in Psychology in India.

Benjamin

Benjamin, aged 39, is a US citizen and resident. He undertook the IB Diploma at a large, lower-middle class public high school that offered a traditional as well as IB programme. Benjamin graduated in 1993. Benjamin also undertook a two year 'pre-IB' programme at the same school. Prior to starting the IB, he had attended a public kindergarten and elementary middle schools in several states in the USA, as a result of the work commitments of his father. Following completion of the IB DP, Benjamin gained an Engineering degree at a State College. Since then, he has worked in electronics engineering. His work also involves technical writing in the field of electronics.

Harith

Harith, aged 35, is a British citizen and resident. He undertook his primary and early secondary school education in Hong Kong at schools serving varied combinations of English and Chinese expatriate communities. Following detailed personal research, Harith arranged to study the IB Diploma at an international school in Mainland China, moving away from his family, and boarding with a family acquaintance. The secondary school, predominantly serving North American, Australian and New Zealand expatriate communities, provided an American curriculum as well as the IB. Following his IB graduation in 1997, Harith studied medicine in the UK, and undertook graduate research at a master's level. His current work combines clinical work, teaching, and research on childhood disease.

James

James, aged 35, is a US citizen and resident. He graduated with the IB Diploma in 1997. He undertook the IB programme at a public high school, in a low socio-economic area, where the IB was one of several curriculum options. An older sibling also undertook the IB programme at the same high school. James' early childhood was spent in the US rural south with his mother, grandmother and siblings. He attended a "Head-Start" preschool programme, and a public elementary and "Magnet" middle school, which offered an accelerated curriculum. After high school, James gained a Bachelor of Arts, specialising in Film. He then spent some years in the armed forces, followed by involvement in a variety of film and activist work. James is currently enrolled in graduate school, focused on social welfare, is also involved in various activist work.

Cohort III, 20 – 34 years: People who participated in IB programmes from the late 1990s to 2010

Cooper

Cooper, aged 34, is a Canadian citizen, who is currently residing in the UK. He undertook an IB programme at a state school, in a socio-economically mixed community in Canada. The high school offered the IB, as a full Diploma and well as individual courses, alongside the regular curriculum. Cooper attended state primary and secondary schools in small Canadian towns, moving due to his father's work. Following his graduation in 1998, Cooper, a computer enthusiast from childhood, studied Computer Science at a Canadian University. During the course of his studies, he transferred to Sociology during the third year of his degree. In his final year of college, Cooper moved to the USA to work in the IT/tech industry. Since then he has worked as a programmer and on various, often socio-politically minded, IT projects, including with non-profit organisations.

Mara

Mara, aged 33, is a US citizen and resident. She graduated with an IB Diploma in 1999 from a public high school in the USA. The school offered the IB Diploma as well as a two year 'pre-IB' alongside the regular curriculum. She was part of a small group of students who undertook the IB Diploma. Mara attended numerous public elementary schools, due to her family moving, and a public middle school. For grades 6 and 7 attended she attended an arts and media focused "Magnet" School. Following high school graduation, Mara gained a bachelor's degree in Canada, majoring in English Literature. She also studied environmental science. Since graduating from university, she has worked in various publishing and communications roles. Mara also writes about sustainability in a freelance capacity.

Peter

Peter, aged 28, is a German citizen and resident. He graduated with an IB Diploma in 2006. Peter undertook the IB programme at an international school in China, with a study body consisting mainly of Chinese and Korean students, but with students from a range of other countries as well. He boarded part-time at the school. Before commencing at that school, Peter attended many schools for German citizens abroad, in various Asian countries, moving frequently due to his father's occupation. Following completion of the IB, Peter gained a Business Degree from a Chinese University. He then worked in investment banking for a number of years, in various parts of China.

Victoria

Victoria, aged 28, was born and grew up in Papua New Guinea (PNG) and currently resides in Australia. She attended an international school in PNG and graduated in 2004, with both the IB Diploma, and an Australian school leaving certificate. The IB Diploma was offered alongside several other curriculum options, and she was one of a small number of the school's students who elected to undertake the IB Diploma. Following high school graduation, Victoria moved to Australia to attend University. She studied Psychology and undertook a Business Degree,

majoring in Human Resources. Since graduating, Victoria has been working in the field of Human Resources.

Miguel

Miguel, aged 23, is a Mexican citizen, and resident. He attended a private high school in Mexico and graduated in 2010 with an IB Diploma. The school offered the IB Diploma, as well as a two year 'pre-IB' programme alongside other curriculum options. His early schooling had also been at private, non-government schools. After completing high school, Miguel enrolled in a degree in Biotechnology Engineering, which he is currently undertaking, at a leading Mexican university. Miguel has completed part of his studies on an international exchange in Australia.

Ingri

Ingri, aged, 23, is a first generation Norwegian citizen and resident. She undertook the IB at a residential, international boarding school in the UK. Ingri graduated with the IB Diploma in 2010. Her previous schooling was at public primary and secondary schools in Norway. After graduating, Ingri returned to Norway, and recently gained a bachelor's degree, majoring in Development Studies. She currently works part time, is involved in various NGOs, and is also taking further studies. Ingri intends to pursue master's level study, ideally abroad, in Peace and Conflict or Development Studies.

Cohort IV: People who completed both the MYP and The DP in the 2000s

Ethan

Ethan, aged 28, is a US citizen and resident. He graduated with an IB Diploma in 2005. He undertook the IB at an international boarding school in Europe. Before that Ethan participated in the MYP programme in the USA. He attended many public schools in the US, moving frequently due to his father's occupation. Following IB graduation, Ethan studied Aerospace Engineering, with a language, and humanities minor, at an Ivy League University. He continued to doctoral level study, and is now working as a post-doctoral researcher.

Alia

Alia, aged 27, is a Canadian citizen who lives in Tanzania. She moved with her family as a young child to Tanzania, where she undertook the IB DP and MYP programmes at an International School in Tanzania, which she attended since kindergarten age. Following IB graduation in 2006, Alia studied in Canada, gaining an Arts Degree with a Religious Studies major. After returning to Tanzania, she gained some teaching experience, and then moved to another Commonwealth country, to study in a graduate primary school teaching programme. Alia has recently completed this study.

Stefa

Stefa, aged 26, is a Polish citizen who currently lives in the UK. She undertook the IB DP and MYP programmes at a high status, select entry, public school in Poland, graduating with the DP in 2007. At the school Stefa attended, students could take IB subjects well as those in the Polish curriculum. She attended local public primary schools prior to enrolling in the select entry high

school. Following IB graduation, Stefa studied in the UK, gaining a degree in Philosophy. Since then she has worked in the charity sector and for non-profit organisations, including those with a knowledge and new-media focus.

Benedita

Benedita, aged 25, is a Portuguese citizen who currently lives in Sweden. She undertook the IB DP, MYP, and one year of the PYP programme at an international school in Portugal. Benedita graduated in 2007. The IB programme was the sole curriculum option available at the school she attended. Prior to commencing at the international school, she was a student at a state funded primary school, also in Portugal. Following IB graduation, Benedita moved to Sweden and undertook a Bachelor of Science. She then worked for an environmentally focused NGO, and is currently undertaking a master's degree in Ecology.

Mateo

Mateo, aged 25, is a Brazilian citizen, who currently lives in the UK. Mateo's initial primary schooling was at a private, Christian school in Brazil. Moving to Switzerland with his family, he attended an international school, where he undertook the IB DP and MYP programmes, graduating with the IB DP in 2007. The MYP programme was being established at the school at the time he began the programme. Following IB graduation, Mateo moved to the UK, and studied mechanical engineering. He now works as an engineer.

Frederico

Frederico, aged 20, is an Australian citizen and resident. He undertook the IB DP and MYP programmes at a high status Catholic high school in his home city, graduating in 2012. The IB programme was the sole curriculum option available at the school. His primary schooling was spent at a Catholic primary school, in the same Australian city. Frederico is currently undertaking a Bachelor of Arts, focused on languages, history and politics.